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WOJCIECH SOSNOWSKI[A] & **VIOLETTA KOSESKA-TOSZEWA**[B]

Institute of Slavic Studies, Polish Academy of Sciences, Warsaw, Poland
[A]wpsosnow@uw.edu.pl ; [B]amaz@inetia.pl

MULTILINGUALISM AND DICTIONARIES

Abstract

The *Dictionary of Semantic Equivalents in Polish, Bulgarian and Russian* that we (Wojciech Sosnowski, Violetta Koseska-Toszewa and Anna Kisiel) are currently developing has no precedent as far as its theoretical foundations and its structure are concerned. The dictionary offers a unique combination of three Slavic languages that belong to three different groups: a West Slavic language (Polish), a South Slavic language (Bulgarian) and an East Slavic language (Russian). The dictionary describes semantic and syntactic equivalents of words between the languages. When completed, the dictionary will contain around 15,000 entries. The principle we build the dictionary on is that every language should be given equal status. Many of our data come from the Parallel Polish-Bulgarian-Russian corpus developed by us as part of the CLARIN-PL initiative. In the print version, the entries come in the order of the Cyrillic alphabet and they are not numbered (except for homonyms, which are disambiguated with Roman numbers). We selected the lemmas for the dictionary on the basis of their frequency in the corpus. Our dictionary is the first dictionary to include forms of address and most recent neologisms in the three languages. Faithful to the recent developments in contrastive linguistics, we begin with a form from the dictionary's primary language and we define it in Polish. Subsequently, based on this definition, we try to find an equivalent in the second and the third language. Therefore, the meaning comes first and only then we look for the form (i.e. the equivalent) that corresponds to this meaning. This principle, outlined in *Gramatyka konfrontatywna języków polskiego i bułgarskiego* (GKBP), allows us to treat data from multiple languages as equal. In the dictionary, we draw attention to the correct choice of equivalents in translation; we also provide categorisers that indicate the meaning of verbal tenses and aspects. The definitions of states, events and their different configurations follow those outlined in the net model of verbal tense and aspect. The *transitive* vs. *intransitive* categorisers are vital for the languages in question, since they belong to two different types: synthetic (Polish and Russian) and analytic (Bulgarian). We predict that

the equal status of every language in the dictionary will facilitate easier and faster development of an electronic version in the future.
Keywords: theoretical contrastive linguistics; contrastive non-lexical and lexical semantics; semantic categorisers; syntactic categorisers; state; event; net model of tense and aspect; transitive; intransitive; trilingual parallel corpus; forms of address

1. A Multilingual Dictionary

The *Dictionary of Semantic Equivalents in Polish, Bulgarian and Russian* that we (Wojciech Sosnowski, Violetta Koseska-Toszewa and Anna Kisiel) are currently developing has no precedent as far as its theoretical foundations and its structure are concerned. The dictionary offers a unique combination of three Slavic languages from three different groups: a West Slavic language (Polish), a South Slavic language (Bulgarian) and an East Slavic language (Russian). The dictionary describes semantic and syntactic equivalents between the languages. When it is finished, the dictionary will contain around 15,000 entries.

1.1. Parallel corpora and CLARIN-PL

The data for our dictionary come from the national and multilingual corpora that are part of CLARIN:[1] The National Corpus of Polish, The Bulgarian-Polish Parallel Corpus (ed. L. Dimitrova, V. Koseska-Toszewa) and other corpora: The Polish-Bulgarian-Russian Parallel Corpus (ed. V. Koseska-Toszewa, W. Sosnowski, J. Satoła-Staśkowiak, A. Kisiel), The Bulgarian National Corpus[2] and The Russian National Corpus.[3] We also have on-going access to the 6-milion-word Polish-Bulgarian-Russian corpus developed by the Department of Corpus Linguistics and Semantics of the Polish Academy of Sciences. Last but not least, the data for the dictionary come from multiple spoken and written sources, authors' own data collected throughout their careers, as well as some research papers in linguistics (cf. Bibliography).

We also decided to include neologisms — also semantic neologisms — in our dictionary; neologisms are notorious for being difficult to describe and not having one-to-one equivalents in other languages, however, they provide a window into a nation's culture. The data thus selected and the fact that the dictionary combines three Slavic languages enable us to conduct extensive research into Slavic lexicology. The primary language has been chosen arbitrarily. Every entry is given as a three-column table, which lets users investigate the three languages in parallel. Moreover, the tabular design of the dictionary facilitates adding new languages in the future — also languages from outside the Slavic family.

[1] *Common Language Resources and Technology Infrastructure* is a project granted the status of ERIC (European Research Infrastructure Consortium) by the European Commission in February, 2012. CLARIN was founded by eight countries: Austria, Bulgaria, the Czech Republic, Denmark, Estonia, Germany, the Netherlands and Poland. CLARIN is part of the ESFRI (European Roadmap for Research Infrastructures, European Strategy Forum on Research Infrastructures). The primary aim of the project is to combine *language tools and resources* for multiple European languages into one unified network, which will become an important research tool for scholars in arts, humanities and social sciences.

[2] `http://dcl.bas.bg`

[3] `http://www.ruscorpora.ru`

1.2. The equivalent selection criteria

It is crucial that the equivalents of every word chosen for a dictionary have high translational accuracy (i.e. equivalence). Our research on equivalence is based on the results of our co-operation with a number of colleagues from Ukraine. For instance, in the Polish-Ukrainian (Luchyk & Antonova, 2012) and Ukrainian-Polish (Antonova, Dubrovs'ka, & Luchyk, 2011) word equivalent dictionaries, the Polish phrase *w końcu* takes the following form: 'W KOŃCU', przysłówek (po wypowiedzeniu, po wykonaniu) — в (у) підсумку [результаті], на останок ∘ Posprzeczaliśmy się, a w końcu okazało się, że to ja miałem rację. ∘ Ми з ним посперечалися, а в підсумку я виявився правий [the latter dictionary].

If two lexical units are perfectly equivalent, their scope of meaning is identical, they have identical collocability, they belong to the same part-of-speech category, and have identical meaning. In many cases, the equivalence is, however, only partial, which entails that two or more partial equivalents are available for a given word. This aspect — i.e. the partial equivalence of lexical units — will be prominent in the electronic version of the dictionary.

Since we also include words and phrases indicating different levels of language politeness, we have used the following works as a source of inspiration and insight: Pytel-Pandey (2003), Watts (2003), Huszcza (2006), Brown & Levinson (2008) and others.

2. Theoretical foundations of the dictionary

The concept of our dictionary stems from the contemporary semantic theory and contrastive studies of natural languages developed in the multi-volume *Gramatyka konfrontatywna bułgarsko-polska* [further referred to as: GKBP] (Koseska-Toszewa & Gargov, 1990; Koseska-Toszewa, 2006; Koseska-Toszewa, Korytkowska, & Roszko, 2007). GKBP is the first contrastive grammar in the world to make use of an intermediate semantic meta-language. Using a semantic meta-language to compare multiple languages provides an innovative solution and diverges from traditional principles of applied contrastive studies. Traditionally, the comparison between two (or more) languages relies heavily on the primary language of description, therefore it is always incomplete and can also be false.

2.1. From meaning to form

In theoretical contrastive studies, the analysis of language data proceeds from meaning to form. This stands in contrast to traditional contrastive grammars, which tend to start with a form in one language and then proceed to a form in another language. The analysis in our dictionary always starts with a form ONLY IN THE PRIMARY LANGUAGE OF THE DICTIONARY; subsequently we define the meaning of this form using Polish. THUS, THE DEFINITION OF THE MEANING OF A FORM IN THE PRIMARY LANGUAGE FORMS THE STARTING POINT FOR THE SEARCH OF ITS EQUIVALENTS IN THE SECOND AND THIRD LANGUAGE (OR MORE IF NEED BE). The above procedure — outlined in GKBP — enables us to treat the data from every language as equal. Our procedure is quite similar to the latest methodology of *Słowosieć 2.2* (`http://plwordnet.pwr.wroc.pl/wordnet/`) — the comprehensive electronic dictionary of Polish and the second largest word-net in the world.

3. Structure of an entry

In the print version, the entries come in the order of the Cyrillic alphabet and they are not numbered (except for homonyms, which are disambiguated with Roman numbers). The entries have been selected on the basis of their frequency.

Table 1.

ед|а́, -ы́ (*sg. tantum*) *rz. ż.*	**я́ден|е, -ета** *rz. n.*	**jedzeni|e, -a** (*sg. tantum*) *rz. n.*
1. 'to, co można jeść' *вку́сная, изы́сканная еда́* *гото́вить еду́*	1. 'to, co można jeść' *вку́сно я́дене* *Приго́твям я́дене за бо́лния.*	1. 'to, co można jeść' *pyszne, wykwintne jedzenie* *przyrządzać, szykować, przygotowywać jedzenie*
2. 'przyjmowanie posiłku' *принима́ть лека́рство до еды́*	2. 'przyjmowanie posiłku' *взе́мам това́ лека́рство преди́ я́дене*	2. 'przyjmowanie posiłku' *wziąć lekarstwo przed jedzeniem*

Table 2.

го|сти́ть, -щу́, -сти́шь *vi. state, intransitive*	**гостю́ва|м, -аш** *vi. state, intransitive*	**go|ścić, szczę, -isz** *vi. state, transitive*
1. 'być czyimś gościem; też: przebywać gdzieś' *гости́ть ка́ждое ле́то в дере́вне;* *гости́ть у родны́х*	1. 'być czyimś gościem; też: przebywać gdzieś' *Аз им гостю́вах през а́вгуст*	1. 'być czyimś gościem; też: przebywać gdzieś' *Często gościłem w ich domu.*
2. brak znaczenia	2. brak znaczenia	2. 'przyjmować kogoś u siebie' *Mamy zaszczyt gościć prezydenta.*

Every meaning of a lexical unit is given under a new number (see Tables 1 and 2). The order of the meanings is not random — it reflects a given meaning's frequency of use in Russian. This does not entail that Russian has a special status in the dictionary; it merely results from the nature of any printed document — it will always be linear.

Wherever we could, we tried to avoid using synonyms to define lexical units in the dictionary and provided descriptive definitions instead. The examples show how the collocability and grammatical features of a unit are presented in the dictionary, e.g. the valency of a verb, the case and preposition constraints of an adjective, or the syntactic order of units that carry such constraints. Some entries also contain culturally entrenched collocations or phrases in the examples of use: *abonent czasowo niedostępny* for 'abonent', *Apetyt rośnie w miarę jedzenia.* for 'apetyt', *strzeżonego Pan Bóg strzeże* for 'strzec'; some entries contain fixed phrases, e.g. '*Te leki biorę przed jedzeniem*' for 'jedzenie'.

In languages with variable stress (i.e. Russian and Bulgarian) we mark the word stress both in the entry word and the example sentences/phrases:

Table 3.

её I *zaimek osobowy* forma B., D. zaimka osobowego *она́* ‘wyraz wskazujący na obiekt (osobę, zwierzę, przedmiot, wydarzenie — rodzaju żeńskiego), o którym mówimy’ *Я её вчера́ не ви́дел.*	**(на) не́я** forma zaimka osobowego *тя* ‘wyraz wskazujący na obiekt (osobę, zwierzę, przedmiot, wydarzenie — rodzaju żeńskiego), o którym mówimy’ *Вче́ра не́я не съм я ви́ждал.* *Дай квита́нцията на не́я, а пари́те скри́й в шка́фа.*	**jej** I *zaimek osobowy* forma D. zaimka osobowego *ona* ‘wyraz wskazujący na obiekt (osobę, zwierzę, przedmiot, wydarzenie — rodzaju żeńskiego), o którym mówimy’ *Nie widziałem jej wczoraj.*

In the above table, we can see that entries are presented in three columns — the equivalent from each language appears in a separate column, along with a definition of its meaning in Polish. The equivalents are aligned horizontally so that equivalents of the same meaning come in the same row. Such a construction allows us to treat every language as equal and supplement the dictionary with more languages in the future. The data collected in the dictionary can easily be transformed into an electronic dictionary (Kisiel, Satoła-Staśkowiak, & Sosnowski, 2014).

4. Three types of categorisers

The categorisers in our dictionary do not only indicate the part-of-speech category that the word belongs to. We also included categorisers that show the differences between the number of meanings of a given form; this includes also spoken (informal) and metaphorical meanings. Our dictionary is the first to treat forms of address as a separate category — a category that is laden with various cultural and sociological undertones.

Table 4.

господи́н, *l. mn.* **господа́**, *dop. l. mn.* ***госпо́д*** *rz. m.*	**господи́н** *rz. m.*	**pan**, *l. mn.* **panowie** *rz. m.*
1. ‘ten, kto ma władzę nad kimś lub nad czymś’ *господи́н свое́й судьбы́*	1. brak znaczenia	1. ‘ten, kto ma władzę nad kimś lub nad czymś’ *pan swojego losu*
2. ‘oficjalna forma grzecznościowa używana przy zwracaniu się do mężczyzny lub w rozmowie o nim’ (używana z nazwiskiem, stanowiskiem lub tytułem)	2. ‘oficjalna forma grzecznościowa używana przy zwracaniu się do mężczyzny lub w rozmowie o nim’	2. ‘oficjalna forma grzecznościowa używana przy zwracaniu się do mężczyzny lub w rozmowie o nim’
господи́н ко́нсул *господи́н президе́нт* *господи́н Лавро́в*	*Господи́не, помогне́те ми да се кача́ на вла́ка.*	*Szanowny Panie* *Panie Adamie* *Pan woźny*

3. 'bogacz; dawniej też: właściciel majątku ziemskiego' *крепостны́е господи́на Турге́нева*	3. brak znaczenia	3. 'bogacz; dawniej też: właściciel majątku ziemskiego' *pracować u pana*
4. brak znaczenia	4. brak znaczenia	4. 'mężczyzna stojący na czele domu, rodziny, gospodarstwa' *pan domu*
5.'mężczyzna' *Когда́ приезжа́ет э́тот господи́н?*	5. 'mężczyzna' *Ня́какъв господи́н те тъ́рси.*	5. 'mężczyzna' *Jakiś pan o ciebie pytał.*

4.1. Traditional categorisers

As we mentioned previously, entries contain categorisers in each of the languages — in contrast to traditional dictionaries, where categorisers are given only for the primary language. There are significant differences between definitions of parts of speech between different strands and theories of linguistics, therefore the unification and standardisation of categorisers in every language was a difficult task. Traditional categorisers include: parts of speech and morphological classifiers pertaining to their gender or number, as well as other categorisers, such as *pot.* [Pol. 'spoken/informal']. They belong to a group of formal categorisers, which have generally been used to indicate the grammatical characteristics of a unit (e.g. a defective inflectional paradigm it belongs to) and to put the unit inside one of the categories of human activity, e.g. *bot.*, *zool.* or *ekon.*

Table 5.

был|ь, -и; -и *rz. ż.* 'to, co się zdarzyło naprawdę, w rzeczywistości' *Э́то не ска́зка, а быль.*	**и́стинска слу́чка** *fraza rzeczownikowa ż.* 'to, co się zdarzyło naprawdę, w rzeczywistości' *Това́ не е виц, а и́стинска слу́чка.*	**prawdziwe zdarzenie** *fraza rzeczownikowa n.* 'to, co się zdarzyło naprawdę, w rzeczywistości' *A tymczasem było to prawdziwe zdarzenie.*

Table 6.

броса́|ть, -ю, -ешь *vi. state, transitive* 1. 'wprawiać w ruch przez chwilowe umieszczenie czegoś w powietrzu' *броса́ть мяч* *броса́ть спаса́тельный круг* *броса́ть на́ пол* *броса́ть оку́рки в у́рну*	**хвъ́рля| м, -аш** *vi. state, transitive* 1. 'wprawiać w ruch przez chwilowe umieszczenie czegoś w powietrzu' *хвъ́рлям ка́мък в прозо́реца*	**rzuca|ć, -m, -sz** *vi. state, transitive* 1. 'wprawiać w ruch przez chwilowe umieszczenie czegoś w powietrzu' *rzucać piłkę* *rzucać piłką* *rzucać o ścianę, na podłogę*

2. 'podczas jazdy gwałtownie poruszać kimś lub czymś na boki' *Машúну бросáло то вверх, то вниз.*	2. 'podczas jazdy gwałtownie poruszać kimś lub czymś na boki' *хвъ́рлям във въ́здуха*	2. 'podczas jazdy gwałtownie poruszać kimś lub czymś na boki' *Na wybojach autobusem bardzo rzucało.* *W pociągu zawsze rzuca pasażerami.*
3. 'wysłać coś gdzieć' *бросáть войскá в бой*	3. 'wysłać coś gdzieś' *хвъ́рлям ги на смъ́рт*	3. 'wysłać coś gdzieś' *Rzucić dywizjon do walki.*
4. brak znaczenia	4. 'emitować' *хвъ́рлям светлинá*	4. 'emitować' *rzucać światło* *rzucać cień*
5. 'krótko zrobić coś związanego z komunikacją' *бросáть рéплику* *бросáть взгляд*	5. 'krótko zrobić coś związanego z komunikacją' *хвъ́рлям пóглед*	5. 'krótko zrobić coś związanego z komunikacją' *rzucać spojrzenie* *rzucać myśl* *rzucać pytanie*

4.2. Semantic categorisers

Semantic categorisers indicate the stylistic properties of a unit and — this is an innovation of our dictionary — the meaning of a verb's aspect and tense. The concepts of events, states and combinations thereof are defined on the basis of net model of tense and aspect.[4] Meanings 1 and 2 for *events* as well as meanings 1 and 2 for *states* can easily be illustrated by an example of an aspectual-temporal relation, i.e. when a given verbal unit conveys a given tense in a Bulgarian, Polish and Russian sentence. In entry words, verbs are infinitives, hence "tense-less", and they can only receive the semantic categorisers *state* and *event*.

(1) a. (ros.) **глотáть** *vi. state, transitive* (bułg.) **гълтам** *vi. state, transitive* (pol.) **łykać** *vi. state, transitive*

b. (ros.) **глотнýть** *vp. event, transitive* (bułg.) глътна *vp. event, transitive* (pol.) **łyknąć** *vp. event, transitive*

State 1 and *state 2* as well as *event 1* and *event 2* can only be differentiated in a larger context; this differentiation is quite clear in parallel corpora. This is the reason why we introduced semantic categorisers in *Korpus równoległy polsko-bułgarsko-rosyjski* ['Polish-Bulgarian-Russian Parallel Corpus'].[5]

4.3. Syntactic categorisers

We included the syntactic categorisers: *transitive* and *intransitive*, which indicate a verb's transitivity. We define transitivity as a verb's capacity to take a direct object. In Polish and Russian, direct objects of transitive verbs take nouns in the accusative case. If a verb is intransitive, it cannot take a noun in the accusative.

[4]For more information of the net model and the application of Petri's nets to natural languages see Mazurkiewicz (1986), Koseska-Toszewa & Mazurkiewicz (1988), Koseska-Toszewa (2006) and Koseska-Toszewa & Mazurkiewicz (2010).

[5]The corpus is being built as part of the CLARIN-PL initiative of the EU, cf. Dimitrova & Koseska-Toszewa (2014).

Bulgarian — analogically to English — is an analytic language, whereas Polish and Russian are synthetic languages. Therefore, we find that the above syntactic categorisers are vital in contrastive publications, such as our dictionary.

4.4. Homonymous units

Yet another innovation of our dictionary is the fact that we treat two verbal forms that differ in their aspect. We never treat a verb form as simultaneously transitive and intransitive, e.g. '**арендова́ть**' *vi., vp.* Our dictionary consistently gives such forms as homonymous forms of different aspect. See examples below:

Table 7.

аренд|ова́ть, -у́ю, -у́ешь I *vi. state, transitive*	**да взе́мам под на́ем** *fraza werbalna* lub **да нае́мам не́що** *fraza werbalna*	**dzierżaw|ić, -ię, -isz** *vi. state, transitive*
1. 'mieć coś w dzierżawie' *арендова́ть зе́млю у сосе́да*	1. 'mieć coś w dzierżawie' *да нае́мам земя́ / да взе́мам земя́ под на́ем*	1. 'mieć coś w dzierżawie' *dzierżawić ziemię od sąsiada*
2. 'mieć coś oddane w dzierżawę' *арендова́ть по́ле сосе́ду*	2. 'mieć coś oddane w dzierżawę' *да нае́мам ни́ва под на́ем на съсе́да си*	2. 'oddawać coś w dzierżawę' *dzierżawić pole sąsiadowi*

Table 8.

аренд|ова́ть, -у́ю, -у́ешь II *vp. event, transitive*	**да взе́ма под на́ем** *fraza werbalna* lub **да нае́ма нещо** *fraza werbalna*	**wydzierżaw|ić, -ię, -isz** *vp. event, transitive*
1. 'wziąć coś w dzierżawę' *арендова́ть у сосе́да лу́г*	1. 'wziąć coś w dzierżawę' *да взе́ма земя́ под на́ем*	1. 'wziąć coś w dzierżawę' *wydzierżawić od sąsiada łąkę*
2. 'oddać coś w dzierżawę' *арендова́ть дом на кани́кулы*	2. 'oddać coś w dzierżawę' *Нае́ ни́ва под на́ем*	2. 'oddać coś w dzierżawę' *wydzierżawić komuś dom na wakacje*

(2) a. **I адрес\|ова́ть, -у́ю, -у́ешь** *vi. state, transitive* **адреси́ра\|м, -ш, -ø** *vi. state, transitive* **adres\|ować, -uję, -ujesz** *vi. state, transitive*

b. **II адрес\|ова́ть, -у́ю, -у́ешь** *vp. event, transitive* **адреси́рам, -аш** *vp. event, transitive* **zaadresować, -uję, -ujesz** *vp. event, transitive*

5. English equivalents

Our methodology is also capable of accommodating additional languages. The examples of English equivalents below illustrate how our dictionary facilitates adding new languages.

Table 9.

та|и́ть, -ю́, -и́шь *vi. state, transitive* ‘utrzymywać w tajemnicy’ *таи́ть зло́бу, оби́ду*	**затая́ва|м -аш** *vi. state, transitive* ‘utrzymywać w tajemnicy’ *затая́вам оби́да; бо́лка*	**ta|ić, -ję, -isz** *vi. state, transitive* ‘utrzymywać w tajemnicy’ *taić własne myśli*	**dissemble** *state, transitive* ‘utrzymywać w tajemnicy’ *dissemble information*

Table 10.

переодева́|ть, -ю, -ешь *vi. state, transitive*	**преобли́ча|м, -ш** *vi. state, transitive*	**przebiera|ć, -am, -asz** *vi. state, transitive*	**change clothes** *fraza rzeczownikowa state, transitive*
1. ‘ubierać kogoś w coś innego’ *переодева́ть сы́на в но́вый костю́м*	1. ‘ubierać kogoś w coś innego’ *преобли́чам дете́то сас су́ха дре́ха*	1. ‘ubierać kogoś w coś innego’ *przebierać dziecko w inne ubranko*	1. ‘ubierać kogoś w coś innego’ *Mum was changing her son’s clothes*
2. brak znaczenia	2. brak znaczenia	2. ‘czyścić coś i jednocześnie wybierać jednostki właściwe, a odrzucać zepsute’ *przebierać śliwki*	2. brak znaczenia
3. brak znaczenia	3. brak znaczenia	3. ‘nie móc się zdecydować’ *Długo przebierał w ubraniach i nic nie wybrał.*	3. brak znaczenia
4. brak znaczenia	4. brak znaczenia	4. ‘wprowadzać coś w stan ruchu’ *przebierać palcami*	4. brak znaczenia

Table 11.

переоде́|ть, -ну, -нешь *vp. event, transitive*	**преобле|ка́, -чеш** *vp. event, transitive*	**przebrać, przebiorę, przebierzesz** *vp. event, transitive*	**change clothes** *event, transitive fraza werbalna*
1. ‘ubrać kogoś w coś innego’ *переоде́ть сы́на в но́вый костю́м*	1. ‘ubrać kogoś w coś innego’ *преоблечи́ дете́то*	1. ‘ubrać kogoś w coś innego’ *przebrać dziecko do szkoły*	1. ‘ubrać kogoś w coś innego’ *Mum changed her son’s clothes*
2. brak znaczenia	2. brak znaczenia	2. ‘oczyścić coś i jednocześnie wybrać jednostki właściwe, a odrzucić zepsute’ *przebrać jabłka*	2. brak znaczenia

Table 12.

богате́|ть, -ю, -ешь *vi. state, intransitive*	**забогатя́в|ам, -аш** *vi. state, intransitive*	**bogac|ić się, -ę, -isz** *vi. state, aux*	**to become rich** *state, intransitive fraza werbalna*
'stawać się bogatym'	'stawać się bogatym'	'stawać się bogatym'	'stawać się bogatym'
богате́ть люды́ми спо́собами	*Зна́е как да забогатя́ва*	*bogacić się na różne sposoby*	*John became richer every day*

Table 13.

брони́р|овать, -ую, -уешь *vi. state, transitive*	**резерви́ра|м, -аш** *vi. state, transitive*	**rezerw|ować, -uję, -ujesz** *vi. state, transitive*	**book I** *state, transitive*
1. 'zapewniać sobie możliwość skorzystania z czegoś'	1. 'zapewniać sobie możliwość skorzystania z czegoś'	1. 'zapewniać sobie możliwość skorzystania z czegoś'	1. 'zapewniać sobie możliwość skorzystania z czegoś'
брони́ровать но́мер в гости́нице	*резерви́рам мя́сто във влак, ста́я в хоте́л*	*rezerwować pokój rezerwować bilet*	*He was booking a hotel room, when his Internet connection went down.*
2. 'mieć coś w rezerwie'	2. 'mieć coś w rezerwie'	2. 'mieć coś w rezerwie'	2. brak znaczenia
брони́ровать вре́мя	*резерви́рам вре́ме*	*rezerwować czas na naprawę auta*	

Table 14.

заброни́р|овать, -ую, -уешь *vp. event, transitive*	**резерви́ра|м, -ш** *vi. event, transitive*	**zarezerw|ować, -uję, -ujesz** *vp. event, transitive*	**book II** *event, transitive*
1. 'zapewnić sobie możliwość skorzystania z czegoś'	1. 'zapewnić sobie możliwość skorzystania z czegoś'	1. 'zapewnić sobie możliwość skorzystania z czegoś'	1. 'zapewnić sobie możliwość skorzystania z czegoś'
заброни́ровать но́мер в гости́нице	*резерви́рах три биле́та*	*zarezerwować pokój w hotelu*	*to book a hotel room*

Table 15.

наве|сти́ть, -щу́, -сти́шь *vp. event, transitive*	**навест|и́, -и́ш** *vp. event, transitive*	**odwiedzić, -isz** *vp. event, transitive*	**visit** *event, transitive*
1. 'udać się do kogoś w odwiedziny'	1. 'udać się do kogoś w odwiedziny'	1. 'udać się do kogoś w odwiedziny' *odwiedzić chorego*	1. 'udać się do kogoś w odwiedziny' *visit ill relatives/friends*

2. brak znaczenia	2. brak znaczenia	2. ‘udać się gdzieś w celu obejrzenia czegoś’ *odwiedzić stolicę Mołdawii*	2. ‘udać się gdzieś w celu obejrzenia czegoś’ *visit the capital of Moldova*

Table 16.

наста́ива|ть I, -ю, -ешь *vi. state, intransitive* ‘uparcie domagać się wykonania czegoś’ *наста́ивать на вы́борах*	**настоя́ва|м -аш** *vi. state, intransitive* ‘uparcie domagać się wykonania czegoś’ *настоя́вам да се извини́ш*	**nalega|ć, -am, -asz** *vi. state, intransitive* ‘uparcie domagać się wykonania czegoś’ *nalegać na skrócenie okresu*	**insist** *state, intransitive* ‘uparcie domagać się wykonania czegoś’ *he kept on insisting that I give him another chance*

Our methodology postulates that we take meaning as the point of departure, because only on the basis of meaning can equivalent forms be found. In the above examples, we can see how data from Slavic languages can easily be compared with non-Slavic languages. Although English does not have perfective and imperfective forms of verbs (in contrast to Slavic languages), the *event* and *state* meanings still exist and English verbs can be compared on the semantic plane with corresponding verbal meanings in Slavic languages. This is of paramount importance to contrastive linguistics as well as human and automatic translation.

6. Conclusions

The dictionary presents semantic and syntactic equivalents between the languages — every language is treated as equal. The complete dictionary will contain around 30 000 entries. Faithful to the latest developments in contrastive linguistics, we begin with a form from the dictionary's primary language and we define it in Polish. Subsequently, based on this definition, we try to find an equivalent in the second and the third language. Therefore, the meaning comes first and then we look for the form (i.e. the equivalent) that corresponds to this meaning. This principle, outlined in *Gramatyka konfrontatywna języków polskiego i bułgarskiego* (GKBP), allows us to treat data from multiple languages as equal. In the dictionary, we draw attention to the correct choice of equivalents in translation; we also provide categorisers that indicate the meaning of verbal tenses and aspects. The definitions of states, events and their different configurations come from the net model of verbal tense and aspect. The *transitive* vs. *intransitive* categorisers are vital for the languages in question, since they belong to two different types: synthetic (Bulgarian) and analytic (Polish and Russian). We predict that the equal status of every language in the dictionary will facilitate easier and faster development of an electronic version in the future. In this paper, we provided a number of examples that include English equivalents to show how our dictionary accommodates additional languages.

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