

Support verb combinations with existential verbs (German and Russian)

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Abstract – Résumé

The concept of the lexical functions FUNC0/OPER0 presupposes that word combinations with existential verbs should be treated as collocations. The goal of the present paper is to show that, on the basis of a suitable semantic classification of predicative nouns, one can generalize over the combinatorial properties of groups of nouns and the values of FUNC0/OPER0. However, when examining existential sentences, special treatment must be given to several semantic and communicative-referential features that influence the use of existential verbs.

Le concept de fonctions lexicales FUNC0/OPER0 présuppose que les combinaisons de mots avec des verbes existentiels doivent être traitées comme des collocations. Le but du présent article est de montrer que, sur la base d'une classification sémantique appropriée des noms prédicatifs, on peut formuler des généralisations sur les propriétés combinatoires des groupes de noms et les valeurs de FUNC0/OPER0. Néanmoins, en examinant les phrases existentielles, un traitement spécial doit être accordé à plusieurs traits sémantiques et communicatifs-référentiels qui influent sur l'emploi des verbes existentiels.

Keywords – Mots-clefs

Lexical functions FUNC0/OPER0; existential verbs; semantic classification of abstract nouns; generalization on collocations; Russian; German.

Fonctions lexicales FUNC0/OPER0, verbes existentiels, classification sémantique des noms abstraits, généralisations sur les collocations, russe, allemand.

1 Lexically restricted combinatorics

Our goal in this paper will be to generalise over the values of two lexical functions - FUNC0 and OPER0 (for a similar study on OPER1 see (Reuther 1996)). First, compare the following sentences with Russian and German existential verbs BYT' 4.1 (present form est'), BYT' 4.2 ([Ø]-present form), IMET'SJA, PROXODIT', STOJAT', SUŠCESTVOVAT', CARIT', ES GIBT, BESTEHEN, HERRSCHEN, SEIN, STATTFINDEN. They clearly show the lexically restricted combinatorial properties of these verbs with respect to abstract nouns. What we have here are the values of the lexical functions FUNC0 and OPER0 (the latter for the German verb ES GIBT).

(1a) V aktovom zale [BYT'-Ø] <*est', proxodit> vypusknoj bal. <i>In the ceremonial hall there is the final ball.</i>	(1b) Im Festsaal ist <findet> der Maturaball <statt>. <Im Festsaal *gibt es den Maturaball>.
(2a) V našem dome [Ø] <*est', proxodit, pro(iz)voditsja> remont. <i>In our house *there are repair works. <there are repair works being done></i>	(2b) In unserem Haus *sind <finden> Renovierungsarbeiten <statt>. <In unserem Haus *gibt es Renovierungsarbeiten>.
(3a) V laboratorii *[Ø] <*est', pro(iz)voditsja> analiz krovi. <i>In the laboratory *there is a blood analysis. <there is a blood analysis being carried out></i>	(3b) Im Laboratorium *ist <*gibt es, wird> eine Blutuntersuchung <durchgeführt>.
(4a) V Alžire [Ø] <est', sušcestvuet, imeetsja> ugroza graždanskoj vojny. <i>In Algeria there is <?exists> the danger of a civil war.</i>	(4b) In Algerien *ist <gibt es, besteht> die Gefahr eines Bürgerkriegs.
(5a) V našej sem'e [Ø] <*est', *sušcestvuet, *imeetsja, *carit> ssora. <i>In our family there is <*exists> a dispute.</i>	(5b) In unserer Familie ?ist <gibt es, *besteht, herrscht> Streit.
(6a) Na ulice [Ø] <*est', *carit, stoit> vesna. <i>Outside *there is <we have> spring time.</i>	(6b) Draußen ist <*gibt es, *besteht, ?herrscht> Frühling.
(7a) V etoj komnate [Ø] <*est', *carit, stoit> neprijatnyj zapax. <i>In this room there is <*governs, *reigns, *rules, *stands> a disgusting smell.</i>	(7b) In diesem Zimmer ist <*besteht, herrscht> ein unangenehmer Geruch. <In diesem Zimmer ??gibt es einen unangenehmen Geruch.>
(8a) Na cherdake byla <carila, *stojala> temnota. <i>On the roof there was <governed (poetic), *reigned, *ruled, *stood> darkness.</i>	(8b) Auf dem Dachboden *war <*gab es, *bestand, herrschte> Dunkelheit.

Figure 1.

For a detailed „lexicographic portrait“ of the Russian verb BYT' including its combinatorics see (Apresjan 1995).

2 Semantic classification of abstract nouns

For further considerations on possible generalizations on combinatorial properties we refer to the following partial semantic classification of abstract nouns. The noun classes are ordered according to two axes – the horizontal one of increasing ‘agency’ from the left to the right, and the vertical one of decreasing ‘duration of time’ from top to bottom. For Russian and German nouns falling within these semantic groups see Section 4, Fig 4.1 below.

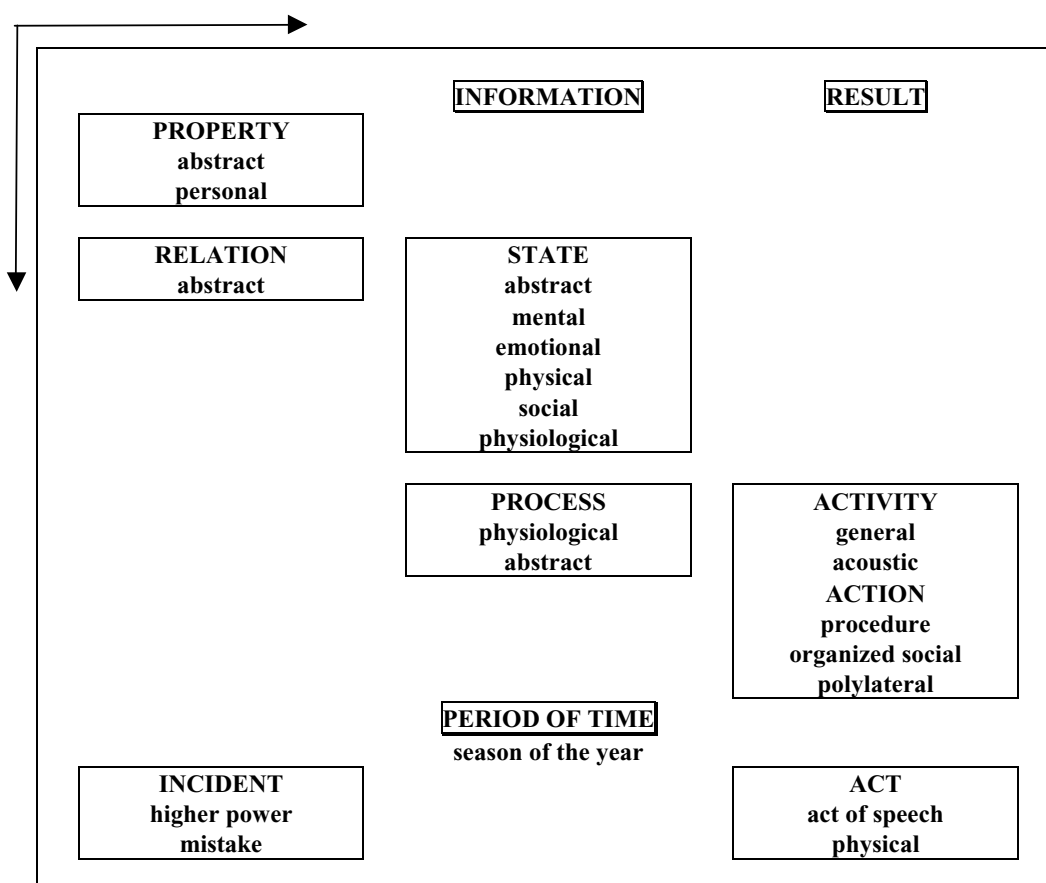


Figure 2.

3 Semantic and communicative-referential features

The semantic and communicative-referential features of existential sentences to be looked at are the following (for more information on different types of existential sentences see also (Arutjunova, Širjaev 1983)):

3.1. The semantic structure of existential sentences differs as to ‘actual existence’ vs. ‘non-actual existence’.

3.2. The basic communicative-referential structure of existential sentences is:

$([Loc]_{Theme}) + [V + S]_{Rheme}$

For detailed discussion we further consider the following types of sentences:

3.2.1. Special type I with the existential verbs in its rheme:

$$(\text{Loc}) + \downarrow V_{\text{Rheme}} + S_{\text{Theme}} ; S_{\text{Theme}} + \downarrow V_{\text{Rheme}} (+ \text{Loc})$$

3.2.2. Special type II with the noun in its rheme:

$$[(\text{Loc}) + V]_{\text{Theme}} + \downarrow S_{\text{Rheme}}$$

3.2.3. Special type III with the localizer in its rheme:

$$[S + V]_{\text{Theme}} + \downarrow \text{Loc}_{\text{Rheme}}$$

3.2.4. Special type IV with an attribute in its rheme:

$$(\text{Loc}) + V + \downarrow \text{Attr}_{\text{Rheme}} + S_{\text{Theme}}$$

The difference between ‘actual existence’ vs. ‘non-actual existence’ is shown by sentences in Fig. 3.1 below. Examples for the basic structure 3.2 were given in Fig. 1 above.

Zasedanie/Sitzung (<i>team</i>) meeting	‘actual’	‘non-actual’
Provoditsja zasedanie kafedry. Es findet eine Institutssitzung statt . <i>There is a team meeting taking place.</i>	PROVODIT’SJA STATTFINDEN	- -
Est’ osmyslennye i bessmyslennye zasedanija. Es gibt sinnvolle und sinnlose Sitzungen. <i>There are meaningful and senseless team meetings.</i>	- -	BYT’ 4.1 ES GIBT
*Est’ zasedanie kafedry. ??Es gibt (gerade) eine Institutssitzung. <i>There is a team meeting (now).</i>	*BYT’ 4.1 ??ES GIBT	- -

Figure 3.1.

The subtypes 3.2.1 – 3.2.4 are to be found in the following Fig. 3.2. The rheme of the sentences is underlined.

(1) Pocemu vy somnevaetes’? V aktovom zale est’ zasedanie. <i>Why do you doubt? In the ceremonial hall</i> <i><u>there is</u> a team meeting.</i>	(1) Warum zweifeln Sie? Im Festsaal gibt es eine Sitzung.
(2) V Moskve [Ø] rost , a ne snizenie cen . <i>In Moscow <u>there is an increase</u>, and not a</i> <i><u>decrease in prices</u>.</i>	(2) In Moskau gibt es einen Anstieg , und kein Sinken der Preise.
(3) Zasedanie [Ø] v aktovom zale . <i>The team meeting is in the ceremonial <u>hall</u>.</i>	(3) Die Sitzung ist im Festsaal .
(4) V Moskve [Ø] bol’soj rost cen. <i>In Moscow <u>there is a big increase</u> in prices.</i>	(4) In Moskau gibt es einen starken Anstieg der Preise.

Figure 3.2.

Six important generalizations over different features of existential sentences can be named:

1. 'Non-actual existence' in Russian and German is expressed by **free** word combinations with the lexemes BYT' 4.1 and ES GIBT, cf. Fig. 3.1 and also the following example: *Est' strax i est' vostorg - eto dva raznyx cuvstva. Es gibt Angst und es gibt Begeisterung - das sind zwei verschiedene Gefühle. There is fear and there is enthusiasm - these are two different feelings.* Consequently, the meaning 'non-actual existence' is **no significate** of the lexical functions FUNC0/OPER0 and emerges semantically from the lexical meaning of the given existential verbs.
2. 'Actual existence' in Russian and German is expressed by **lexically restricted** word combinations (collocations) with the lexemes BYT' 4.1, BYT' 4.2 (and other Russian existential verbs), ES GIBT, SEIN (and other German existential verbs). Consequently, this meaning is a **significate** of the lexical functions FUNC0/OPER0, cf. Fig. 1 and Fig. 3.1. above.
3. Sentences with rhematic existential verbs (Type 3.2.1) allow for a wider use of BYT' 4.1 and ES GIBT, cf. Fig. 3.1 vs. Fig. 3.2, sentence (1).
4. Sentences with rhematic noun (Type 3.2.2) allow for a wider use of BYT' 4.2 and ES GIBT, cf. Fig. 3.2, sentence (2) vs. the same example with the basic communicative-referential structure of existential sentences: *V Moskve nabljudajtsja <??[Ø]> rost cen. In Moskau ist ein Preisanstieg zu beobachten. <In Moskau ??gibt es einen Preisanstieg.> In Moscow ??there is an increase in prices.*
5. Sentences with rhematic localization (Type 3.2.3) always take localizing verbs, not existential verbs, cf. Fig. 3.2, sentence (3) with BYT' 2.1 (local) and SEIN (local). Consequently, this meaning is **no significate** of the lexical functions FUNC0/OPER0.
6. Sentences with rhematic attributives (Type 3.2.4) allow for a wider use of BYT' 4.2 and ES GIBT, cf. Fig. 3.2, sentence (4) vs. the same example with the basic communicative-referential structure as mentioned above.

Consequently, generalizations over the value of the lexical functions FUNC0/OPER0 are relevant only for the meaning of 'actual existence' and should be tested under the basic communicative-referential structure of existential sentences.

4 Combinations of nouns and existential verbs

Let us now consider combinations of nouns and existential verbs in the context of the basic structure of existential sentences. **Fig. 4. 1** comprises all noun classes from Fig. 2 and the verbs **BYT' 4.1, BYT' 4.2, ES GIBT** and **SEIN**. For easier reference the grey zone of SEIN refers to the grey zones in Fig. 4.4 and Fig. 4.6 below. Brackets around verbs indicate that the combinations with nouns from the respective class are either idiosyncratically more restricted even within this class or that there might be particular stylistic restrictions. Additional verbs (byt' 2.1, pro(iz)vodit'sja, proizojti, durchführen, haben) are given to show what lexemes can be used instead of our FUNC0/OPER0-type verbs. As for the German verb HERRSCHEN see Fig. 4.5 below. The numbering of noun lexemes cannot be motivated due to the lack of space. For our purpose it is enough to be aware of the fact that several given nouns have different meanings (cf. *change* can mean a 'process' or a 'result of this process' - Veränderung 2a/izmenenie 2a, *analysis* can mean an 'action' - Untersuchung 1/analiz 1- or the 'result of this action').

Information <i>problem</i> general	Problem problema	BYT' 4.1	ES GIBT	-
Information <i>plan, question</i> mental, act of speech	Plan, Frage plan, vopros	BYT' 4.1	ES GIBT	-
Result <i>change</i> of a process, action, incident	Veränderung 2a izmenenie 2a	BYT' 4.1	ES GIBT	
Property <i>analphabecy</i>	Analphabetentum negrarnost'	-	ES GIBT	-
Relation <i>connection</i> abstract	Zusammenhang svjaz'	BYT' 4.1	ES GIBT	(SEIN)
State <i>danger, possibility</i> abstract	Gefahr, Möglichkeit ugroza, vozmožnost'	BYT' 4.1	ES GIBT	-
State <i>opinion, doubt</i> mental	Meinung, Zweifel mnenie, somnenie	BYT' 4.1	ES GIBT	-
State <i>fear, enthusiasm</i> emotional	Angst, Begeisterung strax, vostorg	byt' 2.1	HERRSCHEN	-
State <i>influenza</i> physical	Grippe gripp	(BYT' 4.2)	haben	-
State <i>dispute, war</i> social	Streit 1b, Krieg 1b ssora 1b, vojna 1b	(BYT' 4.2)	ES GIBT	(SEIN)
State <i>smell, darkness</i> physiological	Geruch, Dunkelheit zapax, temnota	BYT' 4.2	HERRSCHEN	(SEIN)
Process <i>rain, thunderstorm</i> physiological	Regen, Gewitter dožd', groza	BYT' 4.2	ES GIBT	SEIN
Process <i>raise/increase</i> abstract	Anstieg/Zunahme rost	(BYT' 4.2)	(ES GIBT)	-
Activity <i>repair works</i> general	Reparaturarbeiten remont(nye raboty)	(BYT' 4.2)	(ES GIBT)	-
Activity <i>shouting</i> acoustic	Geschrei krik	(BYT' 4.2)	(ES GIBT)	SEIN
Action <i>complex analysis</i> procedure	Untersuchung 1 analiz 1	pro(iz)- vodit'sja	durchführen	-
Action <i>ball, meeting</i> organized social	Ball, Sitzung bal, zasedanie	BYT' 4.2	ES GIBT	SEIN
Action <i>negotiations</i> polylateral	Verhandlungen peregovory	(BYT' 4.2)	(ES GIBT)	SEIN
Incident <i>accident</i> higher power	Unfall katastrofa	BYT' 4.2	ES GIBT	SEIN
Incident <i>mistake</i> mistake	Fehler 1 ošibka 1	proizojti	ES GIBT	-
Act of <i>order, murdering</i> speech, physical act	Befehl 1, Mord prikaz 1, ubijstvo	(BYT' 4.2)	(ES GIBT)	-
Period <i>spring time, vacation</i> of time	Frühling, Ferien vesna, kanikuly	BYT' 4.2	(ES GIBT)	SEIN

Figure 4.1.

The following **Fig 4. 2** comprises only part of the nouns from Fig. 4.1 (the upper half) and the verbs used in combination with these nouns - **SUŠCESTVOVAT'**, **IMET'SJA** (as well as

BESTEHEN due to its collocational closeness to **SUŠCESTVOVAT'**). The grey zone of **SUŠCESTVOVAT'** and **IMET'SJA** refers to the grey zone in Fig. 4.3 and Fig. 4.6 below.

Information <i>problem</i> general	Problem problema	SUŠCEST- VOVAT'	(IMET'- SJA)	(be- stehen)
Information <i>plan, question</i> mental, act of speech	Plan, Frage plan, vopros	(SUŠCEST- VOVAT')	(IMET'- SJA)	(be- stehen)
Result <i>change</i> of a process, action, incident	Veränderung 2a izmenenie 2a	(SUŠCEST- VOVAT')	(IMET'- SJA)	-
Property <i>analphabecy</i>	Analphabetentum negrarnotnost'	-	-	-
Relation <i>connection</i> abstract	Zusammenhang svjaz'	SUŠCEST- VOVAT'	IMET'- SJA	be- stehen
State <i>danger, possibility</i> abstract	Gefahr, Möglichkeit ugroza, vozmožnost'	SUŠCEST- VOVAT'	IMET'- SJA	be- stehen
State <i>opinion, doubt</i> mental	Meinung, Zweifel mnenie, somnenie	SUŠCEST- VOVAT'	IMET'- SJA	be- stehen
State <i>fear, enthusiasm</i> emotional	Angst, Begeisterung strax, vostorg	-	-	-
State <i>influenza</i> physical	Grippe gripp	-	-	-
State <i>dispute, war</i> social	Streit 1b, Krieg 1b ssora 1b, vojna 1b	-	-	-
State <i>smell, darkness</i> physiological	Geruch, Dunkelheit zapax, temnota	-	-	-

Figure 4.2.

The interpretation of Fig. 4.1. - Fig. 4.2. is the following:

1. **Russian** verbs **BYT' 4.1** and **BYT' 4.2** are distributed complementarily as related to different noun classes. This distribution marks the collocational aspect of these two lexemes according to (Apresjan 1995). Alternatives of **BYT' 4.1** and **BYT' 4.2** are given when these two lexemes do not combine with the respective noun class.
2. In **German** the wide combinatorial potential of **ES GIBT** contrasts to the small combinatorial potential of **SEIN**. Alternatives of **ES GIBT** and **SEIN** are given when these two lexemes do not combine with the respective noun class.
3. **Russian** verbs **SUŠCESTVOVAT'**, **IMET'SJA** and the **German** verb **BESTEHEN** show a limited and almost equivalent distribution among noun classes.

The following **Fig. 4.3** and **Fig. 4.4** show the quite different “topological” distribution of the Russian verbs verbs **BYT' 4.1** (present form *est'*) - single frame, **BYT' 4.2** ([Ø]-present form) - double frame, **SUŠCESTVOVAT'/IMET'SJA** - grey zone, and the German verbs **ES GIBT** - double frame and **SEIN** - grey zone among noun classes.

Noun classes that **do not combine** with our verbs are put in dotted frames.

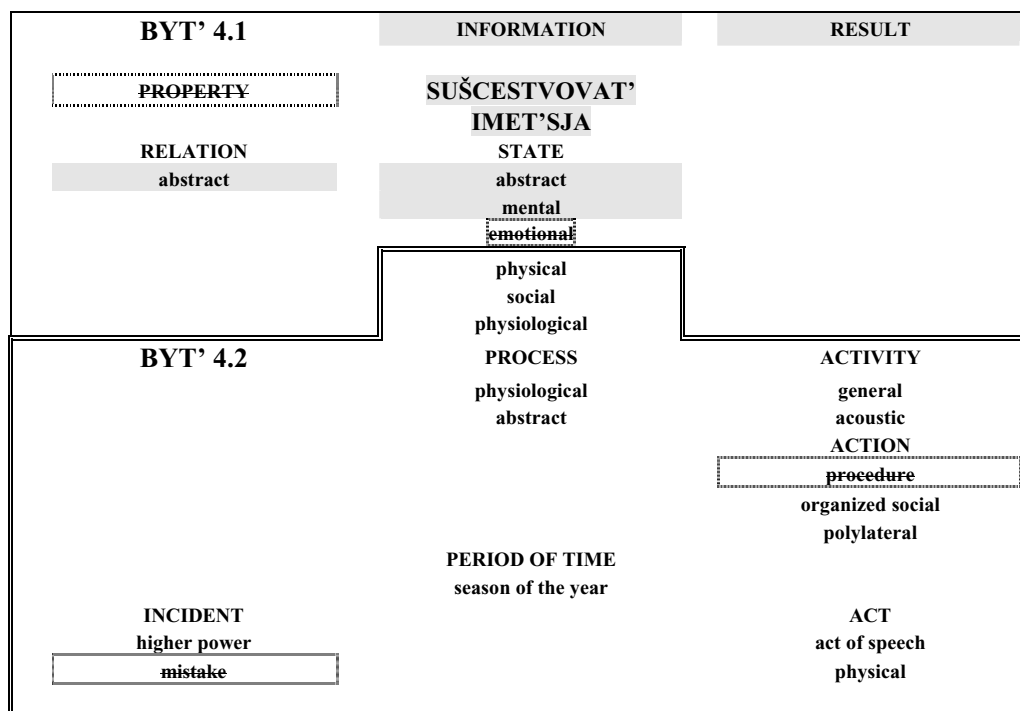


Fig. 4.3.

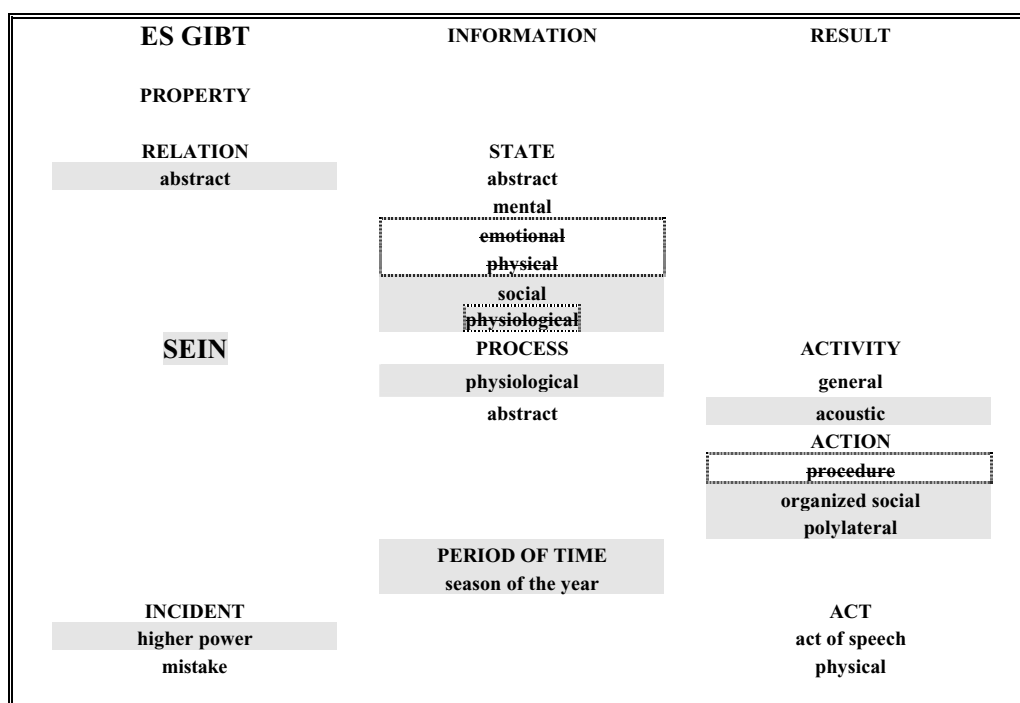


Figure 4.4.

Let us proceed now with the verbs **CARIT'**, **STOJAT'**, **HERRSCHEN**, **BESTEHEEN**. The following **Fig. 4.5** gives an overview of the combinatorial potential of these more “marginal” existential verbs. For an interpretation of Fig. 4.5 see below.

Support verb combinations with existential verbs

Information <i>problem</i> general	Problem problema	-	-	(BE- STEHEN)
Information <i>plan, question</i> mental, act of speech	Plan, Frage plan, vopros	-	-	BE- STEHEN
Result <i>change</i> of a process, action, incident	Veränderung 2a izmenenie 2a	-	-	-
Property <i>analphabecy</i>	Analphabetentum negramotnost'	CARIT'	HERR- SCHEN	-
Relation <i>connection</i> abstract	Zusammenhang svjaz'	-	-	BE- STEHEN
State <i>danger, possibility</i> abstract	Gefahr, Möglichkeit ugroza, vozmožnost'	-	-	BE- STEHEN
State <i>opinion, doubt</i> mental	Meinung, Zweifel mnienie, somnenie	(CARIT')	HERR- SCHEN	BE- STEHEN
State <i>fear, enthusiasm</i> emotional	Angst, Begeisterung strax, vostorg	(CARIT')	HERR- SCHEN	-
State <i>influenza</i> physical	Grippe gripp	(CARIT')	(HERR- SCHEN)	-
State <i>dispute, war</i> social	Streit 1b, Krieg 1b ssora 1b, vojna 1b	-	HERR- SCHEN	-
State <i>smell, darkness</i> physiological	Geruch, Dunkelheit zapax, temnota	STOJAT' CARIT'	HERR- SCHEN	-
Process <i>rain, thunderstorm</i> physiological	Regen, Gewitter dožd', groza	-	-	-
Process <i>raise/increase</i> abstract	Anstieg/Zunahme rost	-	-	-
Activity <i>repair works</i> general	Reparaturarbeiten remontnye raboty	-	(HERR- SCHEN)	-
Activity <i>shouting</i> acoustic	Geschrei krik	STOJAT'	HERR- SCHEN	-
Action complex <i>analysis</i> procedure	Untersuchung 1 analiz 1	-	-	-
Action <i>examination</i> organized social	Prüfung ekzamen	-	-	-
Action <i>negotiations</i> polylateral	Verhandlungen peregovory	-	-	-
Incident <i>accident</i> higher power	Unfall katastrofa	-	-	-
Incident <i>mistake</i> mistake	Fehler 1 ošibka 1	-	-	-
Act of <i>order, murdering</i> speech, physical act	Befehl, Mord prikaz, ubijstvo	-	-	-
Period <i>spring time, vacation</i> of time	Frühling, Ferien vesna, kanikuly	(STOJAT')	(HERR- SCHEN)	-

Figure 4.5.

The interpretation of Fig. 4.5 is the following:

1. The two **German** verbs BESTEHEN and HERRSCHEN show a much greater combinatorial potential than the **Russian** verbs STOJAT' und CARIT'.
2. In the upper part of the table (i.e. in the area of 'quasi-objects' and 'non-dynamic situations') the two **German** verbs HERRSCHEN und BESTEHEN taken together provide combinations with all noun classes, mostly in complementary distribution. The **Russian** verbs STOJAT' and CARIT' are collocationally much more restricted, especially CARIT'.
3. In the lower part of the table (i.e. in the area of 'dynamic, temporarily limited situations') only 'activities' combine with the verbs STOJAT' and HERRSCHEN. Besides that both verbs combine with 'periods of time'. Combination with 'processes', 'actions' und 'incidents' are excluded from combinations with our verbs.

Let us finally consider the areas of combinatorial intersection between our verbs:

	BYT' 4.1	BYT' 4.2	SUŠCESTVOVAT'	IMET'SJA
ES GIBT	+	+	+	+
SEIN	-	+	-	-

Figure 4.6.

	STOJAT'	CARIT'
BESTEHEH	-	-
HERRSCHEN	+	+

5 Conclusion

Quite obviously, the lexical functions FUNC0/OPER0 allow for generalizations over their values, as did the lexical function OPER1, cf. (Reuther 1996). We managed to show that, on the basis of a suitable semantic classification of predicative nouns (Fig. 2), one can generalize over the combinatorial properties of groups of nouns and existential verbs. However, only sentences with the meaning of 'actual existence' provide a proper field for the study of lexically restricted word combinations. Other types of existential sentences allow for a wider use of ES GIBT, BYT' 4.1 and BYT' 4.2 respectively (Fig. 3 – 3.2). Our work was carried out on Russian and German existential verbs and we were able to show clear language specific combinatorial features of abstract nouns with existential verbs (Fig. 4.1 – 4.6).

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