Light Verbs in Slovak¹

Martina Ivanová, *Prešov University, Faculty of Arts (Slovakia)* ivanovmartina@gmail.com

Received: August 1, 2014. Accepted: September 28, 2014.

ABSTRACT

The paper aims at a lexical description of light verbs (LVs) in Slovak, with some implications for processing such verbs within the project of preparing the Dictionary of Multi-Word Naming Units. Analysis based on data gained from the Slovak National Corpus aims at a description of their status from the perspective of lexicalization and grammaticalization theory. The semantic status of LVs is discussed in theoretical works ranging from opinions favouring semantic emptiness of LVs, to assuming that LVs are not empty of meaning and have semi-lexical status. Corpus data also serve as the basis for an investigation of non-composionality, non-substitutability and non-modifiability as well as productivity patterns of particular LVCs. The paper also examines the opinions according to which LVs are in the initial stages of grammaticalization. In the paper Himmelmann's idea (2004) of grammaticalization and lexicalization as processes that can be orthogonal or may even run in parallel is adopted.

Keywords: light verb, light verb construction, lexicalization, grammaticalization, multiword expression.

1. Introduction

The paper aims at a usage-based description of the semantic and syntactic facets of so called light verb constructions (LVCs) and light verbs (LVs) (see also notions such as support verbs, functional verbs, categorial verbs in different theoretical works). It is part of the project APVV-0342-11 *Dictionary of Multiword Expressions in Slovak (lexicological, lexicographic and comparative research)* aimed at the preparation of the *Dictionary of Multiword Expression in Slovak* (c.f. Ološtiak, Ivanová, and Genči, 2012).

The outline of the paper is as follows: Section 2 makes the reader familiar with the state of the art concerning approaches to LVCs in foreign and Slovak scientific literature and presents the methodology that was used for conducting the research. Section 3 presents the way of gaining the data and specifies the material that was analysed in the paper. Section 4 gives the definition and characteristics of LVs and LVCs. In Section 5 the relation of LVs to the processes of lexicalization and grammaticalization is described and it provides elaboration of different criteria applied for lexicalization and grammaticalization processes with respect to LVCs. Finally, Section 6 summarizes the findings and presents the future perspective of the research.

2. Current state of art

LVCs and LVs have received considerable attention from linguists with highly diverse theoretical backgrounds. Several works analysing LVCs and LVs from different aspects can be mentioned, e.g. analysis of syntax-semantic interface in Wierzbicka (1982), Kearns (1988), Butt (2010), analysis within generative approach in Grimshaw, and Mester (1988), Elenbaas (2011), LVs and LVCs as a result of grammaticalization and lexicalization processes

¹This work was supported by Slovak Research and Development Agency on the basis of the contract n. APVV-0342-11.

in Brinton (2011), analysis within a functional approach in Apresjan (2009), analysis within a cognitive approach in Newman (1996), Norvig, and Lakoff (1987), analysis of the semantic status of LVs in Butt, and Geuder (2001), LVs and polysemy in Brugman (2001), LVs and lexicographic presentation in Kotsyba (2007), stylistic constraints on LVCs in Shahrokny, and Höche (2011), statistical measures for automatic identification of LVCs in Stevenson, Fazly, and North (2004), Fazly (2007), etc.

Within the Czech and Slovak linguistic context the works of several authors can be mentioned, such as Macháčková (1979), Cinková, and Kolářová (2006), Cinková (2009), Radimský (2010), Kettnerová, and Lopatková (2013) for Czech, Jarošová (1999, 2000, 2007), Kačala (1993, 1997), Kralčák (2005), Ološtiak (2011), Ivanová, and Kyseľová (2012) for Slovak.

3. Definition and characteristics of LVs and LVCs

LVCs have a bipartite structure: they consist of a nominal and a verbal component. They represent a type of complex predicate where two syntactic elements serve as a single predicate. There are several classes of predicative nouns (P-noun) in Slovak depending on their semantics: event nominals (such as *výskum* 'investigation'), resultative nominals (such as *rada* 'advice'), state nominals (such as *strach* 'fear', *hlad* 'hunger') and abstract nouns (such as *rozum* 'wisdom, brains'), usually diachronically related to verbs.

Due to their semantic and syntactic characteristics, LVs and LVCs pose a challenge to analysis of their semantic-syntactic interface. There are different approaches to the understanding of the function of a LV within a LVC. According to some authors, in this construction, the meaning of a noun strongly contributes to the meaning of the whole construction, and the meaning of a verb is construed just schematically (Radimský, 2010). Contrary to the claim that LVs are semantically empty verbs, some researchers defend the viewpoint that the lexical selection of LVs is based on their meaning (the hypothesis of the semantic compatibility, c.f. Sanromán Vilas, 2011). Some author claim that LVs have a semilexical status and the amount of content they contribute and the nature of that content usually depends on the particular LV itself. Within this approach LVs are characterised as semantically "bleached" verbs or as verbs with weakened meaning (Butt, 2010).

LVCs are usually distinguished from productive or literal verb + noun constructions on the one hand and idiomatic verbo-nominal expressions on the other hand, e.g.

```
(1) Budúcim prvákom dali darčeky.

'They gave presents to the future first-grade students.'
(literal verb + noun construction)
```

(2) Dám krk, že tie listy písal on. 'I'll bet that he has written these letters.' (idiom)

(3) Dala mu bozk. 'She gave him a kiss.' (light verb construction)

4. Data

The present paper makes use of corpus data from the Slovak National Corpus and monolingual dictionaries of Slovak. The current version, prim-6.1, has been available since September 2013. The publicly available corpus contains more than 829 771 945 tokens (comprising 68.8 % journalistic texts, 13.9 % fiction, 15.3 % scientific texts and 2 % other texts).

5. Light verbs and lexicalization/grammaticalization processes

In many theoretical studies LVCs were analysed as examples of lexicalization (usually followed by idiomatization). On the other hand, several authors (Brinton, and Traugott, 2005; Elenbaas, 2011) claim that the changes LVCs undergo resemble those ones characteristic of grammaticalization.

According to Himmelmann (2004) there are two different approaches to the processes of lexicalization and grammaticalization. Within the first approach, lexicon and grammar are seen as two boxes, the first one full of lexical items, the second one full of grammatical items. L/G represents processes that lead to changes from one box into another. This approach is sometimes called *box metaphor*. Within the second approach – L/G are processes that affect a lexical item or a grammatical construction in various ways, these processes can be orthogonal or may even run in parallel. The problem of the first approach lies in the expectation that necessary and sufficient conditions can be established for delicate grammatical and lexical categories, as opposed to characterizations of typical features.

It remains a debated question what exactly constitutes the difference(s) between grammaticalization and lexicalization, or how they may or may not interact in a given linguistic change. The hypothesis is that in lexicalization, constructions become less general, less productive, and less compositional (see Bybee, Perkins, and Pagliuca 1994 for these criteria). By contrast, in grammaticalization, constructions become more general and more productive; they do, however, also become less compositional through the processes of fixation and coalescence (see Himmelmann 2004 for a related discussion).

Investigating LVCs and LVs, it is obvious that there are two groups of items (with no clear-cut boundaries existing between them): there are LVCs with evident regularity of syntactic patterning forming productive models and LVCs which are more or less fossilised and idiosyncratic. The existence of these two groups will become clearer mostly through analysis of LVCs with the verbs of giving/receiving on the one hand and executive verbs (verbs expressing an action) on the other hand.

5.1. Light verbs and lexicalization

Lexicalization processes are characteristic of producing idiomaticized meaning, highly specified semantic content, low pattern productivity and fossilization. Lexicalization is usually connected with characteristics such as non-compositionality, non-modifiability, non-substitutability.

Some LVCs are rather conventionalized and they can be processed applying methods developed for multiword expressions.

(a) non-composionality

The level of non-composionality of a particular LVC depends on the status of the LV. A higher level of composionality is typical for LVCs with LVs having general meaning whereas LVs having a more specific meaning from less productive patterns, e.g. the non-composionality of complex predicates with the meaning of physical contact differ with respect to an LV that is used: the general LV dat produces several possible combinations, such as dat bozk '(give a) kiss', dat facku '(give a) slap', dat úder '(give a) stroke', whereas LVs with more specific meaning show a lower degree of compositionality vlepit bozk, vtlačit bozk, vtisnút bozk, but not *vtlačit úder, *vtlačit facku, *vtisnút úder, *vtisnút facku; uštedrit úder, uštedrit facku, but not *uštedrit bozk, strelit facku, vylepit facku, struhnút facku, but not *strelit úder, *vylepit úder, *struhnút úder, *strelit bozk, *vylepit bozk, *struhnút bozk.

It seems that some LVCs are not conventionalized, but rather formed according to a common, relatively productive pattern. Research shows that certain LVs have some degree of systematic and predictable behaviour with respect to the class of their complement and can be formed according to productive rules. For example, the LV dat'('give') in Slovak tends to combine with non-verbal illocution nouns such as dat' pokyn 'give instruction', prikaz 'give an order', rozkaz 'give an order', návrh 'give a proposal', podnet 'give an impulse', radu 'give advice' (directives), dat' odpoved' 'give an answer' (interrogatives), dat' povolenie 'give permission', súhlas 'give approval' (permissive). These rather productive patterns diminish the non-composionality of LVCs.

On the other hand in some LVCs, the LV imposes selectional restrictions on the noun, e.g. dat' život 'give life' – *dat' smrt' 'give death', dat' do obehu 'give into circulation' – *dat' do kolobehu, *dat' do cirkulácie.

Non-composionality of some LVCs is connected with a higher level of their semantic idiosyncrasy – their meaning cannot be computed solely on the basis of the meaning of their parts and their connection. The most typical examples are idioms, where the meaning of the whole construction has usually nothing to do with the meaning of its parts. In LVCs, the meaning of the whole construction is related to the meaning of its parts: traditionally the meaning has been attributed to the noun, although it will be argued that the verb also contributes.

To investigate the semantic idiosyncrasy the degree of semantic transposition can be measured. To manifest the degree of semantic transposition the LVCs dostat' rozhrešenie 'get absolution', dostat' pokarhanie 'get a reprimand (lit.), be/get reprimanded' and dostat' hlad 'get a hunger (lit.), get hungry', dostat' smäd 'get a thirst (lit.), get thirsty', dostat' záchvat 'get a stroke (lit.), get stroked' can be compared. LVs from the first group preserve the general semantic component of recipiendi meaning which can be proved by the existence of the parallel converse structures dostat' rozhrešenie 'get absolution' – dat' rozhrešenie 'give absolution', dostat' pokarhanie 'get a reprimand (lit.), get reprimanded' – dat' pokarhanie 'give a reprimand (lit.), reprimand'. The items from the second group do not have converse pendants: dostat' hlad 'get a hunger (lit.), get hungry' – *dat' hlad 'give hunger', dostat' záchvat 'get a stroke (lit.), get stroked' – *dat' záchvat 'give a stroke'. The existing collocations with the verb give represent pseudoconverse pendants: dostat' chut' 'get the taste for, to have an urge' – dat' chut' 'give someone the taste for (lit.), to encourage, prompt, give enthusiasm':

- (4) Teraz dostal na dievčatá chuť.
- 'He's got a taste for girls now.'
- (5) Gospel mi dal chuť znova spievať.

In this respect verbs in LVCs *dostať hlad* 'get the hunger for something', *dostať smäd* 'get the thirst for something', *dostať záchvať* 'get a stroke (lit.), get stroked' have more figurative meaning (in comparison with *dostať rozhrešenie* 'get absolution', *dostať pokarhanie* 'get a reprimand (lit.), get reprimanded'). The higher level of semantic transposition intensifies the level of idiomaticization and supports the lexicalised status of LVC.

What differs lexicalized LVCs from idioms, is that they are at least partly predictable, e.g. within the group of LVCs having the meaning of the psychophysiological state the following metaphoric models can be postulated: POSSESSION-to-STATE *mat' depresiu* 'to have depression/be depressed', RECEIVING-to-STATE INCEPTION *dostat' depresiu* 'to get depression', LOSS in FIGHT-to-STATE INCEPTION *podl'ahnút' depresii* 'to succumb to depression', SPACE-to-STATE INCEPTION *padnút' do depresie* 'to fall into depression'.

(b) non-modifiability

Fixed expressions do not exhibit a syntactic variability: they cannot be modified. This feature is mentioned as non-modifiability in Manning, and Schütze (1999).

The lexicalization of the construction 'light verb + noun' is questioned by the intervention of an adjective between the light verb and noun and the possibility to separate the light verb and the noun in passive constructions (Brinton, 2011, p. 566).

There are two groups of LVs in this respect: within the first group, modifying P-noun with an adjective is a common process, within the second group, adjective modification is quite rare. It can be manifested by comparing the LVC with LV *dostat* 'get' and the LVC with LV *robit* 'make/do'. Corpus data show following patterns of behaviour:

dostať + noun	dostať + ADJ + noun	robit' + noun	robit' + ADJ + noun
dostať rozum: 325 'to get the brains (lit.)'	dostať ADJ rozum: 6	robit' výskum: 429 'to do investigation/ research'	robiť ADJ výskum: 210
dostať odvahu: 34 'to get courage'	dostať ADJ odvahu: 0	robit' prieskum: 540 'to do examination/a survey'	robiť ADJ výskum: 181
dostat' smäd: 21 'to get the thirst for'	dostať ADJ smäd: 1	robit' reformu/reformy: 278 'to do reform(s)'	robiť ADJ reformu/ reformy: 130
dostať hlad: 41	dostať ADJ hlad: 8	robiť zmenu/zmeny: 453	robiť ADJ zmenu/zmeny:
'to get the hunger for'	T 11 1 4 F C 1 F C	'to make change(s)'	311

Table 1. Adjectival modification in selected LVCs in Slovak.

The corpus data have proved that within the LVCs with the LV *dostat'* adjectival modification is less frequent, even rare whereas in LVCs with the LV *robit'* it is very frequent. The presence of an adjective modifying P-noun within a LVC diminishes the degree of non-

^{&#}x27;Gospel made me sing again.'

modifiability thus making it less lexicalized.

Another aspect of non-modifiability is represented by the incomplete paradigm of nominal components within LVCs, e.g. in the LVC *dostat' rozum* ('to get the brains (lit.), to become smart') the number of nominal components cannot be changed from singular into plural without a change in meaning. LVC *dostat' rozumy* has a different meaning ('to get advice'). On the other hand there is a group of LVSc in which the change of P-noun from singular into plural is rather regular and does not change the meaning of the construction, e.g. *dostat' pokarhanie* 'to get a reprimand'— *dostat' pokarhania* 'to get reprimands'.

The same applies to aspectual characteristics of some LVs, e.g. the LVC *urobit' pokus* with a perfective verbal component has the meaning 'try', whereas the LVC *robit' pokus* with its imperfective aspectual counterpart *robit'* has completely different meaning 'to do an experiment'.

(c) non-substitutability

Lexical idiosyncrasy refers to the fact that the parts of a given lexicalized (multiword) expression cannot be substituted by another word of similar meaning without losing its meaning. This phenomenon is also called non-substitutability (Manning, and Schütze 1999).

In the group of Slovak LVCs, a higher measure of non-substitutability is typical for LVs with specific meaning, e.g. within the group of LVs with agentive/executive meaningthere are units *páchať*, *dopustiť* sa ('commit') which can be combined only with P-nouns which have the semantic component [mischievous, forbidden] in their semantic structure. On the other hand, some LVCs allow interchangeability of LVs with little semantic significance: (u) robiť/spraviť reformu – vykonať reformu – uskutočniť reformu – zrealizovať reform 'to do/ realize reform'.

Nevertheless, even the LVCs with rather productive patterns do not show absolute regularity, e.g. LVCs with agentive/executive LVs urobit'/spravit', vykonat', uskutočnit' and zrealizovat' have slightly different distributional patterns: the noun rozhodnutie 'decision' typically combines with LV robit'/urobit', but less frequently with LVs vykonat'/vykonávat', uskutočnit'/uskutočňovat', realizovat'/zrealizovat', the noun útok 'attack' combines with the LV uskutočnit'/uskutočňovat', but less frequently or even rarely with LVs robit'/urobit', vykonat'/vykonávat', realizovat'/zrealizovat', the noun dozor 'control' typically combines with LV vykonat'/vykonávat', but rarely with LVs robit'/urobit', uskutočnit'/uskutočňovat', realizovat'/zrealizovat', the noun výstavba 'building' typically combines with the LV realizovat'/zrealizovat', but rarely with LVs robit'/urobit', vykonat'/vykonávat', uskutočnit'/uskutočňovat', see the following table:

	robiť/urobiť	vykonať/ vykonávať	uskutočniť/ uskutočňovať	realizovať/ zrealizovať
rozhodnutie	779	41	13	13
útok	33	12	51	4
dozor	35	223	2	0
výstavbu	19	7	7	328

Table 2. Collocation patterns of agentive/executive LVs in Slovak.

The most open collocation paradigm is characteristic for the LV robit' and vykonat/vykonávat', however, the second one never combines with communication nouns (*vykonat/vykonávat' rozhovor, vykonat/vykonávat' krik). The LVs vykonat/vykonávat', uskutočnit/uskutočňovat', realizovat/zrealizovat' never combine with nouns implicating unintended events, such as robit' zmätok 'to make a disturbance', robit' chybu 'to make a mistake' (*vykonat/vykonávat' zmätok, *uskutočnit/uskutočňovat' zmätok, *realizovat/zrealizovat' zmätok, *vykonat/vykonávat' chybu, *uskutočnit/uskutočňovat' chybu, *realizovat/zrealizovat' chybu).

5.2. Light verbs and grammaticalization

The number of phenomena which are gathered together under the term grammaticalization is quite large and in some ways quite diverse. It includes such processes as the development of syntax out of discourse, subjectification (pragmatic strengthening), clause combining and class fusion as well as the grammaticalization of lexical items into function words.

In grammaticalization theory, the existence of non-transparent and transparent readings (and possible gradations in between) has come to be interpreted in terms of a development from full lexical meanings to grammatical ones. The appeal of LVs to grammaticalization theory is largely a semantic one; what makes LVs so attractive to this framework is their semantic ambiguity. It can be pointed out that LV is ambiguous between two readings: full lexical and auxiliary.

To investigate grammaticalization, processes applying to LVs Lehmann's parameters will be used. Fischer and Rosenbach (2000, p. 24) present the following table which has been slightly adapted from Lehmann (1982, p. 306) in order to indicate the processes taking place in grammaticalization; the parameters illustrate the degree to which a particular linguistic item has grammaticalized.

Parameters	Paradigmatic processes	Syntagmatic processes
Weight	1a. (loss of) integrity	2a. (reduction of) scope
Cohesion	1b. (increase in) paradigmaticity	2b. (increase in) bondedness
Variability	1c. (loss of) paradigmatic variability: increase in obligatoriness	2c. (decrease in) syntagmatic variability

Table 3. Diachronic stages in the process of grammaticalization.

(1a) loss of integrity – desemantization

The integrity of an autonomous linguistic sign is formed by its semantic and phonological content. Through a process of attrition, the sign loses its semantic content (a process named semantic bleaching in literature).

First of all, LVs are characterized by (semantic) bleaching or desemantization. The grammaticalization cline involves 'upward reanalysis' in the direction full lexical verb > verb of vague action > light verb > auxiliary.

It was repeatedly pointed out in literature (c.f. Traugott, 1982), that desemantization necessarily patterns with resemantization, since grammaticalized items pick up new

semantic values. By virtue of the principle of persistence, or retention (Bybee et al., 1994), grammatical distribution of LVs may be constrained by the vestiges of their lexical history. Resemantization of LVs can be seen in semantic-pragmatic expansion. It is manifested by the fact that the original meanings of full lexical verbs can be neutralized in an LVC and aspectual components are added to the eventive meaning of LV.

According to some authors (Grepl, and Karlík, 1998) predicates tend to cluster into groups the members of which differ with respect to the presence of the categorial semantic component in their semantic structure. Three categorial components are set in this respect: [-MUTATION], [+SIMPLE MUTATION], [+ACTION MUTATION], e.g. mat' nádej/nádejat' sa 'to have hope' [-MUTATION] – získat' nádej 'to get hope' [+SIMPLE MUTATION] – dat' nádej 'to give hope' [+ACTION MUTATION], byt' rozpačitý 'to be bewildered' [-MUTATION] – upadnút' do rozpakov/zrozpačitiet' 'to fall into embarrassment (lit.), to get bewildered' [+SIMPLE MUTATION] – priviest' do rozpakov 'to lead into embarrassment (lit.), to embarrass' [+ACTION MUTATION]. Here the function of LVCs is to fill the empty slot within the given families of predicates.

Aspectual functions of some LVs are important, e.g. in the group of adopted verbs which are imperfective and do not have, as yet, aspectual counterparts LVs are used to express perfective meanings: bilancovat' – x, robit' bilanciu – urobit' bilanciu 'to balance', kalkulovat' – x, robit' kalkuláciu – urobit' kalkuláciu 'to calculate'.

With some group of predicates the existence of LVC is the only way to express ingressive meaning. It is typical especially for some predicates within the group of activities: pustit'sa do bitky 'to start fighting', pustit'sa do roboty 'to start working', pustit'sa do práce 'to start working', pustit'sa do boja 'to start fighting', accomplishments: pustit'sa do hl'adania 'to start searching', pustit'sa do prípravy 'to start providing', pustit'sa do čítania 'to start reading', pustit'sa do rekonštrukcie 'to start reconstructing'. Ingressiveness can also be expressed by phase verbs in Slovak (začať 'to begin' + Verb), nevertheless, the LV emphasizes agentive, dynamic reading, thus it can combine only with active P- nouns and it never combines with P- nouns having the meaning of achievement: *pustit'sa do rastu 'to start growing', *pustit'sa do horenia 'to start burning', *pustit'sa do hnevu 'to start being angry'.

(1b) Parameter: paradigmaticity

Grammaticalization posits a gradual distinction between major linguistic categories (verbs, nouns, adjectives) and minor categories (auxiliaries, prepositions, conjunctions). Major categories are characteristically more open, or open-ended, minor categories are more closed in terms of their membership. Paradigmaticization refers to the evolution from open to closed, from major to minor categories. Because of this fact it is often called decategorialization (Hopper – Traugott, 1993, p. 103).

Typical grammatical categories like copulas possess a closed set of items (byt', mat', stat' sa), on the other hand, particular semantic groups of fully lexical verbs show a more open paradigm of items, e.g. the semantic group of verbs expressing ownership comprises several elements (mat', vlastnit', disponovat', požívat', prechovávat'), the same applies to verbs expressing giving (dat', poskytnút', dodat', pridelit', udelit', podat', prispiet', darovat', venovat', nadelit', uštedrit', vynaložit'). Out of these paradigms only certain verbs can serve as LVs in

LVCs, e.g. *mat'*, *dat'*, *poskytnút'*, *udelit'*, *uštedrit'*. Lexicographic works on Slovak prove that LVs in Slovak can be found on the cline of evolution from more open (full lexical verbs) to more closed (auxiliary copulas) category. The category of LVs is more open than that of copulas; however, it is more closed when compared to the particular semantic group of fully lexical verbs.

Another dimension of the paradigmaticity is connected with the degree to which a linguistic sign enters into paradigms and how well integrated it is in the paradigm. Thus, paradigmaticity refers to the extent to which a particular category or subcategory is clearly defined and tightly integrated. In the process of paradigmaticization, LVs gain certain morpho-syntactic properties which differentiate them from verbs of vague action or fully lexical verbs:

(1) Ellipsis of LV

Ellipsis of LV is possible without a change in meaning, this is the so called reduction test (Radimský, 2010):

```
(6) Peter urobil rozhodnutie. – Rozhodnutie, ktorý urobil Peter. – Petrovo rozhodnutie 
'Peter made a decision.' – 'The/A decision that Peter made' – 'Peter's decision' (light verb)
```

```
(7) Peter urobil cesto. – Cesto, ktoré urobil Peter. – *Petrovo cesto 

'Peter made dough.' – 'The dough that Peter made' – '*Peter's dough' (non-light verb)
```

(2) Co-reference of subjects:

The subject of LV stands in grammatical co-reference with the inner participant of the P-noun in question:

```
(8) Peter cíti jej strach. 'Peter feels her fear.' (non-light verb) (8')*Peter mal jej strach. '*Peter has her fear.' (lit.) (light verb)
```

Sometimes even the same combination of verb and noun can have different status when applying the co-reference test:

```
(9) Európska komisia prijme rozhodnutie čo najskôr.

'The European Commission will decide as early/soon as possible.' (light verb)
```

```
(10) Tajomník Biednik s veľkým nadšením prijal moje rozhodnutie. 
'Secretary Biednik has accepted my decision with great enthusiasm.' (non-light verb)
```

(3) Pronominalization and topicalization

A typical feature of LVs is connected with the fact that the P-noun cannot be replaced with an anaphoric expression and the extraposition of P-noun into subject modified by attributive clause is not possible. On the other hand, some LVs allow pronominalization and topicalization in Slovak as it is proved by corpus data:

```
(11) Viem, že máš strach a ja ho mám tiež. 'I know that you have fear and I have it too.'
```

```
(12) Dôveru, ktorú dostal, si nevážil.
```

(11') ?Dostal odvahu a ja som ju dostal tiež.

(4) Possibility to question the P- noun:

It is not possible to question P-noun in LVC. However, in the corpus there are several examples in which P-nouns are questioned in Slovak:

```
(13) Čo spáchal? Aký zločin? 'What did he commit? Which crime?'
```

```
(13') *Čo má Peter? Strach.
'*What does Peter have? Fear.'
```

According to Radimský (2010) it is possible to question P-noun if the particular categorial function is the central one for the given verb.

(5) Passivization

Generally speaking, the possibility to passivize an LV in an LVC is given by the nature of the verb itself (dynamic transitive verbs, such as *robit'/urobit'*, *vykonat'/vykonávat'*, *realizovat'*, *zrealizovat'*, *uskutočňovat'* 'to do, make', *dat'* 'to give' can be passivized even when they function as LVs in LVCs, non-dynamic transitive verbs, such as *dostat'* 'to get', cannot be passivized and the same applies for their function as LVs in LVCs). This may be considered as evidence for the fact that LVs keep some components of their original meaning within LVCs.

The possibility to passivize an LV is connected with the degree of its semantic transitivity, e.g. compare two structures with syntactically transitive verbs: *prekonat' strach* 'to overcome fear', *stratit' strach* 'to lose fear'. A rather high degree of semantic transitivity of the LV in the construction *prekonat' strach* is given by following factors: greater agentive potentiality, volition, intentionality. That is the reason for the possibility to form passive structures which are attested to in the corpus:

```
(14) Strach z odhalenia je prekonaný.
```

```
(15) Strach bol prekonaný.
```

In construction *stratit' strach* a lower degree of semantic transitivity of LV can be traced: lesser agentive potentiality, non-volition, non-intentionality. That is the reason why no examples of passivization are attested to in the corpus.

It can be summarized that pronominalization, topicalization, the possibility to question P-noun and passivization are not prominent and obligatory morpho-syntactic features of LVs and LVCs in Slovak. Reduction test and co-reference test can be used to differentiate

^{&#}x27;The confidence he got was not appreciated by him.'

^{&#}x27;He got the courage and I got it too.' (lit.)

^{&#}x27;He ran the hazard and I ran it too.'

^{&#}x27;The fear of being unveiled/uncovered/found out has been overcome.'

^{&#}x27;The fear has been overcome.'

LVs from full lexical verbs and verbs of vague action. Generally speaking, the degree of paradigmaticity that holds for LVs is rather low which confirms the idea that LVs are in early stages of grammaticalization.

(1c) Parameter: paradigmatic variability

The paradigmatic variability of an autonomous linguistic sign is the possibility of other signs substituting it in the paradigm; in other words, the number of signs the a given sign is in a paradigmatic relation with. The number of such signs is reduced in grammaticalization, as a result of which the paradigmatic choice becomes more constrained: *mat' auto – vlastnit' auto – disponovat' autom* 'to have a car' vs. *mat' strach – *vlastnit' strach – *disponovat' strachom* 'to have fear'. In the previous chapter it was concluded that Slovak LVs show various degrees of paradigmatic variability with respect to the degree of their non-substitutability.

There are differences concerning paradigmatic variability depending on the degree of compositionality. LVCs with more compositional character show a higher degree of paradigmatic variability. On the other hand, the collocation possibilities of some LVCs have been reduced: neither P-noun nor LV can be altered, e.g. *dostat' rozum* 'to get brains (lit.), to become smart' – *dostat' um, dostat' rozum (um as a synonym of rozum) – *prijat' rozum (prijat' as a synonym of dostat'), but urobit' prieskum 'to make examination, survey' – urobit' sondu – urobit' rekognoskáciu (sonda, rekognoskácia as synonyms of prieskum) – uskutočnit' prieskum – zrealizovat' prieskum (uskutočnit', zrealizovat' as synynyms of urobit').

(2a) Parameter: scope

The structural scope of an autonomous linguistic sign is the size of the syntactic constituent it helps to form. Through condensation, the size of the constituent is reduced.

One aspect of scope condensation is the co-reference between the overt subject of LV and the zero subject of P-noun. As a result this co-referred subject is not manifested overtly in LVC:

```
(16) Cítim svoj/jej strach.
'I feel my/her fear.' (non-light verb)
(16')*Mám svoj strach.
'*I have my fear.' (light verb)
```

(2b) Parameter: bondedness

The "bondedness" of an autonomous linguistic sign is the closeness with which the sign is connected to another sign in a syntagmatic relation; through coalescence, "bondedness" can increase from juxtaposition to merger. The "bondedness" of components within LVC is diminished by the intervention of an adjective between the LV and P-noun. Another operation that weakens the degree of bondedness within LVCs is passivization as it represents the operation which promotes the P-noun to subject position thus separating it from its collocated LV.

(2c) Parameter: syntactic variability

Finally, the syntagmatic variability of an autonomous linguistic sign is the readiness with which the sign can be shifted around; through fixation, the sign becomes fixed to one slot in the phrase. The item evolves from being shifted around freely, via the process of fixation, to occupying a fixed syntactic slot. Within Slovak LVCs, the word order of components is not fixed or constant, however the sequence LV – P-noun is more prototypical (mat' strach – strach mat' 'to have a fear'), sometimes it is even the only possible schema (dostat' rozum – rozum dostat' 'to get brains (lit.), to become smart').

6. Conclusions

The mixed behaviour of Slovak LVs serves as evidence for identifying two categories which differ with respect to lexicalization and grammaticalization.

The investigation has confirmed Himmelmann's idea that L/G processes can be orthogonal or may even run in parallel. This is attested to both in the loss of paradigmatic variability, condensation, bondedness and loss of syntagmatic variability that are common both for lexicalization and grammaticalization processes. On the other hand, productivity, regularity of patterns and the degree of semantic idiomaticity represent factors on the basis of which lexicalization and grammaticalization processes can be differentiated.

Within the first group especially LVCs with the LV *dostat'* 'get' can be counted. These constructions usually have specified semantic content, their degree of semantic transposition involving differences from their full lexical counterparts is higher, they show a low pattern of productivity (host-class reduction). They arise on the basis of lexicalization which is manifested by a higher degree of non-composionality, non-substitutability and non-modifiability. They stand very close to (semi)idiomatic forms. What differentiates them from fully lexicalized idioms is the partial predictability that is manifested in the existence of two central metaphoric models:

Source domain: getting
Target domain: psychophysiological state
Acceptor \rightarrow Undergoer
Patient \rightarrow psychophysiological state
Giver $\rightarrow \varnothing$ dostat' hlad, smäd, strach, obavu, záchvat
'to get the hunger for, the thirst for, fear, worrying, stroked'

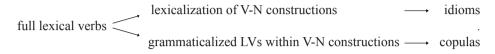
Source domain: getting
Target domain: communication
Acceptor → Addressee
Patient → communication act
Giver → Producer
dostat' rozhrešenie, odpoved', požehnanie, otázku,
príkaz
'to get a reprimand, an answer, a blessing, a
question, an order'

On the other hand there is a group of LVCs with LVs, such as *dat'* 'give' or *robit'/urobit'*, *vykonat'/vykonávat'*, *realizovat'/zrealizovat'*, *uskutočnit'/uskutočňovat'* 'do, make'. They usually have less idiomaticized meaning. They have a more compositional character which is manifested by the rather regular pattern they exhibit. These items represent highly productive (however not illimitably productive – with comparison to copulas) models thus manifesting host-class expansion typical of grammaticalization processes.

What differentiates LVs from fully grammaticalized copulas is the existence of certain

constraints intervening in their productivity measure and regularity pattern.

Thus, the development of LVs in Slovak can be described by means of following schema:



Grammaticalization and lexicalization processes occurring within LVCs adopt a gradualist model of linguistic change. As a result, it challenges the validity of those approaches, which insist on discrete grammatical and lexical categories.

REFERENCES

- Apresjan, J. (2009). The Theory of Lexical Functions: An Update. In D. Beck, K. Gerdes, J. Milićević & A. Polguère (Eds.), *Proceedings of the Fourth International Conference on Meaning-Text Theory*. Montréal: OLST, 1-13.
- Brinton, J. (2011). The grammaticalization of complex predicates. In: H. Narrog & B. Heine (Eds.), *Grammaticalization*. Oxford, New York: Oxford University Press, 559-569.
- Brinton, L. J., & Traugott, E. C. (2005). *Lexicalization and language change*. Cambridge: Cambridge University Press.
- Brugman, C. (2001). Light verbs and polysemy. Language Sciences, 23(4), 551-578.
- Butt, M. (2010). The light verb jungle: Still hacking away. In: M. Amberber et al (Eds.), *Complex Predicates: Cross-LinguisticPerspectives on Event Structure*. Cambridge: Cambridge University Press, 48-78.
- Butt, M., & Geuder, W. (2001). On the (Semi)Lexical Status of Light Verbs. In: N. Corver & H. van Riemsdijk (Eds.) *Semi-lexical Categories: On the Content of Function Words and the Function of Content Words*. Berlin: Mouton de Gruyter, 323-370.
- Bybee, J., Perkins, R., & Pagliuca, W. (1994). *The Evolution of Grammar: Tense, Aspect, and Modality in the Languages of the World.* Chicago: University of Chicago Press.
- Cinková, S. (2009). Words that Matter: Towards a Swedish-Czech Colligational Dictionary of Basic Verbs, volume 2 of Studies in Computational and Theoretical Linguistics. Prague: UFAL.
- Cinková, S., & Kolářová, V. (2006). Nouns as Components of Support Verb Constructions in the Prague Dependency Treebank. In: M. Šimková (Ed.), *Insight into Slovak and Czech Corpus Linguistics*. Bratislava: Veda, 113-139.
- Elenbaas, M. (2011). Tracing grammaticalisation in English light verbs: A corpus-based study. *ISLE2 17-21 June 2011, Boston.* Retrieved from: http://www.bu.edu/isle/files/2012 /01/Marion-Elenbaas-Tracing-grammaticalisation-in-English-light-verbs.pdf
- Fazly, A. (2007). Automatic acquisition of lexical knowledge about multi-word predicates. *PhD Dissertation*. Toronto: University of Toronto.
- Fischer, O., & Rosenbach, A. (2000). Introduction. In: O. Fischer, A. Rosenbach & D. Stein (Eds.), *Pathways of Change. Grammaticalization in English.* Amsterdam: Benjamins, 1-37.

- Grepl, M., & Karlík, P. (1998). Skladba češtiny. Olomouc: Votobia.
- Grimshaw, J., & Mester, A. (1988). Light verbs and Θ-marking. *Linguistic Inquiry*, 19(3), 205-232.
- Himmelmann, N. P. (2004). Lexicalization and grammaticization: opposite or orthogonal? In: W. Bisang, N. P. Himmelmann & B. Wiemer (Eds.), *What makes grammaticalization: a look from its fringes and its components*. Berlin: de Gruyter, 21-42.
- Hopper, P. J., & Traugott, E. C. (1993). *Grammaticalization*. Cambridge: Cambridge University Press.
- Ivanová, M., & Kyseľová, M. (2012). Niekoľko poznámok o statuse a vymedzení kategoriálnych verb. In: K. Buzássyová, B. Chocholová & N. Janočková (Eds.) *Slovo v slovníku. Aspekty lexikálnej sémantiky gramatika štylistika (pragmatika). Na počesť Alexandry Jarošovej.* Bratislava: Veda, Jazykovedný ústav Ľudovíta Štúra SAV, 159-170.
- Jarošová, A. (1999.) Problém vyčleňovania ustálených lexikalizovaných spojení pomocou štatistických nástrojov. *Jazykovedný časopis*, *50*(2), 94-100.
- Jarošová, A. (2000). Lexikalizované spojenie v kontexte ustálených spojení. In: J. Dolník (Ed.) *Princípy jazyka a textu. Materiály z medzinárodnej vedeckej konferencie konanej 9.* 10. 3. 2000 na Katedre slovenského jazyka Filozofickej fakulty Univerzity Komenského. Bratislava: Univerzita Komenského, 138-153.
- Jarošová, A. (2007). Problém vymedzenia kolokácií. *Jazykovedný časopis*, 58(2), 81-102. Kačala, J. (1993.) Kategoriálne slová v slovných spojeniach (príspevok k teórii jazykového významu). *Jazykovedný časopis*, 44(1), 14-24.
- Kačala, J. (1997). K statusu lexikalizovaných spojení. Slovenská reč, 62(4), 193-202.
- Kearns, K. (1988). *Light verbs in English. Master's thesis*. Cambridge, MA: MIT. Retrieved from: http://www.ling.canterbury.ac.nz/documents/lightverbs.pdf.
- Kettnerová, V., Lopatková, M. (2013). The Representation of Czech Light Verb Constructions in a Valency Lexicon. In: E. Hajičová, K. Gerdes & L. Wanner (Eds.) *Proceedings of the Second International Conference on Dependency Linguistics, Depling 2013*. Prague: Matfyzpress, Charles University in Prague, 147-156.
- Kotsyba, N. (2007). Semantics of light verbs in lexicographical presentation. In: *Proceedings of the international conference 'Modern Problems of Lexicography' held in Grodno, Belarus, 19-21 October 2007*. Retrieved from: http:// http://domeczek.pl/~natko/papers/nk GrodnoX07.pdf
- Kralčák, Ľ. (2005). Analytické verbo-nominálne spojenia v slovenčine. Synchrónno-diachrónny pohľad. Nitra: Univerzita Konštantína Filozofa v Nitre.
- Lehmann, Ch. (1982). *Thoughts on Grammaticalization: A Programmatic Sketch*. Munich: Lincom Europa.
- Macháčková, E. (1979). Analytická spojení typu sloveso + abstraktní substantivum (analytické vyjadřování predikátů). Praha: Ústav pro jazyk český ČSAV.
- Manning, Ch., & Schütze, H. (1999). *Foundations of Statistical Natural Language Processing*. Cambridge, MA: MIT Press.
- Newman, J. (1996). Give: A Cognitive Linguistic Study. Berlin: Mouton de Gruyter.
- Norvig, P., & Lakoff, G. (1987). Taking: A Study in Lexical Network Theory. In: J. Aske, N. Beery, L. Michaelis & H. Filip (Eds.), Proceeding of the 13th Annual Meeting of the Berkeley Linguistics Society, February 14-16, 1987. General Session and Parasession

- on Grammar and Cognition. Berkeley: Berkeley Linguistics Society, 195-206.
- Ološtiak, M. (2011). *Aspekty teórie lexikálnej motivácie*. Prešov: Filozofická fakulta PU v Prešove.
- Ološtiak, M., Ivanová, M., & Genči, J. (2012). Slovník viacslovných pomenovaní (lexikografický, lexikologický a komparatívny výskum). Koncepcia projektu. *Slovenská reč*, 77(5-6), 259-274.
- Radimský, J. (2010). *Verbo-nominální predikát s kategoriálním slovesem*. České Budějovice: Jihočeská univerzita v Českých Budějovicích.
- Sanromán Vilas, B. (2011). The unbearable lightness of light verbs. Are they semantically empty verbs? In: I. Boguslavsky & L. Wanner (Eds.) *Proceedings of the 5th International Conference on Meaning-Text Theory*, 253-263. Retrieved from: http://meaningtext.net/mtt2011/proceedings/papers/Sanroman.pdf
- Shahrokny-Prehn, A., & Höche, S. (2011). Rising through the registers: light verb constructions on the move. *Corpus Linguistics and Language Variation*, 43(1-2), 367-387.
- Slovenský národný korpus verzia prim-6.0-public-all. (2014). Bratislava: Jazykovedný ústav Ľ. Štúra SAV. Retrieved from: http://korpus.juls.savba.sk.
- Stevenson, S., Fazly, A., & North, R. (2004). Statistical Measures of the Semi-Productivity of Light Verb Constructions. *Proceedings of Second ACL Workshop on Multiword Expressions: Integrating Processing*. Retrieved from: http://www.cs.toronto.edu/~ryan/mwe04-ref.pdf.
- Traugott, E. C. (1982). From Propositional to Textual and Expressive Meanings: Some Semantic-Pragmatic Aspects of Grammaticalization. In: W. P. Lehmann & Y. Malkiel (Eds.), *Perspectives on Historical Linguistics*. Amsterdam: Benjamins, 245-271.
- Wierzbicka, A. (1982). Why can you have a drink when you can't *have an eat? *Language*, 58(4), 753-799.