

Nouns as Components of Support Verb Constructions in the Prague Dependency Treebank

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1. Introduction

Support Verb Constructions (SVCs) are combinations of a noun denoting an event or a state and a lexical verb. From the semantic point of view, the noun seems to be a part of a complex predicate rather than the object (or subject) of the verb, despite what the surface syntax suggests. The meaning is concentrated in the noun component, whereas the semantic content of the verb is reduced or generalized.

In this article we are dealing with the question how to treat SVCs in the Prague Dependency Treebank (PDT in the sequel). In the second section we briefly describe what PDT is, what linguistic theory it is based on and what questions regarding the SVCs arose during the annotation. In the third section we explain how SVCs have been identified and inventoried in PDT. We also give a brief survey of how SVCs have been treated within other linguistic frameworks and what conclusions based on this knowledge were drawn for PDT. Of course, this survey does not have the ambition of being exhaustive. The fourth section focuses on the semantic aspects of SVCs. The last section describes how the FGD-based valency theory has been implemented in the case of SVCs to provide both a consistent and a linguistically justified annotation in PDT.

2. SVCs as a Type of Complex Predicates in PDT

2.1. PDT

For written Czech language, corpora of two types exist: (i) a databank of linear texts, i.e. the Czech National Corpus (CNC in the sequel) at the Faculty of Arts, Charles University, Prague (this is a representative corpus of contemporary written Czech, a part of which, called SYN2000, contains about 100 million wordforms in its current version), and (ii) a dependency based treebank, i.e. the Prague Dependency Treebank, which is a part of CNC annotated at several layers. The shallow-parsed shape of the latter, so-called analytical level, contains approx. 90 000 sentences; the so-called tectogrammatical level of PDT captures underlying syntactic structures of sentences and contains approx. 55 000 sentences. Both these corpora are annotated (by morphological tags in the whole CNC, by morphological tags, syntactic functions, functors, coreference, and TFA in PDT). The linear corpus is very useful for searching morphemic and lexical phenomena, including information about their frequency, but the dependency treebank is irreplaceable whenever one investigates syntactic relations in the sentence. Due to the high degree of “free” word order in Czech, many modifications can occur as either preceding or

following their governors. Thus it is very difficult to formulate a query about syntactic relations in the linear corpus.

2.2. Theory of Valency Applied in PDT

A verb occupies the central position in the sentence structure, so it is clear that one of the key syntactic relations is the valency of verbs, as well as the valency of deverbal nouns and adjectives.

Our approach to issues of valency is based on the theory of valency (especially valency of verbs) as elaborated in the framework of the Functional Generative Description (FGD in the sequel, see Sgall, Hajičová and Panevová 1986; Panevová 1980).

In FGD, the valency frame of a verb, stored in the lexicon, can be described as present on the tectogrammatical level. The following complementations (i.e. the individual dependency relations) are included into the set as being able to fill individual slots of valency frames of verbs:

(i) inner participants or arguments (they can be obligatory or optional): Actor (ACT), Patient (PAT), Addressee (ADDR), Effect (EFF), Origin (ORIG);

(ii) obligatory free modifications or adjuncts (especially those with the meaning of location (e.g. DIR3, LOC) and manner (MANN)).

Most of these complementations can be omitted on the surface layer of the sentence, but some of them must be always present (as PAT with the verb *potkat* 'to meet', MANN with the verb *chovat se* 'to behave', etc.), unless a textual deletion is concerned, in which case the presence of the complementation in the surface shape is not obligatory. E.g.: '*Potkali jste ho?*' '*Potkali*'. (lit. '*Have you met him?*' '*Met_1stPlur*', i.e. '*Have you met him?*' '*Yes, we have*'.)

While describing valency frames of deverbal nouns and adjectives, we use the same set of complementations as with verbs. However, in comparison with the frames assigned to the source verb, the process of nominalization (condensation) may be accompanied by a reduction of the number of slots in the valency frames of derived nouns and adjectives at the underlying layer. Moreover, any complementation of a noun can be omitted on the surface layer.

2.3. Recording Complex Predicates in PDT

In the tectogrammatical annotation of the Prague Dependency Treebank there arose the need of marking complex predicates (henceforth CPs). A CP typically comprises a verb and a noun that make up both a syntactic and semantic unit (e.g. *věnovat pozornost*, lit. '*to pay attention*'). It can appear as a nominalization as well (e.g. *věnování pozornosti*, lit. '*paying of-attention*', *pozornost věnovaná dětem*, lit. '*attention paid to-children*'). The PDT annotation also considers certain nouns and adjectives to be special kinds of CPs when appearing with the copula verb *to be*: *být schopen* '*to be able*', *být ochoten* '*to be willing*'; *Je povinností koalice nalézt řešení*, lit. '*It is an incumbency of the coalition to find a solution*', i.e. '*The coalition is obliged to find a solution*'. Their nominalizations are also considered to be CPs, such as *Petrova náchylnost k něčemu* '*Peter's predisposition to sth*'. Nevertheless, this type of CPs, in which nominal components are mostly marked as PAT, will be left aside in this study. The CPs to be dealt with in this paper are entirely those of the verb-noun type, such as *věnovat pozornost*, lit. '*to pay attention*', *mít tendenci*, lit. '*to have tendency*', *přijít s nápadem*, lit. '*to come up with idea*', etc. In accordance with the rich English-written literature they will be henceforth referred to as support verb constructions (SVCs).

Lemmatizing CPs in PDT as multi-word units (MWU) was out of question as there already have been supporting valency frame lexicons for nouns and verbs, respectively. One more lexicon would have had to be designed to capture the multi-word units. The multi-word units would of course have overlapped with the one-word lemmas whose frames had already been described by the existing lexicons, which would have led to confusions in valency representations. Apart from the effort and time a MWU lexicon would have cost, the selection of its lemmas would necessarily have been based on arbitrary decisions on the degree of a collocation's lexicalization. Another essential aspect would have been ignored, that is, that SVCs make up a productive mechanism in the language, allowing for well-formed *ad hoc* constructions (cf. Ekberg 1989 and Dura 1997, see below). Therefore they can hardly be captured by a finite list. A MWU lexicon would rather have become a burden than a supporting tool. Therefore, CPs are not lemmatized as MWUs in PDT.

In SVCs, which is the CP type to be discussed here, the distinguishing feature is the marking of nouns / noun groups as CP components by a special functor CPHR ("Compound Phraseme"). A necessary condition for a noun to obtain a CPHR functor is that it be an obligatory valency complementation of the verb in the given frame. This implies that an obligatory actant in a verb frame, e.g. PAT, is re-classified as a CPHR when the entire syntagm is considered a SVC (cf.: *to pay 30 dollars.PAT* × *to pay attention.CPHR*). By means of a different functor we indicate that, from the semantic point of view, the noun within a SVC ceases to be the PAT of the verbal part of the SVC; the fact that it is not appropriate to provide the noun within a SVC with a semantic role is also confirmed by Macháčková (1983, p. 135). This further implies that PDT in fact lists SVCs as frames in the valency lexicon of verbs. Thus a list of SVCs can currently be obtained by searching PDT for frames containing CPHR.

3. Criteria for SVC Identification

3.1. CPHR-Candidate List

Before introducing the functor CPHR, a list of CPHR candidates had been made up by searching PDT for "a verb governing a noun governing a PAT-node". The given structure of the query was originally motivated by two aspects:

- (i) The realization of SVC as two nodes has certain consequences for coreferential relations, also annotated in PDT (cf. Kučová – Kolářová – Žabokrtský – Pajas – Čulo, 2003). Especially, we wanted to capture the coreferential relations in those SVCs that correspond to synthetic predicates of control, e.g. *Petr se chystá přijít* × *Petr má plán přijít* ('Peter is getting ready to come' × 'Peter has the plan to come'; more about predicates of control see Panevová – Řezníčková – Urešová, 2002).
- (ii) Most nouns that appear in SVCs have their own argument structure, no matter if they ever occur in predicates of control. They are regularly captured by the tectogrammatical tree structures without any problems. However, problems can arise when such nouns (i.e. those having their own dependent nodes) become part of a SVC. Due to certain types of TFA-contingent word order changes, the nodes governed by the SVC-noun node are sometimes located quite far from their governing node, making the tree-structured diagram non-projective, which generally is to avoid (cf. Hajičová et al., 2004, and Lopatková, 2003).

Possible CPHRs were separated from obvious trivial collocations (i.e. the type *to pay attention* from *to pay 30 dollars*, cf. Heid, 1998). To enhance the list and to determine the sorting criteria more exactly, both Czech and foreign literature on verb-noun structures was consulted.

3.2. A Cross-linguistic Survey of SVC Descriptions

Support verb constructions seem to be common in many European languages, as already noted by R. Jakobson (1932, see Jelínek, 2003, p. 50). In Czech, they had first been believed to exemplify a negative influence from German (see Jelínek, 2003, pp. 45-46). As a slight irony, in German alone SVCs had been first criticized from the stylistic point of view. As recently as in the 1970's, support verb constructions became a serious point of interest within German generative and transformational grammar (Rothkegel, 1973), (Persson, 1975) and in books on German as a foreign language (Helbig – Buscha, 1996; Günther – Pape, 1976). In German, SVCs have been thoroughly discussed and analyzed. Besides that, German has affected Czech in many respects. Therefore, we took the literature on German SVCs as our point of departure, gradually extending the scope.

Helbig and Buscha, the classic German grammar for foreign learners, introduce support verbs as a special semantic class defined by the inability of the verbs to form a predicate alone (*Funktionsverben*). Support verbs have to make a cluster with a noun phrase which is then considered a part of the predicate. The noun phrase in a support verb construction is either formed by a noun in accusative or by a prepositional phrase. The entire support verb construction (*Funktionsverbgefüge*, *FVG*) corresponds to a simplex lexical verb or to an adjective (with an auxiliary verb) having the same stem as the noun in the support verb construction. The nouns should be abstract noun derivations from verbs or adjectives, but never concrete nouns.

3.2.1. The Notion of Base and Collocate in SVCs

Support verb constructions can also be looked upon as a collocation type. Malmgren (2002, p. 12)¹ describes a number of apparent support verb constructions calling them a kind of “prototypical collocations” that consist of a semantically impoverished verb and an abstract noun. The abstract noun keeps its meaning, hence it is the more stable member of the collocation – the collocational base. Its verbal collocate is generally unpredictable (Malmgren, 2002, p. 11, cf. Rothkegel, 1973, p. 39). Inspired by Mel’čuk’s Meaning-Text-Theory (Kahane, 2003; Wanner, 1996), Malmgren finds and associates Swedish verbal collocates to the nouns by means of the lexical function Oper. Fontenelle (1992, p. 142) also claims that “support verbs roughly correspond to the type of lexical relation that can be encoded through the Oper lexical function used by Mel’čuk”. For examples of lexicons and lexical databases using Lexical Functions see e.g. Macleod (2002), Benson – Benson – Ison (1997) and Polguère (2000).

The understanding of nouns as collocational bases in verb + abstract noun constructions is clearly shared by Čermák, (e.g. 2003): “Abstract nouns seem to follow few general patterns in

¹ Malmgren’s starting point is the system-oriented understanding of collocations coined especially by German linguists as Hausmann and Heid (1998, p. 302) rather than the original English contextualist approach to collocations (Malmgren, 2002, pp. 5-6).

their behaviour, which seem to be more structured, allowing for much less freedom than concrete nouns. The patterns the abstract nouns enter are determined by their function and meaning”.²

While Helbig and Buscha were struggling to identify a distinct class of “Funktionsverben”, and Baron and Herslund (1998), Rothkegel (1973) and Persson (1975, 1992) were trying to define support verb constructions by the semantic relation between the noun phrase and the verb, Fontenelle, Malmgren and Čermák have focused on the noun, in perfect accordance with the pregnantly formulated observation of Hanks (2001): “[...] it seems almost as if all the other parts of speech (verbs and function words) are little more than repetitive glue holding the names in place”.

Even in the cross-linguistic perspective it is usually the noun that is the common denominator for the equivalent support verb constructions: “The verb [...], which is though often the only one that is correct and idiomatic, can seem totally arbitrary. In another language there could - mutatis mutandis - often occur totally different verbs which would work as place holders; that is why prototypical collocations often cause translation problems” (Malmgren, 2002, p. 11).³ Malmgren further notes that “sometimes, but far from always, one can anticipate a sort of metaphors” in the choice of the verb. Eventual metaphors can be traced back and explained *ex post*, but they definitely do not prove predictable within one language, let alone cross-linguistically.

3.2.2. Productivity vs. Lexicalization in SVCs

Whereas traditional views emphasize that it is mostly the lexicalized units that tend to show specific syntax behaviour, and therefore support verb constructions are to be considered as more or less lexicalized phrases, Ekberg (1989) and Dura (1997), as well as Persson (1992), concentrate on the apparent productivity of SVCs and the regular production patterns they form. Ekberg notes that many lexicalized phrases “have an almost completely or at least partly predictable meaning and new ones can be formed according to productive rules within the grammar” (Ekberg, 1989, p. 32), while Dura goes even further adding that “even the new-formed phrases show the same syntactic restrictions as the lexicalized ones” and interpreting this phenomenon as an evidence that “these restrictions rather indicate that something is meant as a lexicalization than that they would be result of lexicalization” (Dura, 1997, pp. 1-3). She considers articleless verb-noun combinations to be an evidence that there is “a kind of word combination that is not controlled by the regular syntax but aims at lexical composition” and that it is thus “possible to form new phrases which can act as lexical units. The ordinary syntax is oriented at combining lexical units with obligatory grammatical categories, but there even seems to be another syntax, a syntax which allows language users to build larger conceptual units without involving the grammatical categories”.

3.2.3. Communicational Benefits of SVCs

While the first observations of support verb constructions were rather condemning, Helbig and Buscha name many communicational advantages of support verb constructions, giving thereby an explanation of the extreme productivity of these constructions in the modern language.

² Though Čermák explicitly avoids the term “collocation”, using the expression “stable combinations” instead, among which “some are undoubtedly more frequent than others”.

³ The quotations of Malmgren, Ekberg and Dura were translated from Swedish by S.C.

A significant feature of support verb constructions is i.a. their ability to indicate (or specify) the event structure (*Aktionsart*), (Helbig – Buscha, 1996, p. 78 and pp. 103-105). For more about event structure modifications see especially (Baron – Herslund, 1998 and Persson, 1975, 1992). Support verb constructions also help to fill in certain gaps in the vocabulary when no matching simplex verb exists. They enable more general statements by means of an intransitive phrase matching a transitive simplex verb, they unify the argument structure in larger syntagms and they also make up an additional unergative form. Not fully lexicalized support verb constructions also allow for the insertion of multiple adjectival attributes and for compound noun formation, which makes them a good alternative in contexts where a simplex verb would be modified by too many adverbials. Jelínek (Jelínek, 2003, pp. 46, 48) emphasizes mainly the importance of SVCs in textual coreference as well as in TFA.

Last but not least, Vlková (1990) studies the functional-stylistic aspects of SVCs.

3.3. Modification of the CPHR-Candidate List - Resulting Criteria for CPHRs

As the above-mentioned literature on SVCs revealed, no universal criterion has been found yet to draw a line between CPHRs and non-CPHRs. The constraints concerning the surface structure of a SVC are obviously language-dependent and besides that, they also result in scalar classifications. We agree with Persson (1992, pp. 156-157) that:

- 1) It is the semantic relation between the verb and the noun that makes a SVC, rather than the surface structure of the verb-noun group (see also Schrotten, 2002, p. 93, and Boje, 1995, pp. 53, 145).
- 2) This relation could be looked upon as a kind of word formation rather than a syntactic process (see also Dura, 1997).
- 3) There are several types of the semantic relation between the verb and the noun, which would result in different definitions for each type of SVC.

In order not to slow down the annotation, we agreed upon a few relatively simple criteria to mark a noun as a CPHR, from which not all have to be met simultaneously. Basically, we allow for “typical” and “less typical” CPHRs. The features of CPHRs are as follows:

(i) Semantic features of the verbal and the nominal SVC component (cf. Section 4.);

A support verb and a noun component make up a semantic unit, thus it is usually possible to find an adequate synonymic synthetic predicate (or a copula + adjective predicate). For discussion on the effects of the choice between a synthetic predicate and a SVC on coreference relations see Sections 5.3.1. and 5.4.;

(ii) Valency features of the verbal and the nominal SVC component (cf. Section 5.).

The absolute cooccurrence frequency was not considered as a criterion (cf. Malmgren, 2002, p. 14). Some kind of relative frequency information (mutual information score, log-likelihood ratio) could have been of some relevance but it was not regarded during the annotation.

4. Semantic Aspects of SVCs⁴

4.1. Support verbs (verbal SVC components) in PDT

4.1.1. Semantic Bleaching – Quasimodals and Quasicopulas

As already stated by many authors (e.g. Helbig – Buscha, 1996), support verbs are in fact lexical verbs that have to a large extent lost their lexical meaning, mainly providing the nouns with the morphological categories of verbs (which is the feature that makes them resemble a verb class, cf. Helbig – Buscha, 1996: *Funktionsverben*, and Jelínek, 2003: *operational verbs (operační slovesa*, p. 40)). Many students of this topic have observed that verbs, when occurring in a SVC, start to carry more abstract semantic features. Rothkegel (Rothkegel, 1973, p. 51) considers the semantic bleaching⁵ of the verb the antipode of verbal polysemy. She shows that the meaning of a given lexical verb in SVCs neither matches any of its meanings outside SVCs, nor does it create new meanings when associated to the respective noun phrases. This, however, rather implies that the lexical verb acquires an additional, a more abstract, meaning that is reserved for the verb's occurrence in SVCs, instead of just being deprived of a part of its original meaning. This observation indicates an ongoing grammaticalization process called *context-induced reinterpretation* (Heine – Claudi – Hünnemeyer, 2001, p. 99) instead of speaking of mere semantic bleaching

In PDT, SVCs which lack adequate synonymous synthetic predicates are often regarded as the so called quasimodal verbs. As a rule this concerns SVCs with 'to have': *mít právo* = *moci* (lit. 'to have right' = 'can'), *mít povinnost* = *muset* (lit. 'to have duty' = 'to have to'), *mít potřebu* = *chtít* (lit. 'to have need' = 'to want'). Verbs of intention provide the same quality: *mít plán*, *mít tendenci* = *chtít* (lit. 'to have plan, tendency' = 'to want'). A current-result copula feature⁶ can often accompany the modality feature. If the *mít*-SVCs are regarded as duratives, the SVCs displayed below can be regarded as inchoatives and terminatives. (More about event structure modifications see especially Baron – Herslund, 1998; Persson, 1975, 1992, and Čermák, 1998). What is important is the fact, that the support verbs often acquire quasicopula features which were not present in their original meaning as lexical verbs. Due to the additional modification in the event structure, there does not have to be any exactly matching synthetic predicate.

Inchoative SVCs (i.e. *začít mít*, *začít chovat*, lit. 'to start having'):

dát se do práce (lit. 'to give oneself into work', i.e. 'start working'), *dostat nápad* (lit. 'to get idea'), *dostat se do styku* ('to get in touch'), *najít odvahu* ('to pluck up the courage'), *naskýtá se možnost udělat* (lit. 'a possibility offers_reflexive3thSing to do', i.e. 'There's a possibility of doing'), *otevírat možnost* (lit. 'to open a possibility', i.e. 'to give a possibility'), *pocítit potřebu* (i.e. 'to get a need'), *pojmout podezření* ('to get a suspicion'), *přistoupit k udělení cen* (lit. 'to step to granting the awards', i.e. 'approach granting the awards'), *pustit se do práce* ('set on working'), *sbírat odvahu* ('summon up the courage'), *vzbudit touhu* ('arouse desire'), *někomu vzniká povinnost udělat* (lit. 'an obligation arises to sb', i.e. 'sb gets under obligation to do sth').

⁴ Semantic classification of both the verbal and the noun component in Czech SVCs is described by Macháčková (1983, pp. 146-165).

⁵ She quotes another authors' terms, such as "das Verblassen der Merkmale bei den Verben", "Bedeutungsentleerung", "depletion of the designatum".

⁶ In Czech: *fázová slovesa*, such as *začít*, *přestat*, *zůstat*, *stát se nějakým*.

Terminative SVCs (i.e. *přestat mít*, lit. ‘to stop having’):

nenáležet (*nenáleží mu už právo*, lit. ‘doesn’t belong him the right to do sth any more’, i.e. ‘he doesn’t have the right any more’), *nepříslušet* (*nepřísluší mu už oprávnění dělat* - lit. ‘doesn’t belong him the authorization to do sth any more’, i.e. ‘he has lost the authorization for sth’), *pozbyt odvahu* (‘to lose courage’), *přijít o možnost* (‘to forfeit the chance’), (*někomu*) *zaniká povinnost udělat* (lit. ‘sb_DatSing expires the obligation to do sth’, i.e. ‘sb is no longer under an obligation to do sth’), *ztratit možnost* (‘to lose the possibility’), *ztratit chuť* (lit. ‘to lose the desire’, i.e. ‘not feel like doing sth any more’’).

4.1.2. Verbs with a CPHR-Frame Only

In some approaches (cf. Feil, 1995), a difference is being made between usual lexical verbs occurring in SVCs and semantically empty lexical verbs that can occur in support verb constructions only, such as *lave*, *foretage* and *gøre* (Danish, approx. ‘to make’, ‘to (under)take’ and ‘to do’). PDT has no problems with verbs that lack an “unmarked” frame, e.g. a PAT-frame, but only occur in a CPHR-frame, such as Czech *podniknout* ‘undertake’.

4.2. SVC Noun Component in PDT

The noun phrase is generally considered the bearer of the semantic weight of the entire construction. The nouns are limited to abstracts, often deverbal nouns: *rozhodnutí* ‘decision’, *otázka* ‘question’, but also non-deverbal ones (especially adjectival derivations, such as *možnost* ‘possibility’, *povinnost* ‘responsibility’, *schopnost* ‘ability’, *zodpovědnost* ‘incumbency’, and also some other types, such as *právo* ‘right’, *šance* ‘chance’, *příležitost* ‘opportunity’ (see also Macháčková, 1983, p. 128).

Noun components that share a support verb are often semantically related, e.g.:

- affections: *důvěra* ‘trust’, *něha* ‘tenderness’, *soucit* ‘compassion’, *soustrast* ‘commiseration’, *touha* ‘desire’; professions: *funkce* ‘appointment’, *povolání* ‘occupation’, *praxe* ‘practise’, *profese* ‘profession’, *živnost* ‘enterprise’ (cf. also the cross-linguistic study by Schroten, 2002);
- synonymic groups (often a Czech word matching a loanword): *kontakt* ‘contact’, *spojení* ‘connection’, *styk* ‘touch’, *vztah* ‘relation’; *dohoda* ‘agreement’, *smlouva*, *kontrakt* ‘contract’; *pokyn* ‘instruction’, *příkaz* ‘command’, *rozkaz* ‘order’; *souhlas* ‘consent’, *svolení* ‘approval’; *pokuta* ‘fine’, *sankce* ‘sanction’, *trest* ‘penalty’; *iluze* ‘illusion’, *zdání* ‘impression’;
- (rarely) antonymic groups: *milost* vs. *trest* (‘mercy’ vs. ‘punishment’); *souhlas* vs. *zákaz* (‘permission’ vs. ‘ban’);
- one noun component can be associated to several support verbs that form aspect and event pairs, sometimes even synonymical groups: *dostat* – *mít* – *ztratit chuť* (lit. *to get* – *to have* – *to lose desire*, i.e. *to start feeling like* – *feel like* – *stop feeling like doing sth*).

When annotating the data, PDT annotators have to distinguish between abstract and concrete readings of nouns in context. Thus, the noun *nabídka* ‘offer’ in a clause like *V pondělí dostal nabídku*, lit. ‘on Monday (he) got offer’, will be either assigned a CPHR or a PAT: *V pondělí dostal nabídku*.CPHR = *v pondělí mu bylo něco nabídnuto* (lit. ‘on Monday (he) was offered sth’) vs. *V pondělí dostal nabídku*.PAT = *v pondělí obdržel dokument s nabídkou* (lit. ‘on Monday (he) received document with offer’).

5. Valency Aspects of SVCs

Baron and Herslund (Baron – Herslund, 1998, p. 106-111) analyse the nominal structure of support verb constructions having a simplex verb match. In the traditional view, the argument structure of noun phrases is derived from the argument structure of the matching simplex verb. There are also opposite views saying that support verb constructions inherit the argument structure of the given noun (e.g. Pedersen, 1990, p. 210).

Czech authors suppose that both components of SVC, the verbal component and the noun one respectively, have their own valency properties (cf. esp. Macháčková, 1983, but partially also Čermák, 1974, and Jelínek, 2003). In PDT, we treat the phenomenon of valency within SVCs in the same way: the verbal component as well as the noun one have their own entry in the valency dictionary (in the so-called PDT-vallex, cf. Uřešová, this volume, and Hajič et al., 2003). Also annotators of PDT have to decide if the respective complementation which has occurred in a sentence should be attached to the verb or to the noun.

Typical, transitional, but also some special (problematic) issues of the phenomenon of valency within SVCs are discussed in the sections that follow.

5.1. Valency of the verbal component in SVCs

As mentioned above, in PDT, especially two aspects were taken into account during the selection of constructions possibly treated as SVCs: (i) capturing coreferential relations in valency frames of both components of SVCs, especially those concerning grammatical coreference (as in SCVs where the whole construction corresponds to the simplex verb representing the so-called verb of control), and (ii) SVCs in which the noun component has its original valency complementation causing, in some varieties of the word order, so-called non-projective constructions (cf. Hajičová et al., 2004, and Lopatková, 2003). Thus, the present list of SVCs in PDT (i.e. CPHR-Candidate List, see above, extended by some other verbs) is considerably limited by the two above-mentioned aspects. The fact that the list is not a complete register of SVCs is clearly documented by Macháčková (1983) and Čermák (1974) who present not only richer material of abstract nouns but also a larger list of support verbs. While Čermák states that he found more than 430 verbs having the ability to function as support verbs (when the meaning does not change he regards the aspectual counterparts as the only verb, cf. Čermák, 1974, p. 299), the list of support verbs in PDT contains only about 150 items, including the aspectual counterparts of the particular verbs. Neither the following overview of types of valency of a verbal component in SVCs is exhaustive (for the more detailed description see Macháčková, 1983, p. 137ff.).

The following forms⁷ of the noun component labelled by the functor CPHR were found in PDT:

- prepositionless accusative (these constructions represent the overwhelming majority of SVSc, e.g. *učinít rozhodnutí*, lit. ‘to make decision’);

⁷ Macháčková mentions two more forms: prepositionless genitive, e.g. *dosáhnout úspěchu*, lit. ‘to reach of-success’, i.e. ‘to achieve success’, and prepositionless dative, e.g. *propadnout zoufalství*, lit. ‘to succumb to-despair’ (cf. Macháčková, 1983, p. 139).

- nominative (e.g. *zmocnilo se ho rozčilení*, lit. ‘overcame him rage’, i.e. ‘he was overcome with rage’);
- prepositionless instrumental (e.g. *hořet nenávistí*, lit. ‘to burn with hatred’);
- prepositional phrases (e.g. *přistoupit k hlasování*, lit. ‘to go up to voting’, i.e. ‘to proceed to voting’).

All studies dealing with the phenomenon of SVSc as well as data provided by PDT confirm the fact that the prepositionless accusative is the most frequent form of the noun component in SVCs. In accordance with this observation we will concentrate only on this type of SVCs in following sections, calling them “SVCs with CPHR(4)”.

5.1.1. Forms and semantic functions of the third complementation in SVCs with CPHR(4)

When describing Czech SVCs with three complementations, Macháčková (1983, p. 139) considers the following distribution of semantic functions within SVCs: “There is mostly agent in the subject position (resp. stimulus), the second valency position is occupied by an abstract noun, the third position is occupied by addressee, recipient, sometimes also source, stimulus, aim of the event (action) / state.”⁸ This description is general, it does not concern only SVCs with CPHR(4) but also SVCs containing forms mentioned above, therefore it does not provide forms of the possible valency slots, but rather their semantic functions.

In PDT, the third complementation in SVCs with CPHR(4) is expressed especially by the following forms:

- prepositionless dative (e.g. *dát komu příkaz*, lit. ‘to give to-sb order’);
- prepositional phrases:
 - *od+2* ‘from+2’ (e.g. *dostat od koho příkaz*, lit. ‘to get from sb order’);
 - *z+2* ‘from+2’ (e.g. *nabýt z něčeho přesvědčení*, lit. ‘to gain conviction from sth’, i.e. ‘to come to believe that’);
 - *na+4* ‘on+4’ (e.g. *klást nároky na někoho*, lit. ‘to put demands on sb’);
 - *v+6* ‘in+6’ or *u+2* ‘at+2’ (e.g. *budit obdiv v kom / u koho*, lit. ‘to raise admiration in sb / at sb’).

You can see that the forms extracted from PDT, at least as far as the SVCs with CPHR(4) are taken into account, are in agreement with Macháčková’s description of semantic functions of valency slots within SCVs containing three complementations:

The valency slot expressed by prepositionless dative corresponds to the position of addressee or recipient (in PDT, it is mostly labelled by the functor ADDR (Addressee))⁹. The prepositional phrase *od+2* ‘from+2’ expresses usually source, the prepositional phrase *z+2* ‘from+2’ is near to stimulus (in PDT, they are mostly labelled by the functor ORIG (Origin)). Support verbs having the third valency slot in the form of dative and support verbs with the prepositional phrase *od+2* ‘from+2’ represent SVCs which allow for changes in voice. While SVCs with the valency slot in dative render constructions in active voice (*dát komu příkaz*, lit. ‘to give to-sb order’), SVCs with the valency complementation expressed by the prepositional phrase *od+2* ‘from+2’ can be regarded as constructions in passive voice (e.g. *dostat od koho*

⁸ All quotations of Macháčková were translated from Czech by V.K.

⁹ For the cases of so-called shifting of participants see Panevová (1980), but also Uřešová (this volume).

příkaz, i.e. *bylo mu přikázáno*, lit. ‘to get from sb order’, i.e. ‘to be given an order (by sb)’). Such understanding of the relation between the two mentioned types of SVCs is shared also by Macháčková (1983, pp. 155-157). Various examples of SVCs allowing for changes in voice are given in Section 5.4.

The prepositional phrase *na+4* ‘*on+4*’ obviously serves for several semantic functions. It is common with support verbs that have, when used in a primary (i.e. non-figurative) sense, obligatory free modification with the meaning of direction (in PDT mostly labelled by the functor DIR3), e.g. *klást něco někam*, lit. ‘to put sth somewhere’. The prepositional phrase *na+4* ‘*on+4*’ is one of the prototypical forms of the directional modification (e.g. *klást něco na něco / někoho*, lit. ‘to put sth on sth / sb’). When these verbs function as support verbs, it is not possible to express the third valency slot by an adverb, and only the prepositional phrase *na+4* ‘*on+4*’ remains (cf. *klást nároky na někoho*, lit. ‘to put (make) demands on sb’). Thus, we assign the prepositional phrase *na+4* ‘*on+4*’ within these SVCs the functor ADDR (Addressee). But also some other SVCs with the prepositional phrase *na+4* ‘*on+4*’ exist. Considering the verb *obrátit* ‘to turn’, different forms of the third valency slot are possible even when the verb functions as a support verb (i.e. *obrátit pozornost na něco / k něčemu / někam*, lit. ‘to turn attention on sth / to sth / somewhere’). In this case we assign the more general functor with the meaning of direction (DIR3) rather than the functor ADDR.

We treat in a similar way also support verbs *budit*, *vyvolat* ‘arouse, raise’, which are in their non-figurative meaning often accompanied by the free modification with the meaning of location. When they are used within the SVCs, the third valency slot can be expressed by several forms (*v+6* ‘*in+6*’, *u+2* ‘*at+2*’), including also an adverb (cf. *budit obdiv v kom / u koho / kde*, lit. ‘to raise admiration in sb / at sb / where’); thus we again decide for a more general functor, in this case for the functor with the meaning of location (LOC).

SVCs with the third valency complementation rendering the semantic function of “aim of the event (action) / state” have not been found yet in PDT.¹⁰

5.1.2. Changes in valency frames of SVCs with CPHR(4) in comparison with the non-figurative sense of the verbs

Valency properties of the verb component within SVCs can be investigated not only as far as semantic functions of particular valency slots are concerned but we can also compare valency frames of SVCs with CPHR(4) with the non-figurative sense of these (support) verbs. Taking into account the latter aspect, the following types of valency can be differentiated:

- (a) Valency behaviour of a support verb is the same as in its non-figurative sense (i.e. the support verb has the same number of valency slots and also forms of particular complementations are the same; this type can be illustrated by examples of SVCs quoted in the previous section).
- (b) The support verb acquires a new valency slot which is not present in the valency frame of the respective verb in its non-figurative sense (emergence of the new slot can be mostly explained by means of analogy with valency properties of a corresponding simplex verb or another support verb, cf. below).
- (c) Sometimes a support verb can even lose a valency slot typical for the respective verb in its non-figurative sense (see below).¹¹

¹⁰ Moreover, the complementation with the meaning of aim (labelled by the functor AIM) probably would not have been considered to be a member of a valency frame at all.

Acquiring of new valency slots by means of analogy. Some support verbs that have almost lost their lexical meaning can acquire the third valency slot, although there is no reason for such complementation in the valency frame of the respective verb in its non-figurative sense. This concerns especially verbs such as *dělat, udělat, činit, učinit* ('to make') and also verbs *tvořit, vytvořit* ('to create / form / raise'). Thus the following SVCs exist: (*u*)*dělat / učinit na někoho dojem*, lit. 'to make impression on sb' (probably by analogy with the corresponding simplex verb *zapůsobit na někoho*, lit. 'to impress on sb'), *položít / klást někomu otázku*, lit. 'to put to-sb question', i.e. 'to ask sb a question' (probably by analogy with another support verb, e.g. *dát někomu otázku*, lit. 'to give to-sb question', because the respective valency slot in the valency frame of the source verb of the noun *otázka* 'question' is expressed by genitive, cf. *otázat se koho*, i.e. 'to ask sb', so it cannot be an analogy to this simplex verb). We can also explain by means of analogy the third valency slot of the verb *vyjádřit* 'to express' in SVCs such as *vyjádřit někomu úctu* (it is probably an analogy with the support verb *projevit* 'to express / to show', cf. *projevit někomu úctu*, lit. 'to express / show to-sb respect', because the respective valency slot in the valency frame of the source verb of the noun *úcta* 'respect' is expressed by accusative, cf. *uctívat koho* 'to respect sb' or 'to worship sb').

Losing (of) valency slots. The reverse process, i.e. losing (of) a valency slot typical for a verb in its non-figurative sense, can also be observed, e.g. *podat výkon*, lit. 'to pass performance', i.e. 'to perform' (the valency slot with the meaning of Addressee is missing here), *dostat chuť dělat něco*, lit. 'to get liking to do sth', i.e. 'to feel like doing sth' (the valency slot with the meaning of Origin is missing here).

5.1.3. Recording of SVCs in PDT-vallex

It follows from the statements mentioned above that one support verb can have several different valency frames according to the type of SVCs the concrete support verb is involved in. The following valency frames of particular support verbs illustrate the way of recording SVCs in the PDT-vallex (the list of abstract nouns within braces provides the set of nouns found in the data depending on the particular support verb, jointly representing a SVC; realization of forms of valency slots in the PDT-vallex is discussed by Urešová, this volume).

The verb *dostat* 'to get':

ACT(.1) ORIG(*od*+2 'from+2') CPHR({*rozkaz* 'order', *úkol* 'task',...}.4)

ACT(.1) CPHR({*chuť* 'liking', *nápad* 'idea',...}.4)

The verb *klást* 'to put':

ACT(.1) ADDR(.3) CPHR({*dotaz*, *otázka* 'question',...}.4)

ACT(.1) ADDR(*na*+4 'on+4') CPHR({*nárok* 'demand', *požadavek* 'requirement',...}.4)

The verb *vyjádřit* 'to express':

ACT(.1) CPHR({*přesvědčení* 'conviction', *údiv* 'surprise', *spokojenost* 'satisfaction',...}.4)

ACT(.1) ADDR(.3) CPHR({*důvěra* 'trust', *úcta* 'respect', *podpora* 'support',...}.4)

¹¹ Facts described in points (b) and (c) represent one more reason why such verbs with its valency slots should be considered to be a SVC.

The verb *vyvolat* ‘to cause / rouse / raise’:

ACT(.1) CPHR({diskuse ‘discussion’, jednání ‘action’, potíže ‘trouble’,...}.4)

ACT(.1) CPHR({dojem ‘impression’, důvěra ‘trust’, pochybnost ‘doubt’,...}.4) LOC(v+6 ‘in+6’; u+2 ‘at+2’;*)

5.2. Competition of the valency relation to the noun and to the support verb

The origin of the third valency slot within SVCs formed by verbs that have almost lost their lexical meaning (it concerns again especially verbs such as *dělat*, *udělat*, *činit*, *učinit* ‘to make’ and also verbs *tvořit*, *vytvořit* ‘to create / form / raise’) can be explained not only as an analogy with the respective simplex verb or with another support verb, but rather as a valency slot of the noun component of the SVC. The competing valency slot is interpreted as a member of the valency frame of the noun component whenever the valency relation to the noun is stronger than the relation to the support verb.

When a “competing” valency slot is expressed by a prepositional phrase, it is relatively clear that a complementation of the noun component of the SVC is concerned (e.g. *mít zájem o něco*, lit. ‘to have interest about sth’, i.e. ‘to be interested in sth’; for more examples see Section 5.3.1.).

In case of the third valency slots expressed by prepositionless cases it is more complicated to decide whether the valency slot of the verb or the valency slot of the noun is concerned. A prepositionless genitive is always the valency slot of the noun component (e.g. *dělat rekonstrukci bytu*, lit. ‘to do reconstruction of the flat’). With a prepositionless instrumental we decide on the basis of the context and the word order, cf. the following examples: while in the construction *udělat pohyb rukou*, lit. ‘to make motion by-hand’, i.e. ‘to gesture’ we interpret the word ‘hand’ as the valency slot of the noun ‘motion’, in the construction *udělat tou rukou pohyb*, lit. ‘to make by-that hand motion’, i.e. ‘to gesture’ we expound the word ‘hand’ as the free modification of the verb ‘to make’, i.e. ‘to make by means of hand’. The clear example with the prepositionless instrumental can be exemplified by the construction *vyjádřit pohrdání něčím*, lit. ‘to express contempt with-sth’, i.e. ‘to express contempt for sth’ where ‘sth’ is the valency slot of the noun component. The most disputable examples are represented by SVCs with the third valency slot expressed by prepositionless dative. Nevertheless, considering SVCs formed by nouns derived from verbs with one valency slot expressed by dative, the valency relation to the noun is stronger than that to the support verb in these constructions, so we interpret the respective valency slot expressed by dative as a valency complementation of the noun component, cf. the following examples:

SVC *tvořit / vytvářet / stavět překážku / bariéru něčemu*, lit. ‘to create / to form / to raise obstacle / barrier to-sth’ (it may be an analogy with the valency of the simplex verb *bránit* ‘to prevent’, cf. *bránit čemu*, lit. ‘to prevent to-sth’, but also the source verb of the noun *překážka* ‘obstacle’, i.e. *překážet* ‘to hinder’, has the valency slot expressed by dative, cf. *překážet komu*, i.e. ‘to be in sb’s way’)

(1) ... *zdražuje dopravu a vytváří překážky mezinárodnímu obchodu* (CNC, reduced)

(1’) lit. ‘(it) increases prices (of traffic) and creates obstacles to-international trade’.

SVC *dělat / činit návrh / nabídku někomu*, lit. ‘to make suggestion / offer to-sb’ (it may be an analogy with the valency of the support verb *dát* ‘to give’, cf. the SVC *dát někomu návrh*, lit. ‘to give to-sb offer’, but also the source verbs of nouns *návrh / nabídka* ‘suggestion / offer’ have the

valency slot expressed by dative, cf. *navrhnout / nabídnout někomu něco*, lit. ‘to suggest / to offer to-sb sth)

(2) ... *činí její vyhlášovatel návrh konkrétně neurčeným osobám, aby...* (CNC, reduced)

(2') lit. ‘makes her announcer suggestion to-concretely unspecified persons to...’.

SVC *dělat / činit / učinit někomu ústupky*, lit. ‘to make concessions to-sb’ (only the source verb of the noun *ústupek* ‘concession’, i.e. *ustupovat* ‘to make-way’, exists, having its own valency slot expressed by dative, cf. *ustupovat někomu*, lit. ‘to make-way to-sb’, i.e. ‘to compromise with sb’)

(3) *Bylo nutné učinit větší ústupky lidovcům* (CNC, reduced)

(3') lit. ‘(It) was necessary to make bigger concessions to-members of KDU-ČSL’.

5.3. Valency of the noun component in SVCs

In this section, we will concentrate especially on the valency properties of the noun component within SVCs (see Section 5.3.1.). Extending the scope to nominalizations of SVCs, our investigations will concern also the valency behaviour of nouns which “leave” their SVC and occur alone in the text (see esp. Section 5.3.2.). As mentioned above, both deverbal nouns as well as non-deverbal ones can serve as the noun component of SVCs.

5.3.1. Original valency complementations of the noun component within SVCs

According to the occurrences of SVCs found in PDT, it seems that **deverbal nouns** have their original valency complementations in the vast majority of SVCs (common differences from the valency behaviour of verbs these nouns are derived from are described in Jirsová, 1966, and Novotný, 1980, concerning especially cases when the form of a complementation changes to a prepositional phrase, e.g. *nenávidět někoho* ‘to hate sb’ vs. *nenávist k / vůči někomu* ‘hatred for sb’).

A valency complementation of the noun component within SVCs can be expressed by:

(i) a prepositionless case, e.g. *provést opravu něčeho*, lit. ‘to make repair of-sth’, *budit pocit něčeho*, lit. ‘to raise feeling of-sth’, *vyjádřit pohrdání něčím*, lit. ‘to express contempt with-sth’, i.e. ‘to express contempt for sth’, *vydat pokyn někomu*, lit. ‘to issue instruction to-sb’, *vyhlásit rozkaz někomu*, lit. ‘to pronounce order to-sb’, *dělat ústupky někomu*, lit. ‘to make concessions to-sb’;

(ii) a prepositional phrase, e.g. *mít rozhovor s někým*, lit. ‘to have conversation with sb’, *vést debatu o něčem*, lit. ‘to hold discussion about sth’, *vznést námitku vůči někomu*, lit. ‘to raise objection to sb’, *podniknout krok k čemu*, lit. ‘to take step to sth’, *vynést soud nad někým*, lit. ‘to pronounce judgement on sb’, *vytvářet tlak na někoho*, lit. ‘to exert pressure on sb’, *mít obavu o někoho*, lit. ‘to have fear for sb’, *mít vztah k někomu*, lit. ‘to have relation to sb’, *projevit souhlas s někým*, lit. ‘to express agreement with sb’, *provést útok na někoho*, lit. ‘to make attack on sb’, *dát se do práce na něčem*, lit. ‘to set to work on sth’;

(iii) an infinitive or a subordinated clause, e.g. *vydat pokyn + inf.*, lit. ‘to issue instruction to+inf.’, *učinit rozhodnutí, že...*, lit. ‘to make decision that...’.

Also some **non-deverbal nouns** have within SVCs original valency complementations, often acquired from words these nouns are derived from (esp. deverbal adjectives), e.g. *věrnost někomu* ‘faithfulness to-sb’, *oddanost někomu* ‘devotion to-sb’, *zodpovědnost za něco*

'responsibility for sth', přednost před něčím 'preference to sth', impuls, možnost, příležitost, šance inf. / k čemu 'stimulus, possibility, opportunity, chance inf. / to sth'; právo inf. / na něco 'right inf. / to sth' (for complementations expressed by an infinitive, see below).

Macháčková (1983, p. 136) observes an interesting influence of valency properties of the verb component on the noun component within SVCs: "When a noun serves as a noun component within a SVC, it can keep the form of its valency complementations (*mít, chovat úctu ke komu* 'to have respect to sb'), or – if the support verb has its own valency complementations – it "conforms" with the support verb. This concerns support verbs with three participants as *dát* 'to give', *poskytovat* 'to provide', *vzdát* 'to give / render', *věnovat* 'to devote', *projevit* 'to show / display', *vyslovit* 'to express'. Thus there is *důvěra ke komu*, lit. 'confidence to sb', i.e. 'confidence in sb', but *projevit, vyslovit důvěru komu*, lit. 'to express, pronounce confidence to-sb', similarly there is *péče o Jana* 'care for / of John', but *poskytnout péči Janovi*, lit. 'to provide care to-John', i.e. 'to take care of John' because the verb *poskytnout* 'to provide' has the valency *komu co* 'to-whom what'. So the expression and alignment of participants is determined especially by the support verb; if the verb has no other complementation than an abstract noun (beside its subject; note of the translator), then the realization of other participants is determined by the valency properties of the noun component: *mít zalíbení v kom, čem*, lit. 'to have fancy in sb, sth'.

Sometimes both possibilities still compete as with verbs *budit, vyvolat* 'to arouse, raise'. In one case the valency behaviour is determined by the noun component, it concerns a congruent and a non-congruent attribute: *budit obdiv všech*, lit. 'to raise admiration of all (people)', *budit Janův obdiv*, lit. 'to raise John's admiration'; when an original adverbial of location is concerned, then the valency behaviour is determined by the verb component: *budit v kom (u koho) obdiv*, lit. 'to raise in sb (at sb) admiration'.

Examples of SVCs mentioned above demonstrate, among other things, the fact that in some cases an original valency complementation of the noun component cannot be expressed at all (e.g. **Projevil Petrovi důvěru k němu / k Petrovi*, lit. 'He expressed to-Peter trust to him / to Peter', **Poskytl Janovi péči o něj / o Jana*, lit. 'He provided to-John care of him / of John'). The question arises whether we have to consider this valency complementation to be present at least at the underlying (so-called tectogrammatical) layer of sentences in PDT, understanding it to be an obligatory complementation of the given noun.¹² To keep consistency of the valency lexicon and data, we decided for the following solution: we restore the node for the original valency complementation of the given noun in the tectogrammatical tree (therefore the valency structure of the noun corresponds to its valency frame stored in the PDT-vallex) but we label the restored node by the special tectogrammatical lemma QCor, i.e. Quasi Control¹³. In the tree, the node with the lemma QCor is connected with the respective valency complementation of the support verb by an arrow representing in a graphic way the referential identity of the two given nodes and therefore the coreferential relation between them.

¹² In the cases of deletion in the surface shape of the sentence, nodes are introduced into the tectogrammatical tree to "recover" a deleted word.

¹³ The name of the tectogrammatical lemma QCor indicates similarity to the subject of an infinitive modifying a verb of control which is labelled by the tectogrammatical lemma Cor. The connection between two mentioned types of deletion consists in impossibility of an overt expression of the deleted node in the surface shape of the sentence, and also both types of deletion represent constructions with grammatical coreference. For more details on capturing coreferential relations in PDT see Kučová – Kolářová – Žabokrtský – Pajas – Čulo (2003), for the treatment of constructions with verbs of control in PDT see Panevová – Řezníčková – Urešová (2002).

5.3.1.1. Actor of a noun component of a SVC

Also a valency complementation with the meaning of Actor is an example of an original valency complementation of the noun component within a SVC. It is frequently the case that the subject of a support verb can be understood to be identical to the non-expressed Actor of a noun component in a SVC (for various possibilities of identity of particular valency complementations of a verbal component and a noun component see Section 5.4.). However, we will see that even in these cases, impossibility of expression of an Actor of a noun within a SVC deserves further discussion. Macháčková (1983, p. 135) presents constructions in which we really cannot add an Actor to the noun component of the SVC, e.g. *Jan dostal strach*, lit. 'John got fear', i.e. 'John became scared', but **Jan_i dostal Janův_i strach*, lit. 'John got John's fear'. According to the method described above, in these cases we restore the new node for the Actor of the given noun in the tectogrammatical tree and we label it by the special tectogrammatical lemma QCor. However, at least sometimes it is possible to express the Actor of the noun component by a possessive pronoun as illustrated in (4). In addition, an expression of the Actor of a noun is possible in cases when this complementation and the subject of the support verb are not identical. The subject of the verb and another valency complementation can be identical depending on the particular SVC, cf. Macháčková's example *budit Janův obdiv* 'to raise John's admiration' vs. (5).

(4) *Petr znovu položil Janovi svoji.ACT otázku.*

(4') lit. 'Peter again put to-John his.ACT question', i.e. 'Peter again asked John (his) question';

(5) *Chci obrátit vaši.ACT pozornost na osudy oněch lidí.* (CNC, reduced)

(5') lit. '(I) want to turn your.ACT attention to life-stories of-those people'.

Our further observations demonstrate that the Actor can be expressed by a possessive pronoun also within SVCs which consist of a support verb and a non-deverbal noun. We want to quote especially those non-deverbal nouns which usually are not considered to have an Actor but only their original valency complementation expressed mostly by prepositionless genitive¹⁴, e.g. *příklad čeho.PAT* 'an example of-sth', *verze čeho.PAT* 'a version of-sth', *alternativa čeho / čemu / k čemu.PAT* 'an alternative of-sth / to-sth / to sth', *varianta čeho.PAT* 'a variant of-sth', *cesta k řešení.PAT*, lit. 'the road to solution'. It seems that when such a noun serves as a noun component within a SVC, it acquires its Actor just by means of the connection with a support verb, cf. (6), (7), and (8).

(6) *Petr má nějakou (svoji.ACT) alternativu k vašemu řešení*, lit. 'Peter has some (his.ACT) alternative to your solution';

(7) *Petr má nějakou (svoji.ACT) verzi řešení toho problému*, lit. 'Peter has some (his.ACT) version of-solution of-that problem';

(8) *Petr má (svoji.ACT) zvláštní strategii*, lit. 'Peter has (his.ACT) strange strategy'.

The valency complementation with the meaning of Actor can be recognized clearly in constructions with those non-deverbal nouns which "leave" their SVC and occur alone in the text¹⁵, see (9), (10), and (11).

(9) *Petrova.ACT alternativa řešení.PAT problému je jistě výhodnější*, lit. 'Peter's.ACT alternative of-solution of-problem is surely more-favourable';

¹⁴ In PDT, this valency complementation is labelled in most cases by the functor PAT (Patient).

¹⁵ "Becoming independent" can be understood also as a type of a nominalization of the given SVC.

(10) *Petrova*.ACT verze řešení.PAT *problému je lepší*, lit. ‘Peter’s.ACT version of-solution of-problem is better’;

(11) *Petrova*.ACT strategie je opravdu zvláštní, lit. ‘Peter’s.ACT strategy is really strange’.

Some SVCs consisting of a non-deverbal noun and the support verb *mít* ‘to have’ correspond to simplex modal verbs. Then the non-deverbal nouns have the Actor and they combine with an infinitive which is typical for modal verbs. It is also interesting that the valency complementation of the noun component expressed by an infinitive can be within the “modal SVCs” substituted by a complementation expressed by a prepositional phrase, e.g. *na+4* or *k+3* (‘to sth’), which is not admissible with modal verbs.

(12) *Petr má šanci* vyhrát.PAT, lit. ‘Peter has chance to win.PAT’;

(13) *Petr má šanci na výhru*.PAT, lit. ‘Peter has chance for victory.PAT’;

(14) *Petr má právo* volit.PAT, lit. ‘Peter has right to vote.PAT’, i.e. ‘Peter is entitled to vote’;

(15) *Petr má právo na vlastní volbu*.PAT, lit. ‘Peter has right for his-own choice.PAT’;

(16) *Každý má své*.ACT nezadatelné právo volit.PAT, lit. ‘Everyone has his.ACT inalienable right to vote.PAT’;

(17) *Petr má příležitost* se zamyslet.PAT *nad novou situací*, lit. ‘Peter has opportunity to think.PAT about new situation’;

(18) *Petr má příležitost* k zamyšlení.PAT, lit. ‘Peter has opportunity to thinking.PAT’;

(19) *Petr má úkol* připravit.PAT *občerstvení*, lit. ‘Peter has task to prepare refreshment.PAT’;

(20) *Každý má nějaký svůj*.ACT úkol, lit. ‘Everyone has some his.ACT task’.

The valency complementation with the meaning of Actor is again very common in constructions with the non-deverbal nouns which occur in the text without their “modal SVC”, cf. (21), (22), (23), and (24).¹⁶

(21) *Petrova*.ACT šance najít.PAT *zaměstnání tím výrazně vzrostla*, lit. ‘Peter’s.ACT chance to find.PAT job rapidly increased’;

(22) *Petrovou*.ACT povinností je přijít včas, lit. ‘Peter’s.ACT duty is to come in time’;

(23) *Petrovo*.ACT právo se odvolat.PAT *mu nikdo nemůže upřít*, lit. ‘Peter’s.ACT right to appeal.PAT him nobody can deny’;

(24) *Petrův*.ACT úkol připravit.PAT *občerstvení se zdál být snadný*, lit. ‘Peter’s.ACT task to prepare.PAT refreshment seemed to-be easy’.

In connection with the issues of the Actor of nouns within SVCs, Macháčková (1983, p. 135) mentions also the “ability” of this valency complementation to become even the subject of the sentence: “But only connection of deverbal noun with the support verb in a finite form allows the Actor to become the subject of the sentence in a similar vein as the Actor of the verb the noun was derived from: *Zemědělci osévají půdu.*, lit. ‘Farmers sow ground’ – *Zemědělci provádějí osev půdy.*, lit. ‘Farmers carry out sowing of ground’.”. Also Fillmore, Johnson and Petruck (2003, p. 244) highlight this phenomenon in English SVCs and describe how they treat it within the framework of the project called FrameNet: “Certain semantically neutral verbs can turn an event noun or a state noun into a verb phrase-like predicate and allow for the expression of a frame element as their subjects. We call such verbs support verbs. For example, both sentences in (13) report on the same event, that of deciding something and (13)(b) is not about an event of

¹⁶ There is, of course, a possibility to express the Actor also by the form of genitive in these constructions.

making. We want to record the fact that the noun phrase *the committee* instantiates the same frame element in both sentences, and recognizing the role of the support verb *make* allows us to do so.

(13) a. *The committee decided to convene again next month.*

b. *The committee made a decision to convene again next month.*”.

Atkins, Fillmore and Johnson (2003, p. 270) consider the subject of the sentence formed by a SVC to be both the grammatical subject of the support verb and the “logical” subject of the noun component. These authors also differentiate an internal and an external realization of the frame element (i.e. the valency complementation) of the noun component; while the Actor expressed by a possessive pronoun or adjective is regarded as the internal realization of the valency complementation of the noun, its external realization is represented by the grammatical subject of the support verb (cf. Atkins – Fillmore – Johnson, 2003, p. 275).

In PDT, the subject of the sentence is recorded as depending on the support verb. However, in order to indicate the fact that the subject of the verb and the Actor of the noun are identical, we use the method described above; that is, we restore the node for the Actor of the noun (with the tectogrammatical lemma QCor) and then we capture the respective coreferential relation between the two nodes by the arrow.

In addition, Macháčková points out the fact that the valency complementation of the noun component which is not the Actor (thus it is usually Patient) is often deleted within SVCs, e.g. *údržbář opravil vodovod* ‘*the service engineer repaired water main*’, but *údržbář provedl opravu* ‘*service engineer made repair*’. This type of deletion usually is not possible within constructions with the simplex verb, cf. **údržbář opravil* ‘*service engineer repaired*’ (see Macháčková, 1983, p. 135). In PDT, the node for the Patient of the noun is restored in such SVCs. Nevertheless, due to the fact that this node is not identical to any participant of the support verb and it can be identified only from the context, the node is not labelled by the tectogrammatical lemma QCor, but by another lemma corresponding to the respective coreferential relation (for more information about capturing coreferential relations in PDT see Kučová – Kolářová – Žabokrtský – Pajas – Čulo, 2003).

5.3.2. Taking over of valency complementations from the verbal component of a SVC

Baron and Herslund (1998) suggest that it is the support verb constructions that provide the noun phrases with an argument structure which the noun phrases then inherit when they occur alone. Baron and Herslund “regard such nominals, noun phrases as compounds, as reduced clauses which exhibit the same argument structure as a clause” (1998, p. 106) and support verb constructions as “transitional forms between clauses with simplex verbs and complex nominals”. They argue by means of a transformation test that nominal constructions have both semantic and syntactic properties in common with the support verb construction which they do not share with the simplex verb (1998, p. 107).

Also in Czech there exist constructions formed by an original noun component of a SVC which occurs in the text without its support verb but inherits some of its valency complementation¹⁷. With deverbal nouns, the respective valency position is present in its valency frame. However, the form of the valency complementation does not correspond to the form of the

¹⁷ As mentioned above, “becoming independent” can be understood also as a type of a nominalization of the given SVC.

respective valency slot of the verb the noun is derived from, but to the form of the respective valency slot of the support verb. Non-deverbal nouns inherit from support verbs not only the form of the valency complementation but the whole valency position. The valency complementation inherited from the verbal component of a SVC concerns the third valency complementation of support verbs described in Section 5.1.1., and is rendered esp. by one of the following two forms:

- (i) prepositionless dative;
- (ii) prepositional phrase *od+2* 'from+2'.

5.3.2.1. Nominal constructions with the valency complementation in prepositionless dative

Deverbal nouns. An influence of the participant of a support verb (expressed by prepositionless dative) on valency behaviour of deverbal-noun components is most transparent in constructions with nouns derived from verbs with a participant expressed by prepositionless accusative (e.g. *podpora* 'support', *pochvala* 'praise', *informace* 'information', *podnět* 'impulse / impulsion', *uznání* 'appreciation', *zpráva* 'massage') or genitive (e.g. *otázka* / *dotaz* 'question'). Typical changes of surface expressions of valency complementations of verbs within the process of nominalization are described by Karlík and Nübler (1998). According to them, in valency frames of nouns denoting action the original form of accusative changes to genitive, and genitive does not change. It seems that at least some of the nouns mentioned above do not allow for the expression of the valency complementation by the form of genitive at all, e.g. **informace někoho.ADDR* 'information of-sb', **dotaz někoho.ADDR* 'question of-sb', but examples of nouns with the complementation in prepositionless dative occur. Some of the nouns allow for both the genitive and the dative form of the complementation (e.g. *pochvala někoho / něčeho.PAT* 'praise of-sb / sth' or *pochvala někomu.PAT* 'praise to-sb'; *podpora někoho / něčeho.PAT* 'support of-sb / sth' or *podpora někomu / něčemu.PAT* 'support to-sb / sth')¹⁸. The question arose what is the origin of the dative form, and the influence of the third participant of a support verb offers one of the possible explanations. The following examples illustrate the notional process of taking over the form of dative from the support verb: e.g. *pochválit někoho* 'to praise sb', but *udělit někomu pochvalu*, lit. 'to award to-sb a praise' → *pochvala někomu* 'a praise to-sb'; *informovat někoho* 'to inform sb', but *dát / poskytnout někomu informaci*, lit. 'to give / provide to-sb information' → *informace někomu* 'information to-sb'; *podnítit někoho* 'to stimulate sb', but *dát někomu podnět*, lit. 'to give to-sb impulse' → *podnět někomu* 'impulse to-sb'; *uznávat někoho* 'to appreciate sb', but *vyjádřit někomu uznání*, lit. 'to express to-sb appreciation' → *uznání někomu* 'appreciation to-sb'; *podporovat někoho* 'to support sb', but *vyjádřit někomu podporu*, lit. 'to express to-sb support' → *podpora někomu* 'support to-sb'; *otázat / dotázat se někoho* 'to ask sb', but *dát / položit někomu otázku / dotaz*, lit. 'to give to-sb a question' → *otázka / dotaz někomu* 'a question to-sb'. Constructions with nouns modified by the valency complementation in dative can be documented by examples from CNC, cf. (25), (26), (27) and (28), information about their absolute and relative frequency in CNC and PDT is given also in Kolářová (in prep.). Although Macháčková (1983) does not deal with valency behaviour of nouns leaving their SVC, her insights support the idea mentioned above: "While simplex verbs are modified by an Addressee expressed by prepositionless dative (*přikázat komu* co, lit. 'to

¹⁸ Possibility / impossibility of expression of the complementation by a form of prepositionless genitive with other mentioned nouns is discussed in Kolářová (in prep.).

order to-sb sth', i.e. 'to order sb to do sth') but sometimes also by prepositionless genitive (*ptát se koho* 'to ask sb'), prepositionless accusative (*informovat koho* 'to inform sb') or an attribute (*souhlasím s tvou cestou* 'I agree to your journey'), within SVCs the Addressee is expressed first of all by prepositionless dative: *Dal jim rady, svolení, informace, otázky*, lit. 'He gave them suggestions, permission, information, questions'." (p. 153). However, some nouns derived from verbs with a participant expressed by prepositionless accusative exist that allow for the expression of the same participant by prepositionless dative (e.g. *prosba* 'request' / *výzva* 'appeal' / *varování* 'warning' *někomu* 'to-sb', cf. also (29)), although this form is not influenced by any participant of the support verb (e.g. *dělat propagaci*, lit. 'to make promotion', i.e. 'to promote', *mít prosbu*, lit. 'to have a request', *učinít výzvu*, lit. 'to make an appeal', *vyslovit varování*, lit. 'to express / pronounce warning'). This phenomenon yields untypical changes of surface expressions of the valency complementation of the verbs within the process of nominalization, i.e. Acc → Dat or Gen → Dat¹⁹. Again, some of the nouns allow also for the expression of the complementation by the form of prepositionless genitive, e.g. *systém varování obyvatelstva.ADDR v okolí Jaderné elektrárny Dukovany* 'the system of-warning of-population.ADDR in the neighbourhood of the Nuclear power station Dukovany'.

Up to now, we have found about thirty nouns which allow for the complementation in dative corresponding to the verbal valency complementation in accusative or genitive.

(25) *Psychologicky vhodná byla jeho.ACT závěrečná otázka panu Ježkovi.ADDR* (CNC, reduced)

(25') lit. 'Psychologically suitable was his concluding question to-Mr Ježek.ADDR', i.e. 'His concluding question to Mr Ježek was psychologically suitable.';

(26) *Operativní informace uživatelům.ADDR knihovny o mimořádných situacích.PAT v knihovně svědčí o...* (CNC, reduced)

(26') lit. 'Operative information to-users.ADDR of-library about extraordinary situations.PAT in library manifests about...';

(27) *Situace byla podnětem Raiffeisenovi.ADDR k založení.PAT místních družstev* (CNC, reduced)

(27') lit. 'Situation was impulsion to-Raiffeisen.ADDR to establishment.PAT of-local associations';

(28) *Dva dny nato neoficiální posel Wendell Wilkie přijel do Anglie s osobní zprávou Winstonu Churchillovi.ADDR od prezidenta.ACT Roosevelta.* (CNC, reduced)

(28') lit. 'Two days after-that unofficial envoy Wendell Wilkie came to England with personal message to-Winston Churchill.ADDR from president Roosevelt.ACT';

(29) *Jako poznámku uvádíme prosbu autorům.ADDR píšícím na počítači, aby pečlivě dbali.PAT na rozlišování písmene O od čísla 0.* (CNC)

(29') lit. 'As note we present request to-authors.ADDR writing on PC to carefully mind.PAT distinguishing letter O from numeral 0.'.

Non-deverbal nouns. Also some non-deverbal nouns can occur with their valency complementation in the form of dative influenced by the third participant of the support verb, esp. the support verbs *dát* 'to give' or *udělit* 'to award' (e.g. *důtka* 'admonishment', *políček* 'slap', *pohlavek* 'slap', *pokuta* 'fine / penalty', *ultimátum* 'ultimatum'). Constructions with the nouns

¹⁹ Examples of deverbal nouns with the complementation in dative which is not inherited from the verbs they are derived from nor influenced by participants of a support verb are illustrated more precisely in Kolářová (in prep.).

modified by the complementation in dative are documented by examples found in PDT or CNC, cf. (30), (31) and (32).

(30) *Odložení jeho ratifikace si hierarchie vykládá jako políček polskému papeži.PAT od polského parlamentu.ACT* (PDT)

(30') lit. 'Postponement of-his ratification hierarchy interprets as slap to-Polish pope.PAT from Polish Parliament.ACT';

(31) *Vedoucí má podepsat návrh na pokutu Zemědělskému družstvu.PAT Kosova Hora za znečištění.CAUS vody v Sedlčanech.* (CNC, reduced)

(31') lit. 'Boss has-to sign draft of fine to-Collective farm.PAT Kosova Hora for contamination.CAUS of-water in Sedlčany';

(32) *Následovalo ultimátum vládě.ADDR, aby zajistila.PAT návrat země k plně sekulárnímu státu.* (CNC, reduced)

(32') lit. '(There) followed ultimatum to-government.ADDR to arrange.PAT regress of-country to fully secular state.'

5.3.2.2. Nominal constructions with the valency complementation expressed by the prepositional phrase *od+2* 'from+2'

Taking over the valency complementation expressed by the prepositional phrase *od+2* 'from+2' is very frequent although there are not many support verbs with the third valency slot expressed by this form (e.g. *dostat* 'to get', *získat* 'to obtain'). While the valency complementation of the support verb is labelled by the functor ORIG (Origin; e.g. *somebody.ACT got from secretary.ORIG affirmation.CPHR*), it gets the meaning of Actor with deverbal nouns (e.g. *affirmation from secretary.ACT*, i.e. *secretary.ACT assured*). In a similar vein, we label it by the functor ACT also with non-deverbal nouns. Constructions with the nouns modified by the valency complementation in the form *od+2* 'from+2' inherited from the support verb are documented by examples from PDT or CNC (for deverbal nouns cf. (33), (34), and (35), for non-deverbal nouns cf. (36), (37), (38)).

(33) *Nedávno jsme zde slyšeli velice pozitivní ujištění od ministra.ACT zahraničních věcí USA...* (CNC, reduced)

(33') lit. 'Recently (we) here heard very positive affirmation from secretary.ACT of state of-USA';

(34) *Takový byl alespoň slib od okresní nemocnice.ACT.* (CNC)

(34') 'That was at least the promise from the regional hospital.ACT';

(35) *Mezitím se z vysílačky ve voze ozývají rozkazy od dispečera.ACT pro všechny řidiče.* (CNC)

(35') lit. 'In-meantime from walkie-talkie in carriage are-heard orders from dispatcher.ACT for all drivers';

(36) *Theresa Weldová zařadila do svého programu salchow, což jí vyneslo důtku od rozhodčích.ACT* (CNC, reduced)

(36') lit. 'Theresa Weld included to her program salchow which her earned reprehension from referees.ACT';

(37) *Měl by si s sebou vzít dostatek peněz na pokuty od dopravní policie.ACT* (CNC, reduced)

(37') lit. '(He) had with him to take enough money for fines from traffic police.ACT';

(38) *Petice byla ultimátem od rodičů.ACT* (PDT, reduced)

(38') 'The petition was the ultimatum from the parents.ACT'.

Nevertheless, not all valency complementations expressed by the form *od+2* 'from+2' modifying nouns denoting action can be interpreted as a result of taking over the valency complementation from a support verb. Sometimes there is no support for this form even in the valency frame of the verb the noun is derived from, e.g. **odprodat od+2* 'to sell from+2', but *odprodej od+2* 'sale from+2', cf. (39).

(39) *M. Zeman navrhl možnost jeho.PAT odprodeje od státu.ACT židovským obcím.ADDR*
(CNC)

(39') '*M. Zeman suggested possibility of its.PAT sale from state.ACT to Jewish communities.ADDR*'.

It follows from our observations that non-deverbal nouns which serve as a noun component within SVCs can have in addition to their original valency complementations also the valency position with the meaning of Actor as well as another valency slot inherited from the support verb. In this sense, they can be considered to be equal to deverbal nouns²⁰, and moreover, in the valency dictionary they should be treated in a similar way as deverbal nouns.

5.4. Sharing of valency complementations of the verbal and the noun component of SVCs

As already mentioned above, some valency complementations of the verbal as well as the noun component of a SVC can be referentially identical. In other words, the verbal and the noun component share some valency complementation. The form of the complementation is equal (e.g. prepositionless dative, cf. *poskytnout pomoc Petrovi*, lit. 'to provide help to-Peter', and also *pomoc Petrovi*, lit. 'help to-John') or different (e.g. *Janův obdiv* 'John's admiration' vs. *budit obdiv v Janovi* 'to raise admiration in John', *péče o Jana* 'care of John' vs. *poskytnout péči Janovi*, lit. 'to provide care to-John', i.e. 'to take care of John'). The semantic function of the complementation may also be the same or different. Actors of both components are shared in most SVCs, but also other complementations can be concerned, e.g. Addressee. In PDT, the shared valency complementation which is not present in the surface shape of the sentence is restored (it concerns esp. a valency complementation of the noun component) and labelled by the tectogrammatical lemma QCor. Then the node is connected with the shared valency complementation of the support verb by an arrow representing in a graphic way the referential identity of the two given nodes and therefore the coreferential relation between them.

The following types of sharing of valency complementations can be distinguished:

(a) SVCs corresponding to constructions with the respective simplex verb in active voice

(ai) SVCs in which the ACT of the noun component and the ACT of the verbal component are identical

This group contains the overwhelming majority of SVSc which can be represented esp. by so-called quasimodal verbs (e.g. *mít právo*, lit. 'to have right', *mít povinnost*, lit. 'to have duty', *mít potřebu*, lit. 'to have need'), verbs of intention (e.g. *mít plán* 'to have plan', *mít tendenci* 'to have

²⁰ Even new verbs can be derived from the non-deverbal nouns, e.g. *dát pokutu*, lit. 'to give fine' → *pokutovat* 'to fine', *dát pohlavek*, lit. 'to give slap' → *zphlavlkovat* 'to slap', cf. also Čermák, 1974, p. 299.

tendency'), inchoative SVCs (e.g. *dát se do práce*, lit. 'to give oneself into work', *najít odvahu*, lit. 'to find courage', *pojmut podezření*, lit. 'to entertain suspicion'), terminative SVCs (e.g. *pozbyt odvahu*, lit. 'to lose courage', *přijít o možnost*, lit. 'to forfeit chance') and lot of other SVCs such as e.g. *učinit rozhodnutí*, lit. 'to make decision', *věnovat pozornost*, lit. 'to devote attention', *projevit zájem*, lit. 'to express interest', *provést omezení*, lit. 'to make restriction'.

(aii) SVCs in which the ACT of the noun component and the ADDR (or another valency complementation of the verbal component which is not the ACT) are identical, e.g.: *dát možnost*, lit. 'to give possibility', *ukládat povinnost*, lit. 'to give duty', *vzbudit (v někom) dojem*, lit. 'to raise (in sb) impression'.

(aiii) SVCs in which the ACT of the noun component and the ACT of the verbal component as well as the ADDR (or another valency complementation) of the noun component and the ADDR of the verbal component are identical, e.g.: *dát příkaz*, lit. 'to give order', *dát radu*, lit. 'to give advice', *klást otázku*, lit. 'to put question', *udělit pochvalu*, lit. 'to award praise', *poskytnout pomoc*, lit. 'to provide help'.

(b) SVCs corresponding to constructions with the respective simplex verb in passive voice

(bi) SVCs in which the ACT of the noun component and the ACT of the verbal component are identical, e.g.: *Petr dostal možnost přijít*, lit. 'Peter got possibility to come' = *Petrovi bylo umožněno přijít* 'Peter was allowed to come'; *Petr získal možnost pracovat*, lit. 'Peter obtained possibility to work' = *Petrovi bylo umožněno pracovat* 'Peter was allowed to work'.

(bii) SVCs in which the ACT of the noun component and the ORIG of the verbal component as well as the ADDR (or another valency complementation) of the noun component and the ACT of the verbal component are identical, e.g.: *Petr dostal (od šéfa.ORIG) příkaz přijít*, lit. 'Peter got (from boss) order to come' = *Petrovi bylo (šéfem.ACT) přikázáno přijít*, lit. 'Peter was (by boss) ordered to come'; *Petr dostal (od šéfa.ORIG) pochvalu*, lit. 'Peter got (from boss) praise' = *Petr byl pochválen (šéfem.ACT)*, lit. 'Peter was praised (by boss)'.

6. Concluding remarks

There is no doubt that SVCs represent very complicated, complex linguistic phenomenon and an investigation of this problem concerns many particular aspects. We touched on only two of them dealing with the semantic and valency properties of SVCs. Issues of the word order and TFA within SVCs were left out and deserve further discussion. We outlined the basic principles of annotation of SVCs in the tectogrammatical tree structure of PDT and presented the method of their recording in the PDT-vallex. Real examples from CNC and PDT illustrate the fact that the noun component of a SVC, the non-deverbal as well as the deverbal one, can be to a large degree influenced by the valency properties of the verbal component. More inquiries into the issues of the process of nominalization of SVCs, including also the valency behaviour of adjectives derived from support verbs, would probably yield further interesting observations.

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Resume

Složenými predikáty (SP) rozumíme zejména konstrukce složené z významově vyprázdněného slovesa a nějakého abstraktního substantiva (často označujícího děj nebo stav). Toto substantivum může být jak deverbativní (např. *učinit rozhodnutí, provést údržbu*), tak nedeverbativní (např. *dát pohlavek*). Zmíněný typ predikátů je občas označován také za predikáty verbonominální, příp. analytické. V rámci anotací PDT volíme pro tyto predikáty název „složené predikáty“, a to z toho důvodu, že termín *analytický* je vyhrazen pro tzv. analytickou rovinu PDT a atributy s ní spojené, termín *verbonominální* pak zpravidla používáme pro označení jednoho z podtypů složených predikátů, a to predikátů tvořených sponovým slovesem *být*. V anglickém textu používáme pro označení všech typů složených predikátů termín *complex predicates*; pro složené predikáty, které nejsou tvořeny sponovým slovesem *být*, pak volíme obecně užívaný termín *support verb constructions*. V tomto příspěvku se věnujeme složeným predikátům bez sponového slovesa *být*.

V rámci jednotlivých složených predikátů rozlišujeme slovesnou část (SČ) a jmennou část (JČ). Slovesná část SP se může nominalizovat, pak jde o spojení dvou substantiv (např. *věnování pozornosti*), případně jde o konstrukci s deverbativním adjektivem (např. *pozornost věnovaná dětem*).

V PDT jsou zachycovány kromě jiného i koreferenční vztahy mezi některými uzly tektogramatické stromové struktury a anotuje se rovněž aktuální členění věty. Při rozhodování, které konstrukce máme při anotacích označit za složený predikát, jsme vybíraly zejména konstrukce s gramatickou koreferencí (tzv. složené predikáty kontroly) a dále taková spojení slovesa a substantiva, jejichž jmenná část má nějaké vlastní valenční doplnění, jehož slovosledné postavení může v tektogramatické stromové struktuře způsobovat neprojektivní konstrukce. Současný seznam sloves, která mohou vstupovat do složených predikátů, byl tedy těmito hledisky značně limitován a určitě není vyčerpávající (lze ho získat prohledáváním dat nebo valenčního slovníku (tzv. PDT-vallexu), čítá zhruba 150 položek).

Po prostudování české i zahraniční odborné literatury jsme došly k závěru, že pro složené predikáty jsou charakteristické zejména následující skutečnosti:

(i) Sémantické vlastnosti slovesné a jmenné části SP

Slovesná část SP je často významově vyprázdněná, význam celého SP je dán významem jmenné části. Většinu sloves vstupujících do složených predikátů je možné přiřadit ke slovesům, která nazýváme kvazifázová, protože spolu se jmennou částí vyjadřují jednu z fází průběhu děje. Substantiva mající společnou slovesnou část jsou často významově propojena, někdy dokonce tvoří určité sémantické třídy.

Dané spojení slovesa a substantiva je možné ze sémantického hlediska považovat za jednu (víceslovnou) lexikální jednotku, k tomuto spojení je tedy většinou možné nalézt adekvátní synonymní vyjádření pomocí syntetického predikátu. Vzhledem ke konvenci zavedené v PDT-vallexu však víceslovné lexikální jednotky nezachycujeme pomocí jednoho uzlu, nýbrž každá z částí má svůj vlastní uzel. K zachycení složeného predikátu jako jedné lexikální jednotky využíváme následující anotační prostředky:

Funktory pro jmennou část SP. Vzhledem k tomu, že jmenná část SP tvoří se slovesem jednu lexikální jednotku, není adekvátní ji považovat za jeden z aktantů příslušného slovesa. Jmenné části SP tedy přiřazujeme speciální funktor CPHR („compound phrase“, zkráceno z „část složeného predikátu“).

Tektogramatické lemma QCor. Skutečnost, že je možné nějaký SP považovat ze sémantického hlediska za jednu lexikální jednotku, má za důsledek referenční totožnost určitých valenčních členů substantiva a slovesa tvořících daný SP. Relevantní referenčně totožné valenční doplnění jmenné části SP je zpravidla povrchově vypuštěno. Domníváme se však, že v hloubkové struktuře věty je toto valenční doplnění přítomno, proto ho na tektogramatické rovině PDT doplňujeme a přiřazujeme mu speciální tektogramatické lemma QCor (tj. Quasi-Control). Od uzlu s lemmatem QCor pak vede koreferenční šipka k tomu valenčnímu doplnění slovesa, s nímž je uzel s lemmatem QCor referenčně totožný. Existuje více různých typů totožnosti (sdílení) valenčních členů.

(ii) Valenční vlastnosti slovesné a jmenné části SP

V PDT počítáme s tím, že jak slovesná část, tak jmenná část SP může mít svoji vlastní valenci: v PDT-vallexu bude mít jak sloveso, tak substantivum své vlastní heslo a svůj vlastní valenční rámec.

Valence slovesné části složených predikátů. Jmenná část s funktoem CPHR může být vyjádřena formou bezpředložkových i předložkových pádů. Nejčastější formou JČ v rámci SP je bezpředložkový akuzativ. V PDT se vyskytují zejména následující formy třetího valenčního doplnění SČ v rámci SP s bezpředložkovým akuzativem: dativní doplnění (funktor ADDR; *dát někomu možnost*); *od+2* (funktor ORIG; *dostat od někoho úkol*); *z+2* (funktor ORIG; *nabýt z něčeho dojem*); *na+4* (funktor ADDR/DIR3; *klást na někoho nároky*); *v+6* nebo *u+2* (funktor LOC; *budit v někom nepříjemný pocit, vzbuzovat u někoho pochybnosti*).

Hodnotíme-li valenci slovesné části SP z toho pohledu, zda je určité valenční doplnění typické i pro bezpříznakové užití slovesa, můžeme vymezip následující typy: (a) valence, kterou má dané sloveso i mimo užití ve složeném predikátu; (b) valence, kterou dané sloveso získává až při zapojení do složeného predikátu (většinou jde asi o analogii k valenci jednoslovného synonymního slovesa); (c) někdy může dokonce sloveso svoji valenci typickou pro bezpříznakové užití ztrácet. Slovesa, která vstupují do SP, mohou mít tedy i v rámci složených predikátů různé valenční rámce.

Valence jmenné části složených predikátů. Valenci jmenné části SP zkoumáme jak v případě, kdy je JČ součástí SP, tak v případě, kdy se daná JČ od SČ osamostatní a vystupuje v textu sama o sobě.

Z dokladů složených predikátů v PDT se zdá, že *deverbativní substantiva* mají v rámci SP svou vlastní valenci v naprosté většině případů. Může jít o valenční doplnění vyjádřené prostými pády (např. *provést opravu něčeho*), předložkovou vazbou (např. *vést debatu o něčem*), i formou infinitivu nebo vedlejší věty (např. *vydat pokyn + inf*). Také některá z *nedeverbativních substantiv* mají v rámci SP svou vlastní valenci, často získanou od slov, od kterých byla odvozena (zejména od deverbativních adjektiv, např. *zodpovědnost za něco*).

Pro valenční chování deverbativních substantiv v rámci SP je typické, že ta valenční doplnění, která jsou referenčně totožná s nějakým valenčním doplněním SČ, jsou v povrchové realizaci věty vypuštěna. V naprosté většině případů takové valenční doplnění nelze vůbec doplnit (např. **Poskytl Janovi péči o něj/o Jana*), v případě totožnosti konatelů je výjimečně možné Aktora jmenné části vyjádřit pomocí přivlastňovacího zájmena *svůj* (např. *Petr Karlovi znovu položil svoji.ACT otázku*). Některá z nedeverbativních substantiv v rámci SP získávají valenční doplnění, o kterých se u nich běžně neuvažuje (zejména Aktor vyjádřený přivlastňovacím zájmenem, u substantiv tvořících součást SP, která jsou synonymním vyjádřením modálních sloves, pak i infinitivní vazba a její varianty, např. *Petrova.ACT šance najít.PAT zaměstnání*).

V případě, že se substantivum osamostatní od slovesné části svého SP a vystupuje v textu samo, může přebrat formu třetího valenčního doplnění slovesné části svého SP. Jedná se zejména o dativní vazbu a o valenční doplnění vyjádřené formou *od+2*. K přebírání formy valenčního doplnění může dojít jak u deverbativních, tak u nedeverbativních substantiv.

Vliv dativní formy třetího valenčního doplnění slovesné části SP na valenční chování jmenné části daného SP je nejzřetelnější v konstrukcích se substantivy odvozenými od sloves s příslušným valenčním doplněním vyjádřeným akuzativem (např. *podpořit někoho*, ale *vyjádřit někomu podporu* → *podpora někomu*) nebo genitivem (např. *otázkat se někoho*, ale *dát / položit někomu otázku* → *otázka někomu*). U jiných substantiv však oporu pro dativní vazbu u slovesné části SP nemáme (např. *vyzvat někoho*, *učinit výzvu*, ale *výzva někomu*). Dochází tak ke specifickým formálním změnám Ak → Dat a Gen → Dat. Některá ze substantiv s dativní vazbou odpovídající u slovesa akuzativu si uchovávají i možnost vyjádření příslušného valenčního doplnění pomocí genitivu (např. *podpora někoho.ADDR*, *varování někoho.ADDR*).

K převzetí formy třetího valenčního doplnění slovesné části SP dochází často i v případě vazby *od+2* (např. *získat od někoho.ORIG slib* → *slib od někoho.ACT*).

Složené predikáty bezesporu představují komplexní jazykový jev, jehož zkoumání zasahuje do mnoha různých oblastí. Dotkly jsme se pouze dvou z nich; krátce jsme se zabývaly sémantickými

vlastnostmi složených predikátů, největší pozornost jsme pak věnovaly jejich valenčním vlastnostem. Popsaly jsme také základní pravidla anotace složených predikátů v PDT a jejich zachycení v PDT-vallexu.