



## A case of collision in principles of language description?

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### Abstract

In the article, I deal with an apparent case of incoherence within the framework of Functional Generative Description (FGD) in treating certain reflexive constructions. According to the principle that differences between valency frames are constitutive for establishing different lexical units (e.g., Žabokrtský and Lopatková, 2007), the occurrences of *vnímat* in (i) *Vnímá syna jako soka* and (ii) *Sám se vnímá jako síla ochraňující divadlo* have to be assigned to two different lexical units, as there is a difference in the formal marking of the Effect-argument (*jako*+accusative case in (i), *jako*+nominative case in (ii)). On the basis of the commutation test (e.g., Panevová, 2008) which identifies the reflexive clitic *se* in (ii) as an object-clitic, both occurrences of *vnímat* have to be, however, assigned to the same lexical unit as the only difference between *vnímá syna* in (i) and *vnímá se* in (ii) consists in the lexical filling of the object position. In the main part of the text, I review two different strategies to remedy the conflict between the two principles. I point out certain implications of both strategies and conclude by pleading for a solution within the framework of Modified Valency Theory (Karlík, 2000a).<sup>1</sup>

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### 1. Introduction

One of the advantages of the framework of Functional Generative Description (FGD) as it is developed since the sixties by a team of linguists associated with the Charles University in Prague (cf., e.g., Sgall et al., 1986) is the fact that it is systematically applied to a large corpus of linguistic data. By analyzing huge amounts of

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<sup>1</sup> Some of the observations and analyses, especially those concerning the existence of the dative-type clitic *si* in Czech and its implications for the grammar of Czech, stem from my unpublished dissertation accepted in 2012 at the Department of Czech language at Masaryk University in Brno/Czech Republic (accessible from [http://is.muni.cz/th/56270/ff\\_d/wagner\\_prognosa\\_reflex.pdf](http://is.muni.cz/th/56270/ff_d/wagner_prognosa_reflex.pdf)). The broader line of argumentation, however, is original to the present article.

natural language data, lacunas or inherent contradictions in the descriptive apparatus inevitably become apparent and can be amended (Panevová, 1998). The present article deals with a conflict between two guiding principles of language description currently applied within FGD which seems to have gone previously unnoticed. One principle concerns the definition of the verbal lexical unit on the basis of its valency frame; the second principle is used to determine the status of the clitic reflexive *se* in different syntactic contexts. As will be shown in detail in the following text, both principles give inherently incoherent results when applied to Czech constructions containing, apart from further arguments, an Effect argument (EFF).

In Section 2, I try to formulate both principles under consideration as precisely as possible. Section 3 introduces the construction which is problematic with respect to these two principles of language description. All examples are based on the Czech verb *vnímat* 'to see, to regard (as)'. Further examples taken from the Valency Lexicon of Czech Verbs [VALLEX] (Lopatková et al., 2008) are given in Section 4. In Section 5, I provide a detailed discussion of two possible strategies how the collision of principles described in the previous sections can be avoided. One strategy is based on a suggestion made by Oliva (2001), which would allow eliminating the type of reflexives causing the problem from the descriptive apparatus altogether. The second strategy considered in Section 5 adopts Karlík's (2000a; 2000b) modification of Valency Theory for defining valency frames underspecified with respect to the formal features of certain arguments. As a consequence, all occurrences of the verbs which at present are problematic for FGP can be integrated into one lexical unit. Although the discussion leads to no definite conclusion, it hopefully highlights the problem and clarifies the implications which different solutions might have for the wider architecture of the grammar.

## 2. Two descriptive principles in FGD

FGD is a valency based approach to syntactic analysis. Each verb is said to be associated in the lexicon with a certain valency frame which encodes the number and the morphosyntactic form of the arguments to be realized in the syntax, cf. e.g., Žabokrtský and Lopatková (2007). In contrast to other linguistic theories which also rely in one way or the other on valency information (e.g., Chomsky, 1981; Wunderlich, 1997; Karlík, 2000a,b), no distinction is drawn between structural cases, which are assigned to their arguments in certain structural contexts and which are therefore entirely predictable, and idiosyncratic or "lexical" cases, which are unpredictable and have, therefore, to be listed together with the respective arguments in the lexical entry of the verb.

In accordance with the current practice in FGP, the Valency Lexicon of Czech Verbs [VALLEX] gives for every single argument of a lexical unit the morphological case and/or the preposition (e.g., *na+4*) which is to be associated with this argument in the syntax (cf. Žabokrtský and Lopatková, 2007, pp. 49–50). This approach necessar-

ily implies that the morphosyntactic information associated with the slots in a FGD valency frame has to be considered as an integral part of the valency frame. Two valency frames implying different morphosyntactic features for their arguments have to be considered as different frames, even if they coincide otherwise in the number and functional role type of the implied arguments.

A case at hand are the verbs *oslavovat/oslavit* 'to celebrate', *dosahovat/dosáhnout* 'to reach' and *patřit* 'to belong to'. According to [VALLEX], pp. 142, 60 and 149, respectively, all three verbs are associated with a two place valency frame (neglecting free modifications) including an Actor (ACT) and a Patient (PAT) argument. However, the PAT differs as to the morphological case of the nominal realizing the patient slot in the syntax. While the PAT of *oslavovat/oslavit* must be realized by a nominal in the accusative case (*oslavit své narozeniny* 'to celebrate one's birthday'), the PAT of the other two verbs has to be realized by a nominal in the genitive case (*nemoc dosáhla pokročilého stadia* 'the disease reached a progressed stage') and the dative case (*kniha patří Janovi* 'the book belongs to Jan'), respectively (examples taken from [VALLEX]). To guarantee the realization of the appropriate case form in the syntax, the Patient arguments of the three lexical entries are each marked for a different case feature (4 for accusative, 2 for genitive, 3 for dative case). The valency frames thus look as follows (again neglecting insubstantial details): ACT<sub>1</sub>, PAT<sub>4</sub> for *oslavovat/oslavit*, ACT<sub>1</sub>, PAT<sub>2</sub> for *dosahovat/dosáhnout* and ACT<sub>1</sub>, PAT<sub>3</sub> for *patřit*. As the case features included in these valency frames convey distinctive information specific for the respective verbs, it follows, that ACT<sub>1</sub>, PAT<sub>4</sub> × ACT<sub>1</sub>, PAT<sub>2</sub> × ACT<sub>1</sub>, PAT<sub>3</sub> are three different frames, even though they all include the same syntactic-functional roles (ACT and PAT).

In order to formulate the first principle of FGP as I see it, we now have to take a closer look at the relation between lexical entries for verbal lexemes and valency frames. Lexical entries in [VALLEX] are organized on two levels of abstraction. On a higher, more abstract level, the lexicon is organized in "lexemes", i.e. abstract lexical types defined on the basis of the phonological and morphological identity of the related tokens. Each "lexeme" may be further sub-divided into several "lexical units" (Žabokrtský and Lopatková, 2007) or "lexes" (Panevová, 1998). According to Žabokrtský and Lopatková (2007, p. 43), a lexical unit "corresponds [...] to the lexeme used in a specific sense and with specific syntactic combinatorial potential." As the valency frame reflects the combinatorial potential of the word form, it is associated not with the lexeme as a whole but with the lexical unit. Each lexical unit is therefore characterized by (a) a specific meaning, (b) a specific combinatorial potential reflected in its valency frame. Both aspects are constitutive for the lexical unit. It is, therefore, not feasible that one and the same lexical unit is associated with several different valency frames, even though a "lexeme" (as an entity defined on purely formal grounds) may be composed of different lexical units differing with respect to their valency frames.

Based on these considerations and following Panevová (1998), the first principle of FGP discussed in the present article can be formulated as follows:

**Principle 1:** Differences in valency frames correlate with differences in lexical meaning; to each lexical unit one and only one valency frame can be assigned.<sup>2</sup>

We now turn to the second principle which, as I claim in the present article, conflicts in certain cases with Principle 1. Principle 2 states how to treat verb forms co-occurring with reflexives. Within FGP (e.g., Panevová, 2008), three structural types of reflexive constructions are distinguished:

- (a) the reflexive occurs either obligatorily with the respective verb or indicates a difference in lexical meaning between the verb under discussion and a further, homonymous verb not co-occurring with a reflexive;
- (b) the reflexive co-occurs with certain verb forms of an otherwise non reflexive verb indicating a non canonical mapping<sup>3</sup> of arguments onto surface syntactic positions;
- (c) the reflexive co-occurs with a verb form of a non reflexive verb indicating co-reference of two argument positions.

In case (b), the reflexive is analyzed as a grammatical marker of a certain derived diathesis of the Czech verb called occasionally “reflexive passive”. Reflexives in case (c) are analyzed as reflexive pronouns realizing the argument associated with the syntactic position they are occupying. Czech has a pronominal system distinguishing clitic and non-clitic forms, therefore reflexives of type (c) can appear in the clitic (*se* in the accusative, *si* in the dative case) as well as in the non-clitic form (*sebe* in the accusative, *sobě* in the dative case). As only reflexives of type (c) are analyzed as reflexive pronouns, the substitutability of the form *se*, resp. *si*, for *sebe*, resp. *sobě*, can be used as an operational test to distinguish reflexives of type (c) from reflexives of all other types. As to case (a), the reflexives obligatorily appearing with certain verbs are analyzed as an integral part of the respective lexical unit. This is so, because they are either a permanent feature of all occurrences of a certain verb (and have therefore to be lexically associated with the respective lexical unit) or distinguish different homonymous surface forms belonging to different lexical units (and are therefore a relevant part of the word structure of the respective units). As to their exact syntactic status, the theory is agnostic. Usually, they are referred to simply as “particles” (cf. Panevová, 1999, p. 271; 2008, p. 154; Žabokrtský and Lopatková, 2007, p. 44).

Taking for granted the analysis of reflexives reviewed above, I now formulate the second descriptive principle of FGP to be discussed in the present article:

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<sup>2</sup> Panevová (1998, p. 2, footnote 4) concedes that this principle is, for practical reasons, not always respected in lexicographic work. For the user of dictionaries, it is sometimes convenient to unite lexical units with different frames into one entry. In this article, I retain the more rigorous version given above, as I am concerned with principle questions of linguistic description, not with possible applications for practical purposes.

<sup>3</sup> The term “non canonical mapping” is not used in the work cited above. It is introduced here to capture the difference between valency potency and valency realization, cf. Daneš et al. (1987); Ágel and Fischer (2010). The details are not relevant to the present discussion.

**Principle 2:** A reflexive which is not the clitic form of a reflexive pronoun or the marker of the grammatical category ‘reflexive passive’ is an integral part of the lexical unit; reflexive and non-reflexive verbs are two different lexical units.

Principle 2 has a corollary with regard to reflexives analyzed as reflexive pronouns. This corollary has to be made explicit, as it will play an important role in the following discussion.

**Corollary of Principle 2:** A reflexive element, which *is* the clitic form of a reflexive pronoun, is not part of the lexical unit, i.e.: A verbal form co-occurring with a (clitic) reflexive pronoun and a verbal form not co-occurring with a (clitic) reflexive pronoun belong *to the same lexical unit* (as long as other criteria for lexical identity are met).

We are now in a position to approach the collision between Principle 1 and Principle 2.

### 3. The case of collision

In order to see the conflict arising between the two descriptive principles of FGP formulated in the previous section, we now turn to a specific case of reflexivization. The point can be made most clearly by considering trivalent verbs including an Effect argument (EFF) in their valency frame. An EFF is “[...] the predicative complement (with such verbs as *elect, nominate, promote*) and the traditional adverbials of result in *he tore it to pieces [...]*” Sgall et al. (1986, p. 134). A typical example of a verb including EFF in its valency frame is the verb *vnímat* ‘to see, to regard, to consider (as)’. In (1), the third lexical unit within the lexeme *vnímat* is given:<sup>4</sup>

- (1) Lemma: *vnímat*<sub>3</sub>  
 Meaning: to see, to regard, to consider (as)  
 Valency frame: ACT<sub>1</sub>, PAT<sub>4</sub>, *že*, EFF<sub>jako+4</sub>.

The morphosyntactic information added to PAT requires the Patient argument to be realized either as a nominal in the accusative case or as an embedded clause introduced by the subordinating conjunction *že* ‘that’. The morphosyntactic information added to EFF states that the Effect argument has to be realized as a nominal in the accusative case introduced by the element *jako*. A larger structure containing the verb *vnímat* and its syntactic arguments is given in (2):

- (2) *Vnímá syna jako soka.* (VALLEX, Lopatková et al., 2008, p. 295)  
 ‘He sees his son as a rival.’

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<sup>4</sup> The entry is given according to [VALLEX], p. 295. The English paraphrase has been added.

The nominal *sok* ‘rival’ in (2) is in the accusative case, exactly as required by the valency frame. Now, let us take a look at another example showing the verb *vnímat* co-occurring with a reflexive. The example is taken from the Czech National Corpus:<sup>5</sup>

- (3) *Sám se vnímá jako „síla ochraňující divadlo“.* (SYN2005)  
 ‘He sees himself as a force sheltering theatre.’

We observe that the requirements of the valency frame given in (1) are not met in (3): Instead of being in the accusative case, the Effect argument *síla* ‘force’ appears in the nominative case (even though introduced by *jako*, as it is required by the lexical entry). Applying Principle 1 of FGP, we are forced to conclude that the verb form appearing in (2) and the verb form appearing in (3) belong to two different lexical units. Let us say, then, that sentence (2) exemplifies the lexical unit ‘*vnímat*<sub>I</sub>’ (including the argument  $EFF_{jako+4}$  in its valency frame) and that sentence (3) exemplifies the lexical unit ‘*vnímat*<sub>II</sub>’ (including the argument  $EFF_{jako+1}$  in its valency frame).<sup>6</sup>

The verb ‘*vnímat*<sub>II</sub>’ is co-occurring with a reflexive which is missing in the environment of ‘*vnímat*<sub>I</sub>’. Apparently, the reflexive, then, is the formal marker of the lexical difference between both lexical units. Applying the classification of reflexives introduced in Section 2, we have to assign the reflexive in (3) to class (a): It is an integral part of the lexical unit indicating a lexical difference between the reflexive verb ‘*vnímat*<sub>II</sub>’ and the non-reflexive verb ‘*vnímat*<sub>I</sub>’. We can now refer to the reflexive lexical unit ‘*vnímat*<sub>II</sub>’ by adding the reflexive to the lemma (‘*vnímat se*’) and reserve the lemma ‘*vnímat*’ without index to the basic lexical unit ‘*vnímat*<sub>I</sub>’.

Now, consider example (4) containing a certain form of the verb ‘*vnímat*’ in one further context.

- (4) *Karel IV. vnímá sebe jako vyvoleného třetího krále.* (SYN2005)  
 ‘Charles IV sees himself as the chosen third king.’

The sentence in (4) contains the non-clitic, “strong” pronominal form *sebe* which according to FGP forms a paradigm with the clitic reflexive *se* seen in (3). The sentences (3) and (4) can be therefore interpreted as minimal contexts for applying the substitution test mentioned in Section 2. Put differently, sentence (4) demonstrates that the

<sup>5</sup> The Czech National Corpus is accessible from <http://ucnk.ff.cuni.cz/>.

<sup>6</sup> In order to avoid misunderstandings, it has to be emphasized that the hypothetical lexical units ‘*vnímat*<sub>I</sub>’ and ‘*vnímat*<sub>II</sub>’ are not given in [VALLEX]. They are introduced at this place by the author of the present article for the sake of argument. [VALLEX], p. 295, gives the lexical unit as reproduced in (1) without including the feature ‘cor4’. According to the notational conventions used in FGP, this would ban the clitic reflexive *se* from appearing in constructions with the verb *vnímat* rendering (3) ungrammatical. Adding the feature ‘cor4’ to the entry in (1) would not, however, solve the problem as the valency frame requires an Effect argument marked for accusative case, independently of the presence or absence of a clitic reflexive. The frame would thus generate sentence (3) with *sílu* in the accusative case, which would be clearly ungrammatical in Czech. The feature ‘cor4’ is discussed further down in the main text of the article.

reflexive clitic *se* co-occurring with *vnímat* in (3) can be substituted with the strong form *sebe* without causing a change in lexical meaning. Contrary to what has been said above, the reflexive must be therefore classified as the clitic form of the reflexive pronoun. But if the reflexive co-occurring with *vnímat* in (3) is a reflexive pronoun, then the Corollary of Principle 2 states, that *vnímat* in (3) is to be regarded as belonging to the same lexical unit as *vnímat* in (2), where the same verb is co-occurring with a (non-reflexive) nominal.

From the discussion above we have to draw the conclusion that Principle 1 and Principle 2, applied to the verb *vnímat*, lead to an incoherent description. While Principle 1 (on the basis of the change in morphosyntactic form of one of the syntactic arguments) makes it necessary to treat the verb forms in (2) and (3) as homonymous surface forms of two different lexical units, Principle 2 (on the basis of the commutability of the reflexive, cf. (4)) requires the assignment of both verb forms to the same lexical unit.

Note that it is not feasible to simply assign every occurrence of *vnímat* paired with a clitic reflexive to one lexical unit ('*vnímat se*') while assigning all occurrences of *vnímat* without a clitic reflexive to another lexical unit ('*vnímat*'), presumably to the one given in (1). The reason is that '*vnímat*' in (1) provides a valency slot for a Patient argument which is, as can be seen from (4), eligible for being filled by a reflexive pronoun. If *sebe* and *se* are two forms of the same paradigm differing solely in their prosodic weight, as it is claimed in FGP, there is no way to prevent the insertion of *se* in the Patient slot of '*vnímat*' and, therefore, no way to categorically exclude the possibility of a surface form *vnímat se* being an instance of the syntagma '*vnímat*' + 'Reflexive Pronoun'. In order to prevent the insertion of *se*, the syntax would have to be allowed to refer to the prosodic properties of certain expressions, which certainly is highly undesirable. (Cases of restriction to one prosodic form only as *вести себя* 'to behave' in Russian have probably to be treated as verbal idioms not formed by the ordinary rules of syntax, which is clearly not the case of *vnímat sebe* in Czech.) At least potentially, the clitic reflexive appearing in (3) is thus a possible instance of a reflexive pronoun and we are, therefore, obliged to apply the operational tests for identifying its type. In this case, we are still faced with the collision between Principle 1 and 2.

Before turning to possible solutions of the problem, it might be appropriate to take a look at a wider corpus of examples in order to determine how widespread the described collision is. This is done in the following section.

#### 4. Further examples of collision

The examples presented in this section are taken from the electronic version<sup>7</sup> of [VALLEX] which allows for electronically scanning of the material. According to in-

<sup>7</sup> More precisely, I refer to version 2.6 of VALLEX accessible from <http://ufal.mff.cuni.cz/vallex/2.6/doc/home.html>. The research has been carried out in January, 2013.

formation on the homepage of [VALLEX], the electronic dictionary contains around 6,460 lexical units. Filtering the data with respect to functional roles reveals that 606 of these lexical units contain EFF in their valency frame. However, not all instances of EFF found in the dictionary are relevant to the present discussion.

First, there are numerous instances of EFF, which somehow depart from the prototypical case of a predicative complement in the sense of Sgall et al. (1986) as they designate some kind of spatial relation, possibly metaphorically extended to further kinds of relations. Examples taken from [VALLEX] are given in (5) and (6):

- (5) smíchat mouku s vajíčky *v těsto*  
 ‘to mix flour and eggs *into a dough*’  
 Valency frame: ACT<sub>1</sub>, ADDR<sub>s+7</sub>, PAT<sub>4</sub>, EFF<sub>do+2, v+4</sub>
- (6) Hájl se *proti nařčení*.  
 ‘He defended himself *against the slander*.’  
 Valency frame: ACT<sub>1</sub>, PAT<sub>4</sub>, EFF<sub>proti+3, před+7</sub>

The underlying reason for classifying the arguments in (5) and (6) set in cursive as Effect seems to be an implicit small-clause analysis in the style of Generative Grammar (cf. Rothstein, 2009; Bailyn, 2012, among many others). For the purpose of the present article it is important to see that for principle reasons no collision between Principle 1 and Principle 2 can arise in these cases. The reason is that the Effect argument is syntactically to be realized as the complement of a preposition (*v* ‘into’ in (5), *proti* ‘against’ in (6)) which unambiguously determines its case value. No case alternation which would require setting up a separate valency frame can, therefore, arise. This can be clearly seen from example (6), where the substitution of the reflexive *se* for some other expression has no impact on the case marking on the Effect argument. The nominal *nařčení* ‘slander’ in *Hájl ho proti nařčení* ‘He defended him against the slander’ is still marked for dative case as required by the valency frame.

Neither a second type of valency frame containing an Effect argument is relevant to the present discussion. An example is given in (7):

- (7) Pokládal ho *za přítele*.  
 ‘He took him *as a friend*.’  
 Valency frame: ACT<sub>1</sub>, PAT<sub>4, inf, že, cont</sub>, EFF<sub>za+4, za+adj-4</sub>

Although a prototypical instance of a predicative complement as it expresses a genuine predicative relation (‘he is a friend’), the Effect argument *za přítele* ‘as a friend’ in (7) shows the same formal behavior as the less prototypical cases discussed in the previous paragraph. It is embedded under the preposition *za* and thus invariably receives a fixed value for case. In this respect, the verbs *vnímat* in (2) and *pokládat* in (7), though nearly synonymous in the given contexts, differ in a crucial way. While the preposition *za* required by the valency frame in (7) assigns a stable case value to the Effect argument in (7), the element *jako* appearing with the Effect argument in (2) does



not.<sup>8</sup> This is, by the way, the reason why the Academic Grammar of Czech (Komárek et al., 1986, p. 225), treats *jako* not as a preposition, but as a conjunction. The direct consequence of this difference can be seen in comparing (2) and (3) above to (7) and (8) below.

- (8) Pokládal se za nejchytřejšího ze všech.  
'He regarded himself as the most intelligent of all.'

While the case value of the Effect argument in (2) and (3) alters in correlation to the presence or absence of the clitic reflexive, giving rise to the collision of principles diagnosed in Section 3, no such alternation can be seen in (7) and (8). The replacement of the non-reflexive pronoun *ho* 'him' in (7) for the clitic reflexive *se* in (8) has no repercussion on the case marking of the Effect argument (*za přítele* 'as a friend' in (7), *za nejchytřejšího ze všech* 'as the most intelligent of all' in (8)), which invariably appears in the accusative case. We have to conclude, then, that the only Effect arguments relevant to this study are those marked in the valency frame with the element *jako*.

Third, there are certain verbs selecting an Effect argument which for pragmatic reasons hardly ever appear in reflexive constructions of type (c), i.e. in constructions coding co-reference between two different arguments. The reasons for this incompatibility can be divided into several groups, the most important being certain selectional restrictions imposed on the participants and logical requirements on the number of participants implied in the verb meaning.

As for selectional restrictions, certain verbs do not allow for human participants as the Patient of the event they express. As the prototypical Actor of a transitive verb is human, no relation of co-reference can be established in this case because an ACT bearing the feature [+hum] cannot be referentially identical with a PAT bearing the feature [-hum]. A feature crash would be the inevitable result. A typical example is the verb *zařizovat/zařídít* 'to furnish' including PAT and EFF (marked with *jako*) in its valency frame. As one can furnish rooms and other spaces, cf. (9), but not human beings (including oneself), there can be no reflexive construction with the verb *zařizovat/zařídít* 'to furnish'.

- (9) Zařídil si předsíň jako kuchyň.  
'He furnished his hall as a kitchen.'

Further cases of blocked reflexivization include verbs coding situations in which the Actor and the Patient are necessarily different persons. For instance, the verb *to leave* lexically implies a separation of two entities from one another. As one and the same person cannot be separated from her/himself, the two roles of Actor and Patient have to be attributed to different participants and never to only one participant, as

<sup>8</sup> This cannot be seen from the valency frame in (1), where *jako* is associated with the accusative case. As I will argue further down in the article, this practice should be rejected.

1	<i>angažovat</i>	to engage
2	<i>brát<sub>7</sub></i>	to take
3	<i>deklarovat<sub>2</sub></i>	to declare
4	<i>fotografovat<sub>1</sub></i>	to take a picture
5	<i>hodnotit<sub>1</sub></i>	to evaluate
6	<i>chápat<sub>2</sub></i>	to perceive, to take as
7	<i>interpretovat<sub>1</sub></i>	to interpret
8	<i>nazývat/nazvat<sub>1</sub></i>	to call
9	<i>ohodnocovat/ohodnotit<sub>1</sub></i>	to rate
10	<i>označovat/označit<sub>2</sub></i>	to declare, to call
11	<i>pojímat/pojmout<sub>3</sub></i>	to comprehend, to conceive
12	<i>prezentovat<sub>2</sub></i>	to present
13	<i>udržovat/udržet<sub>3</sub></i>	to keep, to retain, to hold
14	<i>určovat/určit<sub>3</sub></i>	to appoint, to designate
15	<i>ustavovat/ustavit<sub>2</sub></i>	to establish
16	<i>usvědčovat/usvědčit<sub>2</sub></i>	to convict
17	<i>uznávat/uznat<sub>2</sub></i>	to acknowledge, to recognize
18	<i>vidět, vidat<sub>5</sub></i>	to see
19	<i>vnímat<sub>3</sub></i>	to perceive
20	<i>vyhlašovat/vyhlásit<sub>2</sub></i>	to proclaim
21	<i>znát<sub>1</sub></i>	to know

Table 1. Verbs from VALLEX leading to conflict between Principle 1 and 2

would be the case under reflexivization. An example is the verb *ponechávat* ‘to leave behind, to leave alone’. In a sentence like *Ponechává děti samotné* ‘He leaves the children alone’, the word *děti* ‘children’ cannot be replaced by a reflexive without producing a nonsense statement. As a result, sentences of this type are rarely found in actual language data and are, therefore, irrelevant from a practical point of view.

In [VALLEX], the pragmatic restrictions on reflexivization lined out in the previous paragraphs are captured by the features ‘cor4’ and ‘cor3’ (cf. Žabokrtský and Lopatková, 2007, p. 53). The presence of these features in a lexical entry indicates, that the accusative position and/or the dative position are accessible for semantic reflexivization via the clitic reflexives *se* or *si*, respectively. However, it is not possible to use these features for automatic scanning of the material, as they are used somehow inconsistently. For example, the entry for *hodnotit* ‘to evaluate’ (p. 74) is equipped with the feature cor4, the entry for *vnímat* ‘to regard as’ (p. 295) is not. Example (3) above shows that semantic reflexivization of *vnímat* is, nevertheless, possible and actually quite usual. I therefore had to go through all entries for verbs requiring an Effect argument in order to decide on a case to case basis, if they are relevant to the

present study or not. The verbs I retained as relevant are listed in Table 1. (A few more comments on the feature 'cor4' will be shortly added in the next paragraph.)

In each single case, a conflict between Principle 1 and Principle 2 arises whenever the verb is used in a reflexive construction of the syntactic type (i.e. type c). Where [VALLEX] gives examples containing clitic reflexives, the conflict is apparent directly in the respective lexicon articles. In (10) and (11), I give examples taken from the electronic version of [VALLEX]. The parts of the entries incompatible with the actual language material (added as examples within the same dictionary article) are emphasized in bold-face.

- (10) *pojímat/pojmout*<sub>3</sub>  
 ACT<sub>1</sub>, PAT<sub>4</sub>, EFF<sub>jako+4, jako+adj-4, za+4</sub>  
 Pojal se jako *nepostradatelný člen skupiny*.  
 'He regarded himself as *an indispensable member of the group*.'
- (11) vidět, vídat<sub>5</sub> ACT<sub>1</sub>, PAT<sub>4</sub>, EFF<sub>7, jako+4, Adj-4</sub>  
 Už se viděla jako jeho *nevěsta*.  
 'She already saw herself as his *bride*.'

As can be seen from (10) and (11), the nouns, resp. nominal groups, in the examples realizing the Effect argument are not in the case required by the corresponding valency frame. Instead of appearing in the accusative case, *nepostradatelný člen skupiny* 'an indispensable member of the group' and *nevěsta* 'bride' are in the nominative case. This violation of the co-occurrence restrictions stated in the respective valency frames remains without a comment in the dictionary.

Although the group of verbs showing the kind of syntactic misbehavior pointed out above is not numerous, the cases cannot be discarded as marginal either. Admittedly, the 21 units identified in Table 1 make up for merely 0.3% of the vocabulary covered in [VALLEX] (6,460 verbal lexical units). If one, however, takes into account only the units containing EFF in their valency frame (606 units), the percentage of relevant cases rises to 3.5%. In addition, verbs such as *nazývat / nazvat* 'to call' or *ohodnocovat / ohodnotit* 'to rate, to evaluate' have to be considered as highly frequent in modern Czech.<sup>9</sup> The search for a possibility to bring in line the analysis of reflexives and the principles for setting up lexical units is not a completely idle business, then.

## 5. Possible remedies for the conflict

In the present section, I will discuss two possibilities to resolve the conflict arising between Principle 1 and Principle 2. The first solution to the problem is to simply eliminate reflexivization of type (c) from the descriptive framework, thus undermining the basis of Principle 2. The second solution consists in relaxing the formal requirements

<sup>9</sup> Among 50,000 entries, the Frequency Dictionary of Czech (Čermák et al., 2004) assigns the frequency rank 2,014 to the verb *nazývat (se)* and the rank 9,196 to the verb *ohodnotit*.

on syntactic contexts to be counted as identical with respect to the valency frame of a lexical unit. In doing so, it will become possible to assign two verb forms which at present have to be considered (according to Principle 1) as to two different lexical units to the same unit.

Before turning to the concrete solutions, a further note on the features ‘cor4’ and ‘cor3’ seems appropriate. From the brief remarks in the previous sections it may seem that the whole problem of reflexivization in the context of an Effect argument boils down to occasional lexicographic mistakes in marking lexical units for these features. This is, however, not the case. By marking the presently deficient units such as *vnímat* ‘to regard as’ additionally for the feature ‘cor4’ one would only multiply the problem that poses the change in case value of the Effect argument for a coherent description. On the other hand, removing the feature ‘cor4’ from all units in question would not only fail to capture the data (as the respective verbs do occur in actual language data with the clitic reflexive *se*); it would be basically ineffective as the possibility of inserting a certain prosodic form of the reflexive pronoun cannot depend on the presence or absence of a certain feature. As has been pointed out already in Section 3, the only precondition for inserting lexical items into the structure is the availability of the respective slot and possibly a match in subcategorization features such as [ $\pm$ animate]. If *se* and *sebe* are just two different prosodic variants of a certain form of one and the same lexical item not differing in grammatical features (both bearing the case value [accusative]), no rule of grammar should be able to distinguish them. A feature such as ‘cor4’ can therefore be nothing more than a notational device which makes it more convenient for non-native speakers of Czech to use the dictionary. In addition, it may facilitate the electronic parsing of language corpora by indicating how the homonymy of different occurrences of the clitic reflexive *se* is probabilistically to be resolved in a certain case at hand. It cannot be regarded however as some kind of subcategorization feature, as there is no linguistic basis for its application, at least not if one wishes to retain a unified paradigm for all personal reflexive pronouns.

### 5.1. Reflexivization in the lexicon

For Czech, the suggestion to eliminate reflexivization of type (c), i.e. the type of reflexivization where the reflexive clitic is considered to be a pronoun occupying a syntactic valency slot, goes back to Oliva (2000, 2001). Similar suggestions for the reflexive clitic *se* in French have been made earlier within the frameworks of Lexical Functional Grammar (Grimshaw, 1982) and Government and Binding Theory (Wehrli, 1986). According to these suggestions, the clitic *se* is viewed in general as a marker of valency reduction. Co-reference between two semantic arguments is, according to these suggestions, coded within the semantic structure of the derived lexical unit. Expanding on the account given by Oliva (2001, p. 204), the derivation of reflexive verbs from transitive non-reflexive verbs can be described as follows.

First, the semantic arguments implied in the semantic structure of the respective non-reflexive verb are lexically co-indexed, forcing a reflexive interpretation on the described event, (12).

Second, the surface valency of the derivational base is reduced by one slot. In consequence, only the higher semantic argument can be mapped onto a syntactic position, (13).

Finally, the clitic *se* is added to the structure, serving as visible sign that the operations described in (12) and (13) have taken place, (14).

(12)  $mýt (A-1, A-2) \rightarrow mýt (A-1_i, A-2_i)$

(13)  $mýt (ACT_1, PAT_4) \rightarrow mýt (ACT_1)$

(14)  $/mít/ \rightarrow /mít se/$

According to Oliva, the relevant syntactic properties of the derived reflexive verb such as the absence of agreement of secondary predicates with the reflexive in case features can now be deduced from the fact that the clitic is not a syntactic object at all. It therefore bears no case feature which could be spread within the syntactic structure. In the context of the present discussion, the account given by Oliva would solve the problem of having to treat surface forms such as *vnímat* and *vnímat se* as derived from the same lexical unit ‘*vnímat*’ (on the basis of the commutation test) and as derived from two different lexical units, i.e. ‘*vnímat*’ and ‘*vnímat se*’, (on the basis of the valency change  $EFF_4 \rightarrow EFF_1$ ) at the same time. As the clitic *se* is not a syntactic object, it could never be inserted into the PAT-slot of a valency frame in principle. There is, therefore, no longer a reason to worry about concomitant valency changes in the presence of *se*, as such changes can now be consistently attributed to the lexical operations (12)–(14) introducing *se* in the first place.

The general treatment of reflexivization as a lexical operation has, however, several undesirable consequences for the description of the Czech grammatical system as a whole. These consequences have been pointed out in the literature subsequent to the publication of Oliva (2001) and will not be repeated in detail here (cf. Komárek, 2001; Panevová, 2001). The most pertinent argument against a generalized lexical analysis of all clitic reflexives, it seems to me, is the fact that it neglects the obvious formal parallelism between the non-reflexive pronominal forms on the one hand (*tě – tebe, ti – tobě*) and the reflexive forms on the other (*se – sebe, si – sobě*), cf. Panevová (2001). There is, however, a further problem with the lexicalist approach, which never has been, as far as I know, explicitly pointed out in the literature, and which I wish to discuss in some greater depth here.

A convenient example to illustrate the problem is the verb *představit* ‘to introduce’, which implies three arguments in its valency frame: the one introducing someone (the Actor), the one introduced (the Patient) and the one to whom the patient is introduced (the Addressee). A possible context for the verb *představit* is given in (15):

- (15) Předseda představil kandidáty členům poroty.

'The chair of the commission introduced the candidates to the members of the commission'

The verb *představit* is eligible to reflexivization of type (c), in which case a reciprocal reading arises, as shown in (16):

- (16) Členové poroty si (navzájem) představili kandidáty.

'The members of the commission introduced the candidate to one another'

As (16) contains a reflexive clitic (*si*), a lexical derivation similar to the one described in (12)–(14) is called for. This hypothetical derivation is given in (17):

Lexical unit:	<i>představit</i>		<i>představit si</i>
(17) Semantic arguments:	A-1, A-2, A-3	→	A-1 <sub>i</sub> , A-2, A-3 <sub>i</sub>
Valency slots:	ACT <sub>1</sub> , ADDR <sub>3</sub> , PAT <sub>4</sub>		ACT <sub>1</sub> , PAT <sub>4</sub>

The reflexive *si* is of the dative kind, the operation, therefore, targets the third argument, i.e. the Addressee, which is co-indexed with the first argument, i.e. the Actor. The subsequent valency reduction affects the dative slot. The operation correctly captures the semantic interpretation of example (16), repeated in (18) together with the semantic roles assigned to the subject position. The members of the commission are both the Actors and the Addressees of the introducing event:

- (18) Členové poroty
- <sub>A-1/A-3</sub>
- si (navzájem) představili kandidáty.

There is, however, a further possible, even though marginal, syntactic context for the realization of the lexical unit derived in (17). In principle, it could appear in a passive construction with the second argument (the Patient) promoted to the subject position:

- (19) Kandidáti si byli představeni.

'The candidates were introduced to one another'

Let us see, if (17) provides the right interpretation for (19) as well. In a passive construction, the Patient of the derived entry in (17), i.e. A-2, which is not co-indexed with any further semantic argument, would be mapped onto the subject position. The nominal *kandidáti* in (19) thus receives the role of the one being introduced. The two remaining semantic arguments, bound together via lexical co-indexation, do not appear in the construction (19). Nevertheless, they have to be a part of the semantic interpretation, as they are fixed in the lexical entry in (17). According to the lexical entry, the argument not realized in (19) is the Actor and the Addressee of the introducing event at the same time. We thus derive an interpretation of (19), where the candidates are introduced by an unknown person or an unknown group of persons to this same person or group of persons.

- (20) # Kandidáti<sub>A-2</sub> si byli představeni.  
 ‘The candidates are introduced (by someone to himself)’

As indicated by the sign ‘#’, this interpretation (reflected by the English translation given in (20)), is not the correct interpretation of sentence (19). The correct interpretation, reflected by the English translation given in (19), cannot be deduced from the derived entry in (17), but has to be read off from the surface structure via co-indexation of the reflexive clitic with the subject position, assigning both the role of the Patient and the Addressee to the candidates: *kandidáti*<sub>A-2/A-3</sub>.

- (21) Kandidáti<sub>i</sub> si<sub>i</sub> byli představeni.

The syntax must obviously have access to the reflexive clitic *si* in order to provide the indices necessary for the right interpretation of (19). I conclude, then, that *si* must be a syntactic object eligible to syntactic co-indexation. From this it follows, that there must be instances of *se* being a syntactic object as well. The reason is that analyzing *si* as a syntactic object presupposes (at least under standard, weak-lexicalist assumptions) the existence of an abstract lexical unit (let us designate it by ‘*se*’), which in dative contexts is realized by the word form *si*. Given the existence of such an abstract lexical unit, there is no way to ban the insertion of the same unit into accusative contexts, which presumably would cause its realization by the word form *se*. Accepting *si* as object clitic thus necessarily implies accepting *se* as object clitic as well,<sup>10</sup> and the argument denying object status to any occurrence of *se* can no longer be maintained.

There is, however, a possibility to guarantee the correct interpretation of (19) by lexical means alone. In order to do so, one would have to introduce a further lexical operation deriving a passive entry in a similar fashion as the reflexive entry in (12)–(14). The derived passive entry of the respective verb would then provide an altered argument structure (presumably with A-1/Actor removed from the accessible part of the frame) on which reflexivization could operate. Although strong lexicalist models of the sort obviously assumed by Oliva usually include operations of the described kind, I find this solution undesirable for several reasons:

- The generalization that passive constructions are lexically identical to active constructions, differing only in the way the semantic arguments are mapped onto syntactic positions, is lost.

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<sup>10</sup> This statement holds within a weak lexicalist framework, unless one allows for defective paradigms of an extreme kind, i.e. for paradigms consisting solely of a dative form (‘*se*’: *si*). One could argue, that paradigms of this sort should be banned from description as ill-formed, as the defect affects a cell (the accusative cell) which is ranked higher in the commonly assumed case hierarchy (i.e. NOM > ACC > DAT > GEN) than a regularly filled cell (the dative cell). The absence of a nominative form for ‘*se*’, on the other hand, is no reason to reject the paradigm as ill-formed, as its absence can be attributed to syntactic rather than morphologic factors, i.e. the requirement for syntactic binding of the form, which in case of a nominative form (the subject) cannot be met.

- The distinction between fully productive inflectional processes and semi-productive derivational processes is blurred. In this context, one has to point out, that within FGP “passive” is regarded as one of the inflectional categories of the verb, cf. Panevová and Ševčíková (2014). This analysis could not be maintained when it is claimed that forming a passive is a derivational operation affecting a lexical unit targeted by the operation.
- There would have to be unmotivated, stipulated ordering between the operation of passivization (first) and reflexivization (subsequent to passivization) in order to prevent the derivation of passives from lexical entries such as (17).
- Whether a position inside the valency frame could be targeted by reflexivization or not, would have to be arbitrarily stipulated as well. There would be no principled reason that reflexivization could not target the Actor and the Addressee of a passive entry, generating deviant structures such as (21). In any case, the generalization that it is the *subject*, which serves us antecedent in a reflexive construction, would be lost.

Although the discussion above is not conclusive and does not exhaust the problem, it provides, I think, enough motivation for looking for alternative solutions to the lexicalist analysis. In the next section, I suggest an analysis in the spirit of Modified Valency Theory (Karlík, 2000a,b), which would allow us to retain *se* as reflexive clitic pronoun.

## 5.2. Formally underspecified valency frames and case attraction

Facing data such as (2)–(4) above, there seem to be three generalizations which should arguably be reflected in a grammatical description of Czech. First, the identity in meaning of the verb *vnímat* heading the three constructions and the commutability of the expressions *syna*, *se* and *sebe* (as long as we ignore the formal alternation in the concomitant *jako*-phrase) suggest, that the case should be handled in the syntax, not in the lexicon. This corresponds to a traditional architecture of grammar, according to which productive and semantically inert processes are to be located in the syntactic module, while idiosyncratic and semantically active processes belong into the lexicon (e.g., Karlík, 2000b). Second, the change in formal features of the Effect argument in (2) vs. (3) is obviously not due to a genuine change in valency but reflects the altered referential properties of the construction, namely the fact, that the Effect argument in (2) is co-referential with the Patient argument of the verb only (and shares, therefore, the accusative case), while in (3) it is in addition co-referential with the Actor argument (and shares, therefore, the nominative case). The case feature on the nominal within the *jako*-phrase should, therefore, be independent of the valency frame, as it is not lexically determined by the valency carrier, but by the syntactic context in which this valency carrier is realized. This observation is further confirmed by passive constructions such as (22) or (23), where the Patient argument appears in the subject position and is case-marked for nominative. As a result, the Effect argument,



contrary to what is stated in the respective valency frames given in [VALLEX], is case-marked for nominative as well. The generalization, then, is obviously that there is a dependency between two case values within the structure.

(22) Karel IV. byl vnímán jako třetí král.  
'Charles was regarded as the third king.'

(23) Petr byl označen jako blbec.  
'Peter has been called a fool.'

Third, as the contrast between (3) and (4) shows, co-reference alone is not sufficient for determining the case feature appearing on the Effect argument. There seems to be a notion of prominence in play, connected to Topic-Focus-Articulation (Sgall et al., 1986, p. 176) or Functional Sentence Perspective (Firbas, 1992). As soon as the reflexive element is emphasized and surfaces therefore as *sebe*, cf. (4), its own case value (accusative case) prevails over the competing case value of its antecedent. If, on the other hand, the reflexive element is deemphasized and surfaces, therefore, as reflexive clitic *se*, cf. (3), the case value of the antecedent (nominative case) takes precedence over the case value of the reflexive (accusative case).

To capture these generalizations, I make the following five suggestions.

**Suggestion 1** The commutation test should be considered as valid in determining the syntactic status of the reflexive clitic at hand. A commutating reflexive clitic is to be analyzed as syntactic material realizing one of the arguments of the valency carrier and, therefore, as occupying a syntactic valency slot. The two occurrences of *vnímat* in (2) and (3) can thus be analyzed as lexically identical.

**Suggestion 2** In order to avoid the resulting collision between Principle 1 and Principle 2, there must be drawn a distinction between structural case and lexical case. This distinction is well established at least since Chomsky, 1981 (cf. Woolford, 2006, for a more recent justification), and has been adapted for Valency Theory by Karlík (2000a). Following Karlík (2000a, p. 179), I consider a case appearing on a syntactic argument as "structurally assigned", if its value depends on the grammatical context in which the respective argument is realized. As structural cases take different values according to the grammatical context in which the respective argument appears, their value cannot be fixed in the lexical entry of the valency carrier (its valency frame) but has to be determined independently by general principles of grammar (for further details, see Karlík, 2000a, 2004). Although the prototypical cases analyzed as being "structural" are the nominative and the accusative case appearing on Actors and Patients of transitive constructions, the case appearing on the Effect argument is a clear instance of the same phenomenon. As has been demonstrated above, its value alter-

nates according to the syntactic context in which the Effect argument is realized, i.e., in accordance to the case value assigned to the Patient argument of the same valency carrier.

The theory of structural case suspends us from the obligation to determine the formal features of every single argument at the level of the valency frame. Arguments to be realized in structural valency slots can be notated in the valency frame without any explicit formal specification. As a consequence, it becomes possible to derive different surface constructions, such as the active and passive diathesis, among others, directly from the same valency frame. In the context of the present discussion, assuming structural cases renders it unnecessary to provide two different lexical entries for (2)/(4) and (3). As the Effect argument (being subject to structural case assignment) will no longer be specified in the valency frame as to its formal case feature, all three constructions can be derived from the same valency frame. The three occurrences of *vnímá* in (2)–(4) can, therefore, be analyzed as different realizations of *the same lexical unit*. By the same token, there is no longer any collision between Principle 1 and Principle 2. On the basis of the commutating reflexive, Principle 2 identifies *vnímá (někoho)* and *vnímá (se)* as instances of the same lexical unit, while Principle 1 can be satisfied by providing an identical valency frame for both occurrences of this unit.

**Suggestion 3** In order to guarantee the correct value of the case feature appearing on the Effect argument, i.e. a value identical to the value of the case feature appearing on the Patient argument, some additional technical device has to be used. Obviously, some form of indexation is needed to copy the case value on the Patient argument onto the Effect argument. The linguistic reason behind this technical solution is the fact that the Effect argument is realized in a structural position to which in principle no case value can be assigned directly. This is so, because the position is embedded under the element *jako*, which does not assign case. The case value has, therefore, to be provided by other means than mere configuration within a structure, in the case at hand apparently by a referential dependency.

In the spirit of Modified Valency Theory but sticking to the notational convention of FGP, I suggest the following entry for the lexical unit ‘*vnímat*’ appearing in (2)–(4). The entry (24) is a revised version of the original entry (1) introduced in Section 3.

- (24) Revised entry for *vnímat*<sub>3</sub>  
 Meaning: ‘to see, to regard, to consider, (as)’  
 Valency frame: ACT, PAT<sub>i</sub>, EFF<sub>jako+(i)</sub>.

When the verb ‘*vnímat*’ is realized inside a canonical transitive construction in the active diathesis, ACT and PAT receive (in accordance to general principles of valency realization) nominative and accusative case, respectively. Via co-indexation the case value “accusative” assigned to PAT then will be passed on to EFF. This is the state of affairs illustrated in (2) above. When the verb ‘*vnímat*’ is realized inside a passive

construction, PAT receives (in accordance to principles of non-canonical valency realization) nominative case which, again, will be passed on to EFF. This is the state of affairs illustrated in (22) above.

A further distribution of case values for structural case can be seen from the examples in (25) which have been suggested by an anonymous reviewer:

- (25) a. Klaus vnímá své soky jako hráč.  
 'Klaus takes his rivals as a sportsman.'  
 b. Jak vnímáte Prahu jako architekt?  
 'What do you as an architect think of Prague?'

The nominals presumably realizing the Effect argument of the valency frame in (24), i.e. *hráč* 'player, sportsman' in (25a) and *architekt* 'architect' in (25b), are marked for nominative case. If the case value is passed on via co-indexation from the Patient argument to the Effect argument, as stated in (24), this should not be possible. The obvious reason for the appearance of the nominative case on these nominals is the fact that they are instances of subject-oriented depictive predicates (cf. Rothstein, 2009, p. 210) and as such are classifying the referent of the Actor, not the referent of the Patient. In order to capture this fact one would have to alter the co-indexation provided by the entry in (24) to an indexation connecting EFF to ACT.

There are several technical ways to achieve this. One could devise a further lexical unit in which the altered co-indexation would be explicitly stated within the valency frame: ACT<sub>i</sub>, PAT, EFF<sub>jako+(i)</sub>. Considering the general applicability of the process to a wide range of lexical units, this solution would produce a huge redundancy in the lexicon and fail to draw the borderline between grammatical and lexical information. An alternative solution would be to remove all indices from the valency frame and to leave it to the syntax to provide the indices required for the intended semantic interpretation. One further could wonder if the depictives in (25) are really realizations of an Effect argument. As they provide only additional information on one of the arguments, they arguably have to be regarded as free modifications (or adjuncts, in generative terminology) and should therefore be excluded from the valency frame. The sentences in (25) could be derived from a lexical unit different from (24) which would not include an Effect argument in its valency frame.<sup>11</sup> The case marking on the depictive, then, would have to be handled independently of valency realization, probably along the lines of Panevová (1980, p. 79-86). This last solution seems feasible especially for (25b), less so for (25a), where the depictive is essential to the content of the sentence.

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<sup>11</sup>[VALLEX], p. 295, provides one further lexical unit within the lexeme 'vnímat' (unit 4) which has the meaning 'to consider' and implicates only two arguments (Actor and Patient). The frame contains a position for a manner adverbial (MANN) which is to be considered as a free modification, not as an argument, cf. p. 20-21.

Whatever solution one chooses to adopt, it poses no additional problems for case assignment under reflexivization in (3) and (4), repeated below as (26) and (27), to which I turn in the following paragraph.

- (26) *Sám se vnímá jako „síla ochraňující divadlo“.* (= 3)  
 ‘He sees himself as a force sheltering theatre’
- (27) *Karel IV. vnímá sebe jako vyvoleného třetího krále.* (= 4)  
 ‘Charles IV sees himself as the chosen third king’

In the presence of a reflexive pronoun, the syntax provides (in addition to the lexically determined indices) further indices forcing a co-referential interpretation onto ACT and PAT. We end up, therefore, with an extended chain of indices: ACT<sub>i</sub>, PAT<sub>i</sub>, EFF<sub>jako+(i)</sub>. As a result, the Effect argument now receives two different case values: nominative case via co-indexation with ACT (*pro* in 26, *Karel IV.* in 27) and accusative case via co-indexation with PAT (*se* in 26, *sebe* in 27). In order for the model to work, we must, thus, make further provisions to resolve this conflict between the two mutually exclusive case values.

**Suggestion 4** A situation where two conflicting values for case are assigned to one and the same syntactic position is not uncommon in the languages of the world. Börjars and Vincent (2000) discuss relevant cases and suggest “resolution-rules” for several languages which predict the way the conflict is resolved. In our case, a resolution-rule giving precedence to the case value higher in the commonly assumed case hierarchy NOM > ACC > DAT > GEN (cf. Karlík, 2000b, p. 180; Caha, 2009, p. 291, for recent implementations of such a hierarchy) seems to be warranted. An EFF to which the values ⟨case: nominative, accusative⟩ have been assigned will, thus, be realized with the nominative case. This corresponds to the situation in (26), where the nominal *síla* ‘force’ is in the nominative case.

The solution to the problem of determining the appropriate case value for an Effect argument suggested above, i.e. using indexation to transfer case values onto EFF and applying subsequently a resolution-rule to favor a nominative value over a competing accusative value, can be regarded as a more formal restatement of a proposal made earlier by Panevová (2001). Panevová suggests treating the nominative case appearing on co-predicates in reflexive constructions as the result of “case attraction”, where the expected accusative case (due to the non-distinctiveness of case in the given position) is overridden by a presumably more unmarked nominative case. If we accept this kind of reasoning, we now have to explain why the same resolution-rule does not lead to the same result in (27), where the Effect argument is marked with accusative case.

**Suggestion 5** For explaining the accusative case appearing on EFF in (27), we have to take into consideration the Topic-Focus-Articulation of the example. Obviously,

the reflexive pronoun is under focus in (27) and thus surfaces in its emphatic mutation *sebe*. To capture the correlation between the case marking on EFF and the Topic-Focus-Articulation of the respective sentence, I suggest a formal pairing of the case value assigned to a nominal with a feature reflecting the position of the nominal within the Topic-Focus-Articulation of the sentence. This may seem problematic in a formal framework given the somehow vague status of properties related to the informational organization of the sentence;<sup>12</sup> it is, however, completely unproblematic within the framework of FGP, as the Topic-Focus-Articulation is treated in FGP as a grammatical property of the tectogrammatical structure of the sentence formally represented by grammatical features.<sup>13</sup> We can thus further specify the accusative case value assigned to the reflexive *sebe* in (27) with the formal feature “f” (for “focus”). Via co-indexation with *sebe* (PAT), the Effect argument receives, then, the following set of case values: ⟨case: nominative, accusative<sub>f</sub>⟩. If we now formulate the following resolution-rule for conflicting case assignment, we correctly derive both (26) and (27):

(28) *Resolution-Rule for Czech:*

If different case values are assigned to one and the same position, only the hierarchically higher case value is morphologically realized, unless a lower value is paired with a focus-feature. In the latter case, the case value paired with the focus-feature is morphologically realized.

## 6. Some preliminary conclusions

In the present article, I have been discussing two different strategies to amend the collision between the principle of lexical identity (Principle 1) and the principle of pronominal commutability (Principle 2) which arises when these principles are applied to constructions of type (2) and (3)/(26). An apparently simple solution can be achieved in implementing a radical approach to reflexivization, treating every single instance of the reflexive clitic *se* as the output of a derivational operation on lexical entries. The price one has to pay is to deny the lexical identity of verb forms which (according to meaning) should arguably be treated as lexically identical. In addition, one has to derive passive structures in the lexicon as well, as the derivation of lexical entries for passive verbs must precede the derivation of lexical entries for reflexive verbs, as has been shown above in connection with dative-type reflexives. An alternative strategy to resolve the conflict between both principles makes it necessary to

<sup>12</sup> More recently, there is a certain change in attitude within the generative literature concerning questions of the informational organization of sentences. Especially in work developing the “cartographic” approach to sentence structure (cf. Cinque and Rizzi, 2008), topic phrases and focus phrases are treated on a pair with other phrasal projections.

<sup>13</sup> In the Prague Dependency Treebank (accessible from <http://ufal.mff.cuni.cz/pdt3.0/>), the nodes of a dependency tree are equipped with the attribute “tfa” (i.e. Topic-Focus-Articulation), which can bear three different values: t (for “topic”), f (for “focus”) or c (for “contrastive”).

allow for valency frames which are underspecified with respect to the formal features of certain arguments. Admittedly, one further needs quite complicate analytical machinery, including case transfer via co-indexation and a rule such as (28) resolving the conflict arising from double case assignment. Last but not least, one has to accept a focus-feature as part of the formal vocabulary of the grammar.

At this point, a final evaluation of both strategies seems to be in place, from which, however, I will refrain, as a serious evaluation would require a broader discussion of the grammatical framework implicitly presupposed by both solutions. That it is not possible to rely on mere simplicity of description with reference to an isolated detail of language structure, has been demonstrated in detail already by Matthews (1972). Instead, I will try to relate both solutions to the framework of FGP in its present state of development. In this respect, the suggestion made by Oliva (2001) seems to require some major changes in the framework of FGP. It would lead not only to the disintegration of the nominal paradigm (containing in the current state “weak” and “strong” forms) but also to the loss of the passive as a grammatical category of the Czech verb. In the final end it might undermine the distinction between inflection and derivation inherited by FGP from traditional grammar. In comparison to these fundamental changes, the adjustments needed when adopting the second solution seem to me of relatively minor importance. Basically, they come down to allowing valency frames underspecified for case values of arguments to be realized with structurally assigned case. Some mechanism of case transfer is required in Czech anyway in order to handle case marking on co-predicates not subcategorized by the governing verb, cf. Panevová (1980, p. 79-86). Something similar can be said with respect to the required focus feature, which is available within the framework independently of the proposed adjustment. If there is a need elsewhere in Czech grammar to apply a resolution-rule such as (28), which would obviously foster its status, remains to be seen. Which strategy one prefers in solving the collision between both principles may depend on one’s personal preferences; it depends, however, just as much on the analytical possibilities of one’s theoretical apparatus.

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