

On (Non-)Compositionality of Prefixed Verbs

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This paper deals with differences between compositional and non-compositional prefixed verbs in Slavic. Using a paraphrase test, it classifies prefixed verbs into four categories. In the course of this, it is shown that non-compositional prefixed verbs do not form a unified class. The paper provides a syntactic and semantic analysis of the particular classes and argues that also prefixed verbs with an idiomatic meaning can receive a compositional analysis. Non-compositional prefixed verbs are incrementally derived but the meaning of their parts can be updated under certain circumstances.

1. Introduction

Whereas the difference between lexically and superlexically prefixed verbs has been extensively discussed in the literature (e.g. Isačenko 1962, Babko-Malaya 1999, Ramchand 2004, Romanova 2004, 2006, Svenonius 2004, Di Sciullo & Slabakova 2005, Biskup 2007, 2012, Richardson 2007, Szucsich 2007, 2014, Gehrke 2008, Lehmann 2009, Žaucer 2009, 2012, Markova 2011, Wiland 2012), the difference between compositional and non-compositional prefixed verbs has not attracted much attention. Thus, the first goal of this paper is to classify compositional and non-compositional prefixed verbs. The second task is to provide a syntactic and semantic analysis of their particular classes.

It is well known that prefixed verbs can be compositional or non-compositional. Compositional verbs have a transparent meaning composed of the meaning of the prefix and the verb. In contrast, in the case of non-compositional prefixed verbs, the meaning of the derived verb is not a function of the meanings of its parts.

It has been argued that lexical prefixes (also referred to as qualifying, resultative, internal) have locative or idiosyncratic meaning and that superlexical prefixes (also referred to as modifying, external) have an adverbial meaning (e.g. Babko-Malaya 1999, Ramchand 2004, Svenonius 2004, Richardson 2007).

It has been also argued that lexically prefixed verbs can have both a compositional and non-compositional meaning, whereas superlexically prefixed verbs can only have a compositional meaning (e.g. Romanova 2006, Gehrke 2008). Having this in mind, consider

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examples of compositional lexically prefixed verbs in (1). It is obvious that the meaning of *vpisat'* is composed of the meaning of *pisat'* and *v*, that the meaning of *oderwać* is composed of the meaning of *rwać* and *od* and that the meaning of *namést* is composed of the meaning of *na* and *mést*.

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|--------|---------------------|-----|----|------------|-----|----|----------|------|
| (1) a. | v-pisat' | (R) | b. | ode-rwać | (P) | c. | na-mést | (CZ) |
| | in-write | | | away-tear | | | on-sweep | |
| | 'write in/inscribe' | | | 'tear off' | | | 'sweep' | |

Similarly, in the case of compositional superlexically prefixed verbs in the following example, the meaning of *peregret'* is composed of the meanings of its parts, that is, of the meaning of *gret'* and the excessive meaning of *pere*, the meaning of *dopracovat'* is composed of the meaning of *pracovat'* and the completive meaning of *do* and the meaning of *przepisać* is composed of the meaning of *pisać* and the iterative meaning of *prze*.

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|--------|------------|-----|----|----------------|------|----|------------|-----|
| (2) a. | pere-gret' | (R) | b. | do-pracovat' | (SK) | c. | prze-pisać | (P) |
| | over-heat | | | to-work | | | over-write | |
| | 'overheat' | | | 'stop working' | | | 'rewrite' | |

As to non-compositional lexically prefixed verbs, consider (3).¹ It has been argued that, for instance, 'sign' and 'pump' are non-compositional (see Kratzer (2000) for the German *aufpumpen*, Młynarczyk (2004) for the Polish *podpisać* and Tatevosov (2008) for the Russian *podpisać*). A closer look reveals that there are differences between the prefixed verbs in (3). *Podpisać* (or the Slovak *podpísať* and the Polish *podpisać*), *napompować* (or the Czech *napumpovat*) and *zapít* seem to be more transparent than *nabyć* (or the Czech *nabyt*) and *užít*. *Podpisać* (*podepsat*, *podpisać*) also seems to be more transparent than *zapít*. Furthermore, in *oddělat*, only the verb has an irregular meaning but in *užít* both elements have an irregular meaning. This calls for a more detailed analysis of (non-)compositionality of prefixed verbs.

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|--------|------------------|------|----|------------------------------|------|----|-----------------|------|
| (3) a. | pod-pisat' | (R) | b. | na-pompować | (P) | c. | za-pít | (CZ) |
| | under-write | | | on-pump | | | behind-drink | |
| | 'sign' | | | 'pump' | | | 'drink to sth.' | |
| d. | na-być | (P) | e. | u-žit' | (SK) | f. | z-drhnout | (CZ) |
| | on-be | | | at-live | | | from-rub | |
| | 'buy', 'acquire' | | | 'take (a consumable entity)' | | | 'scarper' | |
| g. | od-dělat | (CZ) | h. | po-dělat | (CZ) | i. | za-vid'a | (BG) |
| | away-do | | | along-do | | | behind-see | |
| | 'take away' | | | 'make a mess in sth.' | | | 'envy' | |

¹ Some verbs can have more meanings; in the translation I use only the meaning relevant to our discussion.

The reminder of the paper is organized as follows. Section 2 categorizes compositional and non-compositional prefixed verbs by means of a paraphrase diagnostics. In section 3, the particular classes are syntactically and semantically analyzed. Conclusions are drawn in section 4.

2. A more fine-grained approach

I am concerned only with prefixed verbs having one prefix here; multiply prefixed verbs, I leave aside.² Given the two elements, the verb and the prefix, and their regular-/irregular-meaning property, there are four classes. The first class is represented by prefixed verbs composed of a prefix with a regular meaning and a verb with a regular meaning. This class contains compositional prefixed verbs. The other three classes contain non-compositional prefixed verbs. Concretely, the second class is represented by prefixed verbs with a regular-meaning prefix and an irregular-meaning verb. The third class contains verbs with an irregular-meaning prefix and a regular-meaning verb. The fourth class is represented by prefixed verbs in which both elements have an irregular-meaning.

I will diagnose the particular classes by paraphrases. According to Bergsma *et al.* (2010), prefix-verb compositionality is a semantic equivalence between a prefixed verb and a paraphrase involving the verb's stem used as a verb. This relates to the first class in my categorization. I modify and extend the proposal by Bergsma *et al.* to all four classes. Thus, for prefixed verbs of class 1, I propose that a prefix and a verb have a regular meaning, that is, they produce a compositional meaning, if the prefixed verb can be paraphrased with the unprefixed verb (abstracting away from perfectivity and telicity) and the prefix/preposition.³ Since in the case of superlexical prefixes it is not possible to use the prefix (preposition) itself in the paraphrase, it is allowed to use the meaning of the superlexical prefix instead.⁴ For instance, *vpišat'* and *namést* have a compositional meaning – belong to class 1 - because they can be paraphrased with the unprefixed verb and the prefix, as shown in (4) and (5).

- (4) a. v-pisat' ~ b. pisat' v (čto-to) (R)
 in-write write in something
 'write/inscribe'

² For recent analyses, see e.g. Istratkova (2004), Arsenijević (2006), Žaucer (2009, 2012), Markova (2011), Wiland (2012).

³ Prefixes that do not have a prepositional counterpart are replaced with the corresponding non-homophonous preposition in the paraphrase.

⁴ Superlexical prefixes are taken to have a regular meaning and to form compositional prefixed verbs because their meanings are mostly just a certain abstraction of meanings of their lexical (locative) counterparts and the meanings behave stably in various prefix-verb combinations; compare e.g. the superlexical *peregret'* or *pereest'* 'overeat' with the lexical *perenesti* 'carry sb./sth. over'. Moreover, in contrast to irregular meanings, superlexical meanings are often listed in dictionaries.

- (5) a. na-mést ~ b. měst na (co) (CZ)
 on-sweep sweep on something
 'sweep'

For superlexical prefixes consider (6) and (7), showing that *przepisać* and *dopracovat'* can be paraphrased with the unprefixated verb and the meaning of the prefix.

- (6) a. prze-pisać ~ b. pisać znowu/na nowo (P)
 over-write write again
 'rewrite'

- (7) a. do-pracovat' ~ b. prestat' pracovat' (SK)
 to-work stop work
 'stop working'

As to class 2, I assume that a prefix has a regular meaning and the verb an irregular meaning if only the prefix can be used in the paraphrase. Example (8), with the lexical prefix, shows that the verb *dělat* cannot be used in the paraphrase of *oddělat*; it must be replaced with *odstranit*.

- (8) a. od-dělat ~ b. odstranit (co) od (čeho)
 away-do remove something away something
 'take sth. away from sth.' not: dělat (co) od (čeho)
 do something away something (CZ)

For a superlexical prefix, consider (9), where the excessive *pře-* is paraphrased as *víc než záhodno* and where *hnát* must be replaced with the more general *dělat*.

- (9) a. pře-hnat ~ b. dělat víc než záhodno
 over-drive do more than advisable
 'overdo' not: hnát více než záhodno
 drive more than advisable (CZ)

For prefixed verbs of class 3, I assume that the prefix has an irregular meaning and the verb a regular meaning if only the verb can be used in the paraphrase. Consider (10), where in the paraphrase of *zapít*, *za* must be replaced with *na*. This class does not contain verbs with a superlexical prefix since superlexical prefixes only have a regular meaning.

- (10) a. za-pít b. pít na (co) not: pít za (co/čím)
 behind-drink drink on something drink behind something
 'drink to sth.' (CZ)

With respect to class 4, both the verb and the prefix have an irregular meaning if there is no paraphrase that can use the prefix or the verb (or both). Some examples of such lexically

prefixed verbs can be found in (11). Given that superlexical prefixes always have a regular meaning in prefixed verbs, they do not occur in this class.⁵

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|---------|------------------------------|------|----|------------------|-----|----|------------|------|
| (11) a. | u-žit' | (SK) | b. | na-być | (P) | c. | za-vid'a | (BG) |
| | at-live | | | on-be | | | behind-see | |
| | 'take (a consumable entity)' | | | 'buy', 'acquire' | | | 'envy' | |

With respect to certain prefixed verbs the proposed paraphrase test seems to be too restrictive because it classifies them as non-compositional although they can be paraphrased in a looser manner (cf. Sekaninová 1980, who substitutes prefixes with various adverbs and PPs in paraphrases of prefixed verbs). A disadvantage of more relaxed versions of the paraphrase test is that it is not clear where the boundary between licit and illicit paraphrases (meanings) should be drawn. This problem does not arise in the proposed paraphrase test because only meanings brought about by the prefix/preposition and the verb themselves are licit (except superlexical prefixes).⁶

3. The four classes

3.1. Class 1

I will begin with prefixed verbs with the compositional meaning, concretely, with the lexically prefixed *namést* in example (12). The syntactic derivation is shown below. Because of lack of space, I will discuss only the relevant parts of the derivation.

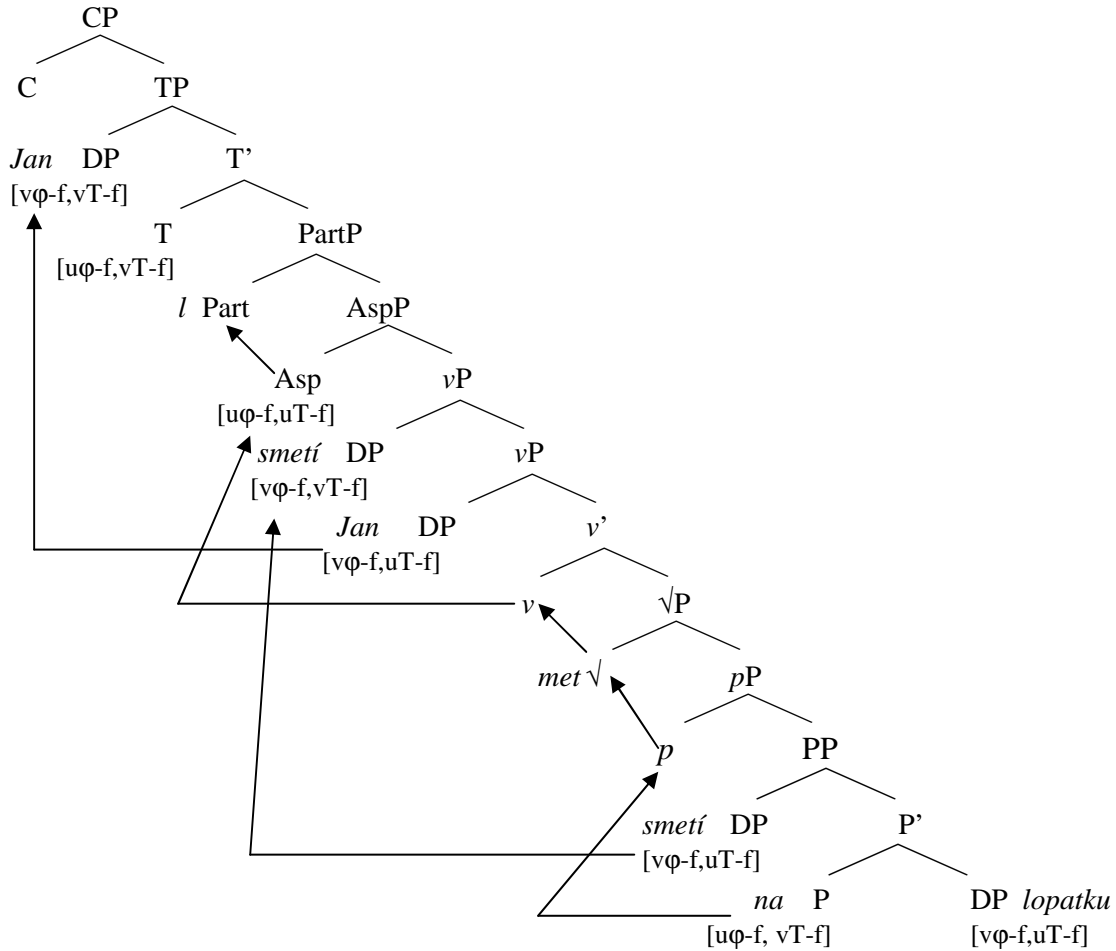
- (12) Jan na-metl smetí na lopatku. (CZ)
 Jan on-swept rubbish on dustpan
 'Jan swept the rubbish into the dustpan.'

First, the preposition *na* merges with the ground DP *lopatku*. Following Biskup (2007, 2009), I treat all cases uniformly as a result of Agree between ϕ -features (ϕ -fs) and the tense-feature (T-f). I assume that prepositional cases are an unvalued T-f on D, which is an extension of Pesetsky & Torrego's proposal (2004, 2006). Specifically, prepositions bear unvalued ϕ -fs and a valued T-f and DPs bear the unvalued T-f and valued ϕ -fs; see (13).

⁵ It has been argued that there are also purely perfectivizing (empty) prefixes (e.g. Grzegorzczkova *et al.* 1984, Babko-Malaya 1999 but see also Filip 1999 for the opposite point of view). These prefixes do not behave uniformly with respect to the paraphrase test, e.g., the Russian *napisat'* 'write' can be paraphrased as *pisat' na* 'write on' but the Czech *pochválit* 'praise' cannot be paraphrased as *chválit po* 'praise along'.

⁶ A reviewer pointed out that compositionality and the regular meaning of prefixes could be defined in the way that if there is more than one prefixed verb with prefix *x* in which *x* has an identical meaning, the meaning can be treated as regular and the prefix can form a compositional verb. This approach would not have to tie the regular meaning of prefixes to the meaning of corresponding prepositions. The question still remains how exactly the identical meaning of the prefix in different prefixed verbs should be identified.

(13)



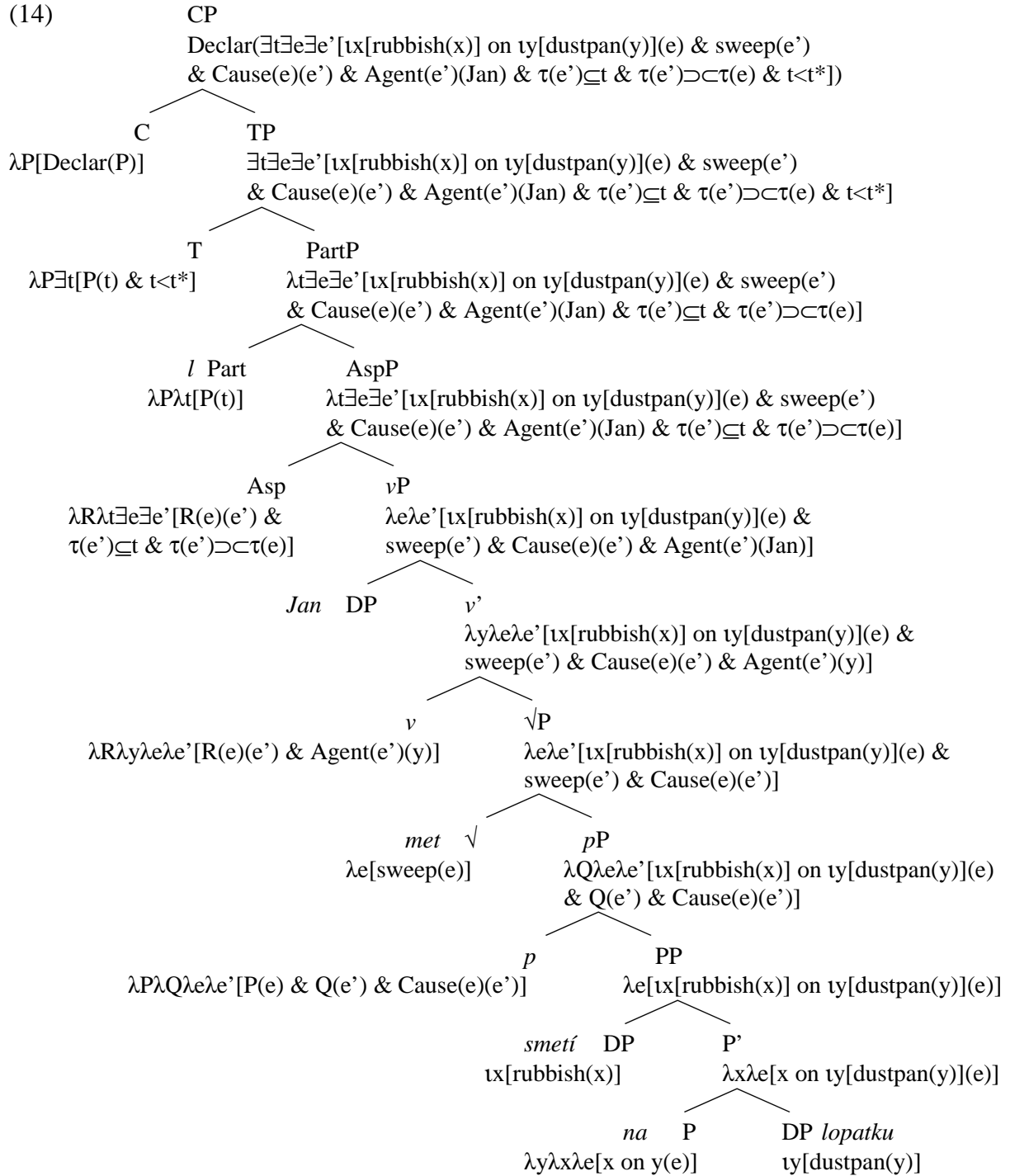
The operation Agree values the unvalued ϕ -fs of *na* and the unvalued T-f (case) of *lopatku*. There is no visible agreement morphology on *na* but in languages like Abaza, Abkhaz, Hungarian, Irish, Iwaidjan languages, Jacalteco, Tsakhur, Welsh, there is one. There are also languages with tensed prepositions like Titan and Māori.

In the next step, P' merges with the figure DP *smetí*. Given the Activation Condition (e.g. Chomsky 2000), T-f on *smetí* cannot be valued by *na*. Later in the derivation, *smetí* gets structural accusative from the aspectual head via Agree with its unvalued ϕ -fs and the valued T-f (see e.g. Jakobson (1936), Wierzbicka (1967), Paducheva (1998), Pereltsvaig (2000), Borer (2005), Błaszczak (2007) and Richardson (2007) for the relation between case and aspectual properties of the predicate).

PP is selected by the head *p* of the prefixal type and *na* incorporates into it. I assume that prefixes are incorporated prepositions (see e.g. Babko-Malaya (1999), Svenonius (2004), Romanova (2006) and for non-Slavic languages, Walinska de Hackbeil (1986), Mulder (1992), Miller (1993), Pitz (1994), Biskup, Putnam & Smith (2011)); hence the complex head

na+p incorporates into the root $\sqrt{}$ and higher heads, valuing the T-f of the aspectual head on the way, which gives rise to perfectivity.⁷

Let us now consider the semantic derivation. The meaning of *na* applies to the definite DP *lopatku* – which is derived by the iota operator – with the result that the figure *x* is in the state of being on the dustpan, as shown in (14).



⁷ The proposed classification says nothing about whether or not superlexical prefixes can merge in the same position as lexical prefixes. There are arguments showing that (at least some) superlexicals are derived as lexicals (Biskup 2007, 2012, Žaucer 2009, 2012).

Then the meaning of P' combines with the meaning of *smetí* and via functional application we receive the meaning that the rubbish is in the state of being on the dustpan. Next, PP combines with p , which makes a prefix from the preposition. The meaning of the prefixal p is composed of three conjuncts. The first conjunct stands for the meaning of PP , that is, for the result state brought about by prefixation. In this way, we derive the prepositional nature of prefixes. The second conjunct introduces an event with properties of the root. The third conjunct expresses the telic property of prefixes, the fact that prefixes bring about the causative relation between the result state and the other subevent.⁸

The meaning of pP applies to the meaning of the root with the result that the rubbish is in the state of being on the dustpan and this is caused by the event of sweeping. After that, the agent is added and later also aspectual, temporal and sentence-mood properties are added.

This derivation contains a non-defective PP because both arguments of the preposition are present in the syntactic derivation, the preposition is overtly realized and assigns prepositional case. This means that two copies of the moved preposition are spelled out. It is usually assumed that more copies of one chain can be spelled out only if they bring about a new output. This is the case in our example since the prefixal copy licenses the perfective aspect and the prepositional copy licenses case with its semantic properties.

PP s can also be defective. This means that the preposition lacks the second selectional feature, which corresponds to the lack of ϕ -fs on P . Given the assumption that case assignment – the valuation of T -f of the prepositional argument – is dependent on ϕ -fs Agree, the argument does not receive case from P . This derives a PP type of Burzio's generalization (see e.g. Svenonius 2003, Biskup & Putnam 2012). However, T -f is present on the preposition because the incorporated P always perfectivizes the verb.⁹ The syntactic defectivity correlates with the semantic and phonological defectivity. The second, syntactically unrealized, prepositional argument is a free variable. Since P does not assign case and case assignment is a constitutive property of Ps , the prepositional copy is not spelled out; only the prefixal copy is. To give an example, consider (15), where the ground argument is missing. The relevant part of the derivation is in (16) (head movement is not shown throughout the paper).

- (15) Jakub na-pompował koło. (P)
 Jakub on-pumped tyre
 'Jakub pumped up the tyre.'

⁸ The variable e ranges over processes as well as states. Thus, the meaning of p can express a change from a state to another state (as in the case of achievements) or a change from a process to a state (as in the case of accomplishments).

⁹ There is a small set of simplex verbs that are perfective by their nature.

(16)

Jakub DP v'
 $\lambda y \lambda e \lambda e' [ix[tyre(x)] \text{ on } y(e) \& \text{ pump}(e') \& \text{ Cause}(e)(e') \& \text{ Agent}(e')(y)]$
owa v \sqrt{P}
 $\lambda R \lambda y \lambda e \lambda e' [R(e)(e') \& \text{ Agent}(e')(y)]$ $\lambda e \lambda e' [ix[tyre(x)] \text{ on } y(e) \& \text{ pump}(e') \& \text{ Cause}(e)(e')]$
pompa $\sqrt{}$ pP
 $\lambda e [\text{pump}(e)]$ $\lambda Q \lambda e \lambda e' [ix[tyre(x)] \text{ on } y(e) \& Q(e') \& \text{ Cause}(e)(e')]$
 p PP
 $\lambda P \lambda Q \lambda e \lambda e' [P(e) \& Q(e') \& \text{ Cause}(e)(e')]$ $\lambda e [ix[tyre(x)] \text{ on } y(e)]$
 $[vT-f]$ *na* P DP *koło* $[v\phi-f, uT-f]$
 $\lambda x \lambda e [x \text{ on } y(e)]$ $ix[tyre(x)]$

pumped'.¹⁰

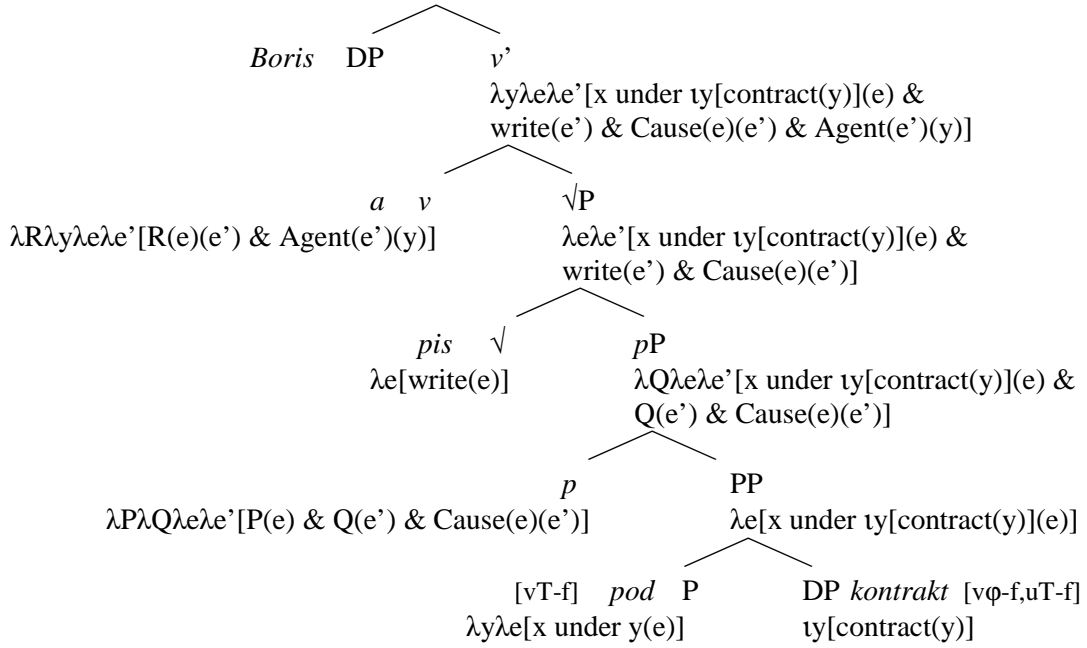
pressure'), which shows that the verb indeed belongs to class 1.

and its derivation in (18).

- (17) Boris pod-pisal kontrakt. (R)
Boris under-wrote contract
'Boris signed the contract.'

¹⁰ In the case of unprefixated transitive verbs, the theme object would be introduced by a head with the following meaning: $\lambda x \lambda P \lambda e [\text{Theme}(e)(x) \ \& \ P(e)]$.

(18)



The preposition *pod* is defective. It lacks the second selectional feature and ϕ -fs (see (18)), hence it does not assign case and the prepositional copy *pod* is not spelled out. The sole argument is the ground and the figure is represented only as the free variable x . The free variable is contextually interpreted as a signature at the semantic interface, so the meaning of vP in (18) is that a signature is in the state of being under the contract, this is caused by the event of writing and the agent of the writing event is Boris.

The proposed analysis is supported by the fact that if the figure is present (i.e., *pod* is not defective), the prepositional copy of P is also spelled out and case is assigned, as in *podpisalsja pod kontraktom* (R)/*podpisał się pod umową* (P)/ *podepsal se pod smlouvou* (CZ), literally ‘he signed himself under the contract’. The reflexive is interpreted as the possessive *his* (signature); compare the Czech *podělat se* ‘make a mess in *one*’s pants’, *vydělat se* ‘do *one*’s business’.

If we allow the presence of the object in the paraphrase, as in (19), then *podpisať* and its Slavic-language equivalents will belong to class 1. If it is not allowed, the verb will belong to class 2, in which the meaning of verbs is irregular. Because of the imperfective aspect, the paraphrase sounds somewhat degraded but if it is correct that *na* in *napisat’* is an empty prefix, then we could also use *napisat’* instead of *pisat’* in the paraphrase.

- (19) a. *pod-pisat’* ~ b. *pisat’ podpis’ pod (čto-to)* (R)
 under-write write signature under something
 ‘sign’

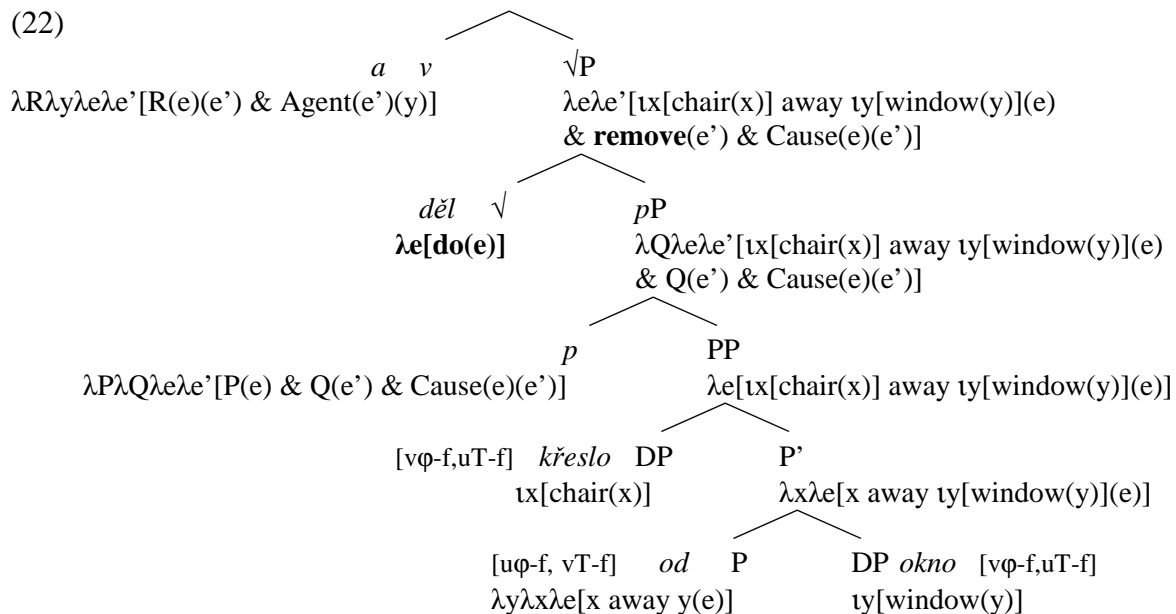
3.2. Class 2

This class contains verbs with a regular-meaning prefix and an irregular-meaning verb, as in (20). There is a non-defective PP because both the figure and the ground are present, two copies of *do* are spelled out and the preposition assigns genitive. (21) shows that only the prefix can be used in the paraphrase.

- (20) Jirk-a od-dělal křesl-o od okn-a. (CZ)
 Jirk-NOM away-did chair-ACC away window-GEN
 ‘Jirka took the chair away from the window.’

- (21) a. od-dělat ~ b. odstranit (co) od (čeho)
 away-do remove something away something
 ‘take sth. away from sth.’ not: dělat (co) od (čeho)
 read something away something

According to Nunberg, Sag & Wasow (1994), the meaning of many idioms, albeit idiosyncratic, can be derived compositionally. They argue that not every idiom must be listed in the lexicon as a complete constituent. I will apply this approach to prefixed verbs. Specifically, I will follow Nunberg’s (1995) predicate transfer analysis, which was used for metonymies *etc.* There are two conditions on the predicate transfer operation: salience and noteworthiness. According to salience, there must be a functional correspondence between the original and the derived predicate. According to noteworthiness, the transfer must be conversionally interesting or relevant. Now consider the derivation of (20), as demonstrated in (22). When the ν P phase is interpreted, the meaning of *dělat* ‘do’ is shifted to ‘remove’ in ν P, as shown in boldface (the original meaning of ν P is not shown there).



This transfer is properly licensed because there is a salient relation between these predicates: functionally, ‘do’ is a superset of ‘remove’. It is also noteworthy, that is, conversionally relevant, because the speaker does not want to or cannot use the more specific predicate. A similar case is shown in (23), where the meaning of *dělat* ‘do’ is shifted to the more specific ‘defecate’ (in contrast to (20), in (23a) PP is defective because the figure is missing).

- (23) a. *po-dělat* ~ b. *kálet po (čem)* not: *dělat po (čem/co)*
 along-do defecate along something do along something
 ‘make a mess in sth.’ (CZ)

The meaning shift is restricted; it happens only in certain semantic contexts delivered by the sister constituent. In (22) it is determined by the *odPP*. If there were, for instance, only the direct object *křeslo* instead of the PP, the meaning of the verb would never be shifted and the interpretation would be ‘make a chair’. Since *dělat* itself does not have the meaning *remove*, the transfer must happen in the course of the derivation. This holds generally; when prefixed verbs are morphosyntactically derived and their parts do not bear the irregular meaning from the beginning, then their idiomatic meaning must arise in the derivation. Verbs like *po-dělat* in (23) or *za-dělat* ‘to cover sth. with sth.’ support this view since the meaning of *dělat* is always shifted in accordance with the meaning of the prefix (of the PP present in the derivation).

There are also more complicated cases like, for instance, (24). According to the paraphrase test, *zdrhnout* behaves like verbs of class 2. The expressiveness of *zdrhnout* satisfies the noteworthiness condition but there seems to be no salient relation between *drhnout* and *prchnout*.

- (24) a. *z-drhnout* ~ b. *prchnout z čeho* not: *drhnout z čeho*
 from-rub scarper from something rub from something
 ‘scarper’ (CZ)

If the restrictive analysis is preferred and noteworthiness and salience are maintained as general conditions on the meaning transfer, verbs like *zdrhnout* will be derived as verbs of class 4, where a special listed meaning is used for the complex head $\sqrt{}$ (see section 4).¹¹

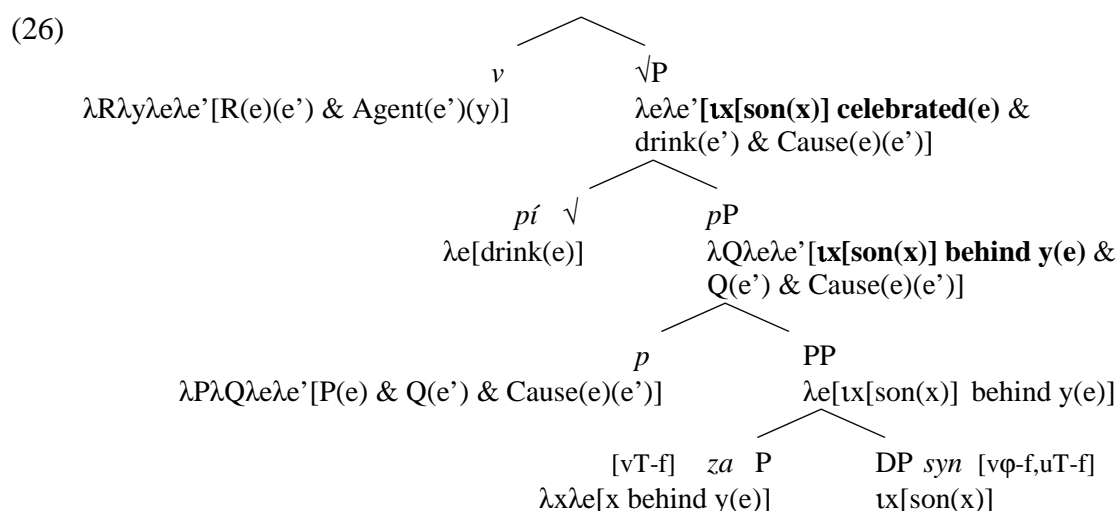
3.3. Class 3

This class is represented by prefixed verbs with an irregular-meaning prefix and a regular-meaning verb, as shown by the following example with paraphrases. There is a defective PP

¹¹ It is not crucial which class the verb belongs to; what is important is that the approach can derive all of the attested possibilities.

- (25) a. Jan za-pil syn-a. ~ b. Jan pil na syna. (CZ)
Jan.NOM behind-drank son-ACC Jan drank on son
'Jan celebrated his son by drinking.' not: Jan pil za syna.
Jan drank behind son

The relevant part of the derivation is shown below. When the ν P phase is interpreted, the meaning of *za* ‘behind’ is shifted to *na* ‘on’ in the meaning of $\sqrt{\text{P}}$, which in the context of ‘drink’ expresses the reason for celebration; see the boldfaced parts.¹² Given the general spatiotemporal properties of prepositions, I assume that there is always a salient relation between them. And the reason for the celebration can be taken to be noteworthy in the conversation. The meaning of the root is not shifted, nor is there a special listed meaning for the complex head *za-pí* in the root, which could be used (as in the case of verbs of class 4, as we will see below), hence the regular meaning of *pí(t)* is used.¹³



Beside the two general conditions, the meaning transfer is again restricted by the semantic context. For instance, it does not happen in cases with consumable entities in PP like in *za-pít pilulku* ‘wash down a pill’.

There are also problematic cases; see (27). With respect to paraphrases, *dokoupiti* behaves like verbs of class 3.

¹² When *na* is directly merged with *syn* instead of *za*, then we obtain a non-defective PP with the argument *se*: *napít se na syna* ‘celebrate son by drinking’.

¹³ I assume that only elements that are not present in the syntactic computation can be represented as a free variable. Thus, in (26) the preposition *za* cannot be represented as a free variable that is later interpreted as the state 'celebrated'.

- (27) a. do-koupit ~ b. koupit k (čemu) not: koupit do (čeho)
to-buy buy towards something buy towards something
‘buy some more’ (CZ)

Given the assumed salient spatiotemporal relation between Ps, the first general condition is satisfied but noteworthiness of the shift of *do* is questionable. Thus, this preposition cannot be transferred and the verb needs to be derived as verbs of class 4.

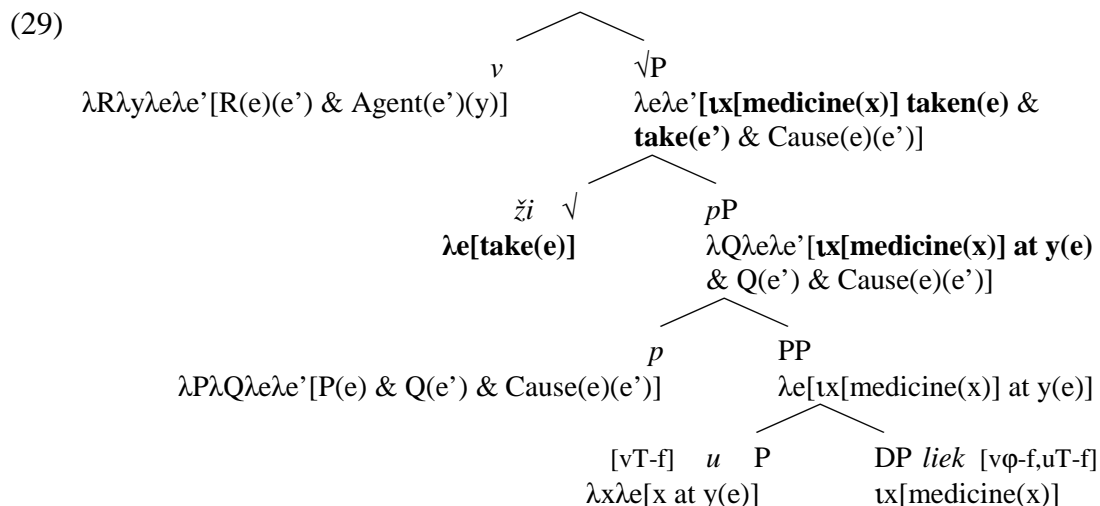
3.4. Class 4

This class, with an irregular-meaning prefix and an irregular-meaning verb, is the largest category. There are no paraphrases that can use the prefix or the verb or both of them. In contrast to class 2 and 3, verbs of this class are not derived by predicate transfer (hence salience and noteworthiness play no role here). Instead, the meaning of the whole prefixed root, listed in the lexicon, is used. Let us demonstrate how the derivation of (28) works.

- (28) Janko u-žil liek. (SK)
Janko at-lived medicine
‘Janko took medicine.’

There is only one argument in PP (*liek*), one copy of *u* and no prepositional case; hence the PP is defective, as demonstrated in (29). Crucially, when the phase is interpreted, the listed meaning ‘take’ is used for the complex root *uži* (the incorporation of *u* is not shown here). The listed meaning occurs directly in $\sqrt{}$ in (29), which shows that there is no shift from an original meaning to the shifted one as in class 2; compare it with (22). In class 4 an idiosyncratic meaning is always used from the beginning.

Since the listed meaning is used for the whole complex root, the meaning must also be used accordingly for the result subevent, as shown in the meaning of \sqrt{P} . This derives the fact that both elements of the prefixed verb have an irregular meaning.



Some meanings of prefixed verbs can be derived in two steps. Consider, for instance, the Czech *oddělat*, which is polysemous between ‘take sth. away from sth.’ and ‘hit’, and *podělat*, which is polysemous between ‘make a mess in sth.’ and ‘fuck up’. We saw in section 3.2. that the first meanings of these verbs are derived as in the case of verbs of class 2. Interestingly, the second meanings are metonymically derived from the first meanings and they belong to class 4 because there are no appropriate paraphrases for them using the verb or the prefix. Note that the second meaning of *po-dělat* is probably not derived as in the case of verbs of class 3 (i.e., do something badly) because there is an analogous polysemous verb *po-srat* ‘make a mess in sth.’, ‘fuck up’ derived from the verb *srát* ‘shit’.

4. Conclusion

I have classified (non-)compositional prefixed verbs by means of paraphrases and provided a syntactic and semantic analysis of their various types. Prefixed verbs can be treated as idioms to a certain extent and can receive a compositional analysis even if they have an idiosyncratic meaning. They are incrementally derived but the meaning of derivational steps can be updated in the course of the derivation. Class 1 contains compositional verbs. Non-compositional prefixed verbs are of three types. Verbs of class 2 and 3 are non-compositional in the sense that their meaning is not composed of the original meanings of their parts but they can be derived compositionally by means of Nunberg’s (1995) predicate transfer. Prefixed verbs of class 4 are derived by the insertion of a listed meaning. Whereas lexical prefixes derive verbs of all four classes, superlexical prefixes only derive verbs of class 1 and 2. Thus, the proposed classification is different from the most widely accepted lexical-superlexical approach to prefixed verbs, which groups together spatially prefixed verbs and idiosyncratically prefixed verbs in opposition to superlexically prefixed verbs. My approach classifies spatially prefixed verbs (with the regular meaning of the prefix) and superlexically prefixed verbs together and separates them from idiosyncratically prefixed verbs.

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