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## On agentive and instrumental deverbal nominalizations in Slovenian

This paper presents an analysis of Slovenian deverbal external argument nominalizations in a syntactic approach, where the focus is on Slovenian agentive and instrumental deverbal nominalizations in *-(V)lec*, the most numerous and productive class in the language according to Stramljič Breznik (1999). It is proposed that these nominals fall in three distinct classes according to the type of the Aspect head found in the nominalization: i) episodic eventive nominals, ii) dispositional eventive nominals (both denoting animate agents) and iii) functional nominals (denoting instruments and humans in professional or temporary functions). The last type is newly introduced, as English and French-based approaches such as Alexiadou and Schäfer (2010) and Roy and Soare (2014) cannot accommodate Slovenian data relating to the presence and properties of the genitive objects found in Slovenian functional nominals.

**Key words:** nominalization; external argument; Slovenian.

### 1. Introduction

The goal of this paper is to propose an analysis of Slovenian deverbal external argument nominalizations (hereafter DEA-nominals) in a syntactic approach in order to contribute to a cross-linguistic understanding of these nominals, as previous, mostly English-based analyses (e.g. Rappaport Hovav and Levin 1992; Alexiadou and Schäfer 2010; Roy and Soare 2014) cannot accommodate Slovenian data. DEA-nominals are nominalizations that denote the external argument of the base verb whose thematic role can be *agent*, *experiencer* or *instrument*; in this paper I focus on Slovenian agentive and instrumental deverbal nominalizations in *-(V)lec*, which is the most numerous and productive class in the language, Stramljič Brez-



nik (1999).<sup>1,2</sup> The paper is organized as follows. The main issues and their analyses in previous proposals are discussed in Section 2. Slovenian nominalizations are described in general terms in Section 3, while the proposal on their structure and the arguments for the proposal are presented in Sections 4 and 5. Section 6 concludes the paper.

## 2. Eventivity and complement structure

### 2.1. *Rappaport Hovav and Levin (1992)*

In the study of English DEA-nominals, eventivity, i.e. whether these nominals imply an occurrence of the event denoted by the base verb, is standardly linked to the presence of complement structure in the form of an *of*-phrase, (Fabb 1984; Keyser and Roeper 1984; Rappaport Hovav and Levin 1992; van Hout and Roeper 1998; Alexiadou and Schäfer 2010; Roy and Soare 2014; McIntyre 2014). DEA-nominals with complement structure are eventive and most commonly denote animate agents (+event property), while those without it are non-eventive and denote instruments and professions (-event property), Rappaport Hovav and Levin (1992), (1). Thus, a machine or person can be referred to as *a coffee-grinder* in the sense of instrument

<sup>1</sup> The "V" in the nominalizations in *-(V)lec* stands for the vowels *a, i* and *e*.

<sup>2</sup> Slovenian has several affixes that participate in DEA-nominalizations. These affixes are of three genders, masculine (most numerous), feminine and neuter. They are listed in Bajec (1950), Toporišič (1975) and Stramljič Breznik (1999), to name the most important literature on the topic. The most commonly found agent-denoting affixes according to Stramljič Breznik (1999) are:

- (i) a. masculine: *-áč, -ilec, -álec, -átor, -ar, -êr, -ánt, -ítelj, -ec*; feminine: *-ka, -ica*
- b. feminine: *-a, -éla, -nica, -úlja, -áča*
- c. neuter: *-álo*

Only nominalizations with a subset of the affixes in (i) are compatible with the presence of complement structure in the form of a noun phrase in the genitive case: *-alec, -ilec, -elec, -ec* and their feminine counterparts, *-itelj, -er, -ator, -nik*; some examples are given in (ii). The most numerous and productive is the *-(V)lec* group and as such constitutes the core of our examples.

- (ii) a. *dvigovalec uteži* lit. 'lifter-masc. of weights', *dvigovalka uteži* lit. 'lifter-fem. of weights'
- b. *gostitelj svetovnega prvenstva* lit. 'host of world championship'
- c. *aranžer cvetja* lit. 'arranger of flowers'
- d. *degustator vina* lit. 'taster of wine'
- e. *uporabnik interneta* lit. 'user of internet'; *dobitnik nagrade* lit. 'receiver of award'

Instrument-denoting nominals are found with *-(V)lec* (most numerous and productive group, (iia)), but also with some other affixes, such as e.g. *-áč, -átor, -áns*, (iiib).

- (iii) a. *dvigovalec stekleničke* lit. 'lifter of bottle'
- b. *odpiráč* 'opener', *transformator* 'transformer', *dezodorans* 'deodorant'.



or profession without ever having ground coffee, while *a grinder of coffee* implies the event of grinding and can only denote a person, i.e. an animate agent, (and not a machine). As a test for eventivity, Rappaport Hovav and Levin (1992) propose the use of event-related adjectival modification with *frequent* or *constant*, available only in the eventive type, (2).<sup>3</sup>

- (1) a. *grinder of coffee, wiper of windshields, saver of lives* (eventive, event implication)  
 b. *coffee-grinder, (windshield) wiper, life-saver* (non-eventive, no event implication)
- (2) a. *frequent grinder of coffee, frequent wiper of windshields, frequent saver of lives*  
 b. *\*frequent coffee-grinder, \*frequent windshield wiper, \*frequent life-saver*

(adapted from Rappaport Hovav and Levin 1992)

Rappaport Hovav and Levin (1992) further argue that the [+/- event] property correlates perfectly with the presence of complement structure, regardless of the actual meaning of the nominalization, i.e. whether it is an agent, experiencer or instrument – for example, instruments, though generally non-eventive, can in some cases take the *of*-phrase, but in such cases they turn eventive and crucially do not express some well-known intrinsic function as they do in more prototypical instances, as in (3).

- (3) a. *A protein... that is a potent inducer of new blood vessel growth.*  
 b. *Woks have always been conservers of cooking oil as well as fuel.*  
 (Rappaport Hovav and Levin 1992)

## 2.2. Syntactic approaches

In syntactic approaches to DEA-nominals, eventivity and non-eventivity are directly linked to the structural representations of the nominals, i.e. whether they contain a little *v* in their structure (eventive) or not (non-eventive), though the approaches differ considerably in how they deal with instrument-denoting nominals.

<sup>3</sup> The test is based on the analysis of process-denoting and result-denoting deverbal nominals as found in Grimshaw (1990) and subsequent work.



### 2.2.1. *Alexiadou and Schäfer (2010)*

Alexiadou and Schäfer (2010) challenge the eventivity-complement structure connection as analyzed in Rappaport Hovav and Levin (1992), claiming that Rappaport Hovav and Levin's (1992) [+eventive] as well as [-eventive] DEA-nominals (specifically *-er* nominals in English) involve an eventive little *v* layer in their structure together with the Voice head that is responsible for licensing the external argument.<sup>4</sup> The interpretational differences between the two types of *-er* nominals, according to Alexiadou and Schäfer (2010), do not lie in the little *v* layer, but in different aspectual operators (termed Asp) binding the event introduced by little *v*, specifically episodic and dispositional aspect, illustrated in column 1 and column 2 in Figure 1. Furthermore, Alexiadou and Schäfer (2010) argue for the existence of yet another type of *-er* nominals, the truly non-eventive nominals (e.g. *diner*, *best-seller*, *sleeper*, *baker* meaning 'potato'), in which the nominalizing head attaches to the root directly with no verbalizing and Voice head in the structure. The proposed structure in column 3 for these truly non-eventive nominals captures a number of restrictions that these nominals show.<sup>5</sup>

Alexiadou and Schäfer's (2010) analysis is based primarily on morphological facts – the two groups of nominals in Rappaport Hovav and Levin's (1992) proposal (termed episodic and dispositional in Alexiadou and Schäfer 2010) are both capable of overt little *v*-realizing morphology and should thus be assigned the same structure. In other words, the nominalizations in which the preferred interpretation is that of the instrument (4a) do not differ morphologically from those that denote agents, (4b). Both consist of the root, the verbalizer *-ize* and the nominalizer *-er* ( $\sqrt{\text{fertil}}$ ;  $\text{fertil-ize} = [\sqrt{\text{+verbalizing affix } v}]$ ,  $\text{fertil-iz-er} = [\sqrt{\text{+verbalizing affix } v} + \text{nominalizing affix } n]$ ).<sup>6</sup>

<sup>4</sup> The paper presents a classification of *-er* nominals that makes use of structural decomposition, as put forth in syntactic approaches to nominalization (e.g. Marantz 2001, Alexiadou 2001, van Hout & Roeper 1998). Little *v* is a verbalizing head that in syntactic approaches signals the presence of event-structure. The Voice projection on top of *vP* introduces the external argument (*x*), following the so-called Voice Hypothesis (Kratzer 1996), according to which the external argument is not introduced by the verb itself, but by a functional head Voice. The *n*-layer is the nominalizer, spelt out as *-er* in English.

<sup>5</sup> These nominals do not denote external arguments, but rather internal arguments, locations etc. They are not productive in the relevant sense and are highly idiosyncratic in meaning. For example, *baker* in the meaning 'a baked potato' can refer only to a potato and not to the whole set of things that can be baked.

<sup>6</sup> See Harley (2009) for a detailed discussion of affixes *-ify*, *-ate* and *-ize* as specific verbalizing morphology.



- (4) a. *fertilizer, visualizer*  
 b. *colonizer, mobilizer*

[+event] -er – ASP <sub>EPISODIC</sub>	[+event] -er – ASP <sub>DISPOSITIONAL</sub>	[-event] -er non-external
<i>saver of lives, grinder of coffee</i>	<i>life-saver, coffee-grinder</i>	<i>diner, sleeper</i>

Figure 1

In this analysis, where all external argument *-er* nominals are eventive, the property [+/- eventive] cannot predict the presence of complement structure any longer. Instead, this difference is derived from the difference in the eventive Asp heads in the structure: Asp<sub>EPISODIC</sub> is found with complement structure nominals (+eventive in Rappaport Hovav and Levin 1992)), while Asp<sub>DISPOSITIONAL</sub> is found in the nominals without it (-eventive in Rappaport Hovav and Levin 1992). In this analysis, agents in nominals without complement structure and instruments designed for a specific purpose or specialized purpose-denoting uses. The only truly non-eventive nominals in Alexiadou and Schäfer's (2010) account are the so-called non-external argument nominals (*diner, bestseller, sleeper, baker*), exemplified in the last column of Figure 1.

Alexiadou and Schäfer (2010) link dispositional nominals to other habitual constructions, such as middles, (5), which ascribe a dispositional property to the internal argument of the verb, while the external argument is generic.

- (5) *This mountain climbs easily.* (True even if no one ever climbed it)

In a parallel fashion, *-er* nominals ascribe dispositional properties to the external argument of the verb, while the internal argument can surface, but has to be generic (i.e. nonspecific/unquantized) and can thus only be expressed by a *for*-phrase or incorporated: *opener for cans, a can-opener*. *Of*-insertion is in Alexiadou and Schäfer's (2010) view a realization of structural case licensing related to quantized phrases, and since in dispositional nominals the potential objects have to be un-



quantized, these cannot appear in an *of*-phrase.

### 2.2.2. Roy and Soare (2014)

Building their analysis on adjectival modification, Roy and Soare (2014) propose a three-way partition of DEA-nominals in French (specifically *-eur* nominals, the equivalents of English *-er* nominals): i) instruments that are always non-eventive; ii) eventive episodic nominals and iii) eventive dispositional nominals, where the semantic distinction between *episodic* and *dispositional* is as in Alexiadou and Schäfer (2010). Instrument nominalizations have the nominalizer attached to the root directly; their structure is as in (6).<sup>7</sup>

- (6) *ventilateur* 'ventilator'  
[DP/NP N *-eur* [<sub>rootP</sub>]] (Roy and Soare 2014)

Eventive nominals have a more complex structure in which *-eur* realizes a true external argument, which is reflected in their expressing an event, either a particular event (episodic reading, *le conducteur du train* 'the driver of the train') or a generic event (dispositional reading, *le conducteur de trains* 'the driver of trains'), (7). The internal argument is crucial in their analysis – non-specific DPs are associated with a dispositional interpretation, while specific DPs are associated with an episodic interpretation.<sup>8</sup>

- (7) *le conducteur de trains/du train* 'the driver of trains/the train'  
[DP/NP N [<sub>AspEvP</sub> *-eur* [<sub>AspEv</sub> e] [<sub>AspQP</sub> DP<sub>object</sub> [<sub>AspQ</sub>][<sub>rootP</sub> conduct-]]]]  
(Roy and Soare 2014)

As to the possibility of adjectival modification, Roy and Soare (2014) distinguish modification with frequency adjectives (termed FA) (Grimshaw 1990 and subsequent literature) and non-intersective adjectives with event-related readings (termed BA) (Larson 1998). They show that the French equivalents of English *-er* nominals show differences in whether they allow the two types of modification. The episodic ones allow both types of modification, (8a, 8a') the dispositional ones do not allow FA modification but allow BA modification, (8b, 8b'), and the instruments allow neither FA modification nor BA modification, (8c, 8c').

<sup>7</sup> Roy and Soare adopt Borer's (2003, 2005) framework, which implements the correlation between event structure and argument structure by proposing that arguments are introduced by functional heads, one of which is responsible for introducing the event variable.

<sup>8</sup> In formal terms, Roy and Soare propose that the difference is due to whether the *Asp* head is quantified over by the existential or the generic operator, leading to the two different interpretations.



## (8) a. Episodic nominals (FA)

*Un consommateur fréquent de cette marque italienne nous a*  
 a consumer frequent of this brand Italian us has

*donné une opinion valable.*

given an opinion valuable

‘A frequent consumer of this Italian brand gave us a valuable opinion’

## a'. Episodic nominals (BA)

*un grand consommateur de drogue*

a big consumer of drug

‘a big drug consumer = consumes a lot of drugs’

## b. Dispositional nominals (FA)

*Un consommateur (\*fréquent) de marques italiennes nous a donné*  
 a consumer frequent of brands Italian us has given

*une opinion valable.*

an opinion valuable

‘A (\*frequent) consumer of these Italian brands gave us a valuable opinion’

## b'. Dispositional nominals (BA)

*Un petit vendeur de voitures paye moins d'impôts.*

a small seller of cars pays less taxes

‘A small car-dealer pays less taxes’ = one who doesn't sell cars much/  
 sells few cars

## c. Instruments (FA)

*\*un aspirateur fréquent de la poussière*

a suck.ATOR frequent of the dust

intended: ‘a frequent vacuum-cleaner of dust’

## c'. Instruments (FA)

*un grand/gros mixeur*

‘a big blender’ ≠ blends much

(adapted from Roy and Soare 2014)

Though the eventive nominals (i.e. episodic and dispositional nominals) do not show a uniform behavior with respect to FA modification, Roy and Soare (2014)



still group them together (in contrast to instruments), assigning them roughly the same structure with a difference in the type of aspect (dispositional and episodic). In both these nominals an object, realized by a *de*-phrase (the French equivalent of the *of*-phrase), is projected, but is specific with episodic and non-specific with dispositional nominals.

The differences between the three approaches and their treatment of instruments in particular are summarized in Table 1 below.

Table 1

	<b>Animate agents</b>	<b>Instruments</b>	<b>Professions</b>
Rappaport Hovav and Levin (1992)	Eventive	Non-eventive (no object)	Same as instruments
Alexiadou and Schäfer (2010)	Eventive (episodic or dispositional)	Eventive (no object)	Same as instruments
Roy and Soare (2014)	Eventive (episodic or dispositional)	Non-eventive (no object)	Same as dispositional animate agents <sup>9</sup>

### 3. Problem

In this section I show that Slovenian DEA-nominals do not fit any of the proposals above in a straightforward fashion. First, Slovenian is problematic, as contrary to the situation in English and French, instrument and profession-denoting nominals in Slovenian *do* take objects in the genitive case (the equivalent of the English *of*-phrase), as exemplified in (9). It has to be stressed that in Slovenian, the nominals with complement structure as well as those without it are ambiguous between a person-tool reading, contrary to English, where only the person reading occurs.

(9) a. *čistilec bazena* lit. ‘cleaner of pool (person or tool)’  
cleaner-nom pool-GEN

b. *mešalec betona*  
mixer-nom concrete-GEN lit. ‘mixer of concrete (person or tool)’

As instruments are in all analyses above treated as not having a possibility of taking the object *of*-phrase, either because there is no object position (Rappaport

<sup>9</sup> Roy and Soare (2014) treat instruments separately from dispositions, but are not explicit about the treatment of professions; these are understood as subsumed under dispositions.





Hovav and Levin 1992; Roy and Soare 2014) or the object position is somehow suppressed with dispositional aspect (Alexiadou and Schäfer 2010), an adjustment of any of the three proposals is needed to account for the data in (9).

Second, in Slovenian there is also a limitation as to the availability of the instrumental non-eventive interpretation: instrument-denoting nominals with complement structure are possible with generic DPs as in (9) and excluded with non-generic ones as in (10), where only the agentive and eventive reading is possible. Contrary to the analyzed data from English, it appears that the main issue in Slovenian is not the presence or absence of the complement structure in the form of genitive object, but whether the object is generic or not, which ties in with the proposal made by Roy and Soare (2014).

- (10)a. *čistilec našega bazena* lit. ‘cleaner of our pool’; person, \*tool  
 b. *mešalec tega betona* lit. ‘mixer of this concrete’; person, \*tool

Finally, the behavior of event-related adjectival modifiers, such as *constant* and *frequent* points to a necessity to group together instruments and humans in professional and temporary functions, following McIntyre (2014) and contra Roy and Soare (2014). In Slovenian, event-related modification is possible with DEA-nominals that are eventive and either entail episodic occurrences of an event as in (11a) or a dispositional nature of an event as in (11b). The modification is not possible with DEA-nominals denoting professions, (11c), and instruments, (11d), though, importantly, this fact is not linked to the presence or absence of complement structure.

- (11)a. *pogosti gledalec naše oddaje* lit. ‘frequent watcher of our show’  
 b. *pogosti gledalec TV programa* lit. ‘frequent watcher of TV program’  
 c. \**pogosti reševalec* lit. ‘frequent life-saver’; \**pogosti polagalec ploščic*  
 lit. ‘frequent layer of tiles’  
 d. \**pogosti mešalec betona* lit. ‘frequent mixer of concrete’, \**pogosti lupilec krompirja* ‘frequent peeler of potatoes’

#### 4. Proposal

I propose that Slovenian DEA-nominals fall in three distinct classes that differ according to the type of Asp head: i) episodic eventive nominals, ii) dispositional eventive nominals and iii) functional nominals. As to the structural representation of DEA-nominals, I express the differences among the three groups by using the



framework from Alexiadou and Schäfer (2010), adding an additional type of Asp ( $Asp_{FUNCTIONAL}$ ) that appears with professions and instruments, Figure 2.

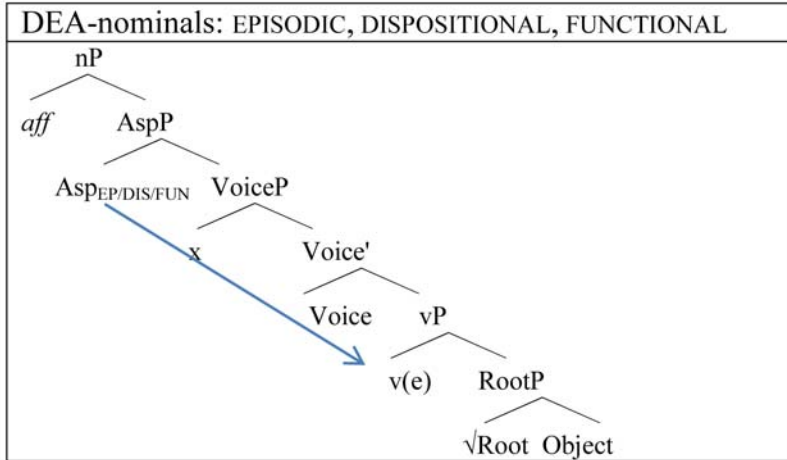


Figure 2

The group of nominals under (i) corresponds to the eventive episodic nominals in Roy and Soare (2014), involving a particular event and a specific object, (12a). The group under (ii) corresponds to Roy and Soare's (2014) dispositional eventive nominals without professions and involves a generic event and a generic object, (12b).<sup>10</sup> Both groups can be modified by frequency adjectives, as expected due to their eventive character, (13).

(12)a. *gledalec te oddaje* lit. 'watcher of this show' (episodic)

b. *gledalec TV oddaj* lit. 'watcher of TV shows' (dispositional)

(13)a. *pogosti gledalec te oddaje* lit. 'frequent watcher of this show' (episodic)

b. *pogosti gledalec TV oddaj* lit. 'frequent watcher of TV shows' (dispositional)

The group under (iii) is newly introduced to treat Slovenian data and includes profession and instrument-denoting nominals as in (14). It involves a generic object and does not tolerate modification with frequency adjectives, (15). The functional

<sup>10</sup> The group of nominals under (i) and (ii) could be joined in one single group called eventive, while the episodic and dispositional character would be decided on the basis of the object (specific for episodic or generic for dispositional). In this paper I retain the original proposal by R&S for the sake of clarity.



interpretation is in McIntyre (2014) defined as the one that names entities whose intrinsic or designated purpose or function is to participate in the event named by the underlying verb, including artefacts designed for particular uses (referred to as instruments in this paper) or humans in professional or temporary functions (referred to as professions in this paper).

- (14) a. *polagalec ploščic* lit. ‘layer of tiles’ (function-profession/instrument)  
 b. *lupilec krompirja* lit. ‘peeler of potato’ (function-profession/instrument)
- (15) a. *\*pogosti polagalec ploščic* lit. ‘frequent layer of tiles’ (function-prof./instr.)  
 b. *\*pogosti lupilec krompirja* lit. ‘frequent peeler of potato’ (function-prof./instr.)

Nominals differ in terms of whether they are more easily seen as professions, dispositional nominals or episodic nominals.<sup>11</sup> E.g., *polagalec ploščic* lit. ‘layer of tiles’ or *dostavljalac paketov* lit. ‘deliverer of parcels’ are most commonly used as functions, while e.g. *gledalec TV programa* lit. ‘watcher of TV program’ or *obiskovalec razstav* lit. ‘visitor of exhibitions’ are normally dispositional and hard to be seen as functions. Sometimes, we can force the more uncommon readings by establishing appropriate contexts. For example, if we are being sarcastic about John's frequent laying tiles, especially as this is not his profession, but he still has to do it very often, we can utter the dispositional (16b). If we see some specific tiles that haven't been laid properly, we can utter the episodic (16c).

- (16) a. *\*pogosti polagalec ploščic* lit. ‘frequent layer of tiles’ (function- prof./instr.)  
 b. *Janez je pogosti polagalec ploščic.* (disposition)  
 John is frequent layer tiles-GEN  
 ‘John often lays tiles’
- b. *Polagalec teh ploščic se ni preveč potrudil.* (episodic)  
 layer these-GEN tiles-GEN se NEG too-much make-an-effort-PTC  
 ‘The person who laid these tiles didn't really make an effort’

The proposed three-way division strongly supports the proposal in Roy and

<sup>11</sup> Whether something is seen as a profession, a disposition or an eventive nominal is related to the extralinguistic situation. For example, many new professions arise with the change in society, such as a professional TV watcher, for example. See McIntyre (2014) for a more detailed discussion of these differences among nominals.



Soare (2014) for French DEA-nominals, albeit with some crucial differences in the analysis of nominals denoting instruments and humans in professional and temporary functions. In Roy and Soare (2014) instruments belong to the non-eventive group, while humans in professional and temporary functions are grouped with dispositions. In this paper, instruments are grouped together with humans in professional and temporary functions. They are here treated as eventive, but they are neither episodic nor dispositional, containing in their structure a third type of Asp head,  $Asp_{FUN}$ , which provides the meaning roughly stated as ‘to be in the specific function of what is denoted by the verb.’ This third type of  $Asp_{FUN}$  that is posited is semantically incompatible with adjectives *frequent*, *constant* or *rare* (see 5.4. for a discussion).

## 5. Discussion: Further data and arguments for the proposal

While the two main arguments for positing the  $Asp_{FUN}$  eventive type of nominal are the presence of complement structure in the functional readings of DEA-nominals and the behavior of event-related adjectival modification, there are at least three additional arguments for positing a little  $v$  head in the structure of instruments and humans in professional and temporary functions. They will be addressed in Sections 5.1.–5.3.

### 5.1. Complement structure

A strong argument for assigning functions a type of structure with a little  $v$  (but a different Asp from  $Asp_{EP}$  and  $Asp_{DIS}$ ) is that in Slovenian, all three kinds of DEA-nominals, including instruments and professions, take the genitive object, (9), with neither of the previous approaches being able to accommodate this fact. What is more, the object is obligatory with some nominalizations, as in (17).<sup>12</sup> If the object is obligatory, then this is a strong indication that it is indeed an object and not perhaps an adjunct (see also 5.3.).

- (17) a. *izdelovalec lesenega pohištva*, \**izdelovalec* lit. ‘maker of (wooden furniture)’  
b. *odstranjevalec madežev*, \**odstranjevalec* lit. ‘remover of (stains)’

<sup>12</sup> The genitive objects can be omitted if they are clear from the context, so strictly speaking, the nominals *izdelovalec*, *odstranjevalec* and *popravljalcec* are not impossible. However, if mentioned without the proper context, the intended reference cannot be established and the nominals cannot be understood by the listener.



c. *popravljalec zadrg*, \**popravljalec*

lit. 'fixer of (zippers)'

## 5.2. Morphology

A further argument for positing a *vP* comes from morphological considerations, in which I follow Alexiadou and Schäfer's (2010) reasoning; as already mentioned, *-er* nominals can contain overt verbal derivational morphology, realized by *-ize*, *-ate* or *-ify*, as in (4) above. We observe that in Slovenian, object-taking nominals are morphologically complex in a similar way and can be broken down as in (18). Moreover, instruments/professions share morphological structure with episodic and dispositional nominals, which undisputedly contain the *v* head in all the syntactic approaches considered; compare the dispositional or episodic (18a) to the instrument-denoting nominal in (18b).<sup>13</sup>

(18) a. *gled+a+l+ec* 'watcher' = √+theme vowel+participial affix+nominalizer

b. *meš+a+l+ec* 'mixer' = √+theme vowel+participial affix+nominalizer

## 5.3. Replacement with *for*-phrase

Roy and Soare (2014) observe that in French, instruments seem to be capable of taking the *of*-phrase object (*de*-phrase), however, they claim that this is not a real object but rather an adjunct as it can always be replaced by a *for*-phrase (*à*-phrase), (19).

(19) *broyer de végétaux* → *broyer à végétaux* lit. 'shredder of/for plants'  
(Roy and Soare 2014)

In Slovenian, the genitive object that appears with instruments and professions cannot be reduced to a *for*-phrase, since it can sometimes, (20a), but not always be replaced by it, (20b,c).<sup>14</sup>

(20) a. *lupilec krompirja* → *lupilec za krompir* lit. 'peeler of/for potato'

b. *polagalec ploščic* → \**polagalec za ploščice* lit. 'layer of/\*for tiles'

c. *odstranjevalec madežev* → \**odstranjevalec za madeže* lit. 'remover of/\*for stains'

<sup>13</sup> The nominals such as *mešalec* 'mixer' in (18b) are ambiguous between the instrumental and agentive (dispositional or episodic) reading, but for the purpose of this argument we are only interested in the instrument-denoting meaning.

<sup>14</sup> In general, the *for*-phrase is more readily available in instruments than in professions.

#### 5.4. More on Asp<sub>FUN</sub> and frequency adjectives

In this part I elaborate on the possibility of the modification with the frequency adjectives such as *frequent*, *constant* and *rare*. In principle, all three groups of DEANominals should be able to bear such modification, given that in my proposal they all contain a little *v* head, which is standardly linked to an event occurrence. However, we observe that only episodic (21a) and dispositional (21b) but not functional nominalizations in (22a,b) allow such modification:

- (21) a. *zvesti gledalec naše oddaje* lit. ‘constant watcher of our show’  
       b. *zvesti gledalec TV programa* lit. ‘constant watcher of TV program’  
 (22) a. \**pogosti polagalec ploščic* lit. ‘frequent layer of tiles’  
       b. \**pogosti lupilec krompirja* lit. ‘frequent peeler of potato’

The question is how to account for the incompatibility of the modification with frequency adjectives in functional nominals and still keep the structure with a little *v* and Asp heads (at least in Slovenian). It is after all a fact in English as well as in Slovenian that functional nominals do not imply an event in the sense that dispositional and episodic nominals do: a potato peeler need not have peeled any potatoes and a tile-layer need not have laid any tiles. I propose that this incompatibility follows from the nature of Asp<sub>FUN</sub>, which I take to mean ‘to be in the specific function of what is denoted by the verb’ and which is static and permanent in nature and thus inherently incompatible with frequency adjectives.

Another way of solving this problem is to propose that the incompatibility of Asp<sub>FUN</sub> and frequency adjectives follows from the structure of the nominalization. If we see functional nominals as containing within them a predication phrase, such phrase could be argued to prevent adjectival modification from above. In the first step of such an analysis, a nominalization denoting the external argument would be constructed (possibly with Asp<sub>FUN</sub>), then the *nP* would be predicated of a null element, giving the following structure: [<sub>PredP</sub> *y* [<sub>Pred'</sub> Pred [<sub>nP</sub> aff [<sub>AspP</sub> Asp<sub>FUN</sub> [<sub>VoiceP</sub> X [<sub>Voice'</sub> Voice [<sub>VP</sub> *v* [<sub>RootP</sub> Root Object]]]]]]]]. The pursuit of a predication analysis goes beyond the scope of the present paper, despite being an exciting option in a syntactic approach.

Finally, when presumably Asp<sub>FUN</sub> nominals (e.g. *reševalec* ‘life-saver’) happen to allow modification with frequency adjectives (marginally with some speakers), the adjective never modifies the event expressed by the verb, but modifies the nominal. Thus in (23a), the phrase *pogosti reševalec* can only be marginally understood as *ta, ki je pogosto v vlogi reševalca* lit. ‘the one who is frequently in the role of a life-



safer.’ (23a) is only marginally better than (23b), which contains a non-DEA-nominal, where such modification is clearly ungrammatical.

- (23) a. *\*/??pogosti reševalec* lit. ‘frequent life-saver’ (as profession)  
 b. *\*pogosti kirurg* lit. ‘frequent surgeon’ (as profession)

## 6. Conclusion

In this paper I argued that Slovenian DEA-nominals fall in three distinct classes differing according to the type of the Asp head in their structure (episodic, dispositional and functional). The argument was based primarily on the fact that, contrary to English and French, the complement structure in the form of a genitive object is available in the functional reading of Slovenian DEA-nominals, i.e. with instruments and professions. Further arguments for the division were the behavior of frequency adjectives, the morphological make-up of these nominals and the *for*-phrase replacement.

Many important questions relating to DEA-nominals had to be left aside due to the overall complexity of the topic and the limitation of space. One of them is whether the proposal based on Slovenian can be applied to French and English as well, i.e. if introducing a functional type in these languages would handle the French and English data better. The other is a more general issue, i.e. establishing how and also why languages differ in terms of their allowing complement structure with instruments and professions in the way they do. Why is it the case that Slovenian allows both incorporation as well as complement structure, while English and French allow only the incorporation of the object with instruments and professions?<sup>15</sup> Can this property be predicted from some other property? As this work focuses on Slovenian nominalizations, more precisely on the most productive group of Slovenian DEA-nominals, a more thorough analysis, though desirable, will have to left for future research.

<sup>15</sup> Alexiadou and Schäfer (2010) briefly discuss the difference between English/Dutch and German; while the first two have many cases of truly non-eventive nominals (column 3 in Figure 1), these nominals seem to be hardly present in other languages, for example in German. They speculate about the reason for this difference, which in their opinion could be related to morphological marking of the middles in these languages. Morphological marking is certainly one direction to be pursued in cross-linguistic comparisons. In the case of Slovenian vs. English/French, one obvious difference is that the complement structure in Slovenian is expressed by the genitive case, while in English and French it is expressed by the *of*-phrase.



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### O AGENTIVNIM I INSTRUMENTALNIM GLAGOLSKIM POIMENIČENJIMA U SLOVENSKOM

Cilj je ovoga rada predložiti analizu slovenskih agentivnih i instrumentalnih glagolskih poimeničenja sintaktičkim pristupom, kako bi se pridonijelo međujezičnom razumijevanju tih imenica. Prethodne analize, temeljene uglavnom na engleskom i francuskom korpusu, ne mogu se primijeniti na slovenske primjere (npr. Rappaport Hovav i Levin 1992; Alexiadou i Schäfer 2010; Roy i Soare 2014.). Naš je prijedlog da se te imenice rasporede u tri odvojene skupine prema vrsti glagolskog vida koji se nalazi u glavi poimeničenja: i) epizodične događajne imenice, ii) događajne imenice stanja (obje skupine označuju žive vršitelje) te iii) funkcijske imenice (označuju instrumente i ljude u profesionalnim ili privremenim funkcijama). Epizodično iščitavanje (s glavom AspEP) upućuje na određeni događaj i (mogući) određeni genitivni objekt kao nadopunu (npr. *obiskovalec te razstave* 'visitor of this exhibition'). Kod primjera stanja (s glavom ASpDIS) upućuje se na općenite događaje s mogućnošću općenitog objekta (npr. *Obiskovalec razstav* 'visitor of exhibitions'). Ta su dva tipa nominalizacija predložili i Roy i Soare (2014) u francuskom jeziku. Funkcijsko iščitavanje (s glavom AspFUN, npr. *lupilec krompirja* 'potato-peeler') je novouvedeni tip koji ne uključuje događaj jer se njegova glagolskovidska glava AspFUN inherentno ne uklapa u događajne implikacije. Obrazloženja za ovaj prijedlog nalaze se u osobinama genitivnog objekta (za razliku od engleskog i francuskog jezika, objekt u genitivu u slovenskom se može javiti u sve tri vrste poimeničenja), osobinama prilagodbi tih poimeničenja vezanih uz događaj te u morfološkim razmatranjima.

**Ključne riječi:** poimeničenje; vanjski argument; slovenski.