

Process Nouns in Dictionaries: A Comparison of Slovak and Dutch

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Abstract

Process nouns are deverbal nouns that designate the process indicated by the corresponding verb. Often, they have additional readings, such as a result reading. We present the productive mechanisms for the formation of process nouns in Slovak and Dutch. The two rules in Slovak and three rules in Dutch differ in the degree of regularity and the tendency to have additional senses.

In their process readings, process nouns are prototypical examples of what can be covered in a run-on entry, i.e. a sub-entry under the headword it is related to without a separate definition. The felicity of run-on entries depends on the regularity and predictability of the word. Some of the rules for process nouns are so regular that there is no reason to specify their output. Other rules are better suited to a representation of their output as a run-on entry, but only if the meaning is constrained to the process reading.

Keywords: nominalization, process nouns, process-result alternation, run-on entries, Slovak, Dutch

1 Introduction

Process nouns are deverbal nouns that designate the process indicated by the corresponding verb, e.g. *activation* corresponding to *activate*. The formation of process nouns is a typical example of what Dokulil (1962) calls *transposition*. Following ten Hacken (2015: 196), we define *transposition* as a process that changes the syntactic category of a word without changing its semantic category or modifying any of its semantic features. In general, transpositions are good candidates for run-on entries. Run-on entries are sub-entries with a much-reduced information content. They appear at the end of the main headword and are typically used for derivationally related words. Atkins and Rundell (2008: 236-238) give a set of conditions for the productive use of this lexicographic device, which can be summarized as the generalization that information about the words covered in run-on entries is predictable on the basis of general rules. This makes unmarked transpositions good candidates for run-on entries. In the case of process nouns, a complicating factor is that they often also have a result meaning. Thus, *translation* can refer to the activity of a translator, but also to the target text they produce. A further point to be kept in mind is the usefulness of dictionary entries. Atkins and Rundell (2008: 397-398) warn against the inclusion of words, even as run-on entries, which are of no practical value to the target user.

In this paper, we discuss the representation of process nouns in monolingual dictionaries of Slovak and Dutch. As a reference point, we use KSSJ (2003) for Slovak and van Dale (2015) for Dutch. Run-on entries are not common in these dictionaries, which is not entirely unexpected, as Svensén (2009: 132) presents them as a typical feature of the Anglo-Saxon lexicographic tradition. However, we will consider in which cases such run-on entries would be useful.

We start in section 2 with a presentation of the relevant formation rules in Slovak and Dutch. Section 3 gives examples of the coverage of process nouns in dictionaries and discusses in which contexts it would be useful to include them in run-on entries. Section 4 summarizes our recommendations.

2 Word formation rules for process nouns

In order to understand the representation of process nouns in Slovak and Dutch, it is first necessary to consider the different formation processes available in the two languages.

2.1 Process noun formation in Slovak

In Slovak, the main word formation processes forming process nouns are suffixation by *-nie/-tie* and by *-ácia/-izácia/-fíkácia*. Other word formation processes are semantically marked and do not lead to the kind of equivalent meanings that we are interested in here. In line with Dokulilean tradition, the formation of deverbal nouns in Slovak is commonly referred to as *transposition*. Horecký et al. (1989: 116-117) make it explicit that further in-depth research into the transposition of verbs to their nominalized counterparts is needed to shed more light on the process of how such deverbal nouns gradually become independent lexical items in the lexicon. Transposition of deverbal nouns takes place in oral and written speech. When the resulting nominalizations are used frequently, they have the potential to become independent naming units in the lexicon. This dynamic process is determined by the need of a speech community to express nominalized actions and processes. Some examples of process nouns with *-nie/-tie* are given in (1).

- (1) a. čakanie ('waiting_N') from čakať ('wait_V')
 b. stretnutie ('meeting_N') from stretnúť ('meet_V')

Nominalizations with *-nie/-tie* in (1a) and (1b) are available for nearly all verbs, and are often considered as part of the inflectional paradigm in Slovak grammars. The difference in the form of the suffix in (1a) and (1b) is correlated with the thematic vowel used in the infinitive form of the verb. In (1a) the thematic vowel is *-a-* whereas in (1b) it is *-ú-*. The thematic vowel determines the conjugation pattern. This dependence on the inflection class is a property that makes nominalizations of this type similar to inflection. A frequent use of nominalization of action and processes can be described as making communication more intellectual. Process nominalizations are frequent in professional communication, where they name methods, technological processes and procedures, e.g. *plastovanie karosérie* 'plasticating_N of [a] car body'. It is interesting to observe that a relatively large number of process nouns are lexicalized, especially with specific collocational combinations, for instance *udelovanie cien* 'awarding_N of prizes, prize award', *poskytovanie služieb* 'providing_N of services, service provision'. According to Horecký et al. (1989: 117) such lexicalization tendencies can be explained by the need of a speech community to name official and sometimes ceremonial procedures.

In (2), the variants of *-ácia* are illustrated. The suffix *-ácia* in (2a) with its variants *-izácia* in (2b) and *-fíkácia* in (2c) is restricted to the [+learned] or [+international] part of the vocabulary.

- (2) a. reprezentácia ('representation') < reprezentovať ('represent')
 b. modernizácia ('modernization') < modernizovať ('modernize')
 c. identifikácia ('identification') < identifikovať ('identify')

As opposed to the forms with the suffix in (1), it cannot be predicted whether a form in *-ácia* exists. In the Slavic linguistic tradition the formations in (2) are labelled as *internationalisms* (e.g. Mistrík, 1976; Horecký et al., 1989; Buzássyová, 2010). It is understood that such international words can be found in a number of different languages, and they are relatively easily recognizable. The bases of such internationalisms are generally of Latin or Greek origin. The suffix *-ácia* in (2a) and its variants *-izácia* in (2b) and *-fíkácia* in (2c) are non-native suffixes which attach mostly to non-native or international bases. In this domain, they compete with the native suffixes

-nie/-tie in (1). Occasionally *-ácia* combines with native bases resulting in formations such as *mečiarizácia*, where the first component is based on the name of Vladimír Mečiar (b. 1942, Slovak Prime Minister between 1990 and 1998). The variation in the form of the suffix is also found in the corresponding verb, as illustrated in (2b-c).

With both suffixes and their variants it is possible that the output word has other readings than a pure transposition, in particular a result reading. The result meaning of process nouns with native suffixes is illustrated in (3).

- (3) a. *premostenie* ('bridging_N')
 Myšlienka na premostenie Dunaja sa prvýkrát zrodila v roku 1402. (SNC)
 ('The idea of bridging [the] Danube first appeared in 1402')
- b. *zateplenie* ('heat cladding_N')
 zateplenie panelových domov postavených po roku [yyyy] (SNC)
 ('heat cladding of panel/prefabricated houses built after the year [yyyy]')
- c. *prevzdušnenie* ('aerating_N')
 Naplánovali si prevzdušnenie futbalového ihriska. (SNC)
 ('They planned [the] aerating of [a] football playground')

In line with Horecký et al. (1989: 124), we distinguish three semantic classes of result reading, illustrated in (3). In (3a), the result reading designates an output or product of the process denoted by a verb. For instance, when it is necessary to connect two parts of the city by a bridge, the noun in (3a) is used to refer to the final product. In (3b), the noun describes the result of a procedure applied, i.e. a house with an external thermal insulation having an outer layer which prevents heat loss. In (3c), the noun implies the meaning of a resulting state in the context of soil aerating. Similarly, process nouns with international or non-native suffixes may have a result reading as given in (4).

- (4) a. *informatizácia* ('informatization')
 b. *popularizácia* ('popularization')
 c. *modernizácia* ('modernization')

The examples in (4) demonstrate the result meaning of particular processes. In (4a) the meaning of the noun is 'adoption of information technology', or in other words, computerization. In (4b) the noun may refer to the action or process of being popularized, and also to the result or product of this process. Similarly, (4c) can mean 'adopting or introducing modern styles, technologies, design, etc.' or the output of these processes.

In some cases, competing forms exist with the same input verb. In such a case, the form with *-nie* tends to have a process reading and the form with *-ácia* a result reading. The examples in (5) illustrate this difference.

- (5) a. *špecifikovanie* ('specifying_N') - *špecifikácia* ('specification')
 b. *preferovanie* ('preferring_N') - *preferencia* ('preference')

In (5a) the noun with *-nie* emphasizes the progress of specifying something without any implication of completeness of the process denoted. Horecký et al. (1989: 280) found out that if the noun in *-ácia* is lexicalized with a result reading and a speaker intends to express process, they will prefer the formation with the native suffix *-nie*. The two nouns in (5b) differ in their stylistic use. The noun formed with *-nie* is less frequent in formal written style. It should be noted that a number of similar pairs do not display semantic differences and both forms can be used interchangeably, for instance, *popularizácia* ('popularization') and *popularizovanie* ('popularizing_N').

2.2 Process noun formation in Dutch

The most neutral word formation rule in Dutch for the formation of process nouns is the rule that forms a neuter noun from an infinitive. As stated by de Haas and Trommelen (1993: 240), every infinitive has a nominalized counterpart. Dutch infinitives are formed by the suffix *-en*, which is reduced to *-n* after monosyllabic stems ending in a vowel, e.g. *gaan* ('go') from *ga-*. In many respects, the relation between the infinitive and its corresponding noun can be compared to the position of English *-ing* forms, as illustrated in (6).

- (6) a. Het is moeilijk deze tekst te vertalen. ('It is difficult this text to translate',
i.e. ... to translate this text)
b. Het vertalen van deze tekst is moeilijk. ('The translating of this text is difficult')
c. Vertalen is moeilijk. ('Translating is difficult')

It is not always straightforward to distinguish verbal and nominal uses of the infinitive. In (6a), *vertalen* is clearly a verbal form because of infinitival *te* ('to'). In (6b), the article *het* ('the_{Neut}') marks *vertalen* as a noun. In (6c), there are no unambiguous markers indicating the syntactic category of *vertalen* and its categorization depends on further theoretical assumptions. The meaning of the noun is restricted to the process as an abstract entity and it is not possible to pluralize it. There are very few nominalized infinitives with specialized meanings. The most striking case is *eten* ('food, meal') from *eten* ('eat_v'). Here the noun does not designate a process and does not block the formation of the regular process noun, as in (7).

- (7) Het eten van bedorven fruit is gevaarlijk. ('The eating of rotten fruit is dangerous')

There are two regular suffixation processes that form process nouns as transpositions of verbs. The first has the suffix *-ing*. Some examples with the same verb as in (6) are given in (8).

- (8) a. De vertaling duurde langer dan verwacht. ('The translation took longer than expected')
b. De vertaling van deze tekst is moeilijk. ('The translation of this text is difficult')
c. Er staat een fout in de vertaling. ('There stands [i.e. is] an error in the translation')

According to de Haas and Trommelen (1993: 241), nominalizations with *-ing* have almost always ('vrijwel altijd') a second meaning designating the result of the action. In (8a), (*de*) *vertaling* has a process reading only and could be replaced by (*het*) *vertalen* without a change in meaning. However, (8b) is ambiguous in a sense (6b) is not. Although it requires more context to foreground this reading, (8b) can also mean that the target text is difficult to read. In (8c), the result reading is the only one available, and it is not possible to express this meaning by means of a nominalized infinitive.

As a restriction on the use of *-ing*, de Haas and Trommelen (1993: 243) mention that the formation rule tends to prefer transitive verbs. An example of a nominalization of an intransitive verb is given in (9).

- (9) a. De zitting van het parlement was succesvol. ('The session of the parliament was successful')
b. Zij heeft zitting in deze commissie. ('She has [a] seat in this committee',
i.e. is a member)
c. De zitting van de stoel is kapot. ('The seat of the chair is broken')
d. *De zitting in de auto was lang en saai. ('The sitting in the car was long and boring')

The intransitive verb *zitten* ('sit') has a nominalization *zitting*, of which the three examples in (9a-c) show the most common meanings. Compared to the verb *zitten*, which has a very general meaning, all examples are semantically marked. For (9a), there is no paraphrase involving the verb. In (9b), *zitting hebben* is equivalent to *zitten*, but it is not possible to use *zitting* in the relevant sense without *hebben* or an alternative support verb. In (9c), the meaning is entirely idiosyncratic. It is not possible to use

zitting as a process nominalization corresponding to the most common sense of *zitten*, as illustrated by the ungrammaticality of (9d). Here, only the noun *zitten* can be used. Also for some transitive verbs, a process nominalization with *-ing* is impossible, e.g. **eting* from *eten* ('eat'), **schrijving* from *schrijven* ('write').

The second suffixation process that produces process nouns involves the suffix *-atie*. Some examples are given in (10).

- (10) a. De provocatie van een misdrijf door de politie is illegaal.
 ('the provocation of a criminal_offence by the police is illegal')
 b. De lancering van een raket was een provocatie aan het adres van Amerika.
 ('the launch of a rocket was a provocation to the address of America',
 i.e. ... directed at America)

The noun *provocatie* in (10) is related to the verb *provoceren* ('provoke'), which in Dutch usually has only a direct object ('someone'). When the goal of the provocation is expressed, as in (10a), the verb *uitlokken* ('provoke') is a more common synonym. In (10a), *provocatie* is used as a process noun and can be replaced by a nominalized infinitive. In (10b), the result of the process is designated.

De Haas and Trommelen (1993: 258-259) do not accept a suffix *-atie*, but analyse it into *-at-* and *-ie*, an analysis also adopted by Booij (2002: 128). For the Latin *provocatio* ('appeal'), such an analysis is certainly valid. Aronoff (1994: 31-59) shows that what he calls the "third stem" is used as the base in a variety of inflectional and derivational forms. In Latin, *-t-* is the marker of the third stem and *-a-* is the thematic vowel of the first conjugation. In *repetitio* ('repetition'), the thematic vowel is *-i-* and in *productio* ('lengthening'), there is no thematic vowel. While it is possible to point out a certain number of correlations between such forms in Latin and words of Dutch, it seems unlikely that *-at-* has a role in Dutch speakers' language competence. It is only of etymological relevance.

The distribution of *-atie* is much more limited than of *-ing*. It only attaches productively to verbs with a stem in *-eer*, as in the case of *provoceren*. There is no constraint as to transitivity, cf. *variatie* ('variation') corresponding to *variëren* ('vary'). However, there are several idiosyncratic gaps. In (11) some examples of verbs in *-eren* with nominalizations are given.

- | | | |
|--|--------------|---------------|
| (11) a. isoleren ('isolate') | isolatie | isolering |
| b. alarmeren ('alarm _v ') | *alarmatie | alarmering |
| c. arresteren ('arrest _v ') | arrestatie | *arrestering |
| d. riskeren ('risk _v ') | *riskatie | *riskering |
| e. protesteren ('protest _v ') | *protestatie | *protestering |

In (11a), the two nouns can both be used as process and result nouns. Van der Wouden (2018) notes that in such cases the noun in *-atie* is often more common in Belgium, and the noun in *-ering* more common in the Netherlands. In (11b), the impossibility of **alarmatie* can be explained by the etymology of the word in French, which precludes the formation of a French noun in *-ation*. In French, *alarme* is derived from *à l'arme*, originally an interjection 'to the arm(s)!'. The reverse situation is found in (11c), where French *arrestation* supports Dutch *arrestatie*. In (11d), only the nominalized infinitive is available, and for the result reading a syntactic description would have to be used. (11e) represents a class of cases where the verb is denominal. Whereas (11d) is correlated to *risico* ('risk'), which is not a process, in (11e), the underlying noun *protest* ('protest_N') denotes the relevant process and thus blocks nominalizations with *-atie* and *-ing*. In all cases in (11), the nominalized infinitive is also available. In view of data such as these, we do not follow van der Wouden's (2018) suggestion that in cases where the *-ing* form does not exist, it may be blocked by the nominalized infinitive.

Booij (2002: 125) lists eight suffixation processes that can be used for nominalization. However, apart from *-ing* and *-atie*, they are either non-productive (e.g. *winst* from *winnen*, ‘win, gain’) or they are not used for transpositions in the sense we adopt this term here, e.g. *-erij*, which forms nouns designating an (often negatively judged) activity (e.g. *filmerij* from *filmen*, ‘film_v’) or a business (e.g. *drukkerij*, ‘printing office’, from *drukken*, ‘print_v’).

This leaves us with three productive word formation processes producing process nouns in Dutch: nominalized infinitives as in (6b-c) and (7), suffixation with *-ing* as in (8) and suffixation with *-atie* as in (10).

2.3 Slovak and Dutch in comparison

It is interesting to compare the three competing processes in Dutch presented in section 2.2 with the two competing processes in Slovak presented in section 2.1. In Dutch, the nominalized infinitive only expresses the process reading. It is available for all verbs. Slovak *-nie* and its variant *-tie*, illustrated in (1), share with the Dutch nominalized infinitive their general availability for all verbs, but the resulting noun can also have a result reading, as illustrated in (3). In Dutch, the result reading can be expressed by *-ing* and *-atie*. Of these, *-ing* is widely available, but not for all verbs, as illustrated in (11c-e). The blocking of **protesting* by *protest* is directly comparable to Aronoff’s (1976: 43-45) example of **gloriosity* blocked by *glory*. This means that Slovak *-nie* does not quite correspond to either the nominalized infinitive or the suffixation with *-ing* in Dutch. Both Dutch *-atie* in (10) and Slovak *-ácia* and its variants in (2) are more restricted in their scope in the sense that fewer verbs can serve as their base. In Dutch, the regular use is restricted phonologically, in Slovak the central criterion is that we are dealing with internationalisms. The status of these generalizations is not the same. The Dutch rule that refers to verbs ending in *-eren* is a necessary, non-sufficient condition for the applicability of *-atie*, as illustrated in (11). The reference to internationalisms in Slovak represents rather a tendency than a condition for the application of *-ácia*, as illustrated by the use of *-ácia* with Slovak proper names. These considerations will play a role in the lexicographic representation, to which we will turn now.

3 The lexicographic representation of process nouns

As mentioned in section 1, KSSJ (2003) and van Dale (2015) do not use run-on entries as a lexicographic device. In the absence of run-on entries, the options for representing process nouns are reduced to including them as full entries with a separate headword or not treating them at all. Here, we will consider how the properties of each of the processes in Slovak and Dutch make these options more or less suitable.

The most regular process is the nominalized infinitive in Dutch. It is not only fully productive in applying to all verbs, but also fully predictable in its meaning, because only the process reading is available. In rare exceptions such as *eten_N* (‘food, meal’), it is obvious that a full entry is needed. In all regular cases, not only a full entry, but also a run-on entry, would be redundant.

The Slovak formations with *-nie* are similar in the predictability of their existence, but cases where an additional reading exists are by no means exceptional. In (12), some examples of the dictionary definitions in KSSJ (2003) for such senses are given.

- (12) a. poistenie (‘insurance’)
 zmluva poistenca s poisťovňou o úhrade škody (KSSJ)
 (‘contract of [an] insured person with [an] insurance-company about [the] payment [in case] of damage’)

- b. vyšívanie ('embroidering_N')
rozpracovaná vyšívaná ručná práca (KSSJ)
(‘unfinished embroidered hand work’)
- c. oznámenie ('announcement')
písomná správa, tlačivo, na ktorom je uverejnená (KSSJ)
(‘written message, document on which [it] is published’)

The senses recorded in (12) are no pure transpositions and are conventionalized. Therefore, they need to be recorded in a dictionary. In the case of (12a), the ‘contract’ reading is so dominant that it is hard to refer to the pure process reading. As no other form is available in Slovak, this will have to be done by means of a syntactic description. In (12b), the process reading of the noun refers to the ongoing action, whereas the result reading designates the piece of needlework being produced. As the definition in (12b) expresses, the needlework can only be referred to as *vyšívanie* as long as it is not finished, i.e. as long as the process is still ongoing. In (12c), the derived sense takes the form of the document in which the message being announced is expressed.

In the entries of (12), the pure process reading is not referred to, but at least for (12b-c) this reading is equally available. One may doubt whether this is the best solution. As mentioned, in (12a) the pure process reading is not readily available. The contrast between these two situations is lost when the regular meaning is not recorded for (12b-c).

In the case of Slovak *-nie* and *-tie*, run-on entries are in general not useful. The existence of the form is generally predictable. All verbs have one and the shape can be predicted on the basis of the inflection class, which is also visible in the form of the infinitive. Where special meanings exist, a separate headword is a better solution. When no special meanings exist, a run-on entry would be redundant. KSSJ (2003) and other Slovak dictionaries generally do not include them.

For Dutch *-ing*, we have seen in (11) that the existence of a nominalization cannot be predicted easily. Van Dale (1992) gives entries for *distantiëring* (‘distancing_N oneself’) and *stranding* (‘running aground’) as in (13).

- (13) a. **distantiëring** (v.), het zich distantiëren.
b. **stranding** (v.), het stranden: [...]; – keer dat een schip strandt.

The underline in the headwords indicates the stress. In (13a), the information in the entry is minimal. The gender information can be predicted from the suffix and the definition is no more than the nominalized infinitive of the corresponding verb as a synonym. In (13b), the additional information consists of an example (omitted here) and a second reading. *Keer* means ‘time’ in the countable sense. As we noted above, the nominalized infinitive does not have a plural. Here, attention is drawn to the fact that a plural can be used for multiple events of *stranding*. However, this is also a property of *-ing* in general. The only information added by the entries in (13) is that *distantiëring* and *stranding* exist. By contrast, no entries are given for *overheveling* (‘transfer’) and *verweving* (‘interweave’). This can hardly be due to the low frequency. CHN (2013) gives 990 occurrences of *overheveling* and 76 of *verweving* as against 13 for *distantiëring* and 65 for *stranding*. A systematic representation of the noun with *-ing* as a run-on entry if it only has a pure process reading would increase the consistency of the dictionary. Of course, for cases such as *vertaling* in (8) a separate headword would still be necessary.

In the case of *distantiëring*, the run-on entry would arguably have another advantage. As the verb stem ends in *-eer*, it is also in the scope of the application of the *-atie* suffixation rule. However, **distantiatie* does not exist. In this sense, the situation is similar to (11b). Giving only *distantiëring* as a run-on entry describes this situation concisely. Such information is not expressed very well in the case of *neutraliseren* (‘neutralize’), as seen in the entries in (14).

- (14) a. **neutralisatie** (v.).
 b. **neutraliseren** [...]
 c. **neutralisering** (v.), het neutraliseren of geneutraliseerd-woorden in de bet. 1, 2, 3 en 4: [...]

The verb in (14b) is described grammatically, etymologically and semantically. It has five senses. The process noun in *-ing* in (14c) is described as applying to the first four senses only (“bet[ekenis]” is ‘sense’). Two examples at the end are omitted in (14c). The sense description gives the active and passive nominalized infinitive. The alternative process noun in (14a) is given without any further information. Although it can be argued that (14c) gives information that would be lost in a run-on entry, the close proximity to (14a) means that it does more to raise questions than give answers. Is (14a) only used in the active voice? Is (14a) the only nominalization for sense 5? Arguably, replacing (14a) and (14b) by run-on entries for the two nominalizations at the end of (14b) would give a clearer representation of the situation.

In the description of Slovak process nouns in *-ácia* and its variants in KSSJ (2003), similar problems can be found. In (15), we give the entries for *modernizácia* (‘modernization’) and *identifikácia* (‘identification’).

- (15) a. **modernizácia** modernizovanie
 b. **identifikácia** identifikovanie

The definitions KSSJ gives consist exclusively of the alternative nominalization with the native suffix *-nie*. As for Dutch *-ing*, this strategy is not used consistently in van Dale (1992). Examples of words attested in SNC (2015) but not listed in KSSJ (2003) include *sebalikvidácia* (‘selfliquidating_N’), *intimizácia* (‘intimizing_N’), *efektivizácia* (‘effectivizing_N’), *cyklizácia* (‘cycling_N’), *prioritizácia* (‘prioritising_N’). The nouns in (15) have both a process reading and a result reading. If the contrast between the two needs to be expressed, the noun in *-nie* denotes the process and the one in *-ácia* the result, but in general both nouns have both readings. This information should thus not so much be expressed in dictionary entries of the type illustrated in (15), as in grammars (as far as they cover word formation) or in the dictionary entries for *-nie* and *-ácia*.

For Slovak nouns in *-ácia*, there is an additional reason to combine their description with that of the corresponding verb. As argued by Panocová (2017), there are good reasons to assume that process nouns in *-ácia* are not derived from the corresponding verbs. Instead, the nouns were borrowed and the verbs should be seen as back formations based on the nouns. She gives evidence for this hypothesis based on frequency and meaning. Whereas in general, process nouns in *-nie* are (much) less frequent than their verbal counterparts, for nouns in *-ácia* the corresponding verb is generally (much) less frequent. Moreover, the meaning of the verb is often described on the basis of the noun. If this hypothesis is correct, a representation of the noun in *-ácia* in the same entry as the verb is also justified in terms of word formation. It might even be envisaged to make the noun in *-ácia* the headword and the verb in *-ovat’* a run-on entry.

4 Conclusion

The use of run-on entries is not common in dictionaries of Dutch and Slovak. Process nouns are a good example of the type of word for which run-on entries can be a suitable lexicographic device. The formation of process nouns is based on a number of different, language-dependent rules. Here we compared the rules in Slovak and Dutch. In Slovak, there are two main regular processes, whereas in Dutch there are three. This constellation gave us the opportunity to show how in a number of different

circumstances the use of run-on entries can be an improvement. The main recommendations of this work can be summarized as follows.

- Where the existence and shape of a process noun is entirely predictable, no run-on entries are used. If there is an additional sense, a separate entry is warranted. Otherwise, the process noun need not be mentioned.
- Where the existence of a process noun or the rule by which it is formed are not predictable, a run-on entry is used, unless the meaning is more complex than can be predicted.

For Slovak, this means that only nouns in *-ácia* are candidates for run-on entries. Combining the process noun and the corresponding verb in one entry has the added advantage of improving the representation of the relationship between the two, because in many cases it can be argued that the verb is a back formation based on the noun. For Dutch, the nominalized infinitive is generally not represented. Run-on entries are useful for process nouns in *-ing* and in *-atie*, in particular for verbs that could have process nouns with either suffix. Because there are two competing formation processes in Dutch, there is a stronger need to record which one(s) are in common use. In both languages, the practice of describing the meaning of a process noun by giving another process noun should be abolished.

References

- Aronoff, Mark H. (1976), *Word Formation in Generative Grammar*, Cambridge (Mass.): MIT Press.
- Aronoff, Mark H. (1994), *Morphology by Itself: Stems and Inflectional Classes*, Cambridge (Mass.): MIT Press.
- Atkins, B.T. Sue & Rundell, Michael (2008), *The Oxford Guide to Practical Lexicography*, Oxford: Oxford University Press.
- Booij, Geert (2002), *The Morphology of Dutch*, Oxford: Oxford University Press.
- Buzássyová, Klára (2010), 'Vzťah internacionálnych a domácich slov v premenách času' [The relationship between international and native words in changing times], *Jazykovedný časopis* 61(2): 113-130.
- CHN (2013), *Corpus Hedendaags Nederlands*, Leiden: Instituut voor Nederlandse Lexicologie (since 2016 Instituut voor de Nederlandse taal), <https://portal.clarin.inl.nl/search/page/search>
- van Dale (1992), *Van Dale Groot Woordenboek der Nederlandse Taal*, 12th ed., Geerts, G. & Heestermans, H. (eds.), Utrecht/Antwerpen: Van Dale Lexicografie.
- van Dale (2015), *Van Dale Groot Woordenboek van de Nederlandse Taal*, 15th ed., den Boon, C.A. & Hendrickx, Ruud (eds.), Utrecht/Antwerpen: Van Dale Lexicografie.
- Dokulil, Miloš (1962), *Tvoření slov v češtině I: Teorie odvozování slov* [Word formation in Czech I: Theory of deriving words], Praha: Nakladatelství ČSAV.
- de Haas, Wim & Trommelen, Mieke (1993), *Morfologisch Handboek van het Nederlands: Een overzicht van de woordvorming*, 's-Gravenhage: SDU.
- ten Hacken, Pius (2015), 'Transposition and the Limits of Word Formation', in Bauer, Laurie; Körtvélyessy, Livia & Štekauer, Pavol (eds.), *Semantics of Complex Words*, Cham: Springer, pp. 187-216.
- Horecký, Ján, Buzássyová, Klára, Bosák, Ján. a kol. (1989), *Dynamika slovnej zásoby súčasnej slovenčiny*. [Dynamics of contemporary Slovak lexis.] Bratislava: Vydavateľstvo Slovenskej akadémie vied.
- KSSJ (2003), *Krátky slovník slovenského jazyka* [Concise dictionary of Slovak], 4th ed., Kačala, J., Pisárčiková, M. & Považaj, M. (eds.), Bratislava: Veda.
- Mistrík, Jozef (1976), *Retrográdny slovník slovenčiny*. [Retrograde dictionary of Slovak.] Bratislava: Univerzita Komenského.
- Panocová, Renáta (2017), 'Internationalisms with the Suffix *-ácia* and their Adaptation in Slovak', in Litta, Eleonora & Passarotti, Marco (eds.), *Proceedings of the Workshop on Resources and Tools for Derivational Morphology (DeriMo), 5-6 October 2017, Milano, Italy*, Milano: EDUCatt, pp. 61-72.
- SNC (2015), Slovenský národný korpus – prim-7.0-public-all. [Slovak national corpus – prim-7.0-public-all.] Bratislava: Jazykovedný ústav Ľ. Štúra SAV 2015. Available at WWW: <http://korpus.juls.savba.sk>.

Svensén, Bo (2009), *A Handbook of Lexicography: The Theory and Practice of Dictionary-Making*, Cambridge: Cambridge University Press.
van der Wouden, Ton (2018), '-ing', Taalportaal, <http://taalportaal.org/taalportaal/topic/pid/topic-14125866172746534> [downloaded 7 May 2018].

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