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55. Closing suffix patterns in Russian

1. Introduction
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Abstract

The article discusses, with special reference to the material of the Russian National Corpus, semantic parallels in Russian to the closing derivational suffixes of German and Bulgarian. The putative Russian parallels are tested to see whether they are also closing (as the semantic typology may predict), and some of their combinatory properties are discussed.

1. Introduction

Closing derivational suffixes are those that do not allow the addition of any further derivational suffixes to the word form. Hereafter we use the term without *derivational*, keeping in mind that closing inflectional suffixes also exist. The term *closing suffix* was originally introduced by Nida (1949) for both inflectional and derivational affixes in English. Aronoff and Fuhrhop (2002) identify the set of closing derivational affixes for German, viz. the following: *-e_{suff}*, *-heit/-keit/-igkeit*, *-in*, *-isch*, *-ling*, and *-ung*. Manova (2008, 2011) examines their semantic homologues in Bulgarian testing the hypothesis of universal semantic constraints. (For further details see also article 54 on closing suffixes.)

Our article continues Manova's approach, aligning Russian suffixes with their German correlates and Bulgarian cognates. Their semantic equivalents in Russian show both typological parallels and differences compared to their German and Slavic counterparts, displaying a certain variation across semantic constraints and the diachronic timeline. Thus the article provides not only insight into the morphological properties of semantically analogous units (as is the case between the suffixes in Germanic and Slavic) but also into the historically cognate units in closely related languages (as is the case within the Slavic group). Bulgarian and Russian share a common Slavic heritage belonging, however, to different subgroups, viz. Bulgarian being a South Slavic language, and Russian an East Slavic language, and they have secondarily influenced each other. South Slavic words and derivational patterns were borrowed extensively into Standard Russian via Church Slavonic, and later, during the Bulgarian national revival in the 19th century, Russian became a source for Bulgarian loan words. Thus, the discrepancies between two languages with so close a history could be an additional test for hypotheses about the semantic mechanisms governing derivation.

The data of the *Russian National Corpus* are used consistently for the evaluation of productivity and diachronic details; we begin with a brief presentation of the possibilities this corpus opens up for gaining insights into morphological structure.

2. The Russian National Corpus

The *Russian National Corpus* (henceforth: RNC), under development primarily by the Vinogradov Institute of Russian Language of the Russian Academy of Sciences since 2001, was placed online on April 29, 2004. Its present size is more than 100 thousand

texts, and its main subcorpus (of written texts) contains over 200 million tokens, encompassing the chronological span from the 18th to the 21st century. All the subcorpora of the RNC have different levels of linguistic tagging, depending largely upon the properties of the relevant subcorpus (for example, metrical annotation in the subcorpus of poetry, or stress in the subcorpus of oral speech), but the main types of annotation that run through the bulk of the RNC are word-by-word morphological and semantic annotations.

Morpheme-by-morpheme annotation is currently being introduced as a test markup (see also below). The morphological characteristics are ascribed to the word form in full; the lemma is provided, as well as its part-of-speech, its lexical (as, e.g., gender or transitivity), and its inflectional categories. A word-by-word glossing like *golovami* (GOLOVA 'head'.N.F.INANIMATE.PL.INSTR) is largely equivalent to the morphological annotation found in the RNC. However, in only a relatively small portion of the corpus is the homonymy between different word forms disambiguated so far. Otherwise, all the possible variants for a given orthographical representation are provided, like in *peč'* (PEČ' 'stove'.N.F.INANIMATE.SG.NOM|ACC| PEČ' 'to bake'.V.TRANS.IPF.INF).

The semantic markup is made for each word form, and its semantic categories are given according to a dictionary; a separate set of semantic categories exists for all the part-of-speech-categories. For example, concrete nouns signifying animals, abstract nouns signifying qualities, adjectives of colour or of intensity, and verbs of motion are all tagged and separately searchable. Additionally, some derivation features are indicated in the semantic markup, including morpho-semantic features (e.g., diminutive, caritive, semelfactive) or taxonomic type of the motivating word (adverb derived from adjective of size).

In the context of the present article, the possibilities that the RNC offers for linguistic research into Russian morphology are the most relevant. Obviously, the main instrument of morphological research is the grammatical search in the corpus that helps to yield the search results on different lexemes, grammemes and their combinations. Currently, there is no affix markup available for searching (except for the orthographical affixes *ne-* 'un-' in participles and *pol-* 'half' that exhibit some word properties, in the subcorpus with manually resolved homonymy). At present a project on affix markup is under development, relying on the corpora dictionary with tagged prefixes and suffixes (see Tagabileva et al. 2009). A test version of morpheme search has been available in the RNC since 2011 but it will not be treated here in detail.

It should be noted that, both in the search for lexemes and for word forms, the RNC allows also for wildcards, which can partially substitute for morpheme-by-morpheme tagging. For example, the combination of prefixes *po-raz-* that yield a semantic combination of distributive activity and centrifugal (ablative) movement, as *po-raz-bežat'sja* 'to run away, one by one, by groups' is searchable using the wildcard *poraz**. Likewise, circumfixes involving both a prefix and a suffix can be set up as in *do*sja* 'to arrive at a (usually, undesired) result due to a continuous activity' (cf. *do-igrat'-sja* 'to arrive at an unpleasant result while playing').

The actual semantic tagging of the RNC also includes some information about derivation, in particular, the separate treatment of nominalizations, diminutives, and secondarily derived nouns signifying females. Combination of both search types is permitted; therefore, it is possible to select specific word types from a larger group of words with a polysemic affix. Thus, the advanced search for nouns denoting female persons among

words in *-nica* will yield *učitel'nica* ‘female teacher’ (← *učitel* ‘teacher’) but not *bol'nica* ‘hospital’ (← *bol'noj* ‘sick’).

The RNC allows for quick sorting of the results according to token-frequency; it is possible to attest the productive or marginal status of affix combinations quickly. The diachronic dimension of the RNC includes sorting of the search results by date and customizing subcorpora to monitor changes in productivity/frequency. Software for off-line statistical analysis of the query results (including collocations and other information data) is under preparation.

3. Closing status of Russian semantic homologues of German and Bulgarian suffixes

3.1. Suffixes denoting female persons

In German, the feminine *-in* as in *Lehrer-in* ‘female teacher’ is a closing suffix and does not allow for further suffixation, e.g., diminutivization: **Lehrerin-chen* ‘little female teacher’. A linking element *-en-* in compound words “reopens” it, however, in Aronoff’s and Fuhrhop’s terminology, for combination with further elements on its right: *Lehrerinnenzimmer* ‘room for female teachers’. Compounds, however, are a different subclass of word-formation, particularly in German, where they are highly productive and governed more by syntax-like incorporating patterns than by word-internal morphology.

In Bulgarian, the feminine suffixes *-k-*, *-inj-*, *-ic-* are closing when applied to native stems denoting human beings (Manova 2008). In Russian, the properties of the native feminine *-nic-* are somewhat more complex, at least diachronically. The suffix *-nic-* disallows *-sk-ij* (adj.) and diminutive *-k-a*: cf. colloquial and pejorative *učilka* or rarely *učitel'ka* ‘female teacher’, the latter possibly additionally influenced by the same (standard) word from Ukrainian, or *plemjaš-ka* (with the *n/š* alternation fairly common in Russian, cf. Itkin 2007) ‘niece’ formed from *plemjan-nic-a*, both times with truncation of the *-nic-* suffix. This suffix, however still rarely, allows the addition of the relational possessive suffix *-in-/yn-*: *učitel'nicyn* ‘of a teacher-FEM’ attested in RNC for 2000 (cf. also *plemjannicyn* for 1995–1999), being otherwise closing.

According to Manova (2011), Russian *-in-* is not a derivational suffix *sensu stricto* as it is synonymous with the inflectional genitive (*syn učitel'nic-y = učitel'nic-yn syn* ‘teacher-FEM’s son’). Although it is not clear whether this is the case synchronically, diachronically in Old Russian and Church Slavonic the relational adjectives were a far more productive pattern that certainly had a status closer to inflection (while the possessive genitive was hardly used except in some special cases). See also Corbett (1995) who compares this phenomenon to double case marking (so-called *Suffixaufnahme*). This status can offer a good historical (if not synchronic) explanation for the peculiar status of *-in-/yn-*. Indeed, in earlier Russian *-nic+yn-* was more productive. There are only three texts using *-nicyn* (slightly stylized fiction by Palej, Slavnikova, and Ulickaja of 1990–2000) in the RNC after 1930, whereas a greater degree of productivity is witnessed by a considerable number of examples in the 18th and 19th centuries (such as *izmennicyn* ‘of a traitor-FEM’ or *volšebnicyn* ‘of a fairy’). The same pattern has been preserved in a

number of Russian surnames as *Kormilicyn* (< '[son] of a wet-nurse') or *Solženicyn* (< '[son] of a woman who trades in malt, Russ. *solod*').

There are also other feminine suffixes like *-in-* (*bog-in-ja* 'goddess'), *-ic-* (*car-ic-a* 'tsarina'), *-ess-* (*poët-ess-a* 'poetess') or *-š-* (in standard language with the slightly obsolete meaning 'wife of X', colloquial 'female X', as *direktor-š-a* formed from *direktor* 'director'). They all do accept relational *-in-* even better than *-nic-* (cf. forms like *knjag-in-in* 'of a princess' ← *knjag-in-ja*, or *graf-in-in* 'of a countess' ← *graf-in-ja*, *direktorš-in* 'of director's wife' ← *direktorša*), but generally not *-k-* (hypocoristic or depreciative), with the exception of the non-native suffixes as *poët-es-k-a* 'poetess' (← *poëtessa*) or *aktr-is-k-a* 'actress' (← *aktr-is-a*), just as in Bulgarian (the two words coincide in both languages).

It seems also that in Russian, unlike Bulgarian, there is no exception for nouns signifying animals (where feminine suffixes are not closing but still allow for diminutivization, cf. Bulg. *magar-ic-a* 'female donkey' → *magarič-k-a*), or that this exception, if it exists, is very weak. Words like Russ. *l'vička* 'lionness' (← *l'v-ica* 'lioness') are attested only as occasional nicknames of people (in some Internet forums found by Google), and *lisička* 'little, cute, etc. fox' is derived from *lisica*, where *-ic-* is not, at least synchronically, an obvious feminine suffix (both words, *lisa* and *lisica*, grammatically belonging to the feminine gender, are names of the whole species of *Vulpes*, the masculine *lis* being a marked term (poetic language)).

3.2. (Next-to-)zero nominalization

German closing *-e* forming abstract nouns, as in *pflēg-en* 'to look after sb., to care' → *Pflēg-e* 'care (noun)', has according to Manova (2011) no equivalent in Bulgarian; likewise, it has no single directly comparable equivalent in Russian either.

In Russian (as in Bulgarian) there is a zero suffixing model forming abstract nouns. For example, it is attested in words like *beg* (with a zero masculine inflection) 'running' formed from *beg-at'* or *bež-at'* 'to run', or in words like *ssor-a* (with feminine inflection) 'quarrel' formed from *ssor-it'sja* 'to quarrel'. Although the zero suffix is indeed always (technically) closing according, for example, to the analysis proposed by a Russian morpheme dictionary (Kuznecova and Efremova 1986), it seems more careful not to include a model which is by definition elusive on the surface (and postulated by definition where no other suffixes can be found) into the discussion of the closing patterns. Indeed, both Russian and Bulgarian models are analyzed by Manova (2011) as instances of conversion rather than affixal patterns.

The nominalizing suffix *-k₁-* (*stroj-k-a* '(process of) construction' from *stro-it'* 'to build') is not closing (cf. *stro-eč₁-k₂-a* 'little/nice process of construction', with a posterior diminutive *-k₂-*). However, this seems to be accounted for by the formal rather than the semantic properties of this morpheme, because nearly all the homonymous *-k-(a)* suffixes allow a second, always diminutive (interpreted by default also as caritative) *-k₂-a*, yielding a reduplicative pattern *-(o/e)č₁-k₂-a*:

- a) diminutive: *knig-a* 'book' → *kniž-k-a* 'little book' → *kniž-eč-k-a* '(very) little book';
- b) suffix used for metaphorical derivation: *spin-a* 'back' → *spin-k-a* 'back (clothes, furniture)' → *spin-oč-k-a*; *strel-a* 'arrow' → *strel-k-a* 'image resembling an arrow' → *strel-oč-k-a*;

- c) univerbation, in Slavic word-formation defined as a procedure for forming a colloquial synonym of an adjectival group by omitting the noun and adding *-k-* to the adjective stem: *samovol'naja otlučka* 'absence of a soldier without official leave; lit. unauthorized leave' → *samovol-k-a* (formed from the adjective *samovol'nyj* 'unauthorized') → *samovol-oč-k-a*.

The same pattern of reduplicating diminutive *-k-* exists in Bulgarian.

3.3. Nominalization of adjectives

German *-heit/-keit/-igkeit*, forming abstract nouns from adjectives, as *Schön-heit* 'beauty' from *schön* 'beautiful', is closing. Russian *-(n)ost'*, an equivalent to the German closing suffix *-heit/-keit/-igkeit*, is not closing (*cel-ost-n-yj* 'coherent' from *cel-ost'* 'integrity', from *cel-yj* 'complete', the same holds for Bulgarian, with the exact cognate *cjal-ost-en*).

In Russian, the suffix shows a reduplication pattern of *-(n)ost-nost'* that is much rarer (though not unknown) in other Slavic languages. It yields abstract nouns with the same or slightly different semantics than the ones with single *-ost'*. The majority of the stems are derived through an adjectival stage. *Cel-ost-n-ost'* 'integrity' is attested in about 70% of the examples of this model in the RNC, which may be related to the fact that it supersedes the synonymous *celost'* which is attested mainly as a part of the fixed phraseological locution *v celosti (i nevredimosti/soxrannosti)* 'intact, safe and sound' and described only as such in dictionaries. According to the RNC data, the old form is still sometimes used in the meaning 'integrity' (largely the same as *celostnost'*) in different texts (some, but not the majority, of them contain certain archaic traits or use church vocabulary) in the 2000s, cf. *bespokojstvo ... za celost' tovara* 'anxiety about the goods being intact' (corpus example from a story by Olga Slavnikova, 2001).

Semantically, there is mainly a group expressing the evaluative personal qualities as *blag-ost-n-ost'* 'benevolence' ← *blag-ost-n-yj* 'benevolent' ← *blag-ost'* 'gentleness, kindness' ← *blag-oj* archaic or ironical: 'good', *zl-ost-n-ost'* 'malignancy' ← *zl-ost-n-yj* 'malicious' ← *zl-ost'* 'anger' ← *zl-oj* 'wicked, angry'. In these cases the whole set of two adjectives and two nouns coexist in Russian. A different case is *bez-žal-ost-n-ost'* 'ruthlessness' from *bez-žal-ost-n-yj* 'ruthless', where no stage with a single suffix (**bez-žal-ost'*) has ever existed; the adjective is formed with the help of the prefix *bez-* 'without' from the word *žal-ost'* 'pity' that has no direct primary adjective as a counterpart (**žal-yj*); the suffixal *žal-k-ij* 'pitiful, poor' has its own, also suffixal, abstract noun *žal-k-ost'* 'pity', though the latter is rare. A similar model, with *bez-/bes-* forming a secondary adjective, is attested in *bes-xitr-ost-n-ost'* 'simplicity, ingenuousness' ← *bes-xitr-ost-n-yj* 'simple, ingenuous' ← *xitr-ost'* 'trick' ← *xitr-yj* 'cunning', *bez-rad-ost-n-ost'* 'dullness, sadness' ← *bez-rad-ost-n-yj* 'sad' ← *rad-ost-n-yj* 'joyful' ← *rad-ost'* 'joy' ← *rad* 'happy'. In the latter case counterparts without *bez-* are also attested, that is *rad-ost-n-ost'* 'being joyful', with a primary noun *rad-ost'*, and *žizn-e-rad-ost-n-ost'* 'being joyful/optimist' (incorporating *žizn'* 'life'), with no such word as **žizn-e-rad-ost'*. The model without *-k-* in the primary adjective is exemplified also by *gad-ost-n-ost'* 'filthiness' ← *gad-ost-n-yj* 'filthy' (practically semantically the same as *gadjij*) ← *gad-ost'* 'filthy thing' ← *gad-k-ij* 'filthy', its synonym *merz-ost-n-ost'* ← *merz-ost-n-yj*

← *merz-ost'* ← *merz-k-ij*, among many others. Yet another type is instantiated by *po-verx-n-ost-n-ost'* 'superficiality' from *po-verx-n-ost-nyj* 'superficial' and *po-verx-n-ost'* 'surface' without a simple adjective in Modern Russian (**poverxnyj*). So, different links of this quadripartite chain can be missing.

Both in Russian and Bulgarian *-ost'/-ost* can also be followed by the suffix *-nik* signifying human beings. In Bulgarian they are pejorative nouns like *xub-ost-nik* 'rascal' (Manova 2011) formed, with a considerable semantic shift, from *xub-ost* 'beauty'. Russian nouns in *-ost-nik* are not productive and rather marginal, often with little or no synchronic relation to the underlying adjectives, like *krep-ost-nik* 'partisan of serfdom' (*krepost'* no longer exists in the sense of 'serfdom', the meaning of which is expressed by an adjective phrase: *krepostnoe pravo*). There are also some neologisms from the 1990s found in the RNC and formed from abstract nouns in *-ost'* signifying 'a professional who works with X-ost' like *nov-ost-nik* 'news journalist' from *nov-ost'* '(piece of) news', *ličn-ost-nik* 'psychologist who studies personality' from *ličn-ost'* 'personality'; the Soviet-era term *skor-ost-nik* 'a professional worker remarkable for his speed of performance' from *skor-ost'* 'speed' is also close to this semantic type. It is worth mentioning that the pejorative nouns in *-ost-nik* like *derz-ost-nik* 'insolent man' or *gad-ost-nik* 'wretch' belong to an archaic Church Slavonic style (they are attested in the RNC in the works of the 19th century writer Leskov in the speech of priests), and so they can have common roots with the Bulgarian pattern. The sole commonly used noun of this kind, *pakost-nik* 'rascal, some who plays little mean tricks' from *pakost'* 'mean trick', already has no suffix *-ost'* synchronically (due to the lack of a corresponding adjective).

3.4. Relational/qualitative adjectives

In Aronoff and Fuhrhop's material, German *-isch* forming relational and/or qualitative adjectives from noun stems, is a closing suffix: *Hund* 'dog' → *hünd-isch* 'doggish'.

Russian relational *-sk-(ij)*, a homologue of German closing *-isch*, is not a totally closing suffix, unlike *-sk-(i)* in Bulgarian analyzed by Manova (2008, 2011). A *-sk-ost'*-pattern exists combining the adjective suffix with the suffix of secondary nominalization. The pattern yields nouns signifying 'the fact of having some properties of X' as *svet-sk-ost'* 'being of high society' or 'secularism' (according to the two meanings of *svet* 'world'), *det-sk-ost'* 'childishness', *rus-sk-ost'* 'Russianness', *evropej-sk-ost'* 'European style' (dozens of stems in the RNC). About 1860 the model *-sk-ost'* became productive in Russian. Before this date only two words belonging to this pattern – *svet-sk-ost'* and obsolete *ljud-sk-ost'* – are attested in the RNC. Bulgarian probably reflects an earlier situation in Slavic languages when the suffix *-sk-* was closing.

Surnames are a separate subsystem of morphology, often reflecting an earlier stage of development. In Russian surnames (ending in *-skij* and obeying the adjectival declension), the suffix *-sk-* is generally closing. This creates some gaps in derivational paradigms. For example, Russian surnames without *-skij* (as *Puškin*) usually do allow adding of *-skij* to form an adjective: *Puškinskie čtenija* 'Pushkin conference'. This is not generally the case with surnames in *-skij* like *Dostoevskij* that categorically disallow reduplication, even following an additional linking morpheme (**Dostoevskij-skij* or **Dostoevsk-ov-skij*) and resist a single suffix with an adjectival reduplication: *?Dostoevskie čtenija*.

Note, however, some invented formations with no surface redundancy: *Puškin-sk-aja* (name of a Metro station) but also *Dzeržin-sk-aja* < *Dzeržin-sk-ij* and *Majakov-sk-aja* < *Majakov-sk-ij* (stations since the 1930s) – normally, both would be female surnames. They can be analyzed as cases of haplology (that is, an omission of one of the identical affixes or phonological segments on the surface), but another type of analysis seems more plausible. In adjectives from city names like *kur-sk-ij* ‘of Kursk’, according to a recent comprehensive treatment of Russian morphophonemics (Itkin 2007: 254), there seems to be no overlap of the suffixes but just absence of the first *-sk-* (cf. *kur-jan-in* ‘a person from Kursk’). The same is probably true here (cf. *dostoev-ščina* ‘Dostoevsky-style passions’ where the pejorative *-ščina* is added directly to the stem). So the closing status of *-sk-* in surnames persists. The only exceptions are rare surnames in *-sk-ov* (mainly names of the Don Cossacks), where *-sk-* is not a closing suffix although diachronically the same as in *-skij*; *-ov-* “reopens”, in Aronoff’s and Fuhrhop’s terminology, the form for further suffixes (*galansk-ov-sk-ij* ‘belonging to [a Soviet dissident] Galanskov’, RNC). The closing status of *-sk-ij* in surnames is incidentally violated in the invented word *dostoevskij-mo* ‘≈ Dostoevskyness’ with *-mo* as in *pis’-mo* ‘letter’, coined by the Russian Futurist poet Velimir Khlebnikov in a poem of 1908.

Another Russian suffix seems to be a better candidate for a Russian morphological equivalent to the relational *-isch* in German than its Bulgarian cognate *-ski*, as it is closing without exceptions. This is the case of the Russian relational suffix *-in* which is productive with words in *-a/-ja* yielding attributive forms of a mixed declension (*pap-in* ‘daddy’s’ from *pap-a*, *plemjannic-yn* ‘niece’s’ from *plemjannic-a*, *Petin* ‘Pete’s’ from *Petj-a*) and also with some words ending in a soft consonant, when it yields long adjective forms (*golub-in-ij* from *golub’* ‘pigeon’s’, *sobolinyj* from *sobol’* ‘sable’s’).

3.5. Nominalizations

In German, *-ung* (like *Prüf-ung* ‘examination’ from *prüf-en* ‘to examine’) yielding nominalizations is a closing suffix.

Bulgarian, according to Manova (2011), has two semantically distinct suffixes: *-(V)n-e* (*pisane* ‘writing’) and *-(V)ni-e* (*pisanie* ‘a piece of writing’). The latter allows for a *-c*-diminutive – *pisaničje*, whereas the former is a closing suffix.

In Russian, the situation basically corresponds to what occurs in Bulgarian, but the facts are slightly more complicated, as the two cognates of *-(V)n-e* and *-(V)ni-e* do not display a clear semantic and formal opposition but either intermix or lexicalize completely. There exist two deverbal nominalizing suffixes in Russian that largely overlap in function:

- a) *-(V)ni-* as in *posl-ani-e* ‘message’ from *posl-a-t’* ‘to send’, *predstavl-eni-e* ‘presentation’ from *predstav-i-t’* ‘to present’. Upon first glance it seems that it is not closing, losing *-i-* before nominalizing *-ec* (like *upravl-en-ec* ‘manager’ from *upravl-en-ie* ‘management’), but see below;
- b) *-(V)n’j-* under the same circumstances as in *posl-an’[j]-e* ‘message’, *predstavlen’[j]-e* ‘presentation’.

Typically, each word with *-(V)nie* potentially has a *-(V)n’je* counterpart that is used, for instance, in poetry *metri causa* or in some highly individual prose style (characteristic,

e.g., for Pasternak). They have the same etymology (diachronically the second is a phonological reduction of the first), so their co-existence in the language offers a kind of “layering” according to the theoretical assumptions of grammaticalization proposed by Hopper (1991). Phonetically, in allegro speech, the two are often indistinguishable, due to a proximity between a reduced unstressed [i] and the semivowel [j].

From a semantic point of view, they also largely coincide. Both suffixes form action nouns (*sočine-nie/-n'je knigi* ‘composing a book’) and object/result nouns depending on the situation expressed by the verb (*škol'noe sočinenie/-n'je* ‘composition/essay as a school task’). However, in some words *-(V)n'j-* is lexicalized, marking a distinction between action nouns and concrete nouns: *varen'je* ‘jam’ vs. *varenie* ‘cooking’ from *varit* ‘to cook’, *pečen'je* ‘cookies’ vs. *pečenie* ‘baking’ from *peč* ‘to bake’. This distinction is directly related to the problem of closing status and further derivation, as only the (concrete nouns) take diminutive *-ic-*: *varen'jice* ‘little jam’, but not the latter, which is clearly related to semantic constraints (diminutives from action nouns are less plausible semantically).

Moreover, in words where there is no opposition, the diminutive preferably refers to a concrete noun and not to an action noun and takes obligatorily *-(V)n'j-* and not *-(V)n-* or *-(V)ni-*: *poslanie – poslan'jice*, **poslani(i)ce* ‘message’, *predstavlenie – predstavlen'jice*, **predstavleni(i)ce* ‘performance’.

But the most interesting aspect is that the same holds for all Russian nouns ending in *-ie* and *-'je*, not only after *-n-* and not only formed from verbs. We may take a phrase illustrating Pasternak’s *-'je*-style from his autobiography “Oxrannaja gramota” [Safe conduct]: *Zaglav'je skryvalo genial'noe otkryt'je* ‘The title concealed a genially simple discovery’. Both *-'je*-words in the phrase correspond to Standard Russian nouns in *-ie* that have nothing to do with the *-(V)n-* pattern: *otkrytie* ‘discovery’ ← *otkryt-yj* ‘open’ (with another participial suffix), *zaglavie* ‘title’ without a corresponding verb. In the web we have found a handful of examples both of *zaglav'j-ic-e* ‘little title’ and *otkryt'j-ic-e* ‘little discovery’ showing that both (but not *zaglavie* and *otkrytie* without reduction) can add *-ic-*.

We propose the following morphological analysis for nouns in *-(V)nie* and *-(V)n'je*: *-(V)n-* can be considered an affix used in both cases, whereas the full and reduced forms of *-i-* and *-j-* are separated from it by a morpheme boundary (and they are also used in words like *zaglav-i-e/zaglav'-j-e* and *otkryt-i-e/otkryt'-j-e*). In this case their status as closing affixes is the following:

- a) *-(V)n-* is not closing, as *upravl-en-i-e* ‘management’ yields *upravl-en-ec* ‘manager’, *upravl-en-č-esk-ij* ‘managerial’, etc.;
- b) *-j-* is not closing as it allows for diminutives both in nominalizations and in other nouns (*upravlen'-j-ic-e*, *zaglav'-j-ic-e*);
- c) *-i-* is closing, allowing no further derivation.

The proposed decision is not unlike the situation in Bulgarian, where *-ne* is closing and *-nie* is not. The two languages have developed from the same diachronic source, different suffixes for action nouns and concrete nouns and the former suffixes have become closing, obeying the same semantic constraints as German *-ung*. Note, however, that in Bulgarian the action noun closing suffix (*-ne*) is phonologically simpler and more reduced as compared to the concrete noun suffix which is not closing; in Russian the situation is inverse.

3.6. Varia (-ling, -izm)

This section offers brief remarks about two other closing suffixes that do not show parallels among the three languages.

Aronoff and Fuhrhop (2002) consider German *-ling* to be closing, e.g., *lehr-en* ‘to teach’ → *Lehr-ling* ‘one who is taught’ → **Lehr-ling-in* ‘a woman who is taught’, although there are numerous counterexamples, especially on the Internet, cf. Manova (2011: 289): *Prüfling-in* ‘examinee-FEM’, *Lehrling-in* ‘apprentice-FEM’, *Häftling-in* ‘prisoner-FEM’). It has no equivalent either in Bulgarian or in Russian, showing that this type of derivation is uncommon in Slavic which prefers inflectional passives (cf. Engl. *-ee*, which is productive, closing and borrowed from a French passive participle suffix).

A borrowed suffix that is closing in Russian is *-izm* belonging to the Greek-based handful of international affixes, cf. *-ismo* in Italian which is also closing. (Relational adjectives in *-ičesk-ij* are derived from personal nouns in *-ist*, e.g., Russ. *turističeskij* ← *turist* ‘tourist’, but semantically they can refer to abstract nouns, e.g., *turizm* ‘tourism’ as well.) A dubious counterexample *mexanizm-ik* ‘a little piece of machinery’ formed from *mexanizm* ‘machinery’ is found in the RNC. Adjectives like *kommunizmennyj* are sometimes attested in newspapers and the Internet as puns. (In this case, however, the alleged suffixation goes back to a portmanteau of *kommunizm* ‘communism’ and *nizmennyj* ‘vile’.)

4. Conclusions

A summary juxtaposing the German closing suffixes with the Bulgarian and Russian ones can be found in Table 55.1.

Tab. 55.1: Closing suffixes in German, Bulgarian, and Russian

German (Aronoff and Fuhrhop 2002)	Bulgarian (Manova 2008, 2011)	Russian
<i>-e</i>	NONE	zero – (closing but elusive) <i>-k-</i> – not closing
<i>-heit/-keit/-igkeit</i>	<i>-ost</i> (Bulg.) / <i>-ost'</i> (Russ.) allows for reduplication and adjectives, not closing	
<i>-in</i>	<i>-k-a</i> , <i>-(k)inj-a</i> , <i>-ic-a</i> , <i>-es-a</i> , <i>-is-a</i> , <i>-v-a</i> closing only with native stem denoting humans	<i>-nic-a</i> , <i>-inj-a</i> , <i>-ic-a</i> , <i>-ess-a</i> , <i>-š-a</i> closing save the relational adjectives (with <i>-nic-</i> productivity is shrinking), diminutives impossible, no human “constraint”
<i>-isch</i>	<i>-ski</i> (closing)	<i>-sk-ij</i> (not closing) <i>-in</i> (closing)
<i>-ling</i>	NONE	
<i>-ung</i>	<i>-(V)n-e/- (V)ni-e</i> (Bulg.) / <i>-(V)ni-e/- (V)nj-e</i> (Russ.) The first suffix signifies action nouns and is closing, the second is not closing.	

The following general conclusions can be drawn. Russian predictably demonstrates semantic patterns of closing suffixes more similar to the Bulgarian suffixes than to the German ones. However, in both Slavic languages there may exist suffixes of the same semantic field that are both closing but still non-cognate (whereas cognates behave differently). Evidence is also presented that the “closingness” of a suffix, depending on its semantics and the combinatory force of other suffixes, is not a discrete feature but can rather be described in terms of principal trends that have exceptions and change diachronically (for example, the status of *-in*).

The use of a corpus enhances detecting rare/marginal models and tracing diachronic ways of developing closing patterns (and even some recent divergence between languages in this point).

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