

Corpus-Based Study of Word-Formation Models of Feminitives in Contemporary Russian

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Abstract

The article is devoted to the description of the main derivational models of feminitives in contemporary Russian using corpus data. Today, native speakers often deviate from the rules of word formation of feminitives described in textbooks on Russian grammar or use several derivational models for the same source word. Our research is based on a sample of feminitives that can be found in various VKontakte communities dedicated to feminism. We compare statistics from the Russian National Corpus and Araneum Russicum III Maximum. Also, we use the Google Ngram Viewer corpus to track the tendency in word formation of feminitives. The results allow us to characterize the current state of derivational models of Russian feminitives, as well as to make adjustments to the existing rules.

Keywords

Corpus Linguistics, Russian, Statistics, Word Formation, Feminitives

1. Introduction

One of the modern trends in the development of the mankind in the XXI century is a rise of the women's movement in many spheres of our life: politics, science, cinematography, etc. As a result, all changes are certainly reflected in the Russian language system. In linguistics, scholars have recently begun to develop a great number of research on gender linguistics. Some studies are of particular interest – the studies of word-formation models of feminitives. On social networks, users often argue about the only correct version of a feminitive: for example, *avtorka*, *avtorsha*, *avtrissa* (*авторка*, *авторша*, *автрица*), etc. Of course, one can turn to traditional grammar and choose the right word to use, but one should not forget that language is a changeable system. Any changes can be tracked in corpora – large text collections presented in a computer format. The aim of our study is to track current trends in the word formation of feminitives using corpus data and to suggest possible changes to the existing grammar rules.

2. Related works

Nowadays many studies on the word formation of feminitives are carried out without the use of corpus statistics. For instance, the study [3] is aimed at analyzing feminine nouns with the *-sh* (*-u*) suffix. The word-formation model with this suffix is one of the means of expressing the word-formation category of femininity. 166 lexemes from contemporary dictionaries and the Russian media space were selected for analysis. It was observed that feminine nouns with the *-sh* (*-u*) suffix are actively used in modern media space without negative connotations, though some stylistic deprecations are recorded in dictionaries. At the same time, they are often replaced by neutral word-formation models (for instance, the *-k* (*-κ*) suffix, etc.). In the previous research of the author [2], she focuses on the study of productive and unproductive word-formation models. The author states that the users of social networks often pay attention to such productive suffixes as *-k*, *-in*, *-shits*, *-nits*, *-its* (*-κ*, *-иш*, *-ишш*, *-ниш*, *-иш*).

In [4], the author also turns to the Russian media field to study the problems of creating feminine nouns. He proves that the task of belonging to the feminine grammatical gender is solved not only by

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means of affixal derivation, but also by nominalization (*уполномоченная* – *уполномоченная*) and analytical word formation (*zhenshchina-president* – *женщина-президент*), thereby he proposes to expand the possible ways of using feminines in media texts.

The paper [1] discusses derivational possibilities of Russian feminines and the existing suffixal patterns that can be changed due to modern trends in the Russian language. Along with the change in the word-formation models, the semantic fullness of derivatives is also subject to change: the suffixes lose their original stylistics, words tend to become common.

At the same time, some scholars try to base their research on Russian corpora. Particularly, in [5], the author investigated the problem of the word-formation models with *-schits/-chits* (*-шущ/-чущ*) suffix basing on both printed dictionaries and the Russian National Corpus (main and newspaper subcorpora). The detailed analysis showed that this suffix is a productive one, it is used in the derivation of new feminines during recent years. It was also revealed that this suffix is used in three productive word-formation models with verbal, substantive and adjective stems.

Nonetheless, we consider that the combination of several corpora for the Russian language helps to represent the most complete picture of the word-formation process of feminines.

3. Traditional word-formation models of feminine nouns in Russian

In the Russian grammar reference by N.Yu. Shvedova [6], one can find main word-formation rules of feminine nouns. Below we present a list of main models with brief explanations. In the following sections, it will be easier to explain the existing feminines and the new ones.

1. *-k* (*-k*) suffix is usually added to masculine nouns without any suffixes, to noun with *-ets* (*-ey*) or *-ist* (*-uct*) suffixes, or to nouns with *-man* (*-ман*).
2. *-its* (*-иц*) suffix can also be added to masculine nouns without any suffixes or with *-ets* (*-ey*) suffix, but it has the meaning “a wife of an *X*”, where *X* is a masculine noun.
3. *-nits* (*-ниц*) suffix is added to nouns with *-tel'* (*-тель*).
4. *-ikh* (*-их*) suffix is used for nouns without any suffixes or with *-nick* (*-ник*) and *-nichy* (*-ничий*). According to N.Yu. Shvedova, it also has the meaning “a wife of an *X*”, where *X* is a masculine noun.
5. *-sh* (*-ш*) suffix is used for nouns with *-r*, *-l*, *-n*, and *-nt* (*-р*, *-л*, *-н* и *-нт*) at the end of stems.
6. If a masculine noun has *-ich/-ovich/-evich* (*-ич/-ович/-евич*) suffix, *-n* (*-н*) suffix is used to form a feminine noun.
7. *-in* (*-ин*) suffix is used for masculine nouns without any suffixes or with *-log* (*-лог*) at the end of stems.
8. *-j* (the Russian letter after soft consonant) is used if a corresponding masculine noun has *-un* (*-ун*) suffix.
9. *-ess* (*-есс*) suffix is added to masculine nouns without any suffixes. It sometimes has the meaning “a wife of an *X*”, where *X* is a masculine noun.
10. *-is* (*-ис*) is added to the masculine nouns with *-or* (*-ор*) and *-tor* (*-тор*) morphemes.
11. *-ukh* (*-ух*) is used for derivating female animals.

N.Yu. Shvedova also states that sometimes a masculine base is absent due to the absence of the corresponding male person in real life (*rodil'nitsa* (*родильница*) has always been a woman, so we can't form a masculine noun). Also, male-female pairs can denote different professions (*tekhnichka* (*техничка*) is a woman who cleans rooms, and *tekhnik* (*техник*) is a builder).

It is also mentioned that if there is no necessity in highlighting a sexual identity, one can use neutral words that have originally been masculine (for instance, *secretar' Ivanova* – *секретарь Иванова*). At the same time, due to the active promotion of feminines in the Russian language, this rule loses its topicality.

4. Experimental design

For this study, we selected over 170 commonly used feminines from various VKontakte communities dedicated to feminism and its promotion. The final list includes feminines that use both one derivational model and several ones. In the beginning of the experiments, we developed criteria for choosing communities and feminines:

1. The total number of members of a community should be more than 10000 as the community can be considered as a trustworthy one. The following communities were taken into account: *Feminizm: nablyadno* (Феминизм: наглядно)², *Podslushano Feminism* (Подслушано Феминизм)³, etc.
2. The feminitives were chosen manually from posts approved and posted by official representatives, for now we leave feminitives from comments out of account.

Then there was a necessity to choose corpora for further procedures. We used the Russian National Corpus⁴ and Araneum Russicum III Maximum⁵ in order to get ipm frequencies from each of them. If there are more than one feminine noun for the analyzed word, we also involved the comparative diagrams that can be easily obtained using the Google Ngram Viewer corpus.

5. Results and Interpretation

Below we present the main results of the study. Diagrams 1 and 2 show ipm frequencies of the feminitives that were in both corpora. There are totally 151 words in the first diagram, that is approximately 84% of the analyzed words. As for the second one, there are less feminitives – only 98 words (55% of the analyzed words).

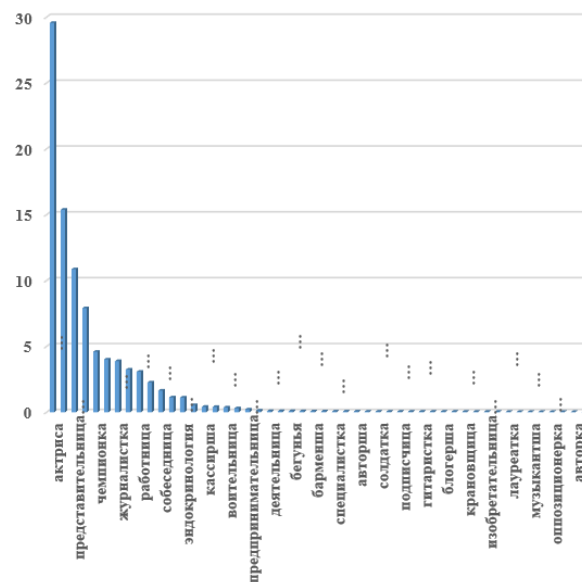


Diagram 1: The most frequent feminitives in the Araneum Russicum III Maximum

² https://vk.com/feminism_visually

³ https://vk.com/overhear_feminism

⁴ <https://ruscorpora.ru/new/>

⁵ http://unesco.uniba.sk/aranea/run.cgi/corp_info?corpname=AranRusi_a

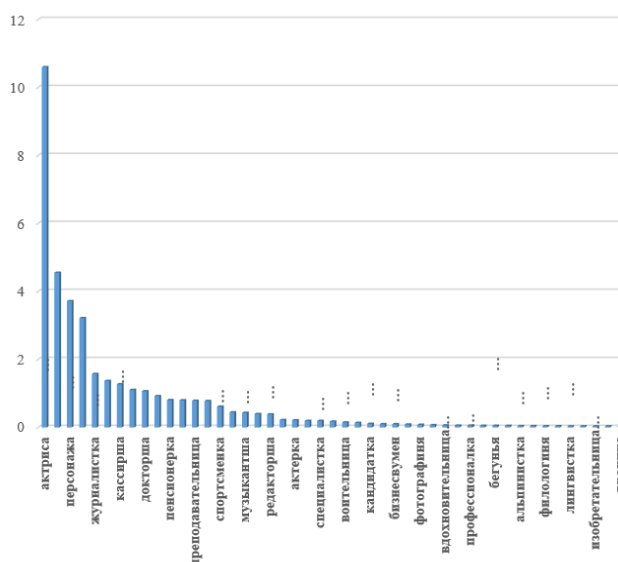


Diagram 2: The most frequent feminitives in the Russian National Corpus

It is obvious that the left part of the diagrams denotes the most stable feminitives that has been existing in the Russian language for a long time: *actrisa*, *predstavitel'nitsa*, *rabotnitsa* (*актриса*, *представительница*, *работница*), etc. At the same time, there are some disputable lexemes. For instance, in the second diagram there is the *personazha* (*персонажа*) word that has two sets of different grammatical features:

- it can be a feminine noun that was formed by adding an ending to the corresponding masculine word;
- it can be a genitive case or an accusative one of the singular of the *personazh* (*персонаж*) word.

While analyzing examples from the Russian National Corpus, it becomes clear that all the examples have the second set of features. There are no examples with the first set of grammatical features.

- Будем считать, что структура **personazha** vklyuchaet v sebya imya, spisok togo, chto on imeet, i spisok togo, chto on khochet imet' (tsel') (Будем считать, что структура **персонажа** включает в себя имя, список того, что он имеет, и список того, что он хочет иметь (цель)) → *the genitive case*.
- Analoga etomu imeni net ni u odnogo zapadnogo yolochnogo **personazha** (Аналога этому имени нет ни у одного западного ёлочного **персонажа**) → *the genitive case*.
- Ya zhe predlagayu vspomnit' otmennogo **personazha** i vpolne sebe interesnyuyu trilogiyu o zhyostkom okhotnike na vampirov (Я же предлагаю вспомнить отменного **персонажа** и вполне себе интересную трилогию о жестком охотнике на вампиров.) → *the accusative case*.

There is also the *adminka* (*админка*) word that has at least two meanings: it can be either a feminine denoting a profession or a special right to access all the functions of a certain website. In the Russian National Corpus, there are only 2 occurrences with the following examples:

- Plyus, sootvetstvenno, obshchaya **adminka**, veb-formy, v kotorykh HR razmeshchayut vakansii (Плюс, соответственно, общая **админка**, веб-формы, в которых HR размещают вакансии).
- I vo-vtoryh, Gennady igral davno, igral khorosho, mnogokratno uchastvoval v sorevnovaniyakh, gde ego mogli videt' v reale, imel blestyashchuyu reputaciyu i pol'zovalsya sredi igrokov bol'shim uvazheniem, za chto emu i predostavlena byla «**adminka**» – special'naya komp'yuternaya programma, pozvolayushchaya regulirovat' khod igry... (И во-вторых, Геннадий играл давно, играл хорошо, многократно участвовал в соревнованиях, где его могли видеть в реале, имел блестящую репутацию и пользовался среди игроков

большим уважением, за что ему и предоставлена была «админка» – специальная компьютерная программа, позволяющая регулировать ход игры...).

As you can see, in both sentences this word is used in the second sense.

Those femininives, whose ipm frequencies are lower than 1, are of great interest. They represent the femininives that are not widely used and may not be mentioned in contemporary dictionaries.

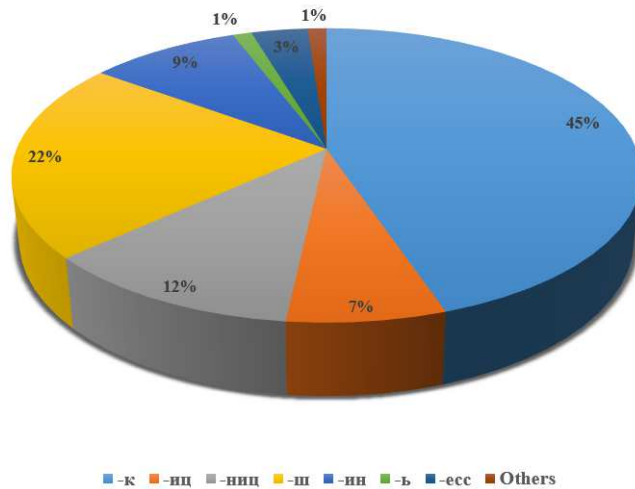


Diagram 3: Main trends in the word-formation models of femininives whose ipm frequencies in the Russian National Corpus is lower than 1

Almost half of the femininives were formed according to the model, in which the suffix *-k* (*-к*) was added to the existing male name of the profession: *guitarist* – *guitaristka* (*гитарист* – *гитаристка*), *spetsialist* – *spetsialistka* (*специалист* – *специалистка*), *yurist* – *yuristka* (*юрист* – *юристка*), etc. These words do not deviate from the traditional rule proposed by N.Yu. Shvedova. There are no deviations in the formation of femininives using the suffix *-nits* (*-ниц*): *deyatel'* – *deyatel'nitsa* (*деятель* – *деятельница*), *voitel'* – *voitel'nitsa* (*водитель* – *водительница*), etc. The *Others* category denotes those word-formation models that were not mentioned in the grammar of N.Yu. Shvedova. There is only one example in this group – *biznesvumen* (*бизнесвумен*). In this case, the derived English-language *-men* (*-мен*) morpheme was replaced by the *-vumen* (*-вумен*) morpheme.

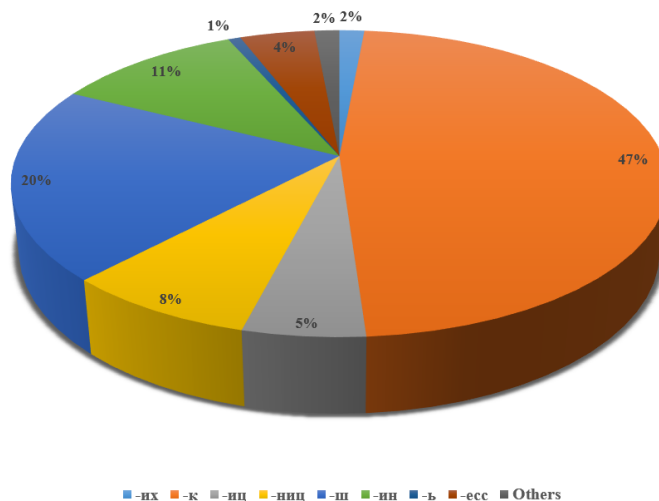


Diagram 4: Main trends in the word-formation models of femininives whose ipm frequencies in the Araneum Russicum Maximum Corpus is lower than 1

As for the second corpus, we can track the same tendency. The word-formation model with the *-k* (*-к*) suffix is the most productive, while the models with *-ikh* (*-их*), *-ess* (*-ecc*), *-its* (*-иц*), *-j* (*-ь*) suffixes are not so widely used. The *Others* group includes two words – *biznesledi* (*бизнеследу*) and *biznesvumen* (*визнесвумен*). Among all the femininives of this sample there are some to pay special attention to. First of all, let's consider the *bojchikha* (*бойчиха*) word. A native speaker prefers adding the *-ikh* (*-их*) suffix

to the masculine stem rather than using the derivated English *gyorl* (*гёрл*) word. Another word is *bloginya* (*блогиня*). According to the reference of N.Yu. Shvedova, one can add the *-in* (*-ин*) suffix to the words with the *-log* (*-лог*) at the end. Actually, that is true for the words in which *-log* (*-лог*) denotes sciences or scientists: *filolog*, *astrolog*, *teolog*, (*филолог*, *астролог*, *теолог*), etc. Moreover, the suffix wasn't added to a profession of the masculine gender, it was added to the word of the masculine gender that denotes the set of posts on social networks. That's why we can consider this word to be a deviation from the traditional rules.

Among the analyzed femininives one can notice that there can be some options of feminine nouns that were formed from the same stem but with the help of different suffixes (Table 1).

Table 1. Comparison of feminine nouns of different word-formation models

Word	Morpheme	Frequencies (ipm) in the Russian National Corpus	Frequencies (ipm) in the Araneum Russicum III Maximum
<i>redaktor (редактор)</i>			
redaktorka (редакторка)	-k (-к)	0	0,002318
redaktorsha (редакторша)	-sh (-ш)	0,385438	0,019485
<i>bloger (блогер)</i>			
blogerka (блогерка)	-k (-к)	0	0,001692
blogersha (блогерша)	-sh (-ш)	0,006217	0,043794
bloginya (блогиня)	-in (-ин)	0	0,003321
<i>illyustrator (иллюстратор)</i>			
illyustratorka (иллюстраторка)	-k (-к)	0	0,000564
illyustratorsha (иллюстраторша)	-sh (-ш)	0,003108	0,000251
<i>animator (аниматор)</i>			
animatorka (аниматорка)	-k (-к)	0	0,000187956
animatorsha (аниматорша)	-sh (-ш)	0	0,001816906
<i>geymer (геймер)</i>			
geymerka (геймерка)	-k (-к)	0	0
geymersha (геймерша)	-sh (-ш)	0	0,005012154
<i>koordinator (координатор)</i>			
koordinatorka (координаторка)	-k (-к)	0	0,002694033
koordinatorsha (координаторша)	-sh (-ш)	0	0,000501215
<i>reper (репер)</i>			
reperka (реперка)	-k (-к)	0	0,000751823
repersha (реперша)	-sh (-ш)	0	0,001378342
<i>avtor (автор)</i>			
avtorka (авторка)	-k (-к)	0,00310837	0,024371601
avtorsha (авторша)	-sh (-ш)	0,046625544	0,060208504
avtrissa (автрисса)	-iss	0	0

Word	Morpheme	Frequencies (ipm) in the Russian National Corpus	Frequencies (ipm) in the Araneum Russicum III Maximum
	(-исс)		
avtoritsa (авторица)	-its (-иц)	0,006216739	0,003132596
avtoressa (авторесса)	-ess (-еcc)	0,015541848	0,00745558
<i>lider (лидер)</i>			
liderka (лидерка)	-k (-к)	0	0,004322983
lidersha (лидерша)	-sh (-ш)	0,006216739	0,003821768
<i>yurist (юрист)</i>			
yuristka (юристка)	-k (-к)	0,096359459	0,025812595
yuristsha (юристка)	-sh (-ш)	0	0
<i>vrach (врач)</i>			
vrachinya (врачinja)	-in (-ин)	0	0,000187956
vracheya (врачeя)	-e (-е)	0	0,000250608
vrachitsa (врачница)	-its (-иц)	0,031083696	0,00357116
<i>politik (политик)</i>			
politikessa (политикeсса)	-ess (-еcc)	0,012433479	0,00031326
politessa (политeсса)	-ess (-еcc)	0	0,001002431
<i>aktyor (актёр)</i>			
aktyorka (актeрка)	-k (-к)	0,211369135	0,004573591
aktrisa (актpиса)	-is (-ис)	10,59954044	29,56350331
<i>tantsor (танцор)</i>			
tantsorka (танцорка)	-k (-к)	0,055950653	0,005388066
tantsovshchitsa (танцoвщица)	-щиц (-shchits)	1,367682637	2,266746808
<i>fotograf (фотограф)</i>			
fotografinya (фотографиня)	-in (-ин)	0,077709241	0,010776132
fotografistka (фотографистка)	-k (-к)	0	0
<i>pensioner (пенcионер)</i>			
pensionerka (пенcионерка)	-k (-к)	0,805067734	4,009034315
pensioninya (пенcиориня)	-in (-ин)	0	0
pensioneressa (пенcионерeсса)	-ess (-еcc)	0	0
<i>biznesmen (бизнесмен)</i>			
biznesledi (бизнеслeди)	-ledi (-лeди)	0	0,028318672
biznesmensha (бизнесмeнша)	-sh (-ш)	0,006216739	0,006265193
bizneswumen (бизнесвyмен)	-vumen (-вyмен)	0,096359459	0,304738985
<i>pol'zovatel' (пользоватeль)</i>			
pol'zovatel'nitsa (пользоватeльница)	-nits (-ниц)	0	0,047114251
pol'zovatel'ka (пользоватeлька)	-k (-к)	0	0
<i>reportyor (репортёр)</i>			

Word	Morpheme	Frequencies (ipm) in the Russian National Corpus	Frequencies (ipm) in the Araneum Russicum III Maximum
reportyorsha (репортерша)	-sh (-ш)	0,021758587	0,016414806
reportyorka (репортерка)	-k (-к)	0,00310837	0,001816906
<i>psikhiatr (психиатр)</i>			
psikhiatressa (психиатресса)	-ess (-есс)	0	0,000187956
psikhiatrinya (психиатриня)	-in (-ин)	0	0,000187956
psikhiatrisa (психиатриса)	-is (-ис)	0,00310837	0
psikhiatorka (психиаторка)	-k (-к)	0	0,000125304
<i>psikhoterapevt (психотерапевт)</i>			
psikhoterapevtka (психотерапевтка)	-k (-к)	0	0,000814475
psikhoterapevtessa (психотерапевтесса)	-ess (-есс)	0	0
psikhoterapevtsha (психотерапевтша)	-sh (-ш)	0	0,000125304
<i>doctor (доктор)</i>			
doktorsha (докторша)	-sh (-ш)	1,063062413	0,129376234
doktorka (докторка)	-k (-к)	0,00310837	0,003007293
doktoritsa (докторица)	-its (-иц)	0,068384132	0,010901436
<i>dizayner (дизайнер)</i>			
dizaynerka (дизайнерка)	-k (-к)	0	0,003508508
dizaynersha (дизайнерша)	-sh (-ш)	0,00310837	0,008144751
<i>prezident (президент)</i>			
prezidentka (президентка)	-k (-к)	0	0,001691602
prezidentsha (президентша)	-sh (-ш)	0,024866957	0,01265569
<i>milliarder (миллиардер)</i>			
milliarderka (миллиардерка)	-k (-к)	0,00310837	0,000375912
milliardersha (миллиардерша)	-sh (-ш)	0,031083696	0,018607623
<i>kommentator (комментатор)</i>			
kommentatorka (комментаторка)	-k (-к)	0	0,000187956
kommentatorsha (комментаторша)	-sh (-ш)	0,00310837	0,002944641
<i>kapitan (капитан)</i>			
kapitanka (капитанка)	-k (-к)	0,00310837	0,002318121
kapitansha (капитанша)	-sh (-ш)	0,394762943	0,032391048

Word	Morpheme	Frequencies (ipm) in the Russian National Corpus	Frequencies (ipm) in the Araneum Russicum III Maximum
<i>champion (чемпион)</i>			
championka (чемпионка)	-k (-к)	0,798850995	4,59432864
championsha (чемпионша)	-sh (-ш)	0,00310837	0,000063
<i>repetitor (репетитор)</i>			
repetitorka (репетиторка)	-k (-к)	0	0,000125304
repetitoressa (репетиторесса)	-ess (-есс)	0	0
<i>direktor (директор)</i>			
direktorka (директорка)	-k (-к)	0	0,005074806
direktorshka (директоршка)	-sh (-ш), -k (-к)	0	0
direktrissa (директрисса)	-iss (-исс)	0,018650218	0,01428464
<i>prepodavatel' (преподаватель)</i>			
prepodavatel'nitsa (преподавательница)	-nits (-ниц)	0,786417516	0,538869245
prepodka (преподка)	-k (-к)	0	0,00031326
prepodsha (преподша)	-sh (-ш)	0	0,022554695
<i>spiker (спикер)</i>			
spikerka (спикерка)	-k (-к)	0	0,000125304
spikersha (спикерша)	-sh (-ш)	0	0,000814475
<i>organizator (организатор)</i>			
organizatorka (организаторка)	-k (-к)	0	0,001002431
organizatorsha (организаторша)	-sh (-ш)	0,012433479	0,005450718
<i>muzykant (музыкант)</i>			
muzykantka (музыкантка)	-k (-к)	0,00310837	0,006641105
muzykantsha (музыкантша)	-sh (-ш)	0,428955009	0,028506628

The first important feature that is worth mentioning is the attempt to create other feminine nouns while there are words that are used by native speakers in their everyday life. These are *aktrisa*, *tantsovshchitsa* (*актриса*, *танцовщица*) and some others. They having ipm frequencies more than 1, it means that they and their word-formation models are rather stable in the Russian language. Nonetheless, new models can be also used. For example, here is an example from the Russian National Corpus: *Moya doch — aktyorka?! Ub'yu! Idi von v stayku, Zor'ku pochist'...* (Моя дочь — актёрка?! Убью! Иди вон в стайку, Зорьку почисть...).

As for the most often-used morphemes, they are *-k* (-к) and *-sh* (-ш). According to the reference of N.Yu. Shvedova, these suffixes are added to the word of the masculine gender that have *-r*, *-l*, *-n*, and *-nt* (-р, -л, -н и -нт) at the end of stems or that don't have any suffixes. Of course, we can track some deviations. For example, let's consider *prepodka* (*преподка*) and *prepodsha* (*преподша*). The compatibility of the stem ending with *-d* (-д) and the *-sh* (-ш) suffix is out of the rule. They are added to

the short colloquial form of the *prepodavatel'* (*преподаватель*) word and have stylistically reduced meanings. Mind the following sentences from the Araneum Russicum III Maximum corpus.

- A **prepodka** na kursakh tak ne dumaet (А **преподка** на курсах так не думает).
- Akhakhakhakha, **prepodsha** teper' menya dazhe ne dostayot na parakh (Ахахahaha, **преподша** теперь меня даже не достаёт на парах).

Basing on Shvedova's reference book, we can distinguish two different linguistic situations of the use of *-k* (*-к*) and *-sh* (*-ш*). At the same time, based on Table 1, we can analyze the statistical difference between these suffixes. For example, let's overview some ipm frequencies from the Araneum Russicum III Maximum corpus. There are 24 pairs of words for which one can use both *-k* (*-к*) and *-sh* (*-ш*). We can use t-test to check whether our datasets are significantly different from each other or not.

$$t = \frac{|M_1 + M_2|}{\sqrt{\frac{s_1^2}{N_1} + \frac{s_2^2}{N_2}}} = \frac{|0,2 + 0,017|}{\sqrt{\frac{0,88}{24} + \frac{0,0008}{24}}} = 1,13 \quad (1)$$

With a threshold value of $p = 0,05$ and a degree of freedom df that is equal to 46, we can find the critical value according to the t-distribution table: $t_{cr} = 2,013$. As t is less than t_{cr} , there are no significant differences in the usage of the suffixes, that's why we can consider them interchangeable in the contemporary word-formation process of feminines.

There are also feminine nouns to which native speakers add the *-iss* (*-исс*) suffix that is another option of the *-ess* (*-есс*) suffix: *avtrissa* (*автрисса*) and *direktrissa* (*директрисса*). The first word has no occurrences in both corpora, and the examples with the second one can be easily found.

- — A chto ty, Sanya, na zabore pisal? — sprosila **direktrissa** (— А что ты, Саня, на заборе писал? — спросила **директрисса**).
- **Direktrissa** mne ponravilas' — takaya pozhilaya dama staroy zakalki (**Директрисса** мне понравилась — такая пожилая дама старой закалки).

At the same time the word *direktrissa* (*директрисса*) can be met in the dictionaries dedicated to military and mathematical spheres. In the Russian National Corpus, there is an example of this word with another meaning: Пояснуйу: **direktrissa** — u nas eto termin, oznachayushchy napravlenie vystrela, udara ili dvizheniya (Поясню: **директрисса** — у нас это термин, обозначающий направление выстрела, удара или движения). Nowadays people get used to using another derivational model with the *-is* (*-ис*) suffix – *direktrisa* (*директриса*). This word has more occurrences in both corpora, but it is not widely used in feminine communities on VKontakte social network.

There are also two feminine nouns that should be mentioned: *politikessa* (*политикесса*) and *politessa* (*политесса*). Although the suffix is the same, different stems are used: *polit-* (*полит-*) and *politik-* (*политик-*). The same situation is with the *bloginya* (*блогиня*) word, as the suffix is not added to the masculine profession.

All the feminines mentioned above can be demonstrated with the help of the Google Ngram Viewer corpus. The Russian 2019 corpus was used. The horizontal axis of graphs shows the years within a given period. The vertical axis shows the relative frequency of occurrence in the corpus. Below we present some of the diagrams.

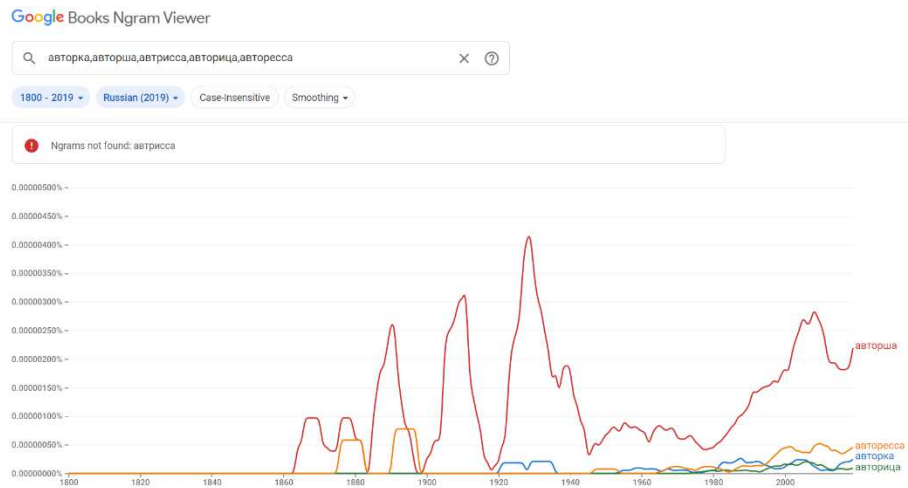


Diagram 5: Tracking trends in the use of word-formation models for the word *avtor* (*автор*)

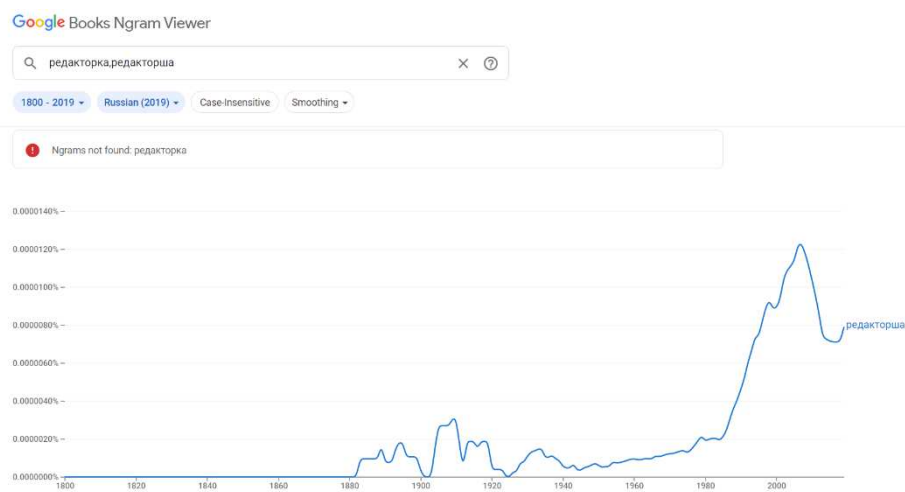


Diagram 6: Tracking trends in the use of word-formation models for the word *redaktor* (*редактор*)

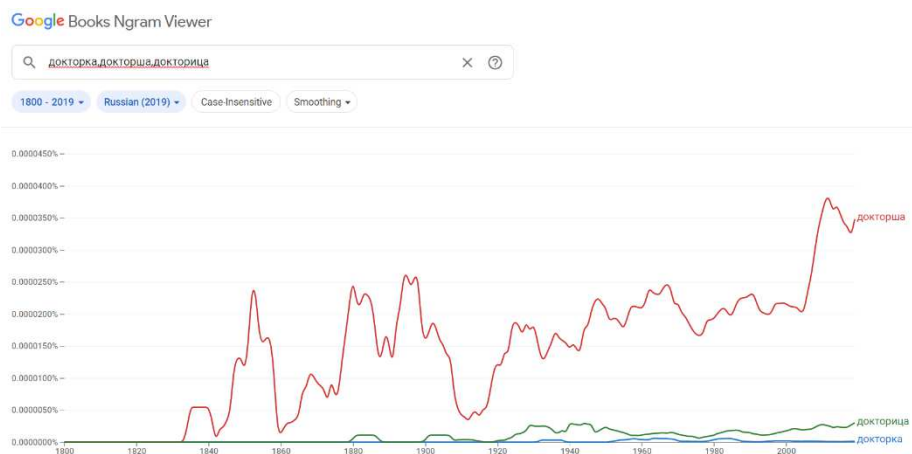


Diagram 7: Tracking trends in the use of word-formation models for the word *doktor* (*доктор*)

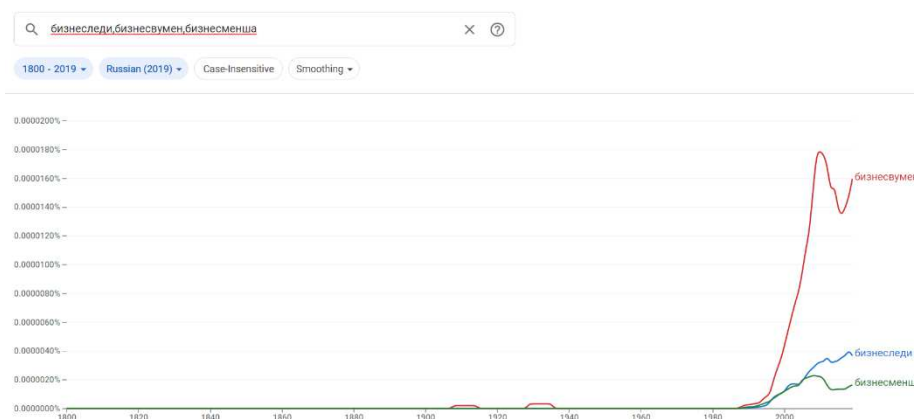


Diagram 8: Tracking trends in the use of word-formation models for the word *biznesmen* (*бизнесмен*)

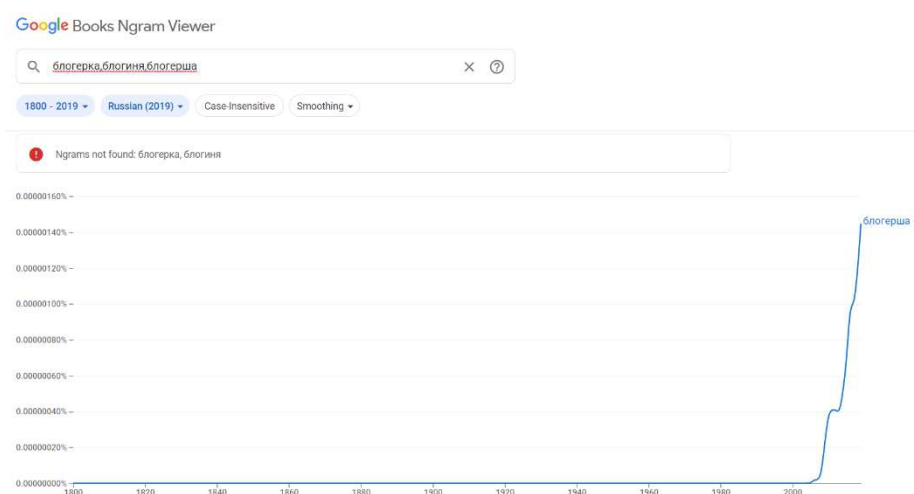


Diagram 9: Tracking trends in the use of word-formation models for the word *bloger* (*блогер*)

As the Google Ngram Viewer corpus contains only printed sources, it doesn't reflect the usage of feminines on the Internet. As a result, it leads to the absence of some feminines in the corpus. Nonetheless, we can highlight some results. The most productive word-formation model is using *-sh (-ш)* suffix that can be also proved by the previous corpus statistics. The *biznesvumen* (*бизнесвумен*) word can be also met in the printed sources in the first third of the XX century (for example, in a book titled *Strana gospoda boga* (*Страна господа бога*) that was first published in 1932). It shows that feminine noun can be also formed by using a foreign feminine word without adding any suffixes to the masculine one.

6. Conclusion

Word formation of feminines is still a controversial issue among linguists and ordinary native speakers. The traditional approach to analysis is interpreting feminines in terms of morphological and stylistic features. However, it does not include statistical indicators. The present study of feminine nouns in Russian corpora allowed us to reveal productive word-formation models and deviations from the traditional rules basing on the frequencies. Among the main results, the following ones should be noted:

- the statistical data do not show large deviations in using feminines with suffixes *-k (-к)* and *-sh (-ш)*, which can mean their interchangeability in most cases;
- adding suffixes to feminines is possible not only for masculine professions, but also for nouns denoting general concepts: *blog*, *politika* (*блог*, *политика*), etc.;
- the *-iss (-исс)* suffix is a variant of the *-ess (-есс)* suffix that can also be found in contemporary feminine nouns;
- sometimes the suffixes that are used for forming feminines can be used for forming nouns of other meanings, so the corpora statistics should always be carefully analyzed;

- web corpora (for example, Araneum Russicum III Maximum) allow scholars to track tendencies on the Internet while others allow to track tendencies in printed sources, mass media and everyday life.

Of course, this paper is a preliminary research for further studies on feminitives in the Russian corpora. The following experiments may relate to the extension of the list of feminitives by involving other communities and social networks and the extension of the used corpora (ruTenTen from Sketch Engine and others).

7. References

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