

# **Second-grade diminutives in Czech and Slovak: A contrastive study with data from corpora**

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# What this study is about

- **Diminutivization**, specifically the formation and use of second-grade diminutives:

Cz / Pl *dom* ‘house’ →

→ DIM1 *dom-ek* ‘small house’ →

→ DIM2 *dom-eč-ek* ‘very small house’

DIM1 – first grade diminutive ‘small X’

DIM2 – second grade diminutive ‘very small X’

- In the literature, diminutives with two diminutive suffixes (DIM1-DIM2) can be found under **second-grade**, **secondary** or **double diminutives**.

# Hypocoristic nouns (I)

- Suffixes used for derivation of diminutives are also found in **hypocoristic nouns**. We used the term for nouns that do not necessarily express smallness, such as the following Czech **proper names**:

*Jan* → *Jan-ek* → *Jan-eč-ek*

*Anna* → *An-ka* → *An-ič-ka*

- In examples such as these, the primary function of the diminutive suffixes is the expression of **affection**.

# Hypocoristic nouns (II)

- Proper names

Cz./Sl. *Anna* → *An-ka* → *An-ič-ka*  
(cf. *hlava* → *hláv-ka* → *hlav-ič-ka*)

- With respect to form and semantics, derivations from nouns denoting **family members** are similar to derivations from proper names :

Cz./Sl. *baba* → *bab-ka* → *bab-ič-ka*  
(compare with *Anna* and *hlava* above)

etc.

# Structure of the talk

1. Data
2. Method
3. Second-grade diminutives in Czech
4. Second-grade diminutives in Slovak
5. Comparison of the Czech and Slovak patterns for derivation of second-grade diminutives
6. Second-grade diminutives in Polish, Russian and Bulgarian
7. Comparison of the patterns found in the five languages
8. Conclusions and relevance for foreign-language learning

# 1. Data

The second grade diminutives analyzed in this study were extracted from the following corpora:

- *Czech National Corpus*, version SYN2015 (100M words)  
<https://wiki.korpus.cz/doku.php/en:cnk:uvod>
- *Slovak National Corpus*, version Prim-7.0-public-all (972M words)  
[http://korpus.sk/structure1\\_en.html](http://korpus.sk/structure1_en.html)

Both corpora were released in 2015 and are lemmatized and morphologically tagged.

## 2. Method (I)

- 1) We listed all diminutivizing suffixes (DIM1) and tried to combine them with each other to establish the suffix combinations (DIM1-DIM2) that are expected to derive second grade diminutives.
- 2) We look for DIM2 suffixes in grammars (Czech and Slovak grammars do not analyze the structure of the second-grade diminutives in terms of DIM1-DIM2 suffix combinations (Daneš et al. 1967, Dokulil 1986, Dvonč et al. 1966, Horecký 1971, Furdík 2004, a.o.)
- 3) We searched the Czech and Slovak National Corpora for words terminating in DIM1-DIM2 suffix combinations as well as for words terminating in DIM2 suffixes that are not a result of suffix combination such as e.g. *-uška*, *-enka*, etc.
- 4) The lists of all extracted forms were manually checked to ensure that the nouns found are second-grade diminutives.

## 2. Method (II)

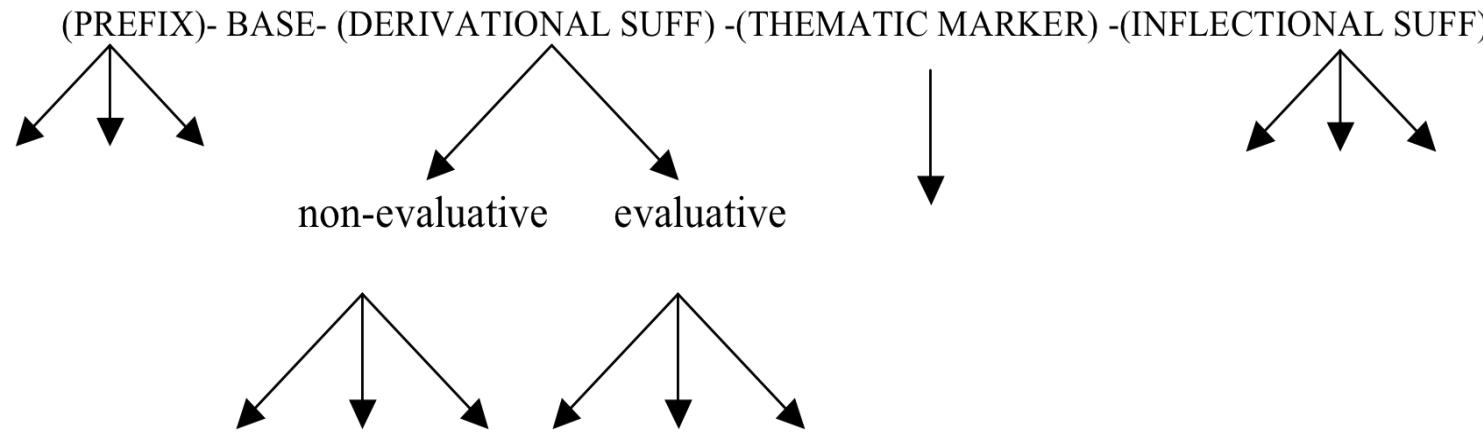
A. We distributed the data into two big groups:

1. Nouns that express smallness, i.e. common nouns
2. Nouns that do not necessarily express smallness
  - 2.1. proper names
  - 2.2. family members

B. This grouping was done for two reasons:

1. The research on second-grade diminutives in the literature is based on common nouns (assuming that proper names and family members have non-diminutive semantics and due to high frequency of use exhibit irregularities)
2. To see the nouns of which group are the most numerous in a corpus of written texts

# The structure of the Slavic word



### 3. DIM2 in Czech

#### DIM2 **-ek**

*-ek + -ek*: *rám* ‘frame’ → *rám-ek* → *rám-eč-ek*

*-ík + -ek*: *kůň* ‘horse’ → *kon-ík* → *kon-ič-ek*

#### DIM2 **-ka** (epenthetic vowel i/e)

*-ka + -ka*: *hlava* ‘head’ → *hláv-ka* → *hlav-ič-ka*

*kniha* ‘book’ → *kníž-ka* → *kníž-eč-ka*

*část* ‘part’ → *část-ka* → *část-eč-ka*

#### DIM2 **-ko** (epenthetic vowel í/i/e )

*-ko + -ko*: *slovo* ‘word’ → *slov-ko* → *slov-ič-ko*

*oko* ‘eye’ → *oč-ko* → *oč-ič-ko*

*místo* ‘place’ → *míst-ko* → *míst-eč-ko*

# Peculiar pattern (Czech)

- In the corpus data, there is only one noun that seems to have forms similar to DIM2 but derived in a different way:

*dcéra* ‘daughter’ → *dcér-ka* → *dcer-unka*

- As we will see later, nouns denoting family members exhibit peculiarities in Slovak, too.
- Note, however, that diminutive suffixes (both DIM1 and DIM2) when attached to nouns for family members do not express smallness but affection.

# 4. DIM2 in Slovak

## DIM2 **-ek**

*-ik + -ek*: *mráz* ‘frost’ → *mráz-ik* → *mráz-ič-ek*

*-ík + -ek*: *kôň* ‘horse’ → *kon-ík* → *kon-ič-ek*

*-ok + -ek*: *list* ‘leaf’ → *líst-ok* → *líst-oč-ek*

## DIM2 **-ka** (epenthetic vowels i/ô/o)

*-ka + -ka*: *hlava* ‘head’ → *hláv-ka* → *hlav-ič-ka*

*kniha* ‘book’ → *kniž-ka* → *kniž-ôč-ka*

*časť* ‘part’ → *čiast-ka* → *čiast-oč-ka*

## DIM2 **-ko** (epenthetic vowels i/ie/e/ô/o)

*-ko + -ko*: *slovo* ‘word’ → *slov-ko* → *slov-ič-ko*

*zrno* ‘corn’ → *zrn-ko* → *zrn-ieč-ko*

*kladivo* ‘hammer’ → *kladiv-ko* → *kladiv-ôč-ko*

# Peculiar patterns (Slovak)

- Family members seem to have forms corresponding to DIM2 nouns but derived in a different way:

*teta* ‘aunt’ → *tet-ka* → *tet-uška*

*dcéra* ‘daughter’ → *dcér-ka* → *dcér-enka*

*dedo* ‘grandfather’ → *ded-ko* → *ded-uško*

*mama* ‘mother’ → *mam-ka* → *mamul-iенка*

However:

*tato* ‘father’ → *tat-ko* → *tat-ič-ko* (i.e. like *slovo* → *slov-ko* → *slov-ič-ko*)

*mama* ‘mother’ → *mam-ka* → *mam-ič-ka* (i.e. like *hlava* → *hláv-ka* → *hlav-ič-ka*)

# 5. DIM2 in Czech and Slovak: A comparison

## Similarities

- Both Czech and Slovak use the same three suffixes for derivation of DIM2 nouns:  
**-ek, -ka, -ko**
- The suffixes *-ek*, *-ka* and *-ko* that serve for derivation of DIM2 nouns are all productive  
(i.e. they can attach to foreign bases)

## Differences

- Slovak uses **-ek** for derivation of DIM1 much less frequently than Czech does:  
Cz. *rám* 'frame' → *rám-ek* → *rám-eč-ek*  
Sl. *rám* 'frame' → *rám-ik* → *rám-č-ek*
- The attachment of phonologically the same DIM2 suffix does not imply the same epenthetic vowel in the two languages:  
Cz. DIM2 **-ka** (epenthetic vowel *i/e*) vs. Sl. DIM2 **-ka** (epenthetic vowels *i/ô/o*)  
Cz. DIM2 **-ko** (epenthetic vowel *i/i/e*) vs. Sl. DIM2 **-ko** (epenthetic vowels *i/ie/e/ô/o*)

## 5. DIM2 nouns in the Czech and Slovak national corpora in % (I)

- We found three types of DIM2 nouns:

	Czech (100% = 72)	Slovak (100% = 70)
1. Common nouns	86.11%	58.57
2. Proper names	8.3%	28.57
3. Family members	5.56%	12.86%

## 5. DIM2 nouns in the Czech and Slovak national corpora in % (II)

	Czech (100% = 72)	Slovak (100% = 70)
<b>1. Common nouns</b>	<b>86.11%</b>	<b>58.57</b>
2. Proper names	8.3%	28.57
3. Family members	5.56%	12.86%

- Based on these distributions, we conclude that diminutivization is indeed about smallness, i.e. the primary function of the morphological markers of diminutivization is the expression of diminutivization and not of affection

(cf. Dressler & Merlini-Barabesi (1994); Jurafsky 1996; Grandi & Körtvélyessy (2015), a.o.)

## 5. DIM2 nouns in the Czech and Slovak national corpora in % (III)

	Czech (100% = 72)	Slovak (100% = 70)
<b>1. Common nouns</b>	<b>86.11%</b>	<b>58.57</b>
2. Proper names	8.3%	28.57
3. Family members	5.56%	12.86%

- The primary function of the morphological markers of diminutivization in Czech and Slovak is the expression of smallness in common nouns
- The Polish, Russian and Bulgarian DIM1-DIM2 suffix combinations (data from the literature) in the next slides prioritize common nouns
- Thus, the cross-linguistic comparisons reported in this study are with a focus on the diminutivization of common nouns

# 6. DIM2 in Polish

## DIM2 **-ek**

*-ek + -ek: dom ‘house’ → dom-ek → dom-ecz-ek*

*-ik / yk + -ek: stół ‘table’ → stol-ik → stol-icz-ek  
kosz ‘basket’ → kosz-yk → kosz-yczek*

## DIM2 **-ka**

*-ka + -ka: rama ‘frame’ → ram-ka → ram-ecz-ka*

## DIM2 **-ko**

*-ko + -ko: sito ‘sieve’ → sitko → sit-ecz-ko*

## Unproductive patterns

*-uszek: kwiat ‘flower’ → kwiat-ek → kwiat-uszek*

*-aszek: kij ‘stick’ → kij-ek → kij-aszek*

*-uszka: paka ‘package’ → pacz-ka → pacz-uszka*

*However, there is no \*-uszko!*

# 6. DIM2 in Russian

## DIM2 **-ek**

*-ok + -ek: golos ‘voice’ → golos-ok → golos-oč-ek*

*-ek + -ek: den ‘day’ → den-ek → den-eč-ek*

*-ik + -ek: nož ‘knife’ → nož-ik → nož-ič-ek*

## DIM2 **-ka**

*-ka + -ka: igla ‘needle’ → igol-ka → igol-oč-ka*

*-ica + -ka: voda ‘water’ → vod-ica → vod-ič-ka*

*čast’ ‘part’ → čast-ica → čast-ič-ka*

*-eška + -ka: ryba ‘fish’ → ryb-eška → ryb-ešeč-ka*

## DIM2 **-ko**

*-ko + -ko: sito ‘sieve’ → sit-ko → sit-ečko*

*BUT okno ‘window’ → DIM1 **okoš-ko** → DIM2 **okoš-eč-ko***

# 6. DIM2 in Bulgarian

## DIM2 *-ence*

*-le + -ence: nos* ‘nose’ → *nos-le* → *nos-l-ence*

*-če + -ence: kräg* ‘circle’ → *kräg-če* → *kräg-č-ence*

*-ce + -ence: selo* ‘village’ → *sel-ce* → *sel-c-ence*

*-ence + -ence: dete* ‘child’ → *det-ence* → *det-enc-ence*

## DIM2 *-ica*

*-ka + -ica: kniga* ‘book’ → *kniž-ka* → *kniž-čica*

## DIM2 *-ka*

*-ica + -ka: räka* ‘hand’ → *räč-ica* → *räč-ička*

- Similar to Czech and Slovak, there are DIM1 suffixes that look like a DIM1-DIM2 combination but derive first-grade diminutives: *-ička* (*čanta* ‘bag’ → DIM1 *čant-ička*) and *-čica* (*sol* ‘salt’ → DIM1 *sol-čica*).

## 7. Comparison (I)

- The **default rules** for diminutivization of (derivation of DIM1 from) common nouns in the five Slavic languages are phonologically-based:
  1. nouns in *-C* select DIM1 suffixes in *-C* or *-e* (in Bg.)
  2. nouns in *-a* select DIM1 suffixes in *-a*
  3. nouns in *-o/-e* select DIM1 suffixes in either *-o* or *-e*
- **Exceptions** to these rules are based on gender, i.e. feminine nouns in *-C* and *-e* select DIM1 suffixes in *-a*, e.g.:
  - R. *čast'* 'part' → DIM1 *čast-ica*
  - Cz. *chvíle* 'moment' → DIM1 *chvíl-ka*

## 7. Comparison (II)

- The derivation of DIM2 is even more regular:
  1. DIM1 nouns in *-C* receive DIM2 suffixes in *-C*
  2. DIM1 nouns in *-a* receive DIM2 suffixes in *-a*
  3. DIM1 nouns in *-e* receive DIM2 suffixes in *-e*
- Based on easiness of processing (Hay 2003), research in psycholinguistics provides an explanation of the observed difference in the attachment of DIM1 and DIM2 suffixes: **the more farther away the suffix from the root, the more productive and regular that suffix.**

## 7. Comparison (III)

The five languages, Czech, Slovak, Polish, Russian and Bulgarian, have specialized three suffixes each for derivation of DIM2 nouns:

Cz.: *-ek, -ka, -ko*

Sl.: *-ek, -ka, -ko*

Pl: *-ek, -ka, -ko*

R.: *-ek, -ka, -ko*

Bg.: *-ka, -ica, -ence*

## 7. Comparison (IV)

- All DIM2 suffixes in the five languages **but -ek** in Slovak are the default suffixes for derivation of DIM1 nouns
- All DIM2 suffixes **but the Slovak -ek** are productive DIM1 suffixes

Cz.: *-ek, -ka, -ko*

Sl.: *-ek, -ka, -ko*

Pl: *-ek, -ka, -ko*

R.: *-ek, -ka, -ko*

Bg.: *-ka, -ica, -ence*

## 7. Comparison (V)

- With respect to the set of DIM2 suffixes used in each language, the East Slavic language Russian patterns with the West Slavic languages:

Cz.: *-ek, -ka, -ko* (West Slavic)

Sl.: *-ek, -ka, -ko* (West Slavic)

Pl: *-ek, -ka, -ko* (West Slavic)

**R.: *-ek, -ka, -ko (East Slavic)***

Bg.: *-ka, -ica, -ence* (South Slavic)

## 7. Comparison (VI)

- The set of DIM2 suffixes used in the South Slavic Bulgarian significantly differs from the sets of DIM2 suffixes of the other languages under scrutiny in this study

Cz.: **-ek, -ka, -ko** (West Slavic)

Sl.: **-ek, -ka, -ko** (West Slavic)

Pl: **-ek, -ka, -ko** (West Slavic)

R.: **-ek, -ka, -ko** (East Slavic)

Bg.: **-ka, -ica, -ence** (South Slavic)

## Conclusions: Constraints on the DIM2 suffix attached

- **Phonological:** the suffix must have a particular phonological make-up
- **Morphological:** the combinations of suffixes (DIM1-DIM2) are fixed and to some extent resemble templatic affix ordering, i.e. only particular suffixes can be placed in the DIM2 subslot of the Slavic noun and these suffixes never co-occur in that subslot
- **Psycholinguistic:** only productive diminutive suffixes are used in DIM2 nouns

Thank you!

# Selected references

- DRESSLER, Wolfgang U., MERLINI-BARABESI, Lavinia (1994): *Morphopragmatics: diminutives and intensifiers in Italian, German, and other languages.* - Berlin-New York: Mouton de Gruyter.
- GRANDI, N., & L. KÖRTVÉLYESSY (Eds.), (2015). *The Edinburgh handbook of evaluative morphology.* Edinburgh: Edinburgh University Press.
- GREGOVÁ, Renáta. 2015. Slovak. In Grandi, Nicola and Livia Kortvelyessy (eds.), *Edinburgh Handbook of Evaluative Morphology*, 296 - 305. Edinburgh: Edinburgh University Press.
- HAY, Jennifer (2003) *Causes and consequences of word structure.* New York: Routledge.
- JURAFSKY, D. (1993). Universals in the semantics of the diminutive. *Proceedings of the Nineteenth Annual Meeting of the Berkeley Linguistics Society*, 19(1), 423–436.
- JURAFSKI, Daniel (1996). Universal Tendencies in the Semantics of the Diminutive. - *Language* 72 (3): 533-578.
- MANOVA, Stela. 2015. Affix order and the structure of the Slavic word. In Manova, Stela (ed.), *Affix ordering across languages and frameworks*, 205-230. New York: Oxford University Press.
- MANOVA, Stela (2010): Suffix Combinations in Bulgarian: Parsability and Hierarchy-Based Ordering. - *Morphology* 20 (1): 267-296.
- Manova, Stela and Mark Aronoff. 2010. Modeling Affix Order. *Morphology* 20: 109-131.
- MANOVA, Stela and WINTERNITZ, Kimberley (2011): Suffix order in double and multiple diminutives: with data from Polish and Bulgarian. - *Studies in Polish Linguistics* 6: 115-138.
- MERLINI BARBARESI, L. (2015). Evaluative morphology and pragmatics. In N. Grandi, & L. Körtvélyessy (Eds.), *The Edinburgh handbook of evaluative morphology* (pp. 32–42). Edinburgh: Edinburgh University Press. Addresses the pragmatics of evaluative morphology.
- SCALISE, Sergio (1984): *Generative Morphology.* - Dordrecht: Foris.
- SZYMANEK, Bogdan, DERKACH, Tetyana (2005): Constraints on the derivation of double diminutives in Polish and Ukrainian. - *Studies in Polish Linguistics* 2, 93-112.
- WIERZBIZKA, Anna (1984): Diminutives and depreciatives: Semantic representation for derivational categories. - *Quaderni di Semantica* 5, 123-130.

# Selected references (Czech & Slovak)

- Dvonč, L. – G. Horák – F. Miko – J. Mistrík – J. Oravec – J. Ružička – M. Urbančok (1966), *Morfológia slovenského jazyka*, Bratislava: Slovenské pedagogické nakladateľstvo.
- Furdík, J. (2004), *Slovenská slovotvorba*, ed. M. Ološtiak, Prešov: Náuka.
- Hayeková, M. (1956), ‘Deminutíva v slovníku, ich štylistické označenie a využitie’, in *Slovenská reč* 1-2, XXI : 76–79.
- Horecký, J. (1959), *Slavotvorná sústava slovenčiny*, Bratislava: Vydavateľstvo SAV.
- Horecký, J. (1971), *Slovenská lexikológia. I. Tvorenie slov*, Bratislava: Slovenské pedagogické nakladateľstvo.
- Ondrus, P. – J. Horecký – J. Furdík (1980), *Súčasný slovenský spisovný jazyk. Lexikológia*, Bratislava: Slovenské pedagogické nakladateľstvo.
- Štolc, J. (1958), ‘K morfológii deminutív v slovenčine’, in *Jazykovedné štúdie III*: 19– 81.
- Trnková, J. (1991), ‘O substantívnej deminutívnej derivácii v slovenčine’, in *Slovenská reč*, 56, č. 2, pp. 87–95.
- Zelinková, K. (1993), ‘Sústava slovenských deminutív’, in *Zborník k 11. medzinárodnému zjazdu slavistov*, Nitra: Vysoká škola pedagogická, pp. 28–44.
- Daneš, František – Dokulík, Miloš – Kuchař – Jaroslav: *Tvoření slov v češtině 2. Odvozování podstatných jmen*. Praha: Academia, 1967. 779 s.
- Dokulil, Miloš a kol. *Mluvnice češtiny (1). Fonetika, fonologie, morfologie a morfemika, tvoření slov*. Praha: Academia, 1986. 566 s.
- Trávníček, František. *Mluvnice spisovné češtiny. Část 1. Hláskosloví, tvoření slov, tvarosloví*. Praha: Slovanské nakladatelství, 1951. 611 s.
- Štícha, František (1978). Naše řeč, ročník 61 (3): 113-127.