The concept of young animal (Proto-Slavic *nt-stems) and diminutivization in modern Slavic languages

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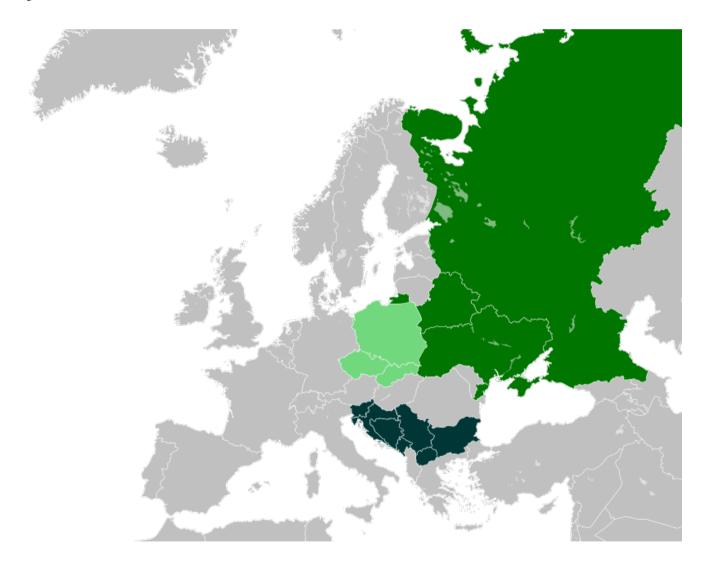
The Slavic family: History

 The Slavic languages have a common ancestor, *Proto-Slavic*, which is an unattested, reconstructed proto-language.

Proto-Indo-European → Proto-Balto-Slavic →

- → Proto-Slavic (c. 1500 BC 500 AD) →
- → Common Slavic (c. 500 1000 AD) →
- → East / West / South Slavic (since around 1000 AD)

East, West and South Slavic



Source: https://commons.wikimedia.org/wikiFile:Slavic_europe.svg

The origin of diminutives

- a diachronic link between diminutive suffixes and linguistic items expressing the relation between 'the adult and the young' (Grandi, 2011)
- the nature and the origin of diminutives in Slavic can be explained by the so-called *nt-stems in Proto-Slavic (cf. nt-stems in Old Church Slavic, see Manova 2005, 2011)
- Ivanova-Mircheva & Xaralampiev (1999) assumed that in colloquial Old Bulgarian (Old Church Slavic) all diminutives belonged to the *nt*-stems (however, see Lunt 2001 for suffixes for young masculine animals as well as our examples from Serbian and the West Slavic languages)

The paradigm of the nt-stem noun **отроча** 'child' -**AT-** < -**ent-**, in the nominative simplifies to -**A**

(Old Church Slavonic Online: https://lrc.la.utexas.edu/eieol/ocsol/50#grammar_1000)

Singular	Dual	Plural
отроч-м	*отроч-ат-ѣ	*отроч-ат-а
отроч-м	*отроч-ат-ѣ	*отроч-ат-а
отроч-ат-€	*отроч-ат-оу	отроч-ат-ъ
отроч-ат-€	*отроч-ат-оу	отроч-ат-ьхъ
*отроч-ат-и	*отроч-ат-ьма	*отроч-ат-ьмъ
*отроч-ат-ьмь	*отроч-ат-ьма	*отроч-ат-ъі
отроч-м	*отроч-ат-ѣ	*отроч-мт-а
	отроч-м отроч-м отроч-мт-є отроч-мт-є *отроч-мт-и	отроч-м *отроч-мт-ѣ отроч-м *отроч-мт-ѣ отроч-мт-є *отроч-мт-оу отроч-мт-є *отроч-мт-оу *отроч-мт-и *отроч-мт-ьма *отроч-мт-ьма

*nt-stem nouns in modern Slavic languages

 The old *nt-stems are visible in the plural forms of young animals in modern Slavic languages:

Bg. pras-e 'pig' – pras-eta
R. paras-ënok 'pig' – paras-jata
Cz. pras-e 'pig' – pras-ata

Goals

- to contribute to the better understanding of diminutivization as a morphological process
- to contribute to the research on *the relation between derivation and inflection* (**nt*-stems are an inflectional pattern, diminutives in modern Slavic languages are (non-prototypical) derivation, cf. Dressler 1989, a.o.)
- to contribute to the better understanding of the nature of derivational paradigms
- to show that a contrastive analysis of closely genealogically related languages is worth pursuing, this even in a very limited domain such as the derivation of young and small animals

Data

East Slavic

Russian (Dmitri Sitchinava) Ukrainian (Maria Shvedova) Belorussian (Uladzimir Koščanka)

West Slavic

Polish (Iwona Burkacka) Czech (Renáta Gregová) Slovak (Renáta Gregová)

South Slavic

Bulgarian (Stela Manova) Macedonian (Ljupco Spasovski) Serbian (Milena Mihajlović)

Method

- 50 nouns for animals from each language as well as the respective nouns for young animals, diminutives of animals and diminutives of young animals
- The 50 nouns for animals were distributed into the following semantic groups:
 - 1. Domestic animals
 - Wild animals
 - 3. Exotic animals
 - 4. Birds
 - 5. Insects
- To make the data comparable and easily analyzable, we ordered all examples in all languages paradigmatically (derivational paradigms)

South Slavic: Domestic animals

! in most cases small animal (DIM) = young animal

English translat ion	Animal	Small animal = DIM	Young animal	DIM of young animal
rabbit	Bg. zaek M. zajak S. zec	zajč-e zajč-e / zajač-e zeč-ić	zajč-e zajč-e / zajač-e zeč-ić	zajč-ence zajč-ence / zajač-ence zeč-ić
donkey	B. magare M. magare-nce S. magarac	magar-ence magar-ence	magar-ence magar-ence	magar-ence-nce magare-nce magar-ence
turkey	B. pujka M. misirka S. ćur-ka	pujč-ica misir-če ćurk-ica	pujč-e misir-če ćur-e	pujč-ence misirč-ence ćur-ence
cat	Bg. kotka M. mačka S. mačka	kot-e mač-e mačk-ica	kot-e mač-e mač-e	kot-ence mač-ence mač-ence

South Slavic: Exotic animals

! small animal (DIM) = young animal

English translation	Animal	Small animal = DIM	Young animal	DIM of young anima
elephant	Bg. slon M. slon S. slon	slon-če slon-če slon-če / slon-čić	slon-če slon-če slon-če / slon-čić	slonč-ence slonč-ence slon-če / slon-čić
lion	Bg. lǎv	lăv-če	lăv-če	lăvč-ence
	M. lav	lav-če	lav-če	lavč-ence
	S. lav	lav-ić	lav-ić	lav-ić
tiger	Bg. tigår	tigăr-če	tigăr-če	tigărč-ence
	M. tigar	tigar-če	tigar-če / tigre	tigar-če / tigr-ence
	S. tigar	tigr-ić	tigr-ić	tigr-ić

South Slavic: Summing up

- For the majority of the nouns denoting animals, South Slavic languages do not make a distinction between small (DIM) and young animals, that is:
- young animals = inflectional diminutives
 - with the suffix -e (this is especially true for Bulgarian and Macedonian, e.g. zajč-e young rabbit & rabbit-DIM' in both languages
- young animals = diminutives proper, i.e. derivational diminutives
 - with the suffix -če in Bulgarian, Macedonian and Serbian, e.g. slon 'elephant' → young animal / DIM slon-če
 - with the suffix -(č)ić in Serbian, thus two forms slon-če and slon-čić
- Diminutives from young animals are derived by the suffix -ence in most cases (the rule is without exceptions in Bulgarian)
 - ! The very productive diminutive suffix **-ence** is related to the thematic marker -nt.

East Slavic

! Each language derives young animals uniformly

English translati on	Animal	DIM of animal	Young animal	DIM of young animal
elephant	R. slon	slon-ik	slon-ënok	slonënoč-ek
	Bl. slon	slon-ik / slon-ičak	slan-iania / slan-ianio	slanian-iatka
	U.slon	slon-yk	slon-en'a	slonen'-atko
lion	R. lev	*	ľv-ënok	ľvënoč-ek
	Bl. lieŭ	*	(i)Íviania / (i)Ívianio	(i)Ívianiatka
	U. lev	lev-yk	lev-en'a	leven'-atko
tiger	R. tigr	tigr-ik	tigr-ënok	tigrënoč-ek
	Bl. tyhr	tyhryk (rare)	tyhr-ania / tyhr.anio	tyhran-iatka
	U. tyhr	tyhr-yk	tyhr-en'a	yhren'-atko

East Slavic: Russian

! derives young animals by -onok / -ënok

English translati on	Animal	DIM of animal	Young animal	DIM of young animal
elephant	R. slon	slon-ik	slon-ënok	slonënoč-ek
	Bl. slon	slon-ik / slon-ičak	slan-iania / slan-ianio	slanian-iatka
	U.slon	slon-yk	slon-en'a	slonen'-atko
lion	R. lev		ľv-ënok	ľvënoč-ek
	Bl. lieŭ		(i)Ĺviania / (i)ĺvianio	(i)Ívianiatka
	U. lev	lev-yk	lev-en'a	leven'-atko
tiger	R. tigr	tigr-ik	tigr-ënok	tigrënoč-ek
	Bl. tyhr	tyhryk (rare)	tyhr-ania / tyhr.anio	tyhran-iatka
	U. tyhr	tyhr-yk	tyhr-en'a	tyhren'-atko

East Slavic: Russian

! derives young animals by -onok / -ënok

English translati on	Animal	DIM of animal	Young animal	DIM of young animal
elephant	R. slon	slon-ik	slon-ënok	slonënoč-ek
lion	R. lev	*	ľv-ënok	ľvënoč-ek
tiger	R. tigr	tigr-ik	tigr-ënok	tigrënoč-ek

East Slavic: Belorussian

! derives young animals by -iania & -ianio

English translati on	Animal	DIM of animal	Young animal	DIM of young animal
elephant	R. slon	slon-ik	slon-ënok	slonënoč-ek
	Bl. slon	slon-ik / slon-ičak	slan-iania / slan-ianio	slanian-iatka
	U.slon	slon-yk	slon-en'a	slonen'-atko
lion	R. lev	*	ľv-ënok	ľvënoč-ek
	Bl. lieŭ	*	(i)ĺv-iania / (i)ĺv-ianio	(i)Ívianiatka
	U. lev	lev-yk	lev-en'a	leven'-atko
tiger	R. tigr	tigr-ik	tigr-ënok	tigrënoč-ek
	Bl. tyhr	tyhryk (rare)	tyhr-ania / tyhr-anio	tyhran-iatka
	U. tyhr	tyhr-yk	tyhr-en'a	tyhren'-atko

East Slavic: Belorussian

! derives young animals by -iania & -ianio

English translati on	Animal	DIM of animal	Young animal	DIM of young animal
elephant	Bl. slon	slon-ik / slon-ičak	slan-iania / slan-ianio	slanian-iatka
lion	Bl. lieŭ	*	(i)ĺv-iania / (i)ĺv-ianio	(i)Ívianiatka
tiger	Bl. tyhr	tyhryk (rare)	tyhr-ania / tyhr-anio	tyhran-iatka

East Slavic: Ukrainian

! derives young animals by -(en)'a

English translati on	Animal	DIM of animal	Young animal	DIM of young animal
elephant	R. slon	slon-ik	slon-ënok	slonënoč-ek
	Bl. slon	slon-ik / slon-ičak	slan-iania / slan-ianio	slanian-iatka
	U.slon	slon-yk	slon-en'a	slonen'-atko
lion	R. lev	*	ľv-ënok	ľvënoč-ek
	Bl. lieŭ	*	(i)Ĺviania / (i)ĺvianio	(i)Ívianiatka
	U. lev	lev-yk	lev-en'a	leven'-atko
tiger	R. tigr	tigr-ik	tigr-ënok	tigrënoč-ek
	Bl. tyhr	tyhryk (rare)	tyhr-ania / tyhr.anio	tyhran-iatka
	U. tyhr	tyhr-yk	tyhr-en'a	tyhren'-atko

East Slavic: Ukrainian

! derives young animals by -(en)'a

English translation		DIM of animal	Young animal	DIM of young animal
elephant	U.slon	slon-yk	slon-en'a	slonen'-atko
lion	U. lev	lev-yk	lev-en'a	leven'-atko
tiger	U. tyhr	tyhr-yk	tyhr-en'a	tyhren'-atko

East Slavic

! diminutives of animals ≠ young animals

English translati on	Animal	DIM of animal	Young animal	DIM of young animal
elephant	R. slon	slon-ik	slon-ënok	slonënoč-ek
	Bl. slon	slon-ik / slon-ičak	slan-iania / slan-ianio	slanian-iatka
	U.slon	slon-yk	slon-en'a	slonen'-atko
lion	R. lev	*	ľv-ënok	ľvënoč-ek
	Bl. lieŭ	*	(i)Ĺviania / (i)ĺvianio	(i)Ívianiatka
	U. lev	lev-yk	lev-en'a	leven'-atko
tiger	R. tigr	tigr-ik	tigr-ënok	tigrënoč-ek
	Bl. tyhr	tyhr-yk (rare)	tyhr-ania / tyhr.anio	tyhran-iatka
	U. tyhr	tyhr-yk	tyhr-en'a	tyhren'-atko

East Slavic: Summing up

- East Slavic languages keep young animals and small animals (i.e. diminutives) apart and both groups of nouns follow different derivational patterns
- Only one suffix (-onok / -ënok) for derivation of young animals in Russian; two suffixes, -iania and -ianio, in Belorussian; and -(en)'a in Ukrainian
- ! The Russian suffix **-onok** / **-ënok** can also derive diminutives, more precisely nouns with meanings similar to diminutives, that do not have anything to do with animals, e.g. čertënok 'imp' from čërt 'devil', povarënok, colloq. style for 'a boy assisting a cook', derived from povar 'cook' (Švedova et al. 1980: 201). However, the pattern is not really productive.
- ! Some nouns in Ukrainian that do not denote young animals use the suffix -en'a for derivation of plural diminutive forms, e.g. očen'ata 'eye-dim-pl', štanen'ata 'trousers-dim-pl', konen'ata 'horse-dim-pl, korolen'ata 'king-dim-pl', božen'ata 'God-dim-pl', etc. (based on GRAC (General Regionally Annotated Corpus of Ukrainian), see also Rodnina 1970).

West Slavic: Czech & Slovak vs Polish

English translation	Animal	Small animal = DIM	Young animal	DIM of young animal
elephant	Cz. slon Sl. slon	slůn-ek slon-ík	slon-ě slon-íča	sloň-átko sloníč-atko
	Pl. słoń	słon-ik / słon-iczek	słon-ię / słon-ik	słon-iątko / słon-iczek (rare)
lion	Cz. lev Sl. lev	lv-ík lev-ík	lv-íče lev-íča	lv-íčata levíč-atko
	Pl. lew	*	lw-ię	lw-iątko
tiger	Cz. tygr Sl. tiger	tygř-ík tigr-ík	tygř-e tigr-íča	tygř-átko tigríč-atko
	PI. tygrys	tygrys-ek	tygrys-ię / tygrys-ek	tygrys-iątko

West Slavic: Czech & Slovak

! different paradigms for small and young animals, uniform patterns for young animals

English translation	Animal	Small animal = DIM	Young animal	DIM of young animal
elephant	Cz. slon Sl. slon	slůn-ek slon-ík	slon-ě slon-íča	sloň-átko sloníč-atko
	Pl. słoń	słon-ik / słon-iczek	słon-ię / słon-ik	słon-iątko / słon-iczek (rare)
lion	Cz. lev Sl. lev	lv-ík lev-ík	lv-íče lev-íča	lv-íčata levíč-atko
	Pl. lew	*	lw-ię	lw-iątko
tiger	Cz. tygr Sl. tiger	tygř-ík tigr-ík	tygř-e tigr-íča	tygř-átko tigríč-atko
	Pl. tygrys	tygrys-ek	tygrys-ię / tygrys-ek	tygrys-iątko

West Slavic: Czech & Slovak

! different paradigms for small and young animals, uniform patterns for young animals

English translation	Animal	Small animal = DIM	Young animal	DIM of young animal
elephant	Cz. slon	slůn-ek	slon-ě	sloň-átko
	Sl. slon	slon-ík	slon-íča	sloníč-atko
lion	Cz. lev	lv-ík	lv-íče	lv-íčata
	Sl. lev	lev-ík	lev-íča	levíč-atko
tiger	Cz. tygr	tygř-ík	tygř-e	tygř-átko
	Sl. tiger	tigr-ík	tigr-íča	tigríč-atko

West Slavic: Polish

! small animal (DIM) = young animal (but two paradigms for young animals)

English translation	Animal	Small animal = DIM	Young animal	DIM of young animal
elephant	Cz. slon Sl. slon	slůn-ek slon-ík	slon-ě slon-íča	sloň-átko sloníč-atko
	Pl. słoń	słon-ik / słon-iczek	słon-ię / słon-ik	słon-iątko / słon-iczek (rare)
lion	Cz. lev Sl. lev	lv-ík lev-ík	lv-íče lev-íča	lv-íčata levíč-atko
	Pl. lew	*	lw-ię	lw-iątko
tiger	Cz. tygr Sl. tiger	tygř-ík tigr-ík	tygř-e tigr-íča	tygř-átko tigríč-atko
	Pl. tygrys	tygrys-ek	tygrys-ię / tygrys-ek	tygrys-iątko

West Slavic: Polish

! small animal (DIM) = young animal (but DIM \rightarrow young animal; two paradigms for young animals: one like in S. Slavic and one with the suffix -ie, i.e. like in W. Slavic

English translation	Animal	Small animal = DIM	Young animal	DIM of young animal
elephant	Pl. słoń	słon-ik / słon-iczek	słon-ię / słon-ik	słon-iątko / słon-iczek (rare)
lion	Pl. lew	*	lw-ię	lw-iątko (
tiger	Pl. tygrys	tygrys-ek	tygrys-ię / tygrys-ek	tygrys-iątko

Three psycholinguistic experiments

- Stimuli: 15 nouns for exotic animals from Slovak
- Participants: 60 students from P. J. Šafárik University (they were not paid for their participation)
- Method:
 - 20 participants were asked to write only the nouns for small animals, i.e. the diminutives
 - other 20 were asked to write only the nouns for young animals
 - still other 20 were asked to write both forms
- If participants did not know forms, they were asked to skip the example and leave the space blank.
- Participants wrote only one derivation per stimulus.

Stimuli used in the experiments

No	English translation	Slovak
1.	elephant	slon
2.	lion	lev
3.	leopard	leopard
4.	giraffe	žirafa
5.	hippo	hroch
6.	crocodile	krokodíl
7.	tiger	tiger
8.	bison	bizón
9.	cheetah	gepard
10.	rhinoceros	nosorožec
11.	ostrich	pštros
12.	koala	koala
13.	panda	panda
14.	cockatoo	kakadu
15.	kenguru	kengura

Results of the experiments:

Derivational paradigms seem to depend on the task

(Doublets are inflectional forms, i.e. derivational morphology is replaced by inflection!)

English	Slovak	Write DIM only	Write both forms/DIM	Write young animal only	Write both forms/young animal Doublets!
elephant	slon	sloník 20x	sloník 20x	sloníča 20x	slon-íča 16x slôň-a 1x
leopard	leopard	leopardík 19x	leopardík 17x	leopardíča 18x	leopard-íča 11x leopard'-a 2x
hippo	hroch	hrošík 19x	hrošík 20x	hrošíča 18x	hroš-íča 10x hroš-a 3x
cheetah	gepard	gepardík 20x	gepardík 20x	gepardíča 18x	gepard-íča 8x geparď-a 2x

Results: Slovak derivational paradigms for diminutives and young animals differ in terms of robustness

- Native speakers were more confident when only a single form had to be produced, i.e. a lesser number of paradigmatic gaps in the production of either young animals or diminutives
- When both forms had to be written, more alternative forms (i.e. with an existing but wrong suffix) were produced for young animals:
 - Young animals (more or less, uniform derivational pattern):
 - Task1: Write a single form 3 instances of alternative (out of 15 stimuli)
 - Task2: Write both forms 6 instances of alternative forms (out of 15 stimuli)
 - Diminutives (there are alternative patterns for derivation of diminutives, thus alternative forms were expected):
 - Task1: Write one form 4 instances of alternative forms (out of 15 stimuli)
 - Task2: Write both forms 2 instances of alternative forms (out of 15 stimuli)
- Although there are alternative patterns for derivation of diminutives and one pattern for derivation of young animals, the paradigm for young animals seems to be less robust than that for diminutives
- Transfer from DIM to young animals but not vice versa, e.g. for some speakers the diminutive koal-ka derived from koala also means 'young koala' (3x) (recall the Polish data)
- This transfer is opposite to what we observed in South and East Slavic where the forms developed from young animals to diminutives.

Conclusions

- There does exist a relation between the concept of young animal and dimunityization but it is different in the different Slavic languages.
- In South Slavic and in Polish, young animal = small animal, i.e. DIM.
- In Russian and Ukrainian young and small animals have different derivational paradigms but the suffixes for young animals can be used for derivation of diminutives from nouns which do not mean animals. The process is not really productive in Russian.
- In Czech and Slovak, the two paradigms, young animals and small animals, differ and one cannot use the suffixes for derivation of young animals as diminutivizers.
- Three psycholinguistic experiments with native speakers of Slovak showed that
 the paradigm for derivation of young animals in Slovak is less robust than that
 for derivation of diminutives, i.e. in Slovak, the suffix transfer seems to be from
 diminutives to young animals (i.e. like in Polish), which is thus entirely in contrast
 to what was observed in South and East Slavic languages.
- Researching derivational morphology in terms of (parallel) paradigms can be very insightful, both from a language-specific and from a cross-linguistic perspective. ((More) gaps in the paradigm of diminutives, recall *lion-DIM In some of the languages.)
- Against any expectation, closely genealogically related languages took completely different paths in the development of their derivational paradigms for young animals and diminutives.

Young animals and diminutives in Slavic

Young animal → DIM

- young animal = diminutive (South Slavic & Polish)
 (Polish has two patterns for derivation of young animals: one like South Slavic and one like West/East Slavic)
- suffixes for young animals derive plural diminutive nouns
 (Ukrainian)
- suffixes for young animals derive nouns related to
 smallness, i.e. DIMs (unproductive in Russian)

DIM → young animal

(Polish, Slovak)

(Young animal ≠ DIM in Czech and Belorussian; according to the informants the suffixes for young animals cannot be used as diminutivizers, but for these language additional research should be done)

Thank you!

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