# Formal Description of Slavic Languages 18 University of Wrocław, 22-24 September 2025

# Morphological borrowing from, into and within Slavic

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This talk is to a considearble extent based on

Arkadiev, Peter & Kirill Kozhanov (2023). Borrowing of morphology (with a case-study of Baltic and Slavic verbal prefixes). In: Peter Ackema et al., *The Wiley-Blackwell Companion to Morphology*.

- This talk is intended as an introduction to morphological borrowing for Slavicists, not as a comprehensive survey of the phenomenon in Slavic languages.
- While doing my best to focus on Slavic, I also give examples from typologically diverse languages where relevant.
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#### Roadmap

- Definition and examples
- Matter vs. pattern borrowing
- Direct vs. indirect affix borrowing
- Factors and parameters
- Summary

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- Borrowing is a process whereby the recipient language (RL) adopts (transfers) some elements from the source language (SL) in a situation of language contact, i.e. a sociolinguistic setting including speakers bilingual in both languages.
- Here we are interested in morphological borrowing, i.e. transfer involving bound grammatical elements (formatives, morphs), patterns of their combination and their functions.

Weinreich 1953, Thomason & Kaufmann 1988, Field 2002, Gardani 2008, 2020a, 2020b, 2021, Matras & Sakel (ed.) 2007, Johanson & Robbeets (eds.) 2012, Vanhove et al. (eds.) 2012, Gardani et al. (eds.) 2015, Arkadiev & Kozhanov 2023, Thomason (forthcoming) etc.

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• I largely abstract away from the questions related to the definition of morphology itself and its basic units such as "word", "affix" or "inflection", as well as from the recent debates on these issues.

E.g. Haspelmath 2011, 2021, 2023a, 2024, Tallman 2020, Tallman & Auderset 2023 etc.

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- Otherwise, I apply criteria I consider consistent.

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- Does any piece of SL morphology in RL qualify as morphological borrowing?
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- "International inflection"?
- (1) a. Polish muzeum ~ muzea < Latin
  - b. German Genus ~ Genera < Latin

    Lexikon ~ Lexika < Greek
  - c. English focus ~ foci < Latin

    phenomenon ~ phenomena < Greek

    cherub ~ cherubim < Hebrew

- "International inflection"?
  - peculiarities of inflection "imported" together with borrowed lexemes and confined to them ("parallel system borrowing", Kossmann 2010);
  - not only do not affect the native vocabulary, but often tend to be replaced by regular native models (cf. English lexicons vs. lexica, although cf. Bauer 2015: 73-74);
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  - often have low formal transparency.

#### Gardani (2018: 3):

- "the mere presence of foreign formatives in words of an RL does not count as morphological borrowing as long as these formatives are not integrated in the morphological system of the RL".
- only those "foreign formatives that have spread to native bases of an RL ... qualify as instances of morphological borrowing, as they have become an active part in the RL's morphological system".



www.linguistik.uzh.ch

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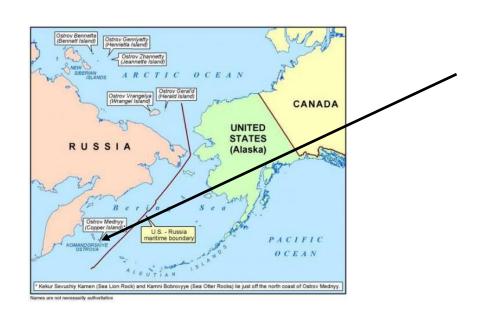
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- "International" affixes in the European languages:
- (2) a. English -age, -able, -ize, de-, ex- etc.
  - b. Polish -acja, -yzm, anty- etc.
- Such affixes are able to combine with native roots:
- (3) a. English defrost, workable
  - b. Polish *antypowieść* 'anti-novel', *Norwidyzm* (Bartnicka et al. 2004: 154, 178)

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Mednyj (Copper Island) Aleut (e.g. Golovko & Vakhtin 1990):

 the verbal inflection and a large number of lexemes are borrowed from Russian, whereas the remainder of grammar (including verbal derivation, case-marking and major syntactic structures) is Aleut.



Mednyj (Copper Island) Aleut (Sekerina 1994: 22, 24):

- (4) taana-x ni-buud-ish ukuu-t' land-ABS NEG-AUX-PRS.2SG see-INF 'You won't see the land.' (~ Rus. ne budeš videt')
- (5) uku-xta-l-ya ula-m uluyaa see-RES-PST-1SG house-OBL red 'I saw a red house.' (~ Rus. vide-l ja)

```
ABS – absolutive case; AUX – auxiliary; INF – infinitive; NEG – negation; OBL – oblique case; PRS – present tense; PST – past tense; RES – resultative; SG – singular
```

• Such bilingual mixed languages (other known cases are Media Lengua, Michif, Mbugu) emerge in very specific sociolinguistic situations characterized, first, by asymmetric bilingualism, and, second, by the creation of the new identity of an ethnolinguistic community, whose sign is the new mixed language.

Bakker & Mous (eds.) 1994, Matras & Bakker (eds.) 2003, Meakins 2016

Frank Seifart 2013:

AfBo: A world-wide survey of affix borrowing

http://afbo.info/

Also Seifart 2017



https://frankseifart.info/



http://afbo.info/

Affix function	total number of borrowed affixes		number of languages that borrowed affixes with this function		\$
Search	Search		Search		
subject/object indexing					10
nominalizer: agent		51			26
verbal TAM		51			17
nominal derivation (miscellaneous)		50			12
adjectivizer		46			19
noun class (inanimate)		45			3
nominalizer: abstract		39			12
nominalizer: miscellaneous		35			16
diminutive		34			16
number: plural		27			14
verbal derivation (miscellaneous)		21			9
case: non-locative peripheral case		20			10
numeral classifier		16			2
gender (human)		11			6
verbalizer		11			8
definite/indefinite		10			5
clause-level TAM		9			5
nominalizer: social group		9			7

http://afbo.info/

- Slavic languages in AfBo:
  - BCMS: Sl for Albanian, Istro-Romanian, Hungarian
  - Bulgarian: SL for Megleno-Romanian
  - Russian: SL for Mednyj Aleut, Hebrew, Karelian, Kola
     Saami, Lithuanian Romani, Yiddish

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  - BCMS: SI for Albanian, Istro-Romanian, Hungarian
  - Bulgarian: SL for Megleno-Romanian
  - Russian: SL for Mednyj Aleut, Hebrew, Karelian, Kola
     Saami, Lithuanian Romani, Yiddish

Not only affixal morphology can be borrowed.

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Modern Persian (Lazard 1957: 57):

(6) a. soltan 'sultan' pl. salâtin (< Arabic)
b. ostad 'master' pl. asâtid (native)
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See e.g. Coghill 2015, Souag 2020 on the borrowing of Arabic root-andpattern morphology.

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See e.g. Coghill 2015, Souag 2020 on the borrowing of Arabic root-and-pattern morphology.

#### Thomason (2015):

"[T]here is no global dispreference for morphological diffusion. In certain types of contact situations, even inflectional morphology passes readily from one language to another. ... the diffusion of inflectional features is considerably more common than one might guess from the general language-contact literature".



https://lsa.umich.edu/

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## Matter vs. pattern borrowing

Yaron Matras & Jeanette Sakel 2007: Investigating the mechanisms of pattern replication in language convergence. Studies in Language 31(4): 829–865.



www.researchgate.net



www.aai.uni-hambufg.de

Matras & Sakel (2007: 829-830):

MAT(ter)-borrowing: "direct replication of morphemes and phonological shapes from a source language"

PAT(tern)-borrowing: "re-shaping of language-internal structures" when "it is the patterns of distribution, of grammatical and semantic meaning, and of formal-syntactic arrangement ... that are modeled on an external source" without transfer of phonological substance.

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- NB nice new terms for an old distinction, cf.
  - "borrowing" vs. "calquing/interference" (Haugen 1950, Weinreich 1953);
  - "direct" vs. "indirect transfer" (Silva-Corvalán 1997);
  - "global" vs. "selective copying" (Johanson 1999, 2008).
- See Gardani (2020b) and Pakendorf (2022) for a finer-grained typology, in particular, arguments that borrowing of pure matter without the associated SL content is also possible.

- Types of morphological pattern-borrowing:
  - copying of functions, e.g. polysemy copying
  - copying of morphological structures:
    - ✓ affix types (e.g. prefixes)
    - ✓ reduplication
    - ✓ compounding
    - ✓ exponence types
    - ✓ suppletion
    - √etc.

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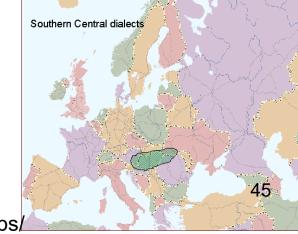
Polysemy copying (Talmy 1982; Heine & Kuteva 2005: Ch. 2; Heine 2012; Gast & van der Auwera 2012 etc.):

 extension of the range of functions/uses of a RL-element to match the range of functions/uses of a partially similar SL-element

Polysemy copying

Romungro Romani (Indo-Aryan > Romani; Romania)

- (4) a. ker-es buki ekh-e čokanoa-ha do-2SG work ART-OBL hammer-INS 'to work with a hammer' (Tenser 2016: 213)
  - b. me kerdjo-v direktoro1SG become-1SG director(NOM)'I become a director.' (Tenser 2016: 214)



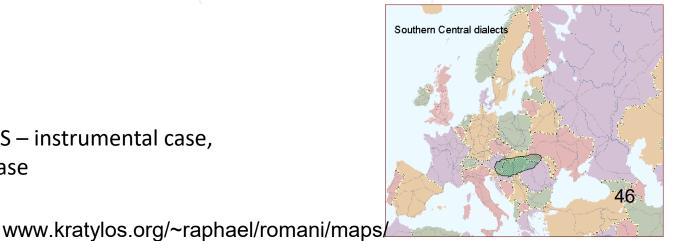
www.kratylos.org/~raphael/romani/maps/

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ker-es buki ekh-e čokanoa-<mark>ha</mark> do-2SG work ART-OBL hammer-INS 'to work with a hammer' (Tenser 2016: 213)

ART – article, INS – instrumental case, OBL – oblique case



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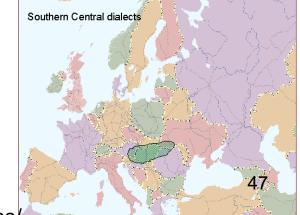
- (7) a. *ker-es buki ekh-e čokanoa-ha*do-2SG work ART-OBL hammer-INS
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'I become a director.' (Tenser 2016: 214)

predicate nominal

instrument

ART – article, INS – instrumental case, NOM – nominative case, OBL – oblique case



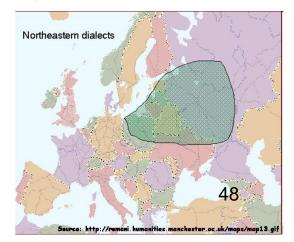
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Polysemy copying

North Russian Romani (Indo-Aryan > Romani; Russia):

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(5) a. te ker-es buty čukane-sa
COMP do-2SG work hammer-INS
'to work with a hammer' (Tenser 2016: 213)
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b. me ker-av pe dir'ektoro-sa
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 'I become a director.' (Tenser 2016: 214)



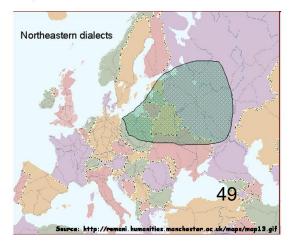
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North Russian Romani (Indo-Aryan > Romani; Russia):

(8) a. te ker-es buty čukane-sa instrument COMP do-2SG work hammer-INS 'to work with a hammer' (Tenser 2016: 213)

b. me ker-av pe dir'ektoro-sa 1SG do-1SG REFL director-INS 'I become a director.' (Tenser 2016: 214

COMP – complementiser, INS – instrumental, REFL – reflexive



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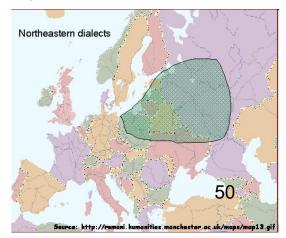
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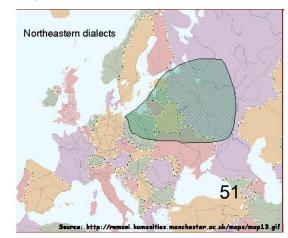
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me ker-av pe dir'ektoro-<mark>sa</mark> b. 1SG do-1SG REFL director-INS

'I become a director.' (Tenser 2016: 214)

The coexpression of instrument and predicate nominal is a typologically rare pattern



instrument

predicate

nominal

COM REFL

Polysemy copying

#### Russian

- (9) a. rabota-t' molotk-om work-INF hammer-INS 'to work with a hammer'
  - b. ja stanovlj-u-s' direktor-om 1SG.NOM become-PRS.1SG-REFL director-INS 'I become a director.'

instrument

predicate nominal

INF – infinitive, NOM – nominative, PRS – present

Polysemy copying

Pre-contact stage (≈Romungro Romani)

Contact language (Russian)

Post-contact stage (North Russian Romani)

**INS:** instrument

NOM: predicate nominal

**INS:** instrument

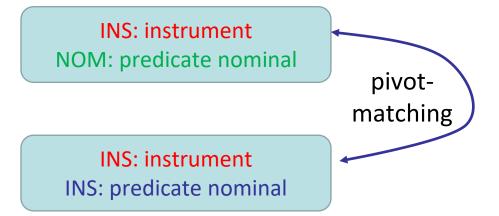
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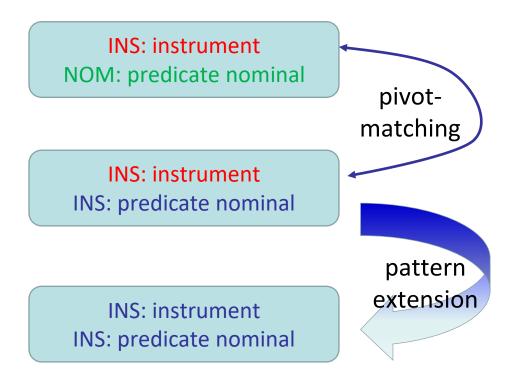


Polysemy copying

Pre-contact stage (≈Romungro Romani)

Contact language (Russian)

Post-contact stage (North Russian Romani)



 Polysemy copying is a widespread and well-documented phenomenon in the domain of Slavic verbal prefixation.

Arkadiev 2014, 2015, 2017, Arkadiev & Kozhanov 2023, with references

- Slavic as SL: e.g. influence on Eastern Yiddish preverbs (Wexler 1964, 1972, Talmy 1982, Shishigin 2015 etc.)
- Slavic as RL: e.g. influence from German onto Sorbian and other minority languages (Wexler 1972, Toops 1992, Bayer 2006 etc.).

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 Pattern-borrowing of morphological structures of different kind is also attested, both cross-linguistically and in the Slavic area.

 Copying of Turkic m-reduplication into Balkan Slavic (Grannes 1996; Friedman & Joseph 2025: 301-304):

```
(10) a. etek 'skirt' etek-metek 'skirt(s) and the like' b. kapı 'door' kapı-mapı 'door(s) and the like'
Friedman & Joseph (2025: 302):
(11) Bulgarian: knigi-migi 'books and such'
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#### (13) Standard Lithuanian

	masculine	feminine
Nominative	jis	ji
Genitive	jo	jos
Dative	jam	jai
Accusative	jį	ją
Instrumental	juo	ja
Locative	jame	joje

 Borrowing of suppletion in third person pronouns between East Slavic and Eastern Lithuanian dialects (Hill 2015).

#### (14) Eastern Lithuanian

	masculine	feminine
Nominative	anas	ana
Genitive	jo	jos
Dative	jam	jai
Accusative	jį	ją
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 Borrowing of suppletion in third person pronouns between East Slavic and Eastern Lithuanian dialects (Hill 2015).

#### (15) Belarusian

	masculine	feminine
Nominative	jon	jana
Genitive	jaho	jaje
Dative	jamu	joj
Accusative	jaho	jaje
Instrumental	im	joju
Locative	im	joj

- Balkan Slavic bound object pronominals:
  - a shift from Wackernagel enclitics to verb-adjacent clitics to affixes;
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#### Affixes vs. clitics (cf. Spencer & Luís 2012, 2013):

- both are bound morphs, i.e. cannot occur in isolation;
- affixes are positioned with respect to roots, stems or words;
- clitics are positioned with respect to larger constituents (phrases or clauses).

 NB Syntactic, referential and other properties of bound elements are orthogonal to their status as affixes vs. clitics.

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Affixes vs. clitics (cf. Spencer & Luís 2012, 2013):

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```
(16) a. Ja=mu=ga često dajem.

1SG.NOM=3SG.DAT=3SG.ACC often give.PRS.1SG

'I often give it to him.' (Alexander 2000: 22)

b. Juče=si=mu=ga ti dala.

yesterday=2SG.AUX=3SG.DAT=3SG.ACC 2SG.NOM give.LF.F.SG

'It was you who gave it to him yesterday.' (ibid.)
```

A paradigm example of clitics

```
(17) a. Včera Vera mi=go=dade.

yesterday Vera 1SG.DAT=3SG.ACC=give.AOR.3SG

'Vera gave it to me yesterday.' (Alexander 1994: 3)
```

- b. Dade=mi=go včera Vera.
  give.AOR.3SG=1SG.DAT=3SG.ACC yesterday Vera
  'It was Vera who gave it to me yesterday.' (ibid.)
- c. \*Vera=mi=go včera dade.
- d. \*mi=qo=dade včera Vera.

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Standard Bulgarian: bound pronominals must be verb-adjacent, but cannot be clause-initial (Tobler-Mussafia law)

- (17) a. Včera Vera mi=go=dade.
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Position determined (in part) by the sentence-level syntax, hence still clitics.

- preposition with indicative forms (including the no longer periphrastic perfect with the former I-participle);
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(18) a. Mi-go-dade včera Vera.

1SG.IO-3SG.DO-give.AOR.3SG yesterday Vera

'Vera gave it to me yesterday.' (Alexander 1994: 3)
```

- b. *Donesi-mi-go!*bring.IMP.2SG-1SG.IO-3SG.DO
  'Bring it to me!'
- c. \*Dade=mi=go včera Vera.
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Macedonian: bound pronominals are verb-adjacent, and their position vrt verb is determined by the latter's inflectional form

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  'Vera gave it to me yesterday.' (Alexander 1994: 3)
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Position determined entirely by the properties of the verb itself, hence not clitics but ambifixes.

#### Cf. Aronson (1997: 33, 36):

- "the distribution of object clitics in Bulgarian is to a great extent syntactically determined"
- "The distribution of object clitics in Macedonian can be described purely on the level of morphology, with all rules relating to the inflected verbal form."
- The same reasoning applies, mutatis mutandis, to many so-called "pronominal clitics" in Romance languages (Monachesi 2005, Spencer & Luís 2012: Ch. 5), Modern Greek (Joseph 1988) and Albanian (Newmark 1955: 168-170).
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(19) a. Macedonian: mu-go-davam daj-mu-go

b. Albanian: i-a-jap jep-i-a

c. Modern Greek: tu-ton-ðino ðose-tu-ton

d. Aromanian: *lj-u-dau dă-lj-u* 

'I give it to him.' 'Give it to him!'

(Based on Alexander 2000: 13; Mišeska-Tomić 2005: 300-302; Buchholz &

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(20) a. Italian: glie-lo-do da-glie-lo

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• Other Slavic varieties in contact with Romance also no longer disallow clause-initial bound pronominals:

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(21) a. Bulgarian in Romania (Ivanova 2025: 18) gu-zea na răcete 'They took him in their arms.
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- Balkan Slavic, in particular, Macedonian, shows convergence to a pattern actually extending beyond the Balkans.
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"Balkan Slavic is typologically different from the rest of Slavic languages, and this difference is mainly explained as a result of the influence of other Balkan languages. Balkan Romance does not differ from other Romance languages so radically."

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- Head-marking (Nichols 1986; Lander & Nichols 2020; Haspelmath 2019) is susceptible to areal spread (Nichols 1992: 272-274).

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### Roadmap

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Donald Winford, 2005. Contact-induced changes: Classification and processes. *Diachronica* 22(2), 373–427.

"[C]ertain structural innovations in an RL appear to be mediated by lexical borrowing, and are therefore not clear cases of direct structural borrowing".



https://linguistics.osu.edu/

Frank Seifart, 2015.

Direct and indirect affix borrowing. Language 91(3), 511–532.

 The first (and so far the only) empirical test of this claim.



https://frankseifart.info/

• Seifart (2015a: 511) on indirect affix borrowing:

"First, a language borrows a number of complex loanwords containing an affix, and second—possibly much later—these complex loanwords come to be analyzed within the recipient language, and eventually the affix becomes productively used on native stems."

- "International" affixes such as Polish -acja, -yzm, anty- etc.
  have initially made their way into the RLs as parts of words
  containing them.
- The fact that these affixes were factored out and became productive is due to the large number of borrowed Latin and Greek words and primarily to the fact that often whole derivational paradigms rather than isolated words have been borrowed.

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Colloquial Russian
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- - b. napominator 'reminder' ~ st. napominanie
  - c. zarjažator 'charger' ~ st. zarjadnoe ustrojstvo
- Spread through children's cartoons and informal communication on the Internet.

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#### Colloquial Russian

- (22) a. pomogator 'helper' ~ standard pomoščnik
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fixiki.fandom.com/

• Seifart (2015a: 512) on direct affix borrowing:

"Under direct borrowing, an affix is recognized by speakers of the recipient language in their knowledge of the donor language and used on native stems as soon as it is borrowed, with no intermediate phase of occurring only in complex loanwords."

#### Seifart (2015a: 527ff):

- Direct and indirect modes of affix borrowing form a scale rather than a clear-cut dichotomy, with most actual cases probably involving both scenarios.
- See also Gardani 2021 for a reassessment.

Suffixes of active present participles of modern Russian:

Church-Slavonic (CS, South Slavic) -ащ-, -ущ- (-аšč-, -ušč-) instead of East Slavic -ач-, -уч- (-аč-, -uč-).

- NB Russian dialects do not know such forms, while Ukrainian and Belarusian retain the East Slavic suffixes.
- Possibly, direct affix borrowing.

See Gardiner (1973) on the role of the Kievan recension of CS and Latin and Polish interference.

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- The borrowing of participial suffixes became possible due to the following factors:
  - the early loss of productivity by the native Russian participles in -ač, -uč and their lexicalization as adjectives (cf. letučij 'able to fly' vs. letjaščij 'flying' < letet' 'fly', gorjačij 'hot' vs. gorjaščij 'burning' < goret' 'burn');</li>
  - the long period of Russian-CS diglossia, which has facilitated the transfer of CS forms into the written language, where the participles were most actively used, especially after 1650;
  - the high degree of congruency between the morphological systems of SL and RL, which has facilitated the expansion and "nativization" of the CS suffixes;
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 Morphological borrowing is determined both by structural as well as and primarily by sociolinguistic factors.

See e.g. Thomason & Kaufman 1988, Thomason 2001, 2008, 2015, Migge & Gooden (eds.) 2020 etc.

- Sociolinguistic factors include such parameters of the language contact situation as:
  - language maintenance vs. language shift;
  - dominance relations between speaker communities and languages;
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- Borrowing scale (Thomason & Kaufman 1988: 74-76):
- (1) Casual contact: lexical borrowing only.
- (2) Slightly more intense contact: borrowing of minor phonological, syntactic, and lexical semantic features.
- (3) More intense contact: derivational affixes may be abstracted from borrowed words and added to native vocabulary.
- (4) Strong cultural pressure: borrowed inflectional affixes and categories ... will be added to native words, especially if there is a good typological fit in both category and ordering.
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- Types of borrowing correlate with types of language-contact situations (Thomason & Kaufman 1988):
  - MAT-borrowing primarily occurs in situations of language maintenance;
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- However, many contact situations cannot be unequivocally described as language maintenance or language shift:
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- Structural factors that have been evoked in the study of contact-induced change:
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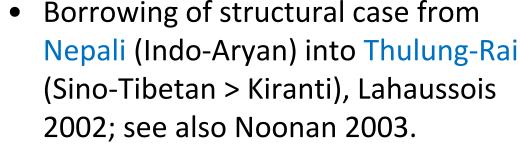
• Gardani (2008: 84, emphasis mine):

"[I]nherent inflection, i.e. the inflectional categories which are more similar to derivation, such as aspect, tense, mood, gender, number and inherent cases (72,3%), is borrowed far more frequently than contextual inflection, i.e. person and structural cases (27,6%)."

On inherent vs. contextual inflection see Booij 1996.

Cf. "early" vs. "late system morphemes" in Myers-Scotton 2002, Myers-Scotton & Jake 2009, 2017 etc.

Borrowing of contextual inflection



 Cf. Mardale & Karatsareas 2020 and Mayo 2025 on differential object marking in contact.



Borrowing of contextual inflection

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Nepali (Lahaussois 2002: 68–69):
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- (23) a. ma tapaai-laai dekhchu 1SG you-OBJ see.NPST.1SG 'I see you.'
  - b. meero aamaa ma-laai khaana dinuhuncha my mother 1SG-OBJ food give.NPST.3SG 'My mother gives me food.'

NPST – non-past, OBJ – object case

Borrowing of contextual inflection

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Thulung-Rai (Lahaussois 2002: 65):
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- (24) a. gu-ka khlea-lai jal-y
  3SG-ERG dog-OBJ hit-3SG>3SG
  'He hits the dog.'
  - b. go a-mam-lai tswtsw gwak-tomi
    1SG my-mother-OBJ child give-PST.1SG>3SG
    'I gave the child to my mother.'

ERG – ergative, OBJ – object case, PST – past tense

- The hierarchy of linguistic factors in morpheme borrowing (Gardani 2008: 88-89):
  - categorial clarity (100%)
  - semantic fullness (90%)
  - sharpness of boundaries (70%)
  - monofunctionality (70%)
  - reinforcement (45%)
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#### Seifart (2017: 417) on the role of the paradigmatic dimension:

- "sets of borrowed affixes tend to consist of internally interrelated affixes rather than being isolated, noninterrelated forms";
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North Russian Romani (Rusakov 2001: 315-316)

lexical prefixes:

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(25) te otdes 'give away' ~ Rus. otdat'
te vydes 'give out' ~ Rus. vydat'
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perfecitivising prefixes:

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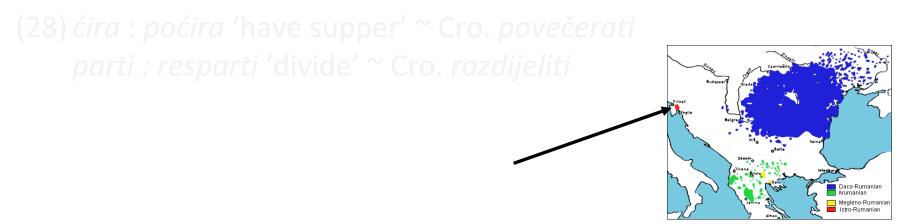
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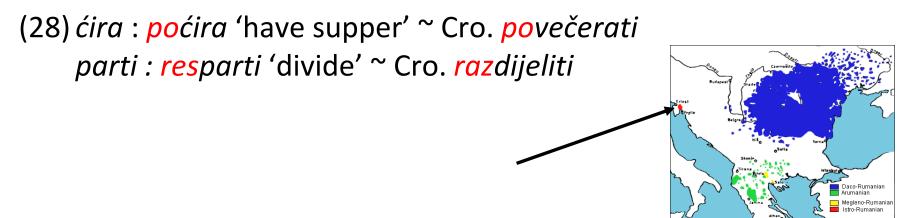


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### Roadmap

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- Direct vs. indirect affix borrowing
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#### The phenomenon of morphological borrowing calls for:

- a refinement of the notions of theoretical morphology (inflection vs. derivation, inherent vs. contextual inflection, "transparency" etc.);
- a serious consideration of sociolinguistic and psycholinguistic data, both on the "macrolevel" (speech communities) and on the "microlevel" (individual linguistic behavior) for a better understanding of linguistic change in general.

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