

Displacement after exponence? Case of Nanai nominal morphology

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Post-syntax?

Big debate: are post-syntactic operations (e.g., Fission/Fusion) necessary?

Yes, says DM.

No, says a lot of people!

Post-syntax?

Smaller debate: is post-syntactic displacement necessary?

Yes, says Arregi & Nevins 2012, Hewett 2023 (among others)

No, says a lot of people!

Post-syntax?

Even smaller: is post-exponence displacement necessary?

Yes, says Embick & Noyer 2001

No, says a lot of people!

A sidenote

Our focus: displacement triggered by morphosyntax
⇒ Infix placement is irrelevant today

See Kalin & Rolle 2022; Kalin 2022 for recent discussion

This talk

Today, we examine the last question

What data can support post-exponentence displacement?

Serial opacity effects

Ordering of two (types of) rules: exponence » displacement

As in any serial model, we expect:

- feeding
- bleeding
- counterfeeding
- counterbleeding

Serial opacity effects

I focus on:

- counterfeeding
- counterbleeding

This talk

What data can support post-exponence displacement?

- non-local* exponence conditioning (counterbleeding)
- lack of local* exponence conditioning (counterfeeding)

*local on the surface

The plan

- “counterbleeding” in exponence (how to analyze)
- “counterfeeding” in exponence (Nanai)

Non-local conditioning

Cf. Nyakusa spirantization ([Hyman 2003](#))

- (1) a. *sob-* 'get lost'
- b. *sof-j* 'get lost-CAUS'
- c. *sob-an-j* 'get lost-RECIP-CAUS' (=get each other lost)
- d. *sof-an-j* 'get lost-RECIP-CAUS' (=to lose each other)

Local dislocation for non-local conditioning

Nyakusa shows a non-local morpho-phonological process in a non-Mirror order

One solution: post-exponence displacement

Local dislocation for non-local conditioning

A sketch of an analysis

- (2) a. Verb \frown Caus \frown Recip \Rightarrow Exponence \Rightarrow
- b. [Verb,sof-] \frown [Caus,-j-] \frown [Recip,-an-] \Rightarrow Displacement \Rightarrow
- c. [Verb,sof-] \frown [Recip,-an-] \frown [Caus,-j-]

In a different order, no spirantization would occur

Non-local processes as argument for what?

Post-exponence displacement creates non-local allomorphy

That follows from the ‘post-exponence’ part

But is it the only analytical choice?

Non-local processes via bottom-up exponence

Myler 2017: word-internal phrasal movement

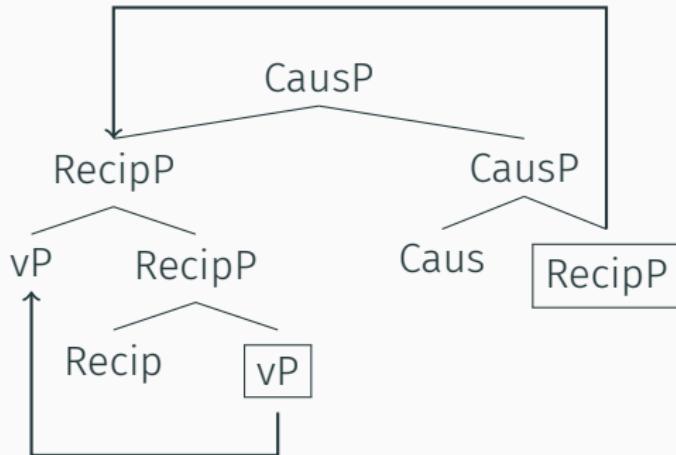
Derives Mirror Principle violations

Derives non-local effects with bottom-up exponence

Myler's analysis of Nyakusa

Mirror-complying structure:

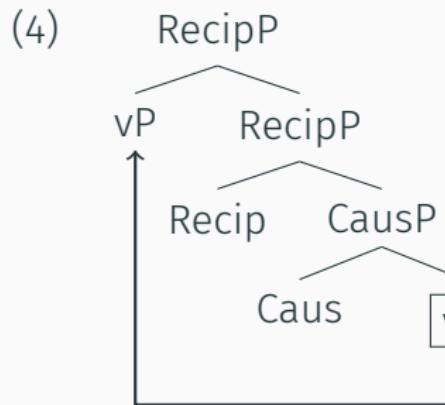
(3)



Linearized as verb-RECIP-CAUS

Myler's analysis of Nyakusa

Mirror-violating structure:



Linearizes as verb-RECIP-CAUS

Myler's analysis of Nyakusa

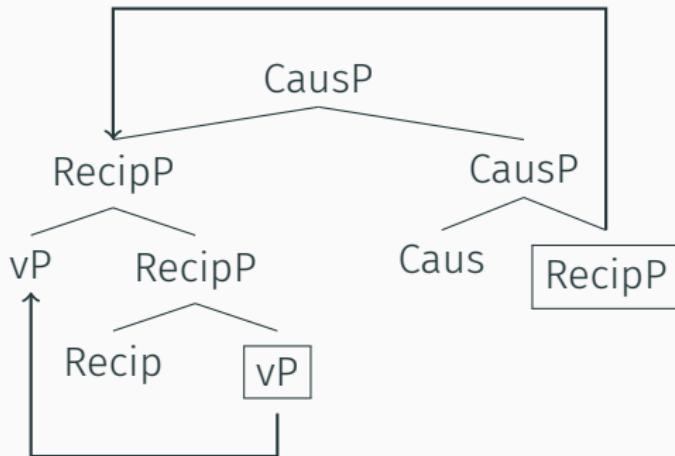
Order of exponentence is governed by:

- (5) If a projection of X dominates a projection of Y, Y is exponed earlier than X

Myler's analysis of Nyakusa

Mirror-complying structure:

(6)



Order of exponence: verb « RECIP « CAUS

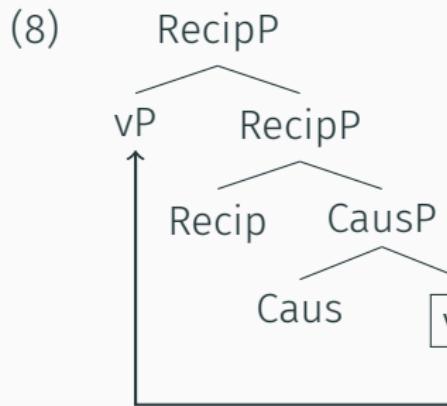
Myler's analysis of Nyakusa

Order of exponence: verb « RECIP « CAUS

- (7) a. ϵ
- b. *sob-*
- c. *sob-+-an- = sob-an-*
- d. *sob-an-+-j- = sob-an-j*

Myler's analysis of Nyakusa

Mirror-violating structure:



Order of exponence: verb << RECIP; CAUS << RECIP

Myler's analysis of Nyakusa

Order of exponence: verb « RECIP; CAUS « RECIP

⇒ there is a derivation point where only verb and CAUS are exponed, allowing non-local interaction

Myler's analysis of Nyakusa

Order of exponence: verb « RECIP; CAUS « RECIP

- (9) a. ϵ
- b. $sob-+-j- = sof-+-j-$
- c. $sof-+-an-+-j- = sof-an-j$

Linear order doesn't correspond to exponence order

An empirical question

Recall the phenomena able to support post-exponence displacement

- non-local exponence conditioning
- lack of local exponence conditioning

Can the second type be re-analyzed Myler-style?

My argument

I present a case of Nanai nominal morphology
which presents lack of bleeding in exponence conditioning
which can't be analyzed Myler-style
⇒ supports post-exponence displacement

On my data: a disclaimer

The data comes from [Oskol'skaya 2015](#) who has done fieldwork on the language and has also compiled claims of previous researchers on Nanai language

Hence, my knowledge of Nanai grammar is incomplete

Core data

POSS	NOM	ACC	ABL
—	<i>ogda</i>	<i>ogda-wa</i>	<i>ogda-diadi</i>
	boat	boat-ACC	boat-ABL
1SG	<i>ogda-i</i>	<i>ogda-i-wa</i>	<i>ogda-diadi-i-wa</i>
	boat-1SG	boat-1SG-ACC	boat-ABL-1SG-ACC
2SG	<i>ogda-si</i>	<i>bala-wa-si</i>	<i>ogda-diadi-a-si</i>
	boat-2SG	boat-ACC-2SG	boat-ABL-ACC-2SG
3SG	<i>ogda-ni</i>	<i>ogda-wa-ni</i>	<i>ogda-diadi-a-ni</i>
	boat-3SG	boat-ACC-3SG	boat-ABL-ACC-3SG
1PL	<i>ogda-pu</i>	<i>ogda-po-wa</i>	<i>ogda-diadi-po-wa</i>
	boat-1PL	boat-1PL-ACC	boat-ABL-1PL-ACC
2PL	<i>ogda-su</i>	<i>ogda-wa-su</i>	<i>ogda-diadi-a-su</i>
	boat-2PL	boat-OBL-2PL	boat-ABL-ACC-2PL
3PL	<i>ogda-ci</i>	<i>ogda-wa-ci</i>	<i>ogda-diadi-a-ci</i>
	boat-3PL	boat-ACC-3PL	boat-ABL-ACC-3PL

Problem 1: φ -sensitive morpheme order

POSS	NOM	ACC	ABL
—	<i>ogda</i>	<i>ogda-wa</i>	<i>ogda-diadi</i>
	boat	boat-ACC	boat-ABL
1SG	<i>ogda-i</i>	<i>ogda-i-wa</i>	<i>ogda-diadi-i-wa</i>
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	boat-3PL	boat-ACC-3PL	boat-ABL-ACC-3PL

Problem 2: exponentence of ACC in oblique cases with POSS

POSS	NOM	ACC	ABL
—	<i>ogda</i>	<i>ogda-wa</i>	<i>ogda-diadi</i>
	boat	boat-ACC	boat-ABL
1SG	<i>ogda-i</i>	<i>ogda-i-wa</i>	<i>ogda-diadi-i-wa</i>
	boat-1SG	boat-1SG-ACC	boat-ABL-1SG-ACC
2SG	<i>ogda-si</i>	<i>bala-wa-si</i>	<i>ogda-diadi-a-si</i>
	boat-2SG	boat-ACC-2SG	boat-ABL-ACC-2SG
3SG	<i>ogda-ni</i>	<i>ogda-wa-ni</i>	<i>ogda-diadi-a-ni</i>
	boat-3SG	boat-ACC-3SG	boat-ABL-ACC-3SG
1PL	<i>ogda-pu</i>	<i>ogda-po-wa</i>	<i>ogda-diadi-po-wa</i>
	boat-1PL	boat-1PL-ACC	boat-ABL-1PL-ACC
2PL	<i>ogda-su</i>	<i>ogda-wa-su</i>	<i>ogda-diadi-a-su</i>
	boat-2PL	boat-OBL-2PL	boat-ABL-ACC-2PL
3PL	<i>ogda-ci</i>	<i>ogda-wa-ci</i>	<i>ogda-diadi-a-ci</i>
	boat-3PL	boat-ACC-3PL	boat-ABL-ACC-3PL

My analytical claims

- ‘Basic’ order is: N-P-Poss-K (the 1P order)
- Order in 2/3P is derived via post-exponence displacement
- Zero-exponence of K is conditioned by linear adjacency to P

My general claim

There is a lack of bleeding of zero-exponence of ACC by displacement

⇒ Nanai is important for the question of necessity of post-exponence displacement

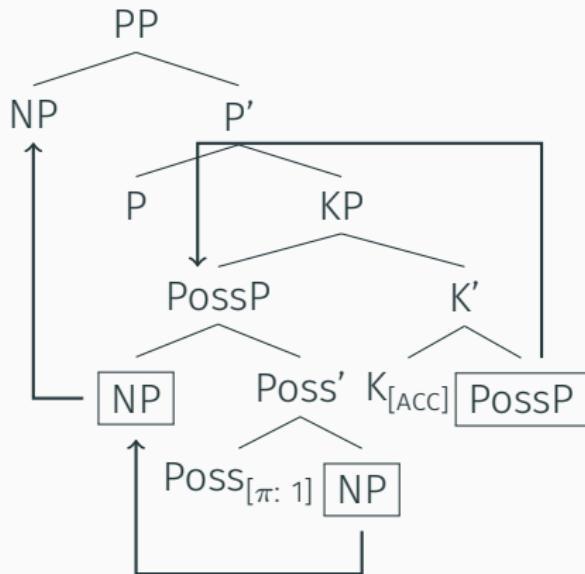
My analytical claims

- ‘Basic’ order is: N-P-Poss-K (the 1P order)
- Order in 2/3P is derived via post-exponence displacement
- Zero-exponence of K is conditioned by linear adjacency to P

Deriving N-P-Poss-K

Cinque-style structure for the ‘basic’ order

(10)



Linearization: N-P-Poss-K

Allomorphy of ACC

VI rules for ACC

- (11) a. $K[ACC] \leftrightarrow \emptyset / P \sim _ _$
- b. $K[ACC] \leftrightarrow -(w)a$

Linear intervention of POSS captures the role of POSS in
exponence of ACC in oblique cases of possessive paradigm

Exponence of Acc in 2/3.POSS

What about 2/3P with N-P-K-Poss order? Local Dislocation

- (12) a. $N \curvearrowleft P \curvearrowleft \text{Poss} \curvearrowleft K$
- b. $[N, ogda] \curvearrowleft [P, diadi] \curvearrowleft [\text{Poss}, -ni] \curvearrowleft [K, -a]$
- c. $[N, ogda] \curvearrowleft [P, diadi] \curvearrowleft [[K, -a] + [\text{Poss}, -ni]]$

For purposes of allomorphy, the order is N-P-Poss-K

Is a displacement « exponence approach viable?

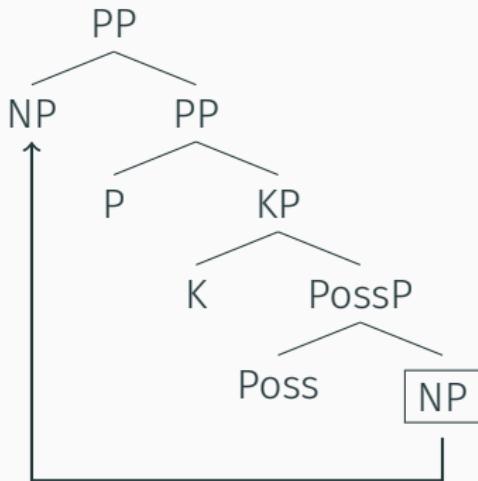
if the N-P-K-Poss order is determined before exponence:

- linear intervention approaches are out
- structural intervention approaches are out
- are exponence order approaches ([Myler 2017](#)) are out?

Can we account for Nanai when displacement « exponence?

Linear order suggest the following structure for 2/3P

(13)



Is a Myler-style approach viable?

No partial ordering of exponence of P, K, and Poss
Hence, no non-local effects expected

Is a displacement « exponence approach viable?

if the N-P-K-Poss order is determined before exponence:

- linear intervention approaches are out
- structural intervention approaches are out
- exponence order approaches ([Myler 2017](#)) are out

Summing up

- A case of exponence » displacement counterfeeding
- Easily explained by post-exponence displacement
- Pre-exponence displacement doesn't account for that
- Existing order-of-exponence approaches seem inapplicable

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