# Nonmanual components with PALM-UP in Russian Sign Language.

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### What is PALM-UP? Where did we start?

A basic form is the rotation of one or both open hands towards an upward palm orientation.

- ➤ Palm-up gesture is "one of the most frequently used" (Müller 2004: 234) and reported for various cultures (Cooperrider, Abner & Goldin-Meadow 2018; Kendon 2004).
- ➤ PALM-UP (PU) sign is of gestural origin (Loon, Pfau & Steinbach 2014) & is highly frequent in discourse (McKee & Wallinford 2011).
- ➤ Major functions as identified for ASL, DSL, NGT & NZSL:
  - 1. Conversation/discourse regulation (turn taking, turn opening, turn ending, question particle, backchannel, pause filling)
- 2. Connection/coherence (comment, conjunction, temporal sequence, causal relationship, contrast, focus)
- 3. Modal meaning (uncertainty, obviousness, possibility)
- 4. Manual frame for unpredictable mouthings (NZSL, McKee & Wallingford 2011)
- ➤ PU sign has no semantic/pragmatic impact other than signaling a boundary; only the accompanying non-manual signals carry the meaning (Kooij, Crasborn & Ros 2006)

## Research question & methods

#### Annotated data

Total signs	37658
Tokens of PU	1719
Data videos	132
Signers	37
female	23
male	14

224 PU tokens & the accompanying nonmanual signals were:

- transcribed by a native RSL signer;
- annotated and searched in ELAN software;
- analyzed in terms of discourse functions.

**Research question**: Do the accompanying nonmanual components indicate the function of PALM-UP?

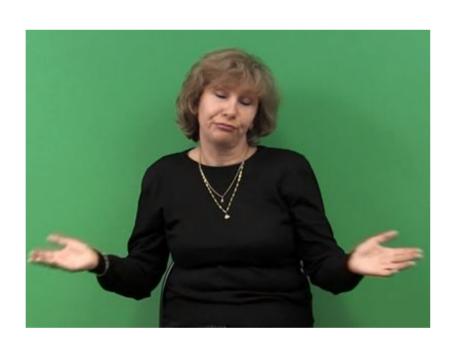
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# Russian Sign Language (RSL) Corpus

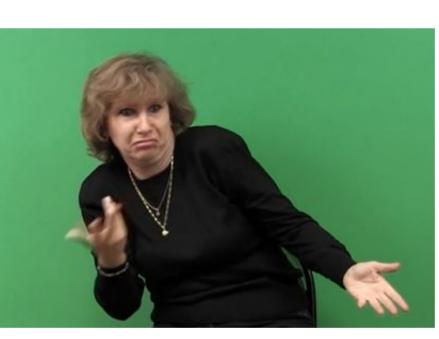
The online corpus of RSL (http://rsl.nstu.ru, Burkova 2012-2015) was made during the project "Corpus-Based Research on Mophosyntax and Vocabulary of the Russian Sign Language" funded by Russian Foundation for Basic Research.

- over 180 texts filmed from 59 RSL signers men and women (18 to 63 years) with varying degrees of deafness: deaf, hardof-hearing and CODA.
- Novosibirsk & Moscow.
- > spontaneous speech (narratives and dialogues), texts on the basis of stimulus materials (cartoons retelling, picture based storytelling) & some elicitation data.

### Which nonmanual signals accompany PU in RSL?







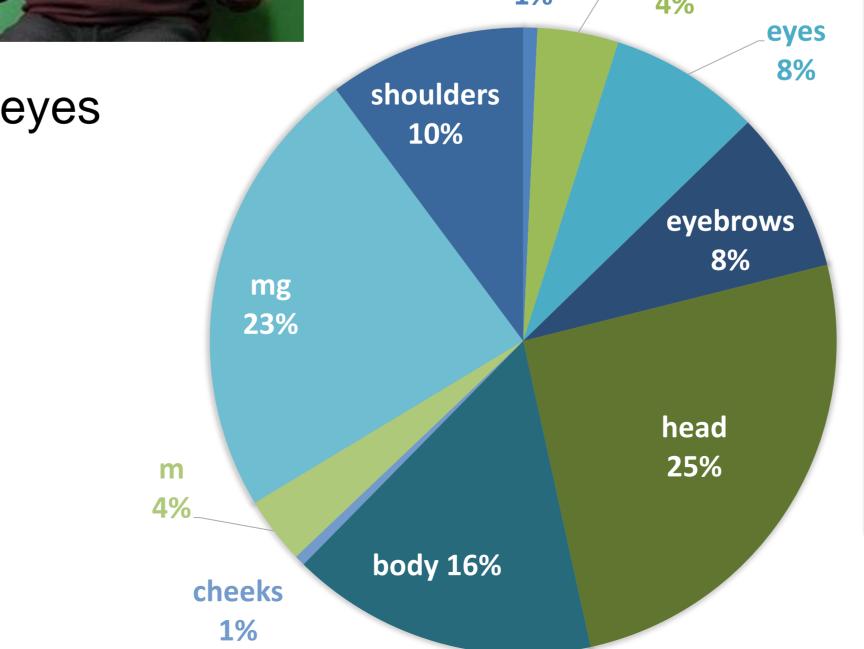
head movements mo

mouth gesture

body movements



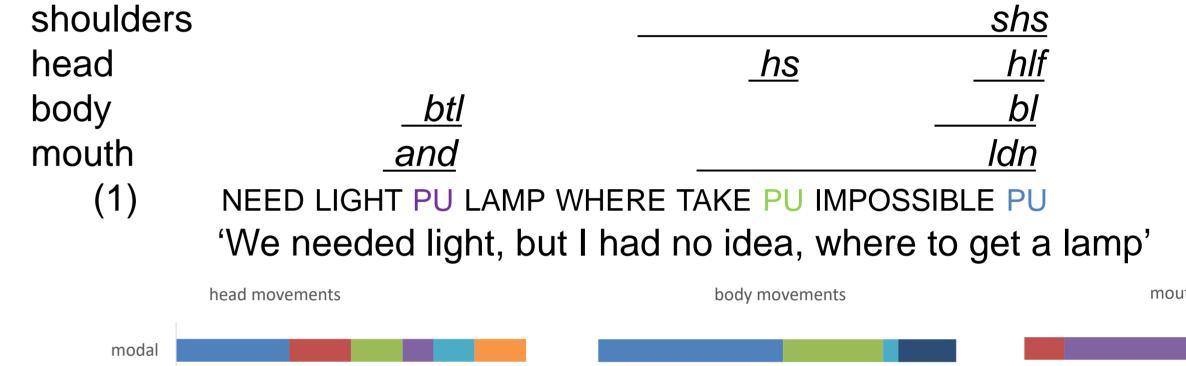


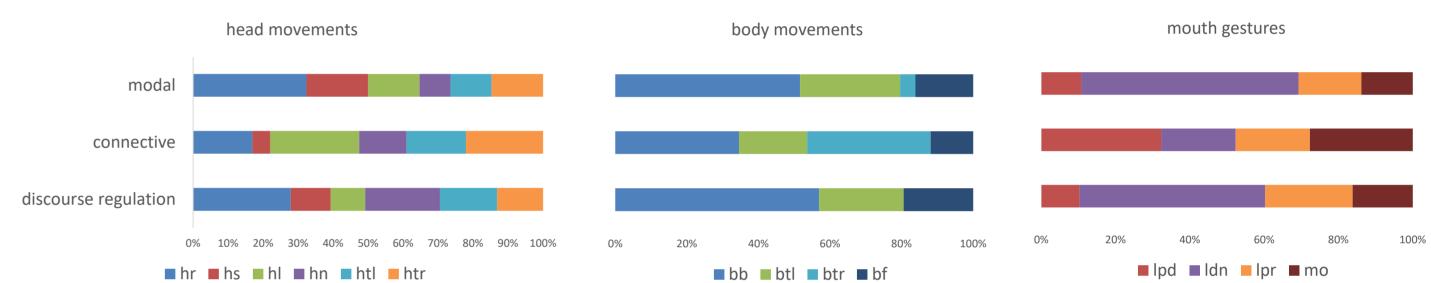


Results

Three main functions were identified in the RSL data (as in (1)):

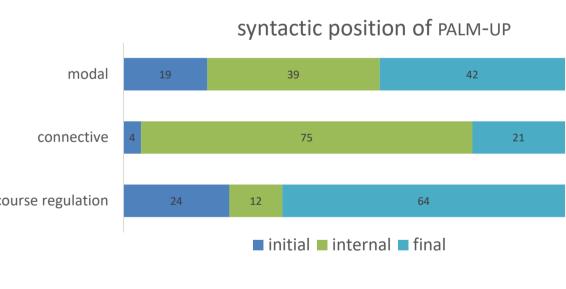
- discourse regulation (49%)
- modal meaning (28%)
- connection (23%)





hr (head turn to the right); hs (head shake); hl (head turn to the left); hn (head nod); htl (left head tilt); htr (right head tilt); bb (body lean backwards); btl (body shift to the left); btr (body shift to the right); bf (body lean forwards); lpd (lips pushed forward); ldn (corners of the mouth lowered down); lpr (lips pressed together); mo (mouth open)

- > PALM-UP is a multifunctional discourse marker in RSL
- ➤ Nonmanual components accompanying PU are not indicative of its functions (complex behaviour of similar nonmanual signals)
- Functions appear to be predictable in terms of syntactic role
- Frame for mouthing is not regarded a function here (only 4% of PU were accompanied by mouthing (e.g. AND, discourse regulation HERE, ALL, OK, IF, HOW etc.)



### References

Cooperrider, Kensy, Natasha Abner & Susan Goldin-Meadow. 2018. The palm-up puzzle: meanings and origins of a widespread form in gesture and sign. *Frontiers in communication* Vol 3, Article 23, 1–16.

Kendon, Adam. 2004. Gesture: Visible Action as Utterance. Cambridge: CUP.

Kooij, Els van der, Onno Crasborn & Johan Ros. 2006. Manual prosodic cues: Palm-up and pointing signs. Poster presentation at the 9th conference on Theoretical Issues in Sign Language Research, Florianopolis, Brazil.

Loon, Esther van, Roland Pfau & Markus Steinbach. 2014. The grammaticalization of gestures in sign languages. In Müller C. et al. (eds.) *Body-Language-Communication: An International Handbook on Multimodality in Human Interaction*, 2133–2149. Berlin: De Gruyter.

McKee, Rachel & Sophia Wallingford. 2011. 'So, well, whatever' Discourse functions in palm-up in New Zeland Sign Language. Sign Language & Linguistics 14(2). 213–247.

Müller, Cornelia. 2004. Forms and uses of the Palm Up Open Hand: A case of a gesture family? In Müller C. & Posner R. (eds.) *The semantics and pragmatics of everyday gestures*, 233-258. Berlin: Weidler.