

# Phrasal lexemes and reduction strategies in Russian

Valentina Benigni - Francesca Masini

benigni@uniroma3.it - fmasini@uniroma3.it

Department of Linguistics

Roma Tre University



## 1 Phrasal lexemes in Russian

Russian has a very rich lexeme formation system. Apart from strictly morphological mechanisms such as derivation and compounding, Russian displays so-called "lexical phrases" (Booij 2009b) or "phrasal lexemes" (Masini 2009).

**Phrasal lexemes** are constructions with a phrasal structure but a lexical nature, and are attested in a number of languages (e.g. Dutch: Booij 2009b, English: Giegerich 2005, German: Hüning 2010, Italian: Masini 2007, 2009). These are the main patterns for **phrasal nouns** in Russian (Benigni & Masini 2009):

(1) [Adj N]	<b>železnaja doroga</b>	iron road	'railway'
(2) [N Prep N]	<b>order na arest</b>	warrant for arrest	'arrest warrant'
(3) [X Conj X]	<b>plot' i krov'</b>	flesh and blood	'flesh and blood'
(4) [N N <sub>CASE</sub> ]	<b>zub mudrosti</b>	tooth wisdom <sub>GEN</sub>	'wisdom tooth'

Here we will deal with **phrasal nouns** (hereinafter **PNs**) of the **[Adj N]** type, which is by far the most productive pattern.

## 2 Phrasal nouns versus canonical noun phrases

Contrary to canonical noun phrases, PNs generally:

- cannot be interrupted by other lexical material:  
(5) a. **mobil'nyj telefon** mobile telephone 'mobile phone'  
b. \***mobil'nyj služebnyj telefon** mobile service/office<sub>ADJ</sub> telephone
- cannot undergo paradigmatic commutability:  
(6) a. **železnaja doroga** iron road 'railway'  
b. \***železnyj put'** iron way
- cannot be internally modified (modification may have scope on the whole expression only):  
(7) a. **detskij sad** child's garden 'kindergarten'  
b. \***tol'ko detskij sad** only child's garden

## 3 Phrasal nouns versus noun compounds

- PNs contain free forms (a), compounds present at least one bound form (b):  
(8) a. **avtorskoe pravo** author's right 'copyright'  
b. **dom+o+vladelec** house<sub>ROOT</sub>+LINKING\_VOWEL+owner 'house owner'
- PNs display regular internal agreement / inflection (a), compounds do not (b):  
(9) a. **vizitnaja kartočka** visiting<sub>F.NOM</sub> card<sub>F.NOM</sub> 'visiting card'  
b. **sux+o+frukty** dry<sub>ROOT</sub>+LINKING\_VOWEL+fruits 'dried fruit'
- Some PNs use prepositions (cf. 2) and conjunctions (a), compounds do not (b):  
(10) a. **prava i objazannosti** rights and duties 'rights and duties'  
b. **divan-krovat'** sofa-bed 'sofa bed'
- PNs may display internal case government (a), compounds normally do not (b):  
(11) a. **obmen studentami** interchange students<sub>INSTR</sub> 'student exchange (programme)'  
b. **ogn+e+tušitel'** fire<sub>ROOT</sub>+LINKING\_VOWEL+extinguisher 'fire extinguisher'

## 4 Reduction strategies of phrasal nouns

There is a specific case in which case government may occur within a compound (*contra* 'iv'), namely stump compounds (cf. (12)). The latter are a way to "condens[e] phrases into single nouns" (Molinsky 1973:15) which was used in the Soviet period to create a new jargon. However, this is not the only strategy used to reduce PNs into a one-word form, as the following list shows:

- Stump compounds** (Molinsky 1973, Comrie & Stone 1978, Billings 1998)  
(12) **zavedujuščij klubom** manager club<sub>INSTR</sub> 'club manager' > **zavklubom**  
(13) **rodil'nyj dom** birth<sub>ADJ</sub> home 'maternity hospital' > **roddom**
- Ellipsis** of Adj (13) or N (14)  
(14) **vysokaja temperatura** high temperature 'fever' > **temperatura**  
(15) **mobil'nyj telefon** mobile phone 'mobile phone' > **mobil'nyj**
- Suffixation** of Adj (16) or, much more rarely, N (17)  
(16) **elektronnaja počta** electronic mail 'e-mail' > **elektron+ka**  
(17) **detskij sad** child's garden 'kindergarten' > **sad+ik**

## 5 A corpus of [Adj N] phrasal nouns

In order to study Russian PNs and their reduction strategies, we collected a corpus of PNs of the [Adj N] type by generating a **frequency list** of [Adj N] combinations from the **Russian Web Corpus** (gathered by Serge Sharoff at the University of Leeds, 187.965.822 tokens, available on the **Sketch Engine CQS**: [www.sketchengine.co.uk](http://www.sketchengine.co.uk)). The raw frequency list was revised manually, thus obtaining a list of about **1000 PNs** with frequency  $\geq 200$ .

Then we checked whether the PNs in the corpus had a corresponding shortened form: this was the case for about **113 PNs** (approx. **13%**), some of which presented more than one shortened form. The quantitative results are given in the table:

Phrasal nouns (fq $\geq 200$ )	Stump compounds	Ellipsis of Adj or N	Suffixation of Adj or N
ca. 1000	42	10	66

Most used strategies are suffixation of Adj (64 items) and stump compounding (42).

## 6 Reduction by suffixation in the corpus

Suffix	-ka	-ik	-uška/jaška	-a
Frequency	51	8	6	1

  

(18) a.	<b>mineral'naja voda</b>	[fq. 651]	>	<b>mineralka</b>	[fq. 280]
	mineral water				
	'mineral water'				
b.	<b>rolevaja igra</b>	[fq. 491]	>	<b>rolevik</b>	[fq. 65]
	role <sub>ADJ</sub> game				
	'role-playing / simulation game'				
c.	<b>nočnaja rubaška</b>	[fq. 339]	>	<b>nočnuška</b>	[fq. 60]
	night <sub>ADJ</sub> shirt/chemise				
	'nightshirt / nightgown'				
d.	<b>mobil'nyj telefon</b>	[fq. 2883]	>	<b>mobila</b>	[fq. 382]
	mobile telephone				
	'mobile phone'				

## 7 Frequency, familiarity and register

One would expect that shortenings correlate with high frequency. However, in our corpus the chances to have a shortened form do not increase as raw frequency increases. Besides, there exist a number of PNs with low or fair frequency that do present a shortened form (especially in -ka), which is typically more frequent:

- |         |                              |          |   |                  |           |
|---------|------------------------------|----------|---|------------------|-----------|
| (19) a. | <b>kopiroval'naja bumaga</b> | [fq. 19] | > | <b>kopirka</b>   | [fq. 89]  |
|         | copying paper                |          |   |                  |           |
|         | 'carbon paper'               |          |   |                  |           |
| b.      | <b>sguščennoe moloko</b>     | [fq. 88] | > | <b>sguščenka</b> | [fq. 279] |
|         | condensed milk               |          |   |                  |           |
|         | 'condensed milk'             |          |   |                  |           |
| c.      | <b>maršrutnoe taksi</b>      | [fq. 88] | > | <b>maršrutka</b> | [fq. 845] |
|         | route <sub>ADJ</sub> taxi    |          |   |                  |           |
|         | 'fixed route taxi'           |          |   |                  |           |

What seems to play a role here is not frequency, but the **familiarity / intimacy** with the referent, also testified by the **colloquial register** attributed to these shortenings.

## 8 Implications and further questions

- It is a common view that reduction strategies do not form new lexemes (a *maršrutka* is still a *maršrutnoe taksi*, cf. (19c)), but rather some variant of an already existing lexeme. **Which kind of relation holds between the full and the shortened form?** Is it synonymy? If yes, which kind of synonymy?
  - Why should we want to "pack" a PN into a one-word noun without obtaining a (significantly) new meaning? **Which is the motivation behind this mechanism?**
  - We can tentatively hypothesise the following motivations or tendencies:
    - a **semantic / functional tendency**: the shortened form might in fact have a new meaning if we intend "meaning" in a **broad sense** as a bundle of **semantic, pragmatic and usage** features (register/style, genre, level of intimacy);
    - a **structural / formal tendency**: the shortening of PNs might be a way to "**morphologise**" (i.e. to reduce to the word level) lexical units that are phrasal in nature. This might correlate with Russian being a highly inflectional language with clearly identifiable word level units.
- Of course, both hypotheses need more investigation.

## A theoretical account

If we accept that the concept of "meaning" is broader than usually thought and that, as a result, full and shortened forms might not be total synonyms, then we can easily account for these reduction mechanisms in terms of **Construction Grammar** (cf., a.m.o., Fillmore et al. 1988; Goldberg 1995) and/or **Construction Morphology** (Booij 2005, 2009a,b). Here follow the **advantages** of a constructionist approach:

- the constructionist framework does not posit a strict division between syntax and the

lexicon/morphology, therefore **intermediate phenomena** such as phrasal lexemes are expected to occur and can be accounted for (cf. Booij 2009b, Masini 2009);

- constructionist models use a very **broad definition of "meaning"**, which comprises semantic, pragmatic and usage features, including information about style/register, genre, etc. This model is therefore suitable in principle to account for full vs. reduced forms that differ solely in this kind of information.

## References

- BENIGNI, V. & MASINI, F. (2009). *Compounds in Russian*, in "Lingue e Linguaggio" VIII (2) (2/2009), 171-193. ~ BILLINGS, L. A. (1998). *Morphology and syntax: delimiting stump compounds in Russian*, in G. Booij et al. (eds.), *Proceedings of the First Mediterranean Morphology Meeting*, Patras, University of Patras, 99-110. ~ BOOIJ, G. (2005). *Compounding and derivation: evidence for construction morphology*, in W. U. Dressler et al. (eds.), *Morphology and its demarcations*, Amsterdam/Philadelphia, Benjamins, 109-132. ~ BOOIJ, G. (2009a). *Lexical integrity as a formal universal: a constructionist view*, in S. Scalise et al. (eds.), *Universals of language today*, Berlin, Springer Science+Business Media, 83-100. ~ BOOIJ, G. (2009b). *Phrasal names: a constructionist analysis*, in "Word Structure" 2 (2), 219-240. ~ COMRIE, B. & STONE, G. (1978). *The Russian language since the revolution*, Oxford, Clarendon Press. ~ FILLMORE, C. J. ET AL. (1988). *Regularity and Idiomaticity in Grammatical Constructions: the Case of Let Alone*, in "Language" 64 (3), 501-538. ~ GIEGERICH, H. J. (2005). *Associative adjectives in English and the lexicon-syntax interface*, in "Journal of Linguistics" 41, 571-591. ~ GOLDBERG, A. (1995). *Constructions. A Construction Grammar Approach to Argument Structures*, Chicago, The University of Chicago Press. ~ HÜNING, M. (2010). *Adjective + Noun constructions between syntax and word formation in Dutch and German*, in A. Onysko & S. Michel (eds.), *Cognitive Perspectives on Word Formation*, Berlin/New York, De Gruyter Mouton, 195-215. ~ MASINI, F. (2007). *Parole sintagmatiche in italiano*, PhD dissertation, Roma Tre University. ~ MASINI, F. (2009). *Phrasal lexemes, compounds and phrases: a constructionist perspective*, in "Word Structure" 2 (2), 254-271. ~ MOLINSKY, S. J. (1973). *Patterns of ellipsis in Russian compound noun formations*, The Hague/Paris, Mouton.