

## GRAMMATICALIZATION VS. REANALYSIS: EVIDENCE FROM RUSSIAN ADVERBIAL STRUCTURES

### I. The dilemma: grammaticalization vs. reanalysis

- For many researchers grammaticalization necessarily involves a change in the (syntactic) distribution of an element and, thus, grammaticalization *ipso facto* presupposes reanalysis.

⇒ This kind of understanding is not followed any further.

- A more specific understanding: the two processes are viewed as **distinct phenomena**.

«Unquestionably, reanalysis is the most important **mechanism of** grammaticalization» [Hopper & Traugott 1993: 32].

«[T]ypically, reanalysis **accompanies** grammaticalization» [Heine et al. 1991: 217].

- Reanalysis & grammaticalization: definitions

Reanalysis: «[A] change in the structure of an expression or class of expressions that does not involve any immediate or intrinsic modification of its surface manifestation» [Langacker 1977: 59].

Grammaticalization: “an evolution whereby linguistic units lose in semantic complexity, pragmatic significance, syntactic freedom, and phonetic substance” [Heine & Reh 1984: 15].

- Haspelmath’s approach

Reanalysis without grammaticalization:

(4a) [Er ging [um Wasser<sub>i</sub>]<sub>PP</sub> [Ø<sub>i</sub> zu holen]<sub>S-INF</sub>]<sub>S</sub>.

(4b) [Er ging [um<sub>COMP</sub> [Wasser zu holen]<sub>S</sub>]<sub>S'-INF</sub>]<sub>S</sub>.

Grammaticalization without reanalysis:

from [Kortmann & König 1992: 684]

lowest degree of grammaticalization

highest degree



*preceding  
facing*

*considering  
failing*

*according to  
owing to*

*during  
pending*

*past  
ago*

Grammaticalization	Reanalysis
loss of autonomy/substance	no loss of autonomy/substance
gradual	abrupt
unidirectional	bidirectional
no ambiguity	ambiguity in the input structure
due to language use	due to language acquisition

## II. The data

- Empirically-driven study;
- Russian structures that synchronically function as (less-than-clausal) **adverbials**;
- Synchronically opaque (idiosyncratic? non-compositional?) syntactic structure;
- Thus, potential explanation by way of a (micro-)**diachronic** analysis;
- Data from the National Corpus of the Russian Language (NLRC, [www.ruscorpora.ru](http://www.ruscorpora.ru))
  - > 140 000 000 words
  - XVIII-XXI centuries

## III. Case study 1: *vo glave s* ... ‘headed by’

### The use under study:

- (1) ... *ucheniki sobiralis'* ... *i vo glav-e s direktor-om exali na promysel.*  
and in head-LOC with director-INS went  
‘The pupils gathered and went to the work **headed by the director**’ (Panteleev, 1938-1952)

### *Golova & glava* in Modern Russian:

*golova* (< Old Russian) ‘head (body-part)’

*glava* (< Old Church Slavonic) ‘chapter’, ‘chief, boss’

⇒ *Glava* lost its original body-part reading.

### Frequency of *golova & glava*:

	1700-1800		1850-1900		1930-1950		1980-2000	
	N	per mln	N	per mln	N	per mln	N	per mln
<i>golova</i>	871	327	20449	966	17744	933	25525	928
<i>glava</i>	848	319	3437	162	3695	194	5593	203

### (Semi-)predicative *vo glave* ‘to head, to command, to lead’ (from 18<sup>th</sup> century onward)

- (2) *Knjaz' Lambez ... vstupaja ... v Tjul'erijskij sad vo glav-e svoego polk-a ... udaril...*  
**entering** in Jardin des Tuileries **in head-LOC of.his** **regiment-GEN**  
‘Prince Lambez, who entered Jardin des Tuileries heading his regiment, hit ...’ (Zhurnal..., 1789).
- (3) *Pobedonoscev byl vo glav-e dobrovol'nogo flot-a...*  
**was** **in head-LOC** **fleet-GEN**  
‘Pobedonoscev was heading the volunteer fleet’ (Vitte, 1911).

- Human protagonist as the subject, group-noun as the headed ‘location’;
- *Vo glave* in the ‘heading’ meaning: almost never with agreeing modifiers;
- *V glave*: almost never in the ‘heading’ meaning;

*V glave* vs. *vo glave*: frequency per mln

	1700-1800	1850-1900	1930-1950	1980-2000
<i>v glave</i>	13,9	28,7	5,5	1,9
<i>vo glave</i>	3,4	2,6	46,6	35,0

Comitative *vo glave*-construction:

- Only 1 example from the 18<sup>th</sup> century:

- (4) *Vpered* ... *exala* ... *kavalerija*, *s de-Lafaet-om vo glav-e*  
 was.moving cavalry, with de-Lafayette-INS in head-LOC  
 ‘The cavalry was moving in front, headed by de Lafayette’ (Zhurnal, 1789).

- Sporadic uses in the texts up to the mid-19<sup>th</sup> century;

Frequency of comitative *vo glave*-constructions:

	1800-1850	1850-1900	1900-1920	1950-1970	1990-1995
N of comitative <i>vo glave</i>	8	97	195	206	138
per mln	1,1	4,6	15,7	13,9	13,6
% among <i>vo glave</i>	6,1%	16,0%	24,3%	43,1%	54,6%

- These structures become increasingly frequent from the mid-19<sup>th</sup> century;
- A slow decline of other uses of *vo glave*

Transparent constituent structure & compositional semantics:

- (5) *nachalo dejstvovat' tret'je [otdelenie [s [Benkendorf-om<sub>i</sub> [\_\_<sub>i</sub> vo glav-e]<sub>SC</sub>]<sub>NP</sub>]<sub>PP</sub>]<sub>NP</sub>*  
 started to.operate third department with Benkendorf-INS in head-LOC  
 ‘The third department, headed by Benkendorf, started to operate’ (Gershenzon, 1826-1905).

Cf. other prepositional phrases (small clauses?) embedded in the comitative structures:

- (6) ... *v nebe letal* ... [*mal'chik* ... [*s [luk-om<sub>i</sub> [\_\_<sub>i</sub> v ruk-ax]<sub>SC</sub>]<sub>NP</sub>]<sub>PP</sub>]<sub>NP</sub>]  
 was.flying boy with bow-INS in hands-LOC  
 ‘A boy with a bow in his hands was flying in the sky’ (Grishkovec, 2004).*
- (7) [*Dar'ja* ... [*s [rebenk-om<sub>i</sub> [\_\_<sub>i</sub> na ruk-ax]<sub>SC</sub>]<sub>NP</sub>]<sub>PP</sub>]<sub>NP</sub> *poshla sledom*  
*Dar'ja* with child-INS on hands-LOC  
 ‘Dar'ja went behind with the child in her arms’ (Sholoxov, 1928-1940).*

No increase of frequency of comitative *vo glave* constructions from the beginning of the 20<sup>th</sup> century!

Did its development stop?

**NO!**

Semantic inseparability of *s NP vo glave*, hence, can be qualified as “**circumpositional**”.  
A shift towards “secondary” preposition:

- (8) *Prochaja molodjosh' vo glav-e s Barcev-ym rezvilas'...*  
youth in head-LOC with Barcev-INS  
‘The rest of the youth, **headed/led by Barcev**, was frolicking’ (Bykov, 2002).

⇒ No multi-layered constituent structure can be posited any more.

Word order in comitative *vo glave* constructions:

	1850-1900	1900-1920	1950-1970	1990-1995
<i>s</i> [NP-Instr] <i>vo glave</i> (“circumposition”)	78	75	26	12
<i>vo glave s</i> [NP-Instr] (“preposition”)	19	120	180	126
% of preposition	19,6%	61,5%	87,4%	91,3%

Summary:

- No evident semantic development throughout;
- No loss of substance;
- Gradual increase in frequency;
- Other uses are getting archaic;
- Hence, idiomaticization (exparadigmaticity and decline of semantic separability);
- Loss of transparent multi-layered constituent structure;
- A crucial role of what happened to **other** constructions;
- Overt changes in word order on the final stages

#### IV. Case study 2: *nazad* ‘ago’

The use in the focus:

- (9) *Katrin uexala v Avstraliju god tomu nazad.*  
year that.DAT ago  
‘Katrin went to Australia **a year ago**’ (Gazdanov, 1950).
- (10) *Boris Safonov byl naznachen komandrom eskadril’ji vsego god nazad.*  
only year ago  
‘Boris Safonov was appointed squadron commander **only a year ago**’ (Gil’jardi, 1950).

Etymology:

*nazad* < *na-zad* ‘(on)to+back’

### Early uses: subordinator *kak* ‘as’:

- (11) *Desjat’ let tomu<sub>i</sub> nazad, [kak ozero sie pokryto bylo sol’ju]<sub>i</sub>.*  
**10 years that.DAT ago as**  
‘It is ten years ago that this lake was covered by salt’ (Lepexin, 1768-1769).  
Lit.: ‘It is ten years backwards to that, as the lake...’

- *Kak* ‘as’ heads a **dependent clause**. It is **optional** in the early texts and disappears almost entirely in the Modern texts (cf. development of similar adverbials in English [Kortmann 1996: 298]).

	1700-1800	1800-1900	1900-
<i>nazad kak</i> (per mln)	0,75	0,41	0,08

### Early uses: non-integration into the clause

- In the older uses the *X-time (tomu) nazad* structure is found in the periphery of the sentence.
- The use of commas: “naive” constituency (intonation breaks? Parentheticals?)
- (12) *Odin iz vashix filosofov, tomu uzhe neskol’ko vekov nazad, vstupil v moju sluzhbu.*  
**, that.DAT already several centuries ago,**  
‘One of your philosophers, (it is) already several centuries ago, came to my service’ (Krylov, 1789).

- Occasional use of the nominative case marker on the time-span NP. (NB: Accusative and nominative are not distinguished in non-feminine nouns):

- (13) *Nedel-ja tomu nazad kak ja videl takoj ekzemplar ...*  
**week-NOM that.DAT ago as**  
‘A week ago I saw such a specimen’ (Leskov, 1888).  
Lit.: **It is a week ago to that, as I ...’**

- *tomu* is a pronominal element that is related to the whole dependent clause, cf. (11).

⇒ The construction at issue goes back to a multi-layered (bi-clausal) structure.

### The time-reference point

- NB: Russian is a zero-copula language. Very rarely in texts one finds non-zero forms of the copula in *nazad-constructions*:
- (14) *skoro budet dva goda tomu nazad, kak on zastrelilsja*  
**soon will.be two years that.DAT ago as**  
‘It will soon be two years since he shot himself’ (Vitte, 1911).  
Lit.: ‘It will soon be two years ago to that, as he...’

⇒ In all other cases *nazad* has the reference point that coincides with the “now” of the speaker! (cf. English *ago* and [Boguslavskij 1996: 76]).

The frequency of temporal *nazad* structures:

	1700-1800		1800-1900		1900-2000	
	N	per mln	N	per mln	N	per mln
<i>god (tomu) nazad</i> '(X) year(s)' ago	32	12,0	1389	51,8	15244	113,4
<i>mesjac (tomu) nazad</i> '(X) month(s)' ago	0	0	258	9,6	1740	12,9
<i>chas(ov) (tomu) nazad</i> '(X) hour(s)' ago	0	0	138	5,1	892	6,6
<i>minut(u) (tomu) nazad</i> '(X) minute(s)' ago	0	0	69	2,6	750	5,6

Contemporary Russian: positional freedom:

- In the nowadays Russian the temporal *X-time (tomu) nazad* structures can be found **in any position** within the sentence, it is usually not separated by intonation breaks (in the speech) or commas (in the writing):

- (15) *Ona vsego god nazad vernulas' iz kapital'nogo remonta.*  
 it only year ago came.back from  
 'It [= missile] underwent a complete overhaul only one year ago (Abarinov, 2003).

Contemporary Russian: the fate of *tomu*:

- Once the the bi-partite structure is released, *tomu* is rendered **functionless**.

- (16) *ejo sestra uchilas dva goda (tomu) nazad v shkole.*  
 studied two years (that.DAT) ago in school.  
 'Two years ago her sister was studying in the school'.

- Its use within *nazad*-adverbials reduces over time. Frequency per mln.:

	1700-1900		1900-	
	N	per mln	N	per mln
<i>let tomu nazad</i> '(N) years ago'	543	18,7	1448	10,8
<i>let nazad</i> '(N) years ago'	296	10,2	7668	57,0

Summary:

- a very subtle semantic shift (fixation of the speaker-oriented reference point);
- gradual loss of substance (synchronically optional *tomu*);
- increase in frequency;
- separate clause-like structure > clause-internal temporal modifier;
- *nazad*: predicatively used adverbial > **post**position

## V. Case study 3: *uzhe ... kak* ‘It is already X-time since / that...’

### Early two-sentence structure:

- (17) [A on, uxodja, prigrozil mne...]<sub>i</sub>, — da tol’ko [tomu]<sub>i</sub> *uzhe pjat’ let proshlo*, i nichego.  
that.DAT already five years passed  
‘And he threatened me when leaving that...; but five years have passed, and nothing happened’ (Koshko, 1928).  
Lit: ‘... but five years passed to that, and ...’

### Early two-clause structure (subordinator *kak*, anaphoric or cataphoric):

- (18) [Tomu]<sub>i</sub> *uzhe neskol’ko let*, [kak ja zaexal v selo P. ]<sub>i</sub>  
**that.DAT already several years as**  
‘Several years have passed since I went to the village of P.’ (Fonvizin, 1788).  
Lit.: ‘It is already several years to that, as I ’

### Diachronic trend:

- These two-partite structures decline towards the first half of the 20<sup>th</sup> century (the last reliable example comes from 1928).
- Anaphoric / cataphoric *tomu* is released (as in scenario IV), **obligatorily** in this case.

### Word order change as the indicator of development towards monoclausality:

- One of the earliest examples of use **within the clause**:

- (19) On *uzhe poltora goda kak sidit voevodoj v Dubne*  
he **already 1,5 years as**  
‘He is the governor of the province of Dubna **for already one year and a half**’ (Gogol, 1835-1841).  
Lit.: ‘He already 1,5 years as governs in Dubna’.

- Nowadays, these adverbials are freely used in any position in the clause.

### Tense-aspect forms of the predicate:

- A. Present Tense of the imperfective verbs (as in (19)) + non-verbal predicates;
- B. Past Tense of the perfective verbs (as in (18)).

### A. *uzhe* X-time-ACC *kak* V.IPFV-PRS = ‘has/have been V-ing for already X-time’

Compare:

- (20) On *uzhe nedel’ju rabotaet v biblioteke*.  
He already **week-ACC** works  
‘He is working in the library for already a week’.
- Accusative (not Nominative!) NPs – one of basic adverbials of duration (thus, in imperfective contexts) in Russian, independently of *kak*;
  - *uzhe* is related to speaker’s expectations [Bogulslavskij 1996: 237 ff.] & retrospectivity [Pertcov 2003].

B. *uzhe* X-time-ACC *kak* V.PFV-PST = ‘it is already X-time since V happened’

*Kak* is obligatory, cf. (18) and:

- (21) \**uzhe*        *neskol’ko*    *let*                    *ja* *zaexal* *v selo*        *P.*  
 already        several        years            I    went    to village P.  
 Lit. \*‘I went to the village P. for already several years’

Case-marking of time-span Ns in *uzhe* X-time *kak* constructions:

- Non-feminine and plural feminine inanimate nouns: Accusative = Nominative.
- Case marking of **feminine** *nedelja* ‘week’: Nominative (22) or Accusative (23):

- (22) *Uzhe*        *nedelj-a*                    *kak*    *nachalas’* *kampanija*  
 already        week-NOM                    as  
 ‘It is **already a week** since the campaign started’ (Tolstoy 1867-1869).

- (23) *Vsex prilichnyx ljudej*    *uzhe*        *nedel-ju*        *kak*    *arestovali.*  
 all decent people.ACC    already        week-ACC    as    arrested  
 ‘It is **already a week** since all the decent people were arrested’ (Voronel’, 1975-2003).

	NOM: <i>uzhe nedelja kak</i>	ACC: <i>uzhe nedelju kak</i>
1813-1930	13	1
1930-1990	6	6
1990-PRESENT	4	17

⇒ Case-pattern is acquired through **analogy** in **both** types of temporal-aspectual structures!

Summary:

- Most structural properties are lost (incl. loss of substance):
  - *Tomu* (lost entirely);
  - Bi-clausal structure, incl. word order pattern (lost entirely);
  - Case-marking of the time-span NP (levelled due to analogy);
  - *Uzhe* is not obligatory (though frequent):

	1990-2000
<i>uzhe ... goda kak</i> ‘already X years’	32
<i>goda kak</i> ‘for X years’ (no <i>uzhe</i> )	19



➤ **Kak** (“subordinator”) seems to be the **only remnant** of the original structure.

- However, it **does not signal any syntactic boundary**,
- nor does it seem to express any particular piece of meaning.
- **Exaptation**: Thus, *kak* loses its status of a conjunction and becomes a relatively free marker of the construction as a whole that no longer plays a role of a linking element.
- **Loosening** of its linear position in modern varieties of Russian: *uzhe* X-time *kak* V (original), but also *uzhe kak* X-time V (24), V *uzhe* X-time *kak* (25), X-time *uzhe* V *kak*, V *uzhe kak* X-time etc.

(24) *Tamozhni jantarnogo kraja uzhe kak god lixoradit.*  
**already as year** cause.fever

‘The amber region’s customs are fevering for already a year’ (Mazepov, 2004).

(25) *... usilenno reklamiruemyj uzhe polgoda kak.*  
**already half.year as**

‘... strenuously advertised for already half a year’.

## VI. Discussion

Conclusion 1 (methodological): An eulogy to **microdiachrony**!

Syntactic change in peripheral structures can be **very rapid**. However, they are hard to notice unless studying **large corpus data**. One **doesn’t need deep diachronic coverage** in order to unearth the **mechanisms of syntactic change**.

		I. <i>vo glave</i> ‘headed’	II. <i>nazad</i> ‘ago’	III. <i>uzhe</i> X-ACC <i>kak</i>
(increase in frequency)		Yes	Yes	Yes
Reanalysis	A change in constituent structure without immediate overt manifestation	Yes	Yes	Yes
Grammaticalization	Unidirectionality (biclausality–to-monoclausality)	Yes	Yes	Yes
	Loss of pragmatic significance	No	Yes	Yes
	Loss of substance	No	Yes (optional)	Yes
	Lexicon-to-grammar drift	Yes	Yes (rather)	No
	Loss of autonomy (exparadigmaticity)	Yes	No	No
	Loss of syntactic freedom	No	No	INCREASE! (tight-to-loose development)
Semantic change (concrete-to-abstract drift etc.)		No	(almost) No	No

Conclusion 2: A **unitary** path of diachronic development might encompass processes that are typical of **both** grammaticalization and reanalysis.

**Reanalysis and grammaticalization are not strictly counteropposed.**

Question: Recall now two of Haspelmath's criteria:

Grammaticalization	Reanalysis
Gradual	Abrupt (either ... or ...)
Due to language use	due to language acquisition

To be honest, I don't know which is the answer in the cases analyzed. However, the hypothesis is that **quantitative changes in use increase the probability of abrupt changes in acquisition.**

#### References

- Boguslavskij, Igor. 1996. Sfera dejstvija leksicheskix edinic. Moskva: Jazyki russkoj kultury.
- Haspelmath, Martin. 1998. Does grammaticalization need reanalysis? *Studies in Language* 22, 315-351.
- Heine, Bernd, Ulrike Claudi and Friederike Hünemeyer. 1991. *Grammaticalization: A conceptual framework*. Chicago: University of Chicago Press.
- Hopper, Paul and Elizabeth C. Traugott. 1993. *Grammaticalization*. Cambridge: Cambridge University Press. (2<sup>nd</sup> edition 2003).
- Kortmann, Bernd & Ekkehard König. 1992. Categorical reanalysis: the case of deverbal prepositions. *Linguistics* 30: 671-697.
- Langacker, Ronald W. 1977. Syntactic Reanalysis. In: Charles Li (ed.), *Mechanisms of Syntactic Change*, 57-139. Austin, University of Texas Press.
- Percov, N.V. 2002. O vozmozhnom semanticheskom invariante russkix frazovyx chastic *uzhe* i *eshchjo*. In: *Logicheskij analiz jazyka. Semantika nachala i konca* (ed. by N.D.Arutjunova et al.). Moscow: Indrik. 137-144.