Headed Correlatives in Russian*

1 Correlatives: An Introduction

(1)	[Kogo	ljublju],	[tomu	darju]
		who.ACC	love.1sG			that.DAT.SG	give.away.1sG	
	$[_{RC}$	wh-]	$[_{\text{MC}}$	correlate]

(2) Kak rabotal, tak i zarabotal. how worked that.way PRT earned

For Lehmann (1986), correlatives are a "variety of the adjoined relative construction" (i.e. a construction where a RC is situated outside the (rest of) MC). In fact some analyses claim that RC originates within MC (see below).

Is headedness compatible with correlativity? In other words, how about e.g.

- (3) [Tomu, [kogo ljublju]], [tomu darju]?
 - (-) Vries (2002, 40): lack of external head as one of the defining properties of correlatives, i.e. HCRs ruled out by definition (which was apparently empirically inspired though). Some deny the presence of the DP/NP level in correlative RCs (Lipták 2009, 8).
 - + Mahajan (2000, 214–215): Hindi features correlative clauses headed by a determiner. Mahajan gives examples with demonstratives (4); note the presence of the NP *a:dmi:*. Similar Indo-Aryan examples, including those with a full NP both in RC and MC, are discussed as somewhat marginal in Cinque (2010).
- (4) vo a:dmi: jo si:ta:ko acc^ha: lagta: hε mujhe vo pasand nahĩ: hε DEM man REL Sita.DAT nice seem.IMP be.PRES I.DAT DEM like not be.PRES 'I do not like the man who Sita likes'

In the talk:

- the variety of headed correlatives (HCRs) in Russian
- preliminary diachronic/lexical data; some implications for theories of correlatives

2 HCRs in Russian

First mention known to me: Лютикова (2008); also Холодилова (2010). Cf. Tsedryk (n.d., fn. 11), apparently unaware of predecessors:

The anonymous reviewer points out ... (i), suggesting that correlative CPs could involve covert universal quantification and bringing up a possibility of analysis in terms of QR (along the lines of antecedent contained deletion).

(i) Vsë, čto ty zaxočeš', to ja i kuplju. all what.ACC you will.want that.ACC I EMPH will.buy [Lit.: 'What you want, that (thing) I'll buy.']

However, the reviewer's example in (i) appears to be an argument against CP movement in terms of universal QR. If (i) is to be derived by moving vsë, čto ty zaxočeš' from Dem, we expect this string of words to be a constituent at the base contrary to fact.

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They are robustly attested in corpus data:¹

- (5) [Tot, kto prestupaet], tot i s bogom prestupal, that.NOM.SG who.NOM trespass.3SG that.NOM.SG PRT with God.INS trespassed poklony bil i vsë ravno prestupal. [Даниил Гранин. Зубр (1987)] bowed and nevertheless trespassed
- (6) [Vsë, čto polezno čelovečestvu], to i everything.NOM that.NOM.SG useful.SG.N humankind.DAT that.NOM.SG PRT blagorodno! [Ф. М. Достоевский. Преступление и наказание (1866)] noble.SG.N

Checklist for correlatives (Vries 2002, 40):

- The head is internal.
- The semantics is maximalizing. ✓ (sometimes overt quantification)
- Left-adjoined to the matrix clause.
- Matrix contains a personal or demonstrative pronoun (the correlate) that refers to the modified relative head.
- They are not nominalized (i.e. not DPs), but they are bare sentences.
 - Do not occur in DP positions.
 - Never have an external determiner. X (attributive demonstrative or quantifier $+ \lceil_{NP} \varnothing \rceil$)
 - Never have an external Case ending or another nominal marking.
 - Never have an external adposition. ✓

For *potomu čto* 'because' the headless correlative configuration is dubious:

(7) ?Počemu èto odejanie nadel Ivan, potomu (že) ego nadel (i) Pëtr. why this attire.ACC.SG put.on I. that's.why PRT it.ACC put.on PRT P.

The corresponding HCR-like construction is as in

(8) (Začem že on nadel čužoe odejan'e? 'Why on earth did he put on another's attire?')

Potomu čto lučše, potomu і nadel... [Н. В. Гоголь. Тарас Бульба (1835-1841)]

because better that's.why PRT put.on

Both demonstrative and universal heads are **light heads** in the sense of Citko (2004), which have the properties intermediate between those of regular heads and the absence of a head (see e.g. Kholodilova 2017, 133), e.g. in terms of the admissible relative pronouns ('what' vs. 'which') in the languages that have restrictions here.

2.1 Real Heads

The head is predominantly nominative (if case-marked): among the case-marked heads in the data in Section 3, 30 are NOM, 3 are ACC, homonymous with NOM, and 1 is INS. May it be that the head in fact forms an unanalysable complex with the relativiser (as proposed for the complementiser *to čto* in Korotaev 2013)? No:

¹Data from the Russian National Corpus, http://ruscorpora.ru.

- the head may inflect for case, number and gender
 - (9) U tex, komu platjat, u tex i sprašivajte. [Google] PREP that.GEN.PL who.DAT pay.3PL PREP that.GEN.PL PRT ask.IMPER.PL
- the head may be separated from the *wh*-word, at least with a preposition:
 - (10) K tomu, k čemu nado, k tomu i to that.DAT.SG to what.DAT should.be to that.DAT.SG PRT otnositsja! [К. Г. Паустовский. Золотая роза (1955)] relate.3SG

2.2 Not Topics

A possible objection: fronted clauses in (5)–(6) are just topics; cf. with a DP:

- (11) Lën'ka navernjaka ne znaet ničego, uroven' ne tot, a vot L. surely NEG know.3SG nothing level.NOM.SG NEG that.NOM.SG but PRT Iljuša tot znaet. [Александра Маринина. Последний рассвет (2013)] I. that.NOM.SG know.3SG
- (12) "JUKOSu" tomu voobšče ot publičnogo obsuždenija prjamaja YUKOS.DAT that.DAT.SG at.all from public discussion.GEN.SG direct vygoda. [Александр Добровинский. Заказ избирателей (2003) // «Новая газета»] profit.NOM.SG

Rejoinders:

- topicalisation has distinctive intonation, which is (in my judgement) not required by (5)–(6)
- universal DPs don't topicalise easily (13), but HCRs with universal heads are OK (14)
 - (13) *Každyj (čelovek) tot i ezdit. every man.NOM.SG that.NOM.SG PRT ride.3SG
 - (14) Ved' na nej každyj, kto zaxočet, tot i PRT on she.LOC everyone.NOM who.NOM want.FUT.3SG that.NOM.SG PRT ezdit! [Л. Н. Разумовская. Счастье (1981)] ride.3SG ~ 'whoever wants to, exploits her'
- demonstrative DPs are degraded as topics "resumed" by a demonstrative (15), which does not preclude HRCs with demonstratives as correlates
 - (15) ?Tot čelovek tot na nej i ezdit. that man.NOM.SG that.NOM.SG on she.LOC PRT ride.3SG

On the other hand, the length of the fronted constituent may play a role: the longer it is, the better the demonstrative.

Headed RCs to which correspond personal pronouns may indeed be topics (the semantics is referential, not maximalising):

(16) Tol'ko ved' te, kogo poslali, — **oni** tam stesnjat'sja ne just PRT that.NOM.PL who.ACC sent they.NOM there feel.shy.INF NEG stanut. [Google] be.FUT.3PL

3 Diachronic and Word-Specific Patterns

Warning! The data are quite preliminary. I consider only correlates immediately followed by the particle i, which is in fact optional (17) and is not tightly linked to the correlate in terms of linear position (18).

The rest of the main clause in a correlative is often preceded by i emphatic particle that marks the most salient part of the sentence.

(Mitrenina 2010, referring to Šimčuk and Ščur)

- (17) Poètomu každyj, kto potruditsja, tot tuda i that's.why everyone.NOM who.NOM work.FUT.3SG that.NOM.SG there PRT vxodit, a kto leniv na duxovnoe, tot idët v preispodnjuju, v enter.3SG but who.NOM lazy spiritually that.NOM go.3SG to hell.ACC to geennu. [Протоиерей Димитрий Смирнов. Проповеди (1984-1989)] Gehenna.ACC
- (18) Každyj, kto bljaxu nadel, tot **nami** i everyone.NOM who.NOM badge.ACC.SG put.on that.NOM.SG we.INS PRT pomykaet. [А. А. Богданов. Потапыч (1897-1899)] rule.3SG

To put a limit on search results, the distance between wh- and correlate was set to 1–5.2

3.1 Lexical Idiosyncrasies

	% headed	skol'ko	kak	kogda	kakoj	kto	čto
gde	4,81	***	***	***	**	***	
čto	3,54	***	**	**	*	*	
kto	1,66	*	(*)	3	_		
kakoj	0,66	_	_	_			
kogda	0,29	_	_				
kak	0,24	_					

Table 1: Differences in the proportions of headed uses in the main subcorpus of RNC (specifications from Table 2 apply); two-sided χ^2 ; *** p < .001, ** p < .01, * p < .05

• Two poles: gde and čto vs. kakoj, kogda and kak, with kto in-between.

The demonstrative heads corresponding to *gde* and *čto* are monosyllabic, may be closer to the prototype of "lightness". The same holds for *kak*, but here a considerable proportion of uses are **not** maximalising but rather convey the meaning of 'just in the same way'.

3.2 Diachronic Variation

See Table 2.

- The proportion of non-demonstrative (universal) heads decreases over time.
- The proportion of demonstrative heads increases.
- · Hence, weak overall tendencies.

²Another warning: Холодилова (2010) comes to different conclusions regarding diachrony.

³Two-sided exact Fisher test: $p \simeq 0.06$.

Wh-word	Period	DEM head	Other heads	All heads	Headless	All	Significance
	-1917	5	ε	8	239	247	
gde 'where'	1918-	34	0	34	592	626	* for DEM, ** for others
	overall	39	3	42	831	873	
	-1917	1	0	1	115	116	
kak 'how' ^a	1918-	0	0	0	303	303	
	overall	1	0	1	418	419	
	-1917	I_p	0	1	64	65	
kakoj 'which (kind of)'	1918-	1	0	-	239	240	
	overall	2	0	2	303	305	
	-1917	0	0	0	107	107	
kogda 'when'	1918-	0	1	1	232	233	
	overall	0	1	-	339	340	
	-1917	1	1	2	398	400	
kto 'who'	1918-	15	2	17	730	747	* for all and for DEM
	overall	16	3	19	1128	1147	
	-1917	0	0	0	120	120	
skoľko 'how many/much'	1918-	0	0	0	295	295	
	overall	0	0	0	415	415	
	-1917	4	3	7	187	194	
čto 'what' ^c	1918-	8	2	10	276	286	
	overall	12	5	17	463	480	
	-1917	12	2	19	1230	1249	
all	1918-	28	2	63	2667	2730	** for DEM, * for others
	overall	70	12	82	3897	3979	

Table 2: Headed and headless CRs in the main subcorpus of RNC (specified further where necessary); two-sided χ^2 where applicable

bHere the head is heavy, but mind the fact that takoj is attibutive: ... is takim že licom, s kakim prišla, s takim i ušla 'and she went out with the same ^aPartial sample: only words starting with A or B after i. Excluded: all uses of kak... tak i conjoining anything but finite verb phrases. face as when she came in' [A. Ф. Писемский. Взбаламученное море (1863)].

^cPartial sample: only words starting with A-Γ after i. Excluded: čto kasaetsja 'as regards', čem... tem 'the more... the more'. One pre-1917 example with èto 'this' instead of to as correlate. A universal head may have its semantic contribution, removing **homogeneity** (Križ 2015): there is a sense in which (19a) is neither decisively true nor decisively false in Scenario 1, but (19b) is definitely false.

(19) a. The professors smiled.

ibid., v, 11

b. All the professors smiled.

Scenario 1. There were ten professors, five of them smiled at a joke.

Adding a demonstrative head, unlike with universal head, makes no semantic contribution. Hypothesis: headedness becomes more automatic, perhaps with some degree of fixedness. Given the emergent use of *to čto* instead of *čto* with mental and speech verbs (Korotaev 2013; Богданова-Бегларян 2015), this suggests a tendency toward formal headedness in contemporary Russian subordinate clauses.

4 Theoretical Implications

- 1. Some theorists (Mahajan 2000; Mitrenina 2010; Pietraszko 2015) argue that the correlative clause undergoes movement from the clause containing the correlate.
 - (A) $[_{RC}$ $kto ...]_i ... [_{MC} [tot [_{RC}$ $kto ...]_i] ...]$ Here it is unclear how the head of the RC emerges.
 - (B) $[tot [_{RC} kto ...]]_i ... [_{MC} [tot [_{RC} kto ...]]_i ...]$ (incomplete deletion, Mahajan 2000)

Option (B) fares well insofar as the head of the HCR is identical to the correlate. However, with universal heads (6) there is no identity. To save the movement account, one would have to stipulate that *to* and *vsë* are different realisations of the same lexeme, cf. Fox, Johnson 2016 for *the* and *every*. (This problem was apparently unknown to Лютикова (2008), but Холодилова (2010) reports several kinds of mismatch between the correlate and the RC head.)

But even this may be insufficient, as for some speakers (prominently for Leo Tolstoy) the complex ' \forall + DEM' is available as head (20), but not as correlate.

- (20) Vsë to, čto daët mne Otec, to all that.NOM.SG what.NOM give.3SG I.DAT Father.NOM.SG that.NOM.SG prijdet ko mne... [Л. Н. Толстой. Соединение и перевод... (1902)] come.FUT.3SG to I.DAT
- 2. Headless CRs can be "multi-head" (Bhatt 2003), as in (21) from Митренина (2008):
- (21) A vpročem, ja takogo mnenija: komu $_1$ kakaja $_2$ premudrost' dalas', but actually I such opinion.GEN.SG who.DAT which wisdom.NOM.SG was.given tot $_1$ toj $_2$ i priderživajsja! [И. С. Тургенев. Собака (1847-1852)] that.NOM.SG that.GEN.SG PRT hold.on.to.IMPER

In HCRs, the use of relative pronouns not connected to the head is degraded. Tsedryk (n.d.): bare interrogative pronouns with indefinite interpretation are licensed in the (immediate) scope of a quantifier over alternatives, e.g. *esli* 'if' (Yanovich 2005). However, Tsedryk discards the idea that (headless) CRs are conditional (it cannot get the movement right).

? But should we draw a divide between headless RCs and HRCs on the grounds of (21)?

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