

In: Zybatow G., Junghanns U., Mehlhorn G., Szucsich L. (ed.), Current Issues in Formal Slavic Linguistics. Frankfurt/Main: Peter Lang (Linguistik International. Bd. 5). 2001, pp.268–279.

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### Distributive Quantifier Float in Russian and Some Related Constructions

The purpose of this paper is to investigate the grammatical pattern that underlies the following Russian construction and to indicate some theoretical problems that arise with its analysis:

(1) a. *Mal'čik-i prines-l-i každ-yj po jablok-u*  
 boy-PL.N bring-PST-PL each-SG.N DP apple-D  
 'The boys each brought an apple'

b. *Deti poš-l-i každ-yj k sebe domoj*  
 children.N go-PST-PL each-SG.N to self-D home  
 'Each of the children went to his house'

I will call this phenomenon Distributive Quantifier Float (DQF), although the traditional movement approach is obviously inadequate for Russian.<sup>1</sup> I will also demonstrate that there are striking similarities between (1) and the constructions exemplified in (2-5):

(2) a. *Mč-atsja bes-y roj za ro-em*  
 rush-PR.3.PL demon-PL.N swarm.SG.N after swarm-SG.I  
 'The demons are rushing along swarm after swarm' (Pushkin)

b. *Spisok byl pročita-n punkt za punkt-om*  
 list.SG.N was read-PRT item.SG.N after item-I  
 'The list was read item by item'

c. *My propusti-l-i ix odn-ogo za drug-im*  
 we.N let.go-PST-PL they.A one.A after other-I  
 'We let them go one after another'

(3) a. *Oni stoja-l-i spin-a k spin-e*  
 they.N stand-PST-PL back-SG.N to back-SG.D  
 'They stood back to back'

b. *Oni stolkn-u-l-i-s' nos k nos-u*  
 they.N run.into-PST-PL-REC nose.N to nose-D  
 'They ran into each other, (lit.:) nose to nose'

c. *Vsj-a Ver-a Kornil'evn-a by-l-a — dva treugol'nik-a,*  
 all-N V.-SG.N K.-SG.N be-PST-SG.F two.N triangle-G

<sup>1</sup> It has been proved inadequate for better studied languages like English also, see (Baltin 1995; the same idea from the point of view of compositional semantics: Dowty and Brodie 1984).

*postavl-enn-yx veršin-a na veršin-u* (Solzhenitsyn)  
 put-PRT-PL.Gapex-SG.N on apex-SG.A  
 ‘Vera Kornilyevna was all like two triangles put apex upon apex’

(4) a. *Oni ne uzna-l-i drug drug-a*  
 they.N not recognize-PST-PL each other-A  
 ‘They didn’t recognize each other’

b. *Ljud-i sprašiva-l-i odin drug-ogo*  
 people-PL.N ask-PST-PL one.N other-A  
 ‘People were asking one another’

c. *Oni š-l-i vojn-oj brat na brat-a*  
 they.N go-PST-PL war-I brother.SG.N against brother.A  
 ‘They waged war, (lit.) brother against brother’

(5) *Oni ne uzna-l-i sam-i sebja*  
 they.N not recognize-PST-PL self-PL.N self.A  
 ‘They didn’t recognize themselves’

In section 1, the DQF construction (1) will be analyzed. In section 2, it will be shown that all constructions listed above show significant similarities so that most of them belong to a family of constructions in Russian with the core semantics of distributivity. In section 3 I address some theoretical issues that arise with the analysis of these constructions<sup>2</sup>.

## 1. The Construction with Distributive Quantifier Float

The Russian universal quantifier pronoun *každyj* ‘each’, unlike other quantifiers like *vsjakij* ‘every, each’, *ljuboj* ‘any’, *nekotoryj* ‘some’, *vse* ‘all’ etc., can be used in the DQF construction. In this construction, the NP over which *každyj* quantifies occurs in plural (6b), not in singular, as is normally the case with *každyj* (6a). *Každyj* obligatorily follows the plural NP it quantifies, but it is itself singular<sup>3</sup>:

(6) a. *Ja každy-ogo student-a (\*každy-yx student-ov)*  
 I.N each-SG.A student-SG.A (each-PL.A student-PL.A)  
*predupredi-l*  
 warn-PST

b. colloq. *Ja student-ov každy-ogo (\*každy-ogo student-ov)*  
 I.N student-PL.A each-SG.A (each-SG.A student-PL.A)  
*predupredi-l*  
 warn-PST  
 ‘I warned each student’

<sup>2</sup> I am indebted to Barbara H. Partee and to the participants of her seminar on formal semantics at RGGU (Moscow) for their valuable comments on the first draft of this paper and for their practical help in my work. All mistakes and inadequacies are my own.

<sup>3</sup> The quantifier *každyj*, like other adjectives, inflects for number, case and gender. For simplicity, its gender characteristics, which are not significant here, will not be glossed below.

(7) colloq. *Oni* *každ-yj* *govorj-at,* *čto* *pomog-ut*  
 they.N each-SG.N say-PRS.3.PL that help-FUT.3.PL  
 ‘Each of them says that they will help’

(8) colloq. *Ja* *sprašiva-l* *u* *rebat* *u* *každ-ogo,*  
 I.N ask.PST by boy.PL.G by each.SG.G  
  
*no* *nikto* *ničego* *ne* *zna-et*  
 but nobody.N nothing.A not know-PRS.3.SG  
 ‘I asked each of the boys but nobody knows anything’

Sentences like (6b, 7 and 8) are attested in colloquial speech, but in standard language they are usually avoided. Nevertheless, there is a more complex construction that is very well attested in both spoken and written speech. In the latter, *každyj* belongs to what I will call below Distributive Constituent (DC). DC includes two elements: the Distributive-key quantifier *každyj* and the Distributive-share component (for the terms see Choe 1987, Gil 1995). The latter may be represented either by a preposition phrase consisting of *po* + dative NP in its distributive meaning (9) or by a phrase containing a reflexive anaphor *sebja* ‘oneself’ (10) or possessive reflexive pronoun *svoj* which also is employed distributively (11). The distributive meaning of the possessive reflexive *svoj* was explored in (Padu[eva 1983]), but of course the argument reflexive *sebja* may be distributive as well (10):

(9) *Mal’čik-i* *prines-l-i* [*každ-yj* *po* *sumk-e*]  
 boy-PL.N bring-PST-PL each-SG.N DP bag-SG.D  
 ‘Each of the boys brought a bag’

(10) *Oni* *pozaboti-l-i-s’* [*každ-yj* *o* *seb-e*]  
 they.N take.care-PST-PL-M each-SG.N about self-P  
 ‘Each of them took care about himself’

(11) *Oni* *govori-l-i* [*každ-yj* *na* *svo-em* *jazyk-e*]  
 they.N speak-PST-PL each-SG.N in self’s-SG.P language-SG.P  
 ‘Each of them spoke his own language’

Instead of reflexive pronouns, several other anaphoric variable-containing expressions, whose characteristics of binding and locality still wait for their researcher, may occur in the Distributive-share component: *svoe* ‘one’s own’ (12), *sobstvennyj* ‘proper’, ‘own’ (13), *odinakovo* ‘alike’, ‘the same’ (14), *otdel’no* and *po otdel’nosti* ‘separately’ (15), *osobyj* ‘separate’, *odno i to že* ‘the same’, and some others. Less felicitous in this construction are anaphoric words with disjoint reference *čužoj* ‘other’s’ (16) and *drugoj* ‘(an)other’ (17).

(12) *Sobesednik-i* *govori-l-i* *každ-yj* *o* *svo-em*  
 interlocutor-PL.N speak-PST-PL each-SG.N about self’s-SG.P  
 ‘Each of the interlocutors spoke about what was interesting to him’

(13) *Doktor-a* *primenja-l-i* *každ-yj* *sobstvenn-ye* *sredstv-a*  
 Doctor-PL.N apply-PST-PL each-SG.N own-PL.A means-PL.A  
 ‘Each of the doctors used his own medicine’

- (14) *Na perv-yj vzgljad rastenij-a vygljadj-at každ-oe*  
 at first-A glance.A plant-PL.N look-PRS.3.PL each-SG.N

*odinakovo*

alike

‘At first glance, all the plants look alike’

- (15) *Priglasite-ix každ-ogo po otidel’nosti*  
 invite-IMP they.A each-SG.A separately

‘Invite each of them separately’

- (16) ? *Ix tjanulo každogo na čuž-oe*  
 they.A feel.desire-PST-3SG each-SG.A on other’s-A

‘Each of them felt desire to get someone else’s property’

- (17) ? *Svidetel-i prestupenij-a podozreva-l-i každ-yj drug-ogo*  
 witness-PL.N crime-G suspect-PST-PL each-SG.N other-SG.A

‘Each of the crime’s witnesses suspected the other’

### 1.1. Semantics

The construction in (1), (9–11) may be called «distributive», since the entities of the two sets — the boys and the apples in (1a), or the children and the houses in (1b), are distributed in pairs. (1a) means that each boy brought one apple and that at least most of the apples brought by the boys were different. (1b) means that each of the children went home and that many, if not all, of their homes were different. The sentence

- (18) *Mal’čik-i posmotre-l-i každ-yj po dva fil’m-a*  
 boy-PL.N watch-PST-PL each-SG.N DP two film-G

‘Each of the boys saw two films’

may be used also when some pairs of films coincide for some of the boys. Nevertheless, the number of pairs must not be much less than the number of the boys. In particular, if all the boys have seen the same two films, (18) sounds utterly infelicitous.

Surprisingly, the number of variables bound by the distributive quantifier is not restricted to two:

- (19) *Mal’čik-i položi-l-i každ-yj v svoj-u tarelk-u*  
 boy-PL.N put-PST-PL each-SG.N in self’s-SG.A plate-SG.A

*po kartofelin-e*  
 DP potato-SG.D

‘Each of boys put a potato in his plate’

In (19), there are two share sets — potatoes (one for each boy), and plates (one for each boy too)<sup>4</sup>.

## 1.2. Word order and agreement

The DQF construction bristles with difficulties for syntactic analysis. The most obvious problem is that the quantifier is in singular whereas the head noun can only be in plural. *Každyj* ‘each’ obligatorily follows the plural noun it quantifies, but is itself singular, cf. (1a) repeated here as (20a):

- (20) a. *Mal’čik-i* (\**mal’čik*) *prines-l-i* *každ-yj* (\**každ-ye*)  
 boy-PL.N (\*boy.SG.N) bring-PST-PL each-SG.N (\*each-PL.N)

*po jablok-u*  
 DT apple-D  
 ‘The boys each brought an apple’

In the more ordinary construction with a preposed quantifier, the number agreement is as usual. Being preposed, *každyj* normally triggers the singular number of its NP:

- b. *Každ-yj* (\**každ-ye*) *mal’čik* (\**mal’čik-i*) *prines*  
 each-SG.N (\*each-PL.N) boy.N (\*boy-PL.N) bring.PST.SG

*po jablok-u*  
 DP apple-D  
 ‘Each boy brought an apple’

*Každyj* may occur with a NP in plural only if it is itself in plural:

- c. *Každ-ye* (\**každ-yj*) *dva mal’čik-a* *prines-l-i*  
 each-PL.N (\*each-SG.N) two boy-G bring-PST-PL

(\**prines*) *po jablok-u*  
 (\*bring.PST.SG) DP apple-D  
 ‘Each two boys brought an apple’

In (20c) the the quantifier ranges over the parts of the group denoted by the plural noun phrase, i. e. each pair of the boys.

David Gil (1995) has shown that distributive-key quantifiers normally trigger singular agreement, whereas quantifiers unmarked for distributivity require plural forms. The idea that a quantifier must have the same number value as the NP it quantifies over, is so strongly believed in, that it is usually assumed that in the English reciprocal (*They saw each other*) *each* is in plural for the single reason that its antecedent is plural (Heim, Lasnik, and May 1991), although as a nominal modifier

<sup>4</sup> I am aware of no acceptable example with four variables, however; (i) sounds very queer:

(i) ? *Mal’čik-i* *položi-l-i* *každ-yj* *svo-ej vilk-oj*  
 boy-PL.N put-PST-PL each-SG.N self’s-I fork-I  
*v svoj-u tarelk-u po kartofelin-e*  
 in self’s-A plate-A DP potatoe-SG.D  
 ‘Each of the boys put a potatoe with his fork in his plate’

*each* triggers singular agreement. In the DQF construction, this agreement in number is obviously violated.

Another interesting characteristic of the DQF construction is its word order. Normally, no material can intervene between *každyj* and the Distributive-share component, although they two may occur in either order, if the Distributive-share component is a *po*-phrase:

- (21) a. *Učenik-i*      *reši-l-i*      (\**reši-l*)      *každ-yj*  
pupil-PL.NOM    solv-PST-PL    (solve-PST.SG)    each-SG.N
- po*    *pjat-i*    *zadač//*      *po*    *pjat-i*    *zadač*      *každ-yj*  
DP    five-G    problem.PL.G//    DP    five-G    problem.PL.G    each-SG.N
- ‘Each of the pupils solved five problems’
- (22) a. ?\* *Učenik-i*    *každ-yj*    *reši-l-i*      *po*    *pjat-i*    *zadač*  
pupil-SG.N    each-SG.N    solve-PST-PL    DP    five-G    problem-PL.G
- b. \* *Učenik-i*    *reši-l-i*      *každ-yj*      *na*      *urok-e*  
pupil-SG.N    solve-PST-N    each-SG.N    at      lesson-P
- po*      *pjat-i*      *žadač*  
DP      five-G      problem-PL.G
- ‘Each of the pupils solved five problems at the lesson’
- (23) a. *Posl-y*      *soobšči-l-i*      *ob*    *et-om*  
ambassador-PL.N    inform-PST-PL    about    this-P
- každ-yj*      *svo-emu*      *pravitel’stv-u*  
each-SG.N      self’s-SG.D      government-SG.D
- b. ?\* *Posl-y*      *každ-yj*      *soobšči-l-i*      *ob*    *et-om*  
ambassador-PL.N    each-SG.N    inform-PST-PL    about    this-P
- svo-emu*      *pravitel’stv-u*  
self’s-SG.D    government-D
- ‘Each of the ambassadors informed his government about it’
- c. \* *Posl-y*      *ob*    *et-om*      *soobšči-l-i*      *každ-yj*  
ambassador-PL.N    about    this-P    inform-PST-PL    each-SG.N
- nemedlenno*      *svoemu*      *pravitel’stvu*  
immediately      self’s-D      government-D
- ‘Each of the ambassadors immediately informed his government about it’

The quantifier and the Distributive-share component can be separated only by another Distributive-share component bound by the same quantifier, as is in (19) repeated below as (24b):

- (24) a. ? *Mal’čik-i*    *položil-i*    *každ-yj*      *v*    *bol’s-uju*    *tarelk-u*  
boys-PL.N    put-PST-PL    each-SG.N    in    big-A      plate-A

*po kartofelin-e*  
DP potato-D

‘Each of the boys put a potato in the big plate, *lit.*: The boys put one potato each in the big plate’

b. *Oni položil-i každ-yj v sv-oj-u tarelk-u*  
they.NOM putPST-PL each-SG.N in self's-A plate

*po kartofelin-e*  
DP potato-D

‘Each of them put a potato in his plate’

The only interpretation that renders (24a) acceptable is if the PP *v bol'suju tarelku* ‘in the big plate’ is also within the scope of the distributive quantifier, i. e. if there are as many big plates as there are boys.

Since Russian is notoriously liberal with respect to word order not only at the clause level, but very often at the phrase level as well, the ungrammaticality of the above examples must be taken very seriously. Judging from the word order, the Distributive-key quantifier and the Distributive-share component really form a single D(istributive) C(onstituent). Examples like (24) undermine the adjunction-to-VP approach to the DQF construction. Since the adjunction of an argument to another argument of the same predicate is a hardly imaginable operation, the DC has to be regarded as a separate clause rather than a complex of adjoined phrasal constituents.

### 1.3. Arguments vs. adjuncts

An NP quantified by *každyj* in a DQF construction may be subject or object. Examples with subject antecedents see above; object antecedents are shown in (25-26):

(25) *My rassmotr-im ix každ-ogo po otdel'nosti*  
we.N consider.FUT they.A each-SG.A separately  
‘We’ll consider them each separately’

(26) *Nam vyda-l-i každ-omu po protivogazu*  
we.D give.PST.PL each-SG.D DP gasmask-D  
‘They gave a gasmask to each of us’

Only arguments, however, can be antecedents in the DQF construction. With adjunct antecedents, distributive constructions can occur only as parenthetical clauses, speakers would separate them with a pause, or in written speech — with a dash, a colon, or with brackets:

(27) a. \**Mašin-a ostanavliva-l-as' u pod'ezd-ov*  
car-SG.N stop-PST-SG by entrance-PL.G  
  
*u každ-ogo po tri minut-y*  
by each-SG.G DP three minute-G  
  
b. *Mašin-a ostanavliva-l-as' u pod'ezd-ov*  
car-SG.N stop-PST-SG by entrance-PL.G

— *u každygo po tri minut-y*  
 by each-SG.G DP three minute-G  
 ‘The car stopped near each entrance — three minutes near each of them’

(28) a. \**On prošel za tri mesjac-a tridcat’*  
 he.N pass-PST in three month-G thirty

*urok-ov za každyj po desjat’*  
 lesson-PL.G in each-SG.A DP ten

b. *On prošel za tri mesjac-a tridcat’*  
 he.N pass-PST in three month-G thirty

*urok-ov: za každyj po desjat’*  
 lesson-PL.G in each-SG.A DP ten

‘During three months, he passed thirty lessons, in each month ten lessons’

In Russian, NPs immediately dominated by adjunct PPs may be divided in two classes: those that can be replaced by pronouns (e. g. with *iz-za* ‘because of’ or *dlja* ‘for’) and those that cannot (e. g. *po* ‘along’, ‘according to’, *u* ‘by’; (Testelec 2001, ch. 3)). The behaviour of *každyj* is typical for pronouns, cf. (27-28) and *zanjal dlja nas dlja každygo po 500 rublej* ‘borrowed for every of us 500 roubles’.

That only arguments are selected as quantified NPs in constructions with the so-called «quantifier float» see (Dowty and Brodie 1984, pp. 78-79). This fact suggests that the latter and the DQF construction must ultimately obtain a common analysis.

#### 1.4. Obligatory Preposition Doubling

If the antecedent in the DQF construction is within a PP, then the preposition must be obligatorily doubled with *každyj* (29a). Neither Preposition Stranding (29b) nor Pied Piping (29c) are available:

(29) a. *Ja vzjal u nix u každygo po tri rublj-a*  
 I.N take-PST from they.G from each-SG.G DP three rouble-G

b. \**Ja vzjal u nix každygo po tri rublj-a*  
 I.N take-PST from they.G each-SG.G DP three rouble-G

c. \**Ja vzjal (n)ix u každygo po tri rublj-a*  
 I.N take-PST they.G from each-SG.G DP three rouble-G

‘I took three roubles from each of them’

*Každyj* is by no means the only adjective that may trigger preposition doubling in Russian (Yadroff and Franks 1999), but it seems to be the only one with which it is obligatory. Since prepositions in argument PPs are determined by the subcategorization frames of their governors, this suggests that inside the DQF construction, there probably exists a separate governing null verb that has a subcategorization frame copied somehow from that of the antecedent’s governor. Otherwise, the uniqueness of the relationship between a verb and its argument might be called in question.

### 1.5. Constructions with numerals: lack of case agreement

Distributive NPs governed by *po* often include a NumP headed by a numeral. Apart from a more standard DQF construction (30a), there is a variant in which the numeral and the numerative word may occur in the *po*-phrase, whereas the NP itself occupies its position in situ outside the DC (30b). There is no agreement in case, since in the Distributive-share component case is determined by the dative-assigning *po* and by the complicated rules of case marking with numerals (see Mel'uk 1985, Franks 1994, Isakadze 1998):

- (30) a. *Oni prines-l-i každ-yj po šest' štuk*  
 they.N bring-PST-PL each-SG.N DP six thing.PL.G.

*jablok*  
 apple.PL.G  
 'Each of them brought six apples'

- b. *Oni prines-l-i jablok-i každ-yj po*  
 they.N bring-PST-PL apple-PL.A each-SG.N DP

*šet' štuk*  
 six thing.PL.G

- c. \**Oni prines-l-i každ-yj po šest' štuk*  
 they.N bring-PST-PL each-SG.N DP six thing.PL.G

*jablok-i*  
 apple-PL.A

What is especially interesting in (30b), both arguments — subject and object — occur twice in the construction: *oni... každyj* 'they... each' and *jabluki... šest' štuk* 'apples... six things'. The case form of the two object constituents is different, since only the second part includes a numeral that requires that the NP it governs be in genitive.

### 1.6. Contexts with empty subjects

As was shown in (Franks, Hornstein 1992; Babby 1998), pronouns *sam* 'oneself', *ves'* 'whole' and *odin* 'one, alone' can occur in the grammatical cases of the Russian subject (nominative and dative) in contexts like converb clauses and object-controlled infinitives, where other kinds of non-null subjects are prohibited. There is at least one more pronoun that occurs as nominative subject in converbal clauses (although not in object-controlled infinitives): *oba* 'both'.

- (31) *Oba vymoknu-v pod dožd-em,*  
 both get.wet-CN under rain-I

*oni doš-l-i do stanci-i*  
 they.N reach-PST-PL until station-G

'Having both got wet under the rain, they reached the station'

There is also at least one more context where normally empty subjects occur, viz. imperative clauses. With imperative 2nd person *pros*, adjective modifiers cannot be used: (32) a. \**Gotovyj prihod-i!* 'Ready come-IMP' is ungrammatical at least

when used with a non-vocative intonation. The floating quantifiers *sam*, *odin*, *ves'* and *oba* are, however, perfectly grammatical in imperative clauses without the vocative intonation: (33) *Sami // odni // vse // oba prixod-i-te!* ‘Come yourselves!’ // ‘Come alone!’ // ‘Come everybody!’ // ‘Come both!’

It turns out that *každyj* has the same distribution, but only within the DQF construction. This holds true for converbal constructions ((34)<sup>5</sup>, for object-controlled infinitives (35), and for imperatives (36):

(34) *Mal'čik-i poš-l-i, nes-ja každ-yj po sumk-e*  
 boy-PL.N go-PST-PL bring-CN each-SG.N DP bag-D  
 ‘The boys went, and each carried a bag’

(35) *Ona poprosi-l-a ix ne ezdi-t' tuda každomu*  
 she.N ask-PST-SG.F they.A not go-INF there each-SG.D DP  
*po neskol'ku raz*  
 DP several time.G.PL  
 ‘She asked them not to go there several times each’

(36) *Posmotr-i-te každ-yj na svo-ego sosed-a!*  
 look-IMP-PL each-SG.N at self's-SG.A neighbour-SG.A  
 ‘Let each of you look at his neighbour!’

*Sam*, *odin*, *ves'*, *oba* and *každyj* in nominative occur also within participle clauses where PRO is controlled by the head noun and normal nominative subjects cannot occur:

(37) *poluč-i-vš-ie sami// odni// oba// každyj*  
 get-PRT-N.PL self.PL// alone.PL// both// each-SG.N  
*po jablok-u*  
 DP apple-SG.D  
 ‘those who received themselves// alone // both //each an apple’

These facts require a broader view of the problem of the «floated» quantifiers of the *sam* type in Russian, and a corresponding revision of the theoretical proposals suggested so far to explain their behaviour.

## 2. Idiomatic distributive constructions

In Russian, there is a large and hardly definable class of idiomatic expressions of the *side-by-side*, *face-to-face*, *hand-in-hand* or *tete-a-tete* type. Of special interest are such idioms in which the first part is in the case of its plural antecedent, but is itself singular:

(38) *Armij-a proxodi-l-a polk za polk-om*  
 army-SG.N pass-PST-F regiment.SG.N after regiment-SG.I  
 ‘The army was passing regiment after regiment’

(39) *My propusti-l-i ix odn-ogo za drug-im*  
 we.NOM let.go-PST-PL they.A one.A after other-I  
 ‘We let them go one after another’

<sup>5</sup> I am indebted to A. E. Kibrik for drawing my attention to this fact.

Cf. in English (40) *The people started to go away one at a time // one by one // one after another*. Here I cannot afford a detailed description of this construction and will give but very few comments. Semantically, (38-39) exemplify a kind of distributive meaning, viz. the distributive relation observed in a temporal string, since every entity within a string follows and is followed by no more than one other entity. A similar construction exemplified in (4) is reciprocal and subject-oriented, as is normal with reciprocals. The third type of the idiomatic distributive constructions (3) denotes a set distributed in pairs (normally consisting of only one pair), whereby each of the entities of a pair has an inalienable part that enters a relation denoted by the predicate to the corresponding inalienable part of the other entity of the pair. Both components denoting inalienable parts are represented by nouns but their meaning unambiguously suggests nonovert quantifiers.

Word order restrictions show that idiomatic constructions too, like the DQF-construction, form a single constituent:

(40) \* *Spisok za punkt-om by-l pročita-n punkt*  
 list.SG.N after item-I be-PST.SG read-PRT item.SG.N  
 ‘The list was read item after item’

(41) \* *Oni odin sprašiva-l-i drug-ogo*  
 they.N one.SG.N ask-PST-PL other-SG.A  
 ‘They asked one another’

(42) \* *Oni spin-a stoja-l-i k spin-e*  
 they.N back-SG.N stand-PST-PL to back-SG.D  
 ‘They stood back to back’

As is the case with the DQF-construction, idiomatic constructions cannot have adjunct antecedents:

(43) \* *My ostavlja-l-i knjig-i u odn-ogo dlja drug-ogo*  
 We.N leave-PST-PL book-PL.A at one-G for other-G  
 lit: ‘We left the books at one’s for the other’

The Preposition Doubling occurs with idiomatic constructions as obligatory as it does with the DQF-constructions:

(44) *U nix u odn-ogo za drug-im*  
 by they.G by one-SG.G after other-SG.I  
 (\**odn-ogo za drug-im*) *obnaruživa-l-sja*  
 (\*one-SG.S after other-SG.I) reveal-PST-PL-AC

*tot že simptom*  
 same symptom.SG.N  
 ‘The same symptom appeared with all of them, one after another’

The most striking similarity of all the constructions is their occurrence in the positions of empty subjects:

(45) a. *Projd-ja odin za drug-im v dver’*  
 pass-CN one.SG.N other-SG.I in door.A

*oni voš-l-i v komnat-u*  
 they.N enter-PST-PL in room-SG.A  
 ‘Passing through the door one after another, they entered the room’

b. *On prosi-l nas ne ezdi-t’ k n-emu*  
 he.N ask-PST we.A not go-INF to he-D

*odn-omu za drug-im*  
 one-D after other-I  
 ‘He asked us not to visit him one by one’

c. *Odin za drug-im zaxod-i-te!*  
 one.N after other-I enter-IMP-PL

‘Come in one by one!’

(46) a. *Ne uzna-v odin drug-ogo,*  
 not recognize-CN one.SG.N other-SG.A

*oni razoš-l-i-s’*  
 they.N disperse-PST-PL-AC  
 ‘Without recognizing one another, they dispersed’

b. *zaščišča-j-te odin drug-ogo!*  
 defend-IMP-PL one.SG.N other-SG.A  
 ‘Defend one another!’

c. *napomina-jušč-ie odin drug-ogo*  
 resemble-PRT-PL.N one.SG.N other-SG.A  
 ‘those who resemble one another’

(47) a. *Stolknu-všis’ nos k nos-u, oni ostanovi-l-i-s’*  
 run.CN nose.SG.N to nose-D they.SG.N stop-PST-PL-AC  
 ‘Having run one into another nose to nose, they stopped’

Cf. also (3c) where an idiomatic expression including a nominative is within a participial clause.

Russian locally bound complex anaphors — the reflexive *sam sebja* ‘oneself’ and the reciprocal *drug druga* ‘each other’ also show remarkable similarity to the DQF-construction. Their components cannot be disjoined by any material except prepositions, they can be used in some positions that require empty subjects. The first part of *sam sebja* copies the case of its Agent antecedent (cf. Rudnitskaya 2000). Adjuncts cannot be antecedents of *sam sebja*, which is strictly Agent oriented. Although *drug druga* ‘each other’ can be bound by non-subject (and non-Agent) arguments as well as by subjects (Rappaport 1986), it cannot be bound by adjuncts:

(48) \**Ja ostavi-l den’gi u Maš-i*  
 I.N leave-PST money.A at Masha-G  
*i u Len-y drug dlja drug-a*  
 and at Lena-G each for other-G  
 lit.: ‘I left money at Masha’s and at Lena’s for each other’

(48), although semantically quite plausible, since the money for Masha could be left at Lena's, and the money for Lena at Masha's, is ungrammatical.

### 3. Some theoretical considerations

The restricted space of this paper enables me only to outline the theoretical issues that are relevant for the analysis of the DQF and related phenomena in Russian. On the one hand, it seems obvious that the DC and its structural analogues — idiomatic constructions and complex anaphors form a constituent that resembles a clause (cf. the small clause analysis for *sam sebja* suggested in Rudnitskaya 2000). On the other hand, there are regular correspondences between the main clause and the DC. Some of these suggest the movement approach (Distributive-key and Distributive-share components and most of their parts cannot occur simultaneously in the main clause and in the DC). Other correspondences suggest rather the copying approach, because some constituents (or features) do occur simultaneously, e. g. the subcategorization frame that must be the same in both clauses (which entails Preposition Doubling). The lack of number agreement or the mismatch of case forms in constructions with NumPs also suggest the feature-copying analysis, whereby some features are copied, and others are not. The latter phenomenon — the head-tail feature mismatch called an *asymmetric chain* was discussed by Anders Holmberg (1998). In particular, Holmberg showed that the feature-copying approach suggested in (Chomsky 1993) can account for the Split Topicalization in some varieties of German (a phenomenon discovered by Henk van Riemsdijk (1989)):

(49) *Ein Schwimmbad hat er sich noch keins gebaut*  
 a pool has he himself yet none built

The features for number, gender and case have been copied, but not the feature [negative] that takes different values for the head and the tail of the chain. Note that in German it is the quantifiers that allow Split Topicalization resulting in an asymmetric chain.

However, there are serious problems with the SC analysis, since the arguments of SC do not c-command the arguments of the main clause, hence the chain is illicit. Moreover, the SC analysis requires a special explanation of how the object of the SC gets the selectional properties of that component of the main clause that is occupied by the SC as a whole.

One may think of a quantifier stranding analysis like that in (Sportiche 1988), assuming that the components of the DC remain in the VP after all the rest of the clause has moved up from there. There is at least one strong argument in favour of this view, — the impossibility of the Distributive-share component to precede the Distributive-key quantifier if the former contains an anaphor, which suggests that both retain their initial positions within the VP:

(50) \**Deti poš-l-i k sebe domoj každ-yj*  
 children.N go-PST-PL to self-D home each-SG.N  
 'Each of the children went to his house'

The Distributive-share component represented by a *po*-phrase, to the contrary, can precede the quantifier, since it does not affect anaphor binding requirements:

(51) *Mal'čik-i prines-l-i po jablok-u každ-yj*  
 boy-PL.N bring-PST-PL DP apple-D each-SG.N  
 'The boys each brought an apple'

However, the case forms within the DC remain a puzzle for this analysis. A nonovert movement of arguments from inside the DC in order to check case would result in quantifiers occupying too high positions at LF that are inadequate for their real scope.

Another possibility lies in that we could look for another explanation for the correspondences (different from movement or copying). The agreement in features between the elements of the main clause and of the DC may be solely a requirement of the semantic interpretation of quantifying expressions that does not belong to grammar.

### List of abbreviations

A — accusative	INF — infinitive
AC — anticausative	M — medial
CN — converb	N — nominative
colloq. — colloquial	P — prepositional
D — dative	PST — past
DP — distributive preposition	PL — plural
<i>po</i>	PR — present
F — feminine	PRT — participle
FUT — future	REC — reciprocal
G — genitive	SG — singular
I — instrumental	SC — small clause
IMP — imperative	

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