

Chapter 14

Quantification in Standard Russian

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14.1 Introduction: Elements of Russian Grammar

14.1.1 Grammatical Relations

Russian is among the most conservative modern Indo-European languages when it comes to grammatical structure. I refer the reader to the reference grammar (Timberlake, 2004) for a detailed discussion; below I will mention just several features of immediate relevance for quantifier structures. Russian grammar traditionally lists six cases with the following major functions:

- **nominative** is the case of subjects and predicate nouns;
- **genitive** marks possessors in noun phrases;
- **dative** is the case of indirect objects;
- **accusative** marks direct objects and time intervals;
- instruments and passive subjects, and sometimes nominal predicates, are marked with **instrumental**;
- nouns in **prepositional** case are always governed by certain prepositions; historically this is locative case that lost independent uses.

(The name *prepositional case* might be misleading; any nominal case except nominative and not just prepositional can be assigned by a preposition.)

While syntactic roles of NPs are coded by case, they do not constrain word order, which is relatively free and is reserved for expressing information structure, if anything. In what follows, I will gloss case only where the syntactic roles of NPs may be otherwise unclear. Examples of NPs in isolation are given in nominative case, unless marked otherwise.

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14.1.2 Paucal Forms

In general, numerals, like adjectives, agree with head nouns^{1, 2}:

- (1) *tremja šarami; třem šaram; třex šarov*
 three.INSTR balls.INSTR three.DAT balls.INSTR three.GEN balls.GEN
 ‘with three balls; to three balls; of three balls’

However, when the NP with a numeral is in nominative or accusative, the head noun does not show nominative or accusative case marking. Instead, the noun assumes one of two forms depending on the numeral; these are called ‘smaller’ and ‘greater’ paucal forms. The former combines with numerals that end in 2, 3, or 4; the latter with numerals ending in bigger simple numerals. The smaller paucal form usually equals genitive singular, the greater paucal form genitive plural, but a handful of words show a contrast, cf. the suppletive genitive plural form *ljudej* and greater paucal *čelovek* ‘people’; genitive singular *rjada* and smaller paucal *rjadá* ‘rows’. Even in cases of contrast like these, there is considerable variation with regard to the usage of a dedicated paucal form vs. conventional genitive (Timberlake, 2004); intervention of different kinds of modifiers between the numeral and the noun affect the choice of genitive vs. paucal in different ways (Mel’čuk, 1985, 431ff). Paucal forms will be marked in glosses only when morphology is in focus of the discussion. They are glossed as genitive when the forms are identical.

The greater and the smaller paucal forms are not simply variants occurring with different numerals. A further syntactic difference between them needs to be mentioned. The smaller paucal form is found only in direct cases, i.e. in nominative and accusative NPs. The greater paucal form also occurs in genitive NPs, in addition to the direct cases. The question is, of course, if the greater paucal form is generally identical to genitive plural, how can we distinguish which form combines with a genitive numeral? Nouns that differentiate the two forms use the large paucal form in this context: *ot pjati čelovek* (paucal), not [?]*ot pjati ljudej* (genitive) ‘from five people’; *ot pjati kilogramm* ‘from five kilograms’ (paucal). The fact that the greater paucal form extends to genitive is known (cf. (Mel’čuk,

¹ I am using the standard scholarly transliteration system for Cyrillic, as accepted e.g. by the *Slavic and East European Journal*.

² In this paper I tried to keep glosses for grammatical morphemes minimal, using them only when the relevant category is under discussion or contributes a non-trivial meaning component. Glosses used here include: NOM – nominative case, GEN – genitive case, DAT – dative case, ACC – accusative case, INSTR – instrumental case, PART – partitive case, LARGEPAUCAL – large paucal form, SMALLPAUCAL – small paucal form; SG – singular, PL – plural; M – masculine, F – feminine, N – neuter; ADJ – adjectivizing suffix; COLL – collective numeral, CARD – cardinal numeral; EXIST – indefinite pronoun series, LIBO – marker of NPI pronoun series, KOE – marker of specific indefinite pronoun series, NI – marker of negative concord pronoun series, also functions as a negative concord conjunction; PO – preposition *po*, functions as a marker of distributive numerals; INF – infinitive, FUT – future tense, SUBJ – subjunctive mood; PONA, NA – prefixes with quantificational meanings, REFL – reflexive verbal suffix.

1985, 431)) but often ignored (e.g. elsewhere in the same monograph Mel'čuk mentions the greater paucal form in relation to just nominative and accusative (Mel'čuk, 1985, 254–255)).

14.1.3 Partitive Case

Russian is sometimes analyzed as having a special case called Partitive, or Second Genitive. Normally, it has exactly the same form as ordinary Genitive, except for some masculine mass nouns (not including abstract nouns) which have a special form for it. The special Partitive form has the ending *-u* (vs. Genitive *-a*) and is homophonous with Dative. For many speakers, the ordinary Genitive form can be substituted for the special Partitive form in any context. Uses of Partitive include:

- as direct object or intransitive subject, meaning ‘unspecified quantity of X;’
- combinations with quantifiers;
- use as Genitive of Negation, including the subject of negative existential statements.

While it has been argued that Genitive of Negation needs to receive a separate analysis from partitive uses (Neidle, 1982, 134ff), a specialized partitive form can occur in both contexts, cf. (2c) and (2a). See Partee and Borschev (2007), Borschev et al. (2008) for references and discussion of Genitive of Negation in Russian. Examples:

- (2) a. Ja nalila sebe čaj = u.
 I poured self.DAT tea = PART
 ‘I poured myself some tea.’ (NCRL³)
- b. Ko mne obraščaetsja celaja kuča narod = u.
 to me address whole heap people = PART
 ‘A whole lot of people address me.’ (NCRL)
- c. No tot ne dal im xod = u.
 but that not gave them movement = PART
 ‘But he didn’t set them [the documents about corruption] in motion.’
 (NCRL)

14.1.4 Direct Case Condition

Certain classes of quantifiers have a restricted distribution in Russian and are found only as subjects or direct objects, and as predicates. These quantifiers include numerals modified by prepositions (*okolo* ‘about’, *za* ‘over’) or comparatives (*bolee* ‘more’), distributive NPs with the preposition *po*, *mnogo* ‘much’

³ National Corpus of Russian Language, <http://www.ruscorpora.ru/>

(at least with mass terms), *malo* ‘few/little’, and (*ne*)*dostatočno* ‘(in)sufficiently many’. Babby (1985) relates this restriction to three other case-related facts: (1) that only direct cases assign a paucal form to the noun, and (2) that partitive and (3) genitive of negation are also limited to NPs that would otherwise be in a direct case. It must be noted though that these phenomena do not have exactly the same distribution. In fact, the four all have different distributions, suggesting that ‘Direct Case’ restrictions may not constitute a unified phenomenon.

Numerals in nominative and accusative NPs have nouns in paucal forms in any syntactic position, while the other phenomena are restricted to subject and direct object positions, excluding accusative NPs as objects of prepositions: *čerez dva časá* ‘in two hours’ (paucal form), but *čerez okolo dvux časov* ‘in about two hours’. Further, as discussed above, (large) paucal forms are also found in genitive NPs, thus not even restricted to direct cases.

QNPs with nouns in paucal forms and numerals modified with prepositions can be predicates or transitive subjects; partitive and genitive of negation do not occur in these positions.

Partitive can occur outside the ‘direct case’ environments as objects of certain genitive-assigning prepositions (e.g. *radi, dlja* ‘for’) and with measure phrases (*čашka čaju* ‘a cup of tea’); genitive of negation alternation preposition-modified numerals and *malo* are disallowed in these contexts.

14.1.5 Types of Numerals

Traditional Russian grammar distinguishes three orders of numerals: cardinal, ordinal, and collective. Cardinal numerals are the basic kind, used in combination with nouns (except *pluralia tantum*) as in *dva stula* ‘two chairs’. Ordinal numerals like *vtoroj* ‘second’, *pjatnadcatyj* ‘fifteenth’ pattern with adjectives morphologically as well as syntactically. When deriving an ordinal from a complex numeral, only the last word of the numeral assumes adjectival morphology, and preceding numeral components have invariable nominative form. For an illustration, consider the dative singular feminine form of ordinal numerals:

- (3) sot = oj; sto pjatidesjat = oj; sto pjat’desjat četver = t = oj
 100 = DATSGF 100.NOM 50 = DATSGF 100.NOM 50.NOM 4 = ADJ = DATSGF
 To the one hundredth; to the 150th; to the 154th

Ordinal numerals are the basis for proportional quantifiers of the patterns ‘cardinal numeral + ordinal numeral_{Feminine}’ (*odna pjataja* ‘one fifth’, *tri dvadcat’ vtoryx* ‘three twenty thirds’), as well as ‘*každyj* + ordinal numeral’ (*každyj pjatyj* ‘every fifth’).

Collective numerals like *dvoe* ‘two’, *pjatero* ‘five’ have several uses. They compete with ordinary numerals when combining with nouns denoting people or young animals: *dva studenta* / *dvoe studentov* ‘two students’, *pjat’* / *pjatero*

teljat ‘five calves’. Collective numerals are also used with *pluralia tantum* like *vorota* ‘gate’, which lack the smaller paucal form, cf. **dva* / ^{OK}*dvoe vorot* ‘two gates’, and with (plural) personal pronouns **pjat’* / ^{OK}*pjatero nas* ‘five us’ (see (Mel’čuk, 1985, 376ff) for lexical restrictions and further discussion).

Finally, collective numerals are freely used on their own without a noun, while cardinal numerals require a noun, unless used as predicates or in elliptical contexts. The following example illustrates the contrast:

- (4) V komnatu zašli dvoe / *dva.
 in room entered two.COLL two.CARD
 ‘Two people entered the room.’

Here the variant with cardinal *dva* is not acceptable unless a clearly elliptical context is provided, e.g. ‘hundreds of policemen surrounded the crime scene but **just two entered the room.**’ Numerals 2–20, 30, 50, 60, 70, and 80 have collective forms, but for 8 and up these forms are almost never used, except in derived adverbs like *vpjatidesjaterom* ‘as a group of 50’.

14.1.6 Selection of D-Quantifiers

The selection properties of D-quantifiers in Russian are very elaborate. The morphosyntax of numerals is probably the most complicated part of Russian grammar along with aspect / Aktionsart; for a careful discussion see Timberlake (2004), Mel’čuk (1985), Corbett (1978). Simplifying slightly, the following types of D-quantifiers can be distinguished based on their selection properties:

A. Ones that select for (singular) mass nouns.

- i. Agreeing with the noun in case and gender, e.g. *ves’* ‘all the’: *vsë* [NOMSGN] *moloko* [NOMSGN] ‘all (the) milk’.
- ii. Selecting for the genitive (partitive) case.
 - a. quantifiers used only in (homophonous) nominative and accusative: *skol’ko* ‘how much,’⁴ *malo* ‘little,’ (*ne*)*dostatočno* ‘(in)sufficiently much,’ e.g. *skol’ko* [NOM] *čaju* [PART] ‘how much tea’, but **skol’ki* [DAT] *čaju* [PART] ‘to how much tea’
 - b. measure phrases and proportional quantifiers which are used in any case (essentially these are nouns syntactically): *dva litra* ‘two liters’, *gorst’* ‘a handful’, *polovina* ‘half,’ *dve treti* ‘two thirds of’, cf. *polovina* [NOM] *čaju* [PART] ‘half of the tea’, *polovine* [DAT] *čaju* [PART] ‘to half of the tea’. Partitive case proper (*čaju*), unlike genitive (*čaja*), sounds less natural with proportional quantifiers like *polovina* than with other mass noun quantifiers, yet it is well attested in usage.

⁴ *Skol’ko* is used in cases other than nominative and accusative only when combined with count nouns.

B. Quantifiers that select for count nouns.

- i. Agreeing with the noun in case and gender. a. Selecting for singular: *každyj* ‘every,’ *vsjakij* ‘all,’ *kotoryj* ‘which,’ *odin* ‘one,’ *tridcat’ odin* ‘thirty one,’ *n + 1* (read as *èn plus odin*), and all other numerals ending in *odin*, cf. *odno* [NOMSGN] *jabloko* [NOMSGN] ‘one apple’, *odnomu* [DATSGN] *jabloku* [DATSGN] ‘to one apple’. b. Selecting for plural: *vse* ‘all,’ (*ne*) *mnogie* ‘(not) many,’ e.g. *vse* [NOMPL] *jabloki* [NOMPL] ‘all (the) apples’, *vsem* [DATPL] *jablokam* [DATPL] ‘to all (the) apples’.
- ii. Selecting for the genitive plural form. (a) quantifiers used only as a subject and direct object: *malo* ‘few,’ (*ne*) *dostatočno* ‘(in)sufficiently many,’ *bol’she vsego* ‘the most.’ (b). quantifiers used in any case (essentially they behave like nouns): *polovina* ‘half,’ *bol’sinstvo* ‘most.’
- iii. Core numerals 5–20, tens, and hundreds, number variables like *n* (read *èn*) and *k* (read *ka*), and any complex numerals ending in these, as well as *skol’ko* ‘how many’ and *stol’ko* ‘this many’ when in nominative, accusative, or genitive, select for the so called larger paucal form, usually identical to genitive plural but for some nouns identical to nominative singular: (*odin*) *kilometr* ‘(one) kilometer’ (nominative singular) vs. (*číslo* / *pjat’*) *kilometrov* ‘(the number of / five) kilometers’ (genitive plural / large count) but (*odin* / *pjat’*) *kilogramm* ‘(one / five) kilogram(s)’ (nominative singular / large count) vs. (*číslo*) *kilogramm*ov ‘(the number of) kilograms’ (genitive plural). The formal difference is most obvious in the case of the noun *čelovek* ‘person’ which has a suppletive plural: (*odin* / *pjat’*) *čelovek* ‘one person / five people’ (nominative singular / large count) vs. (*číslo*) *ljudej* ‘(the number of) people’ (genitive plural). In other oblique cases such numerals do not select for the noun’s case but agree with the noun in case: (*o*) *pjati šarax* ‘(about) five balls’ (prepositional), *pjat’ju šarami* five balls’ (instrumental) etc.
- iv. Nouns denoting numbers select for large paucal forms no matter what the case of the DP is: ‘thousand people’ is *tysjača čelovek* in nominative, *tysjači čelovek* in genitive, *tysjače čelovek* in dative etc. This group includes *noľ / nuľ* ‘zero,’ *tysjača* ‘thousand,’ *million* ‘million,’ *milliard* ‘billion,’ *trillion* ‘trillion,’ etc. Hundreds (200 and up) also tend to behave like this, although in the literary norm they are attributed to the previous group.
- v. Some numerals, when in nominative case, select for a special form of the noun, called the (small) paucal form,⁵ which generally equals genitive singular, but sometimes has a different place of stress: *razmer šára* ‘size of the ball’ but *tri šará* ‘three balls.’ In oblique cases such numerals do not select for the noun’s case but agree with the noun in case: *trëx šarov* ‘three

⁵ This morphological form, traced back to the Old Russian nominative-accusative dual, is gradually fading out as a separate form. Many speakers accept ordinary genitive singular form wherever the paucal form is used, as in *tri šára* ‘three balls,’ *polšára* ‘half of a ball,’ *poltora šára* ‘one and half of a ball.’

balls' (genitive), *tremja šarami* 'three balls' (instrumental) etc. In genitive, however, the large paucal form is often used instead of genitive plural even with small numerals: (*ot*) *trěx čelovek* '(from) three people' (large paucal form) along with (*ot*) *trěx ljudej* '(from) three people' (genitive plural).

Three subgroups of this class can be further distinguished:

- a. the clitic *pol* 'half' selects for a singular noun when in oblique cases: *polušaru* 'to half of a ball.' In accusative, DPs with *pol* are always the same as in nominative: *polšara* 'half of a ball' or *polženščiny* 'half of a woman' can be either nominative or accusative.
- b. the numeral *poltora* 'one and a half' selects for a plural noun when in oblique cases: *poltora šaram* 'to one and half of a ball.' The accusative form of DPs with *poltora* is always the same as nominative: *poltora šara* 'one ball and a half' or *poltory ženščiny* 'one and a half women' can be either nominative or accusative.
- c. Numerals *dva* 'two,' *oba* 'both,' *tri* 'three,' *četyre* 'four,' and any complex numerals ending in these, select for a plural noun when in oblique cases: *dvum šaram* 'to two balls,' *uravnenie s $n + 2$ (en pljus dvumja) kornjami* 'equation with $n + 2$ roots.' The accusative form of DPs with these numerals depends on the animacy of the noun. If the noun is inanimate, accusative is the same as in nominative, otherwise it is the same as genitive: *dva šara* 'two balls' is either nominative or accusative, *dvux ženščin* 'two women' is either genitive or accusative.

Numerals *poltora* 'one and a half', *dva* 'two,' and *oba* 'both' are also unique in Russian because they are the only grammatically plural words that formally distinguish gender. All of them have separate feminine and masculine/neuter forms in nominative (and accusative whenever it is equal to nominative): *poltora* / *dva* / *oba šara* / *okna* 'one and half of / two / both balls (M) / windows (N),' but *poltory* / *dve* / *obe ženščiny* 'one and half of / two / both women (F)'.⁶ *Oba* 'both' is doubly unique in having distinct feminine and masculine/neuter stems in oblique cases: *oboim šaram* / *oknam* 'to both balls (M) / windows (N),' but *obeim ženščinam* 'to both women (F)'.

14.1.7 Series of Pronouns

Many pronominal elements in Russian are organized into morphologically regular series,⁷ mostly based on interrogatives. These include several series of

⁶ Notice the gender agreement here in the absence of case agreement: the numerals express the nominative of the whole DP and assign paucal form to the noun, but agree with the noun in gender.

⁷ The series of quantificational pronouns and pronominal adverbs in Russian and other European languages should not be conflated with series of personal pronouns in many African languages, a phenomenon more akin to case than to quantificational force.

Table 14.1 Series of pronouns

vse 'everyone'	vsegda 'always'	vsjakij 'all kind of'
kto 'who'	kogda 'when'	kakoj 'what kind of'
kto-to 'someone'	kogda-to 'sometime'	kakoj-to 'some'
malo kto 'few people'	malo kogda 'rarely'	malo kakoj 'a rare'
kto ugodno 'anyone'	kogda ugodno 'at any time'	kakoj ugodno 'any'
nikto 'noone'	nikogda 'never'	nikakoj 'no'
nekto 'a certain person'	nekogda 'once upon a time'	nekij 'a certain'

indefinites but also quantifiers with various semantic contributions (see Haspelmath (1997) for a discussion of Russian indefinites and a typological perspective; Yanovich (2005) for a closer look at some of the series). Table 14.1 illustrates seven series, each instantiated by three kinds of pronouns (there are of course many more series and pronominal stems).

When prepositions combine with quantified NPs with series markers preceding the pronominal stem, the series marker comes before the preposition. In these examples, series markers are *ni* for the negative concord series and *koe* for an indefinite series:

- (5) a. Ni o čëm ne sprašivaj!
 NI about what not ask
 'Don't ask about anything!' (NCRL)
- b. ja k nemu tut koe po kakim delam zabegal
 I to him here KOE for which business ran by
 'I stopped by his place with some business' (NCRL)

14.1.8 Agreement

Predicates agree with subjects in number and either person (non-past verb forms) or gender (past tense verbs and nominal predicates). Adjectives within noun phrases agree with nouns in case, number, and gender. Russian possesses the three Indo-European genders: masculine, feminine, and neuter. Nouns are also cross-categorized by animacy; whenever gender agreement takes place, so does animacy agreement. Technically, one should speak of two agreement classes within each gender, distinguished by animacy. The sole expression of animacy is the form of accusative case. In the plural, animate nouns' accusative case form is the same as the genitive, and inanimate nouns' accusative form equals the nominative (the same distinction holds in the singular, but only in some types of paradigms). *Pluralia tantum* can be treated as a separate gender (Zaliznyak, 1967).

Quantified NPs have special agreement properties if the quantifier assigns case to the NP (be that genitive, partitive, or a paucal form). With nouns in paucal forms, adjectives and determiners are in nominative plural (usually when they precede the quantifier + NP combination; this is an option only with

numerals) or in genitive plural (usually when they intervene between the numeral and the common noun):

- (6) a. vse èti smelye pjat' čelovek
all.NOMPL these.NOMPL brave.NOMPL five person.LARGEPAUCAL
'all these brave five people'
- b. tri ètix smelyx človeka
three these.GENPL brave.GENPL man.SMALLPAUCAL
'these three brave people'

(as mentioned, for a vast majority of nouns the larger paucal form = genitive plural, the smaller paucal form = genitive singular).

Verbal agreement can default to 3rd person neuter singular if the subject is a QNP which bears no nominative morphology other than that of the quantifier word (Švedova, 1970, 554). If the QNP contains a determiner or an adjective in nominative plural, this forces standard plural agreement, cf.:

- (7) a. Prišli / prišlo pjat' studentov
came.PL / came.SGN five student.GENPL
'Five students came.'
- b. Prišli / prišlo dva studenta
came.PL / came.SGN two student.GENSG
'Two students came.'
- c. Javilis' / javilos' bol'šinstvo studentov
show up.PL / show up.SGN most student.GENPL
'Most students showed up.'
- d. ^{OK}Javilis' / *javilos' vse pjat' studentov
show up.PL / show up.SGN all.NOMPL five student.GENPL
'All five students showed up.' (overt nominative blocks default agreement)
- e. ^{OK}Javilis' / *javilos' novye pjat' studentov
show up.PL / show up.SGN new.NOMPL five student.GENPL
'Five other students showed up.' (overt nominative blocks default agreement)

14.1.9 Definiteness of NPs

Russian does not have grammaticized articles, neither definite nor indefinite. Bare noun phrases can be interpreted as either definite or indefinite. But semantic (in)definiteness can be expressed. For instance, definiteness is signaled by demonstratives:

- (8) Èta ženščina, tot kot, te studenty
this woman that cat those students
'this woman', 'that cat', 'those students'.

Russian demonstrative determiners include *ètot* ‘this’, *sej* ‘this’ (obsolete or bookish) and *tot* ‘that.’ In some contexts, the demonstratives have no deictic meaning at all but only express definiteness. In such cases, *tot* and *ètot* express different kinds of definiteness. *Ètot* (and *sej*) is typical in NPs referring to an object from the preceding discourse. In contrast, *tot* accompanies NPs with restrictive relative clauses. The numeral *odin* ‘one’ is used to express indefiniteness, usually to introduce a new protagonist into the discourse.

- (9) a. My vstretili **odnogo** čeloveka. **Ètot** čelovek okazalsja dekanom.
 We met **one** man **this** man turned out to be dean
 ‘We met **a** man. **The** man turned out to be the dean.’
 b. Vot **tot** čelovek, o ktorom ja govoril.
 Here **that** man about which I talked
 ‘Here’s **the** man I talked about.’

Definite NPs include proper names. Russian first name stems can typically be treated as monomorphemic, although their compound etymology is sometimes transparent as in Slavic names *Vladimir*, *Vladislav*, *Vjačeslav*. Last names are mostly derived from nouns with suffixes *-ov-*, *-in-*, *-sk-*, *-ovič-*, or from adjectives with suffixes *-ov-* or *-yx* (e.g. *čěrnyj* ‘black’ > *Černov*, *Černyx*).

14.1.10 Generic Noun Phrases

Generic NPs in Russian, both singular and plural, do not have an overt determiner:

- (10) a. Sobaki kusajutsja.
 dogs bite
 ‘Dogs bite.’
 b. Krolík razmnožaetsja bystro.
 rabbit reproduces rapidly.
 ‘The rabbit reproduces rapidly.’
 c. Dinozavry vymerli.
 dinosaurs died out
 ‘Dinosaurs are extinct.’

14.1.11 Negation and Negative Concord

Sentence negation is expressed by *ne* prefixed to the predicate. The same marker *ne* can also mark constituent negation (11c); negated constituents, like other focused constituents, tend to be sentence-final. Russian is a strict negative concord language: negative quantification is expressed by a combination of

the *ni*-words (*negative concord items*) with sentential negation. *Ne* is obligatory in the presence of negative concord items, except in elliptical contexts:

- (11) a. On ni=čego *(ne) znaet.
He NI=what *(not) knows
'He doesn't know anything.'
- b. On krasiv kak ni=kto ~~ne~~ ~~krasiv~~.
he handsome like NI=who not handsome.
'He is handsome like nobody is handsome.'
- c. Prišël ne Petja
came not Peter
'It was not Peter that came'

14.1.12 Quantificational NPIs

Russian *ni*-quantifiers have sometimes been analyzed as NPIs. However, *ni*-quantifiers are licensed only by the same-clause sentential negation but not other decreasing operators. *libo*-quantifiers are a better match to English NPIs since they are used in a wide variety of contexts, including decreasing contexts and polar questions, e.g. (cf. Pereltsvaig (2006a) for a discussion of the contexts in which *libo*-words are licensed):

- (12) a. Devočka ne xotela polučat' kakoe-libo / ni=kakoe obrazovanie voobščë.
Girl not wanted get.INF which-LIBO / NI=which education at.all
'The girl did not want to get any education at all.'
- b. Ja ne verju, čto ona polučit kakoe-libo / *ni=kakoe obrazovanie.
I not believe that she get.FUT which-LIBO / *NI=which education
'I do not believe that she will get any education.'
- c. Polučit li ona kakoe-libo / *ni=kakoe obrazovanie?
get.FUT whether she which-LIBO / *NI=which education
'Will she get any education?'

(see also the examples 66b–66d)

14.2 Generalized Existential Quantifiers

14.2.1 D-Quantifiers

In Russian, bare noun phrases can be interpreted as existentially quantified, but there is also a range of overt intersective determiners:

- (13) a. Nad kaminom ja uvidel (odin) portret Puškina
above fireplace I saw (one) picture Pushkin.GEN
'I saw a /one picture of Pushkin above the fireplace'

- b. Na ulice pojut (kakie-to) morjaki
 on street sing (which-EXIST) sailors
 ‘Some sailors are singing in the street’
- c. V Xakasii za novogodnie prazdniki pogiblo neskol’ko ženščin
 in Khakasia during the winter holidays died several women
 ‘Several women died in Khakasia during the winter holidays.’
 (actual news headline)

14.2.1.1 Existential Quantifiers

- a. Existential quantifiers can be formed from question words by means of prefix *koe-* and postfixes⁸ *-to*, *-libo*, *-nibud’*.

- (14) a. kto -to; kakoj -to portret Puškina
 who -EXIST; what -EXIST picture Pushkin.GEN
 ‘someone’; ‘some picture of Pushkin’

- b. Negative existential quantifiers are non-existent. They are expressed through a combination of negation with negative concord items, built from interrogatives with the prefix *ni-*.

- (15) ni = kto; ni = kakoj portret Puškina
 NI = who; NI = which picture Pushkin.GEN
 ‘nobody’; ‘no picture of Pushkin’

14.2.1.2 Numerals

Russian numerals are based on the decimal system. Table 14.2 gives the list of one-word cardinal numerals between 1 and 999. Names for other numbers below 1,000 are sequences of these one-word numerals, in the descending order of powers of 10, e.g. *sto sem’* ‘107,’ *trista pjat’nadcat’* ‘315,’ *dvadcat’ devjat’* ‘29.’ Note the one-word expressions for numerals 11–19, also found in compound numerals like *šest’sot devjatnadcat’* ‘619.’ Names of numbers larger than 1,000 list the powers of ten in decreasing order using nouns⁹ *tysjača* ‘1,000,’ *million* ‘1,000,000,’ *milliard* ‘1,000,000,000,’ *trillion* ‘trillion,’ *kvadrillion* ‘quadrillion,’ *kvintillion* ‘quintillion,’ etc., potentially *ad infinitum*. Here are some examples of numeral use:

⁸ Both of these have a special linear status. *Postfixes* are placed after case, number, and gender inflections (*k = ogo-to* : who = acc-Existential ‘someone’), and *prefixes* can be separated from the question word stem by prepositions (*koe na k = ogo* : Existential on who = acc ‘on someone’). *Koe-* marks specific indefinites, *-libo* and *-nibud’* non-specific.

⁹ See discussion of their noun status in Mel’čuk (1985).

Table 14.2 Cardinal numerals

1	odin	10	desjat'	11	odinnadcat'	100	sto
2	dva	20	dvadcat'	12	dvenadcat'	200	dvesti
3	tri	30	tridcat'	13	trinadcat'	300	trista
4	četyre	40	sorok	14	četyrnadcat'	400	četyresta
5	pjat'	50	pjat'desjat	15	pjatnadcat'	500	pjat'sot
6	šest'	60	šest'desjat	16	šestnadcat'	600	šest'sot
7	sem'	70	sem'desjat	17	semnadcat'	700	sem'sot
8	vosem'	80	vosem'desjat	18	vosemnadcat'	800	vosem'sot
9	devjat'	90	devjanosto	19	devjatnadcat'	900	devjat'sot

- (16) a. odin million trista pjatdesjat četyre tysjači sto vosemnadcat'
 1 million 300 50 four thousand 100 18
 '1,354,118'
- b. V klasse (est') (rovno) pjat' / bol'se pjati studentov.
 in class is (exactly) five more five students
 'There are (exactly) five / more than five students in the class.'
- c. V klasse net ni odnogo studenta.
 in class is.no NI one student
 'There are no students in the class.'

The noun *nul'* or *nol'* 'zero' is not found within compound numerals. By their syntactic and morphological properties, the interrogative word *skol'ko* 'how many, how much' and its derivatives like *neskol'ko* 'several,' *skol'ko-to* 'some quantity of' are close in distribution to (larger) numerals. *Mnogo* 'many,' *malo* 'few,' *beskonečno mnogo* 'infinitely many,' are similar to numerals but have slightly different properties and are traditionally classified as adverbs (see Mel'čuk (1985) for an extensive discussion of the properties of *mnogo*, *skol'ko* etc.). Determiners *nekotorye* 'some,' *nikakoj/ni odin* 'no,' *praktičeski/počti nikakoj/ni odin* 'practically/almost no' (all but the first negative concord items) are not numerals. See Section 14.5.1.1 on modified numerals.

Some theoretical issues of the syntax and semantic composition of numerals in Russian (and other languages) are discussed by Ionin and Matushansky (2006).

14.2.1.3 Negative Existential Quantification

The meaning of 'no' is expressed by a combination of sentential negation *ne* and negative concord items *nikakoj/ni odin*, consisting of the particle *ni* and either the interrogative determiner or the numeral 'one;' of these two, only *nikakoj* is used with mass nouns. No Russian determiner at all might correspond to *no* in some English sentences, especially in sentences with Genitive of Negation:

- (17) Otveta ne prišlo.
 answer.GEN not arrived
 'No answer arrived.'

14.2.1.4 Value Judgment Cardinals

Value judgment cardinals come in many syntactic flavors. The two core monomorphemic ones, *mnogo* ‘many, much’ and *malo* ‘few, little,’ can function as adverbs or like numerals (assigning partitive = 2nd genitive case). Some are adjectives (*(ne)mnogočislennyj* ‘(non-)numerous,’ *maločislennyj* ‘innumerable’). *(Ne)mnogie* ‘(not) many’ is an adjective morphologically but occupies strictly the leftmost position in their NP, i.e. patterns with determiners. *Mnogo* and *mnogie*, though related, are semantically different. The former, *mnogo*, gravitates toward collective readings, and the latter, *mnogie*, toward distributive readings (Mel’čuk, 1985, 309). Mel’čuk also notes that *mnogie* is more readily construed as restricting the domain of quantification to a contextually relevant set. This observation goes in line with Barbara Partee’s characterization of *mnogie* as a strong and *mnogo* as a weak quantifier (Partee, 2010, 10). There are also pronominal series with *mnogo* and *malo* as series markers, e.g. *malo kogda* ‘rarely’ (lit. ‘few when’), *mnogo kto* ‘many (people)’ (lit. ‘many who’).

- (18) a. My oprosili (ves'ma) mnogix / nemnogix / mnogočislennyx kandidatov.
we interviewed (very) many / few / numerous candidates
‘We interviewed (very) many / few / numerous candidates.’
- b. Sliškom mnogo / malo / nedostatočno kandidatov učastvovalo v vyborax.
too many / few / insufficient candidates participated in elections
‘Too many/few / Not enough candidates participated in the elections.’
- c. Udivitel'no mnogo / malo kandidatov učastvovalo v vyborax.
surprisingly many / few candidates participated in elections
‘Surprisingly many / few candidates participated in the elections.’

14.2.2 Interrogative D-Quantifiers

Russian possesses interrogative determiners, both cardinal (*skol'ko* ‘how many, how much’) and non-cardinal (*kakoj* ‘which’, *kotoryj* ‘which of the’):

- (19) a. Skol'ko studentov prišlo na lekciju?
how.many students came to lecture
‘How many students came to the lecture?’
- b. Kakie studenty sdali èkzamen?
which students passed exam
‘Which students passed the exam?’

14.2.3 Boolean Compounds of D-Quantifiers

Russian can apply some boolean operations to D-quantifiers, including disjunction (*ili* ‘or’ and the negative concord item *ni...ni* ‘(n)either...(n)or’) and negation (*ne*) but not conjunction (*i* and *a* ‘and’, *no* ‘but’):

- (20) a. Na lekciju prišlo ne bolee pjati studentov.
to lecture came not more five students
'Not more than five students came to the lecture.'
- b. Na lekciju prišlo četyre ili pjat' studentov.
to lecture came four or five students
'Four or five students came to the lecture.'
- c. Na lekciju ne prišlo ni četyre, ni pjat' studentov.
to lecture not came nor four nor five students
'Neither four nor five students came to the lecture.'

14.2.4 A-Quantifiers

One-word adverbs with the meaning 'n times' exist for numbers 2 through 4: *dvaždy*, *triždy*, *četyreždy*; there are also archaic adverbs of the same morphological model *odnaždy* 'once'¹⁰ and *mnogaždy* 'many times.' The productive way to express the meaning 'n times' is to combine a numeral with the noun *raz* 'time.' This latter strategy is applicable even when a one-word adverb exists, e.g. *dva raza* 'two times.' Here are some examples of existential A-quantifiers:

- (21) a. inogda; dvaždy; n raz; mnogo raz; ne očen' mnogo raz
sometimes; twice; n times; many times; not very many times
- b. často; počti ni-kogda; ni-kogda.
often; almost NI-when; NI-when.
'often', 'almost never', 'never'

A-quantifiers typically, but not always, express temporal quantification:

- (22) a. Inogda rodingity soderžat ksenolity vmeščajuščix serpentinitov.
sometimes rodingites contain xenolyths enclosing.GENPL serpentinite.GENPL
'Some rodingites contain inclusions of enclosing serpentinites.' (NCRL)
- b. Ja inogda xožu v školu peškom
I sometimes go to school by.foot
'I sometimes go to school by foot.'
- c. Dovol'no často èti cepočki daek raspolagajutsja soglasno zonam
quite often these arrays dikes.GEN are.located according.to zones
rasslancevaniya serpentinitov.
foliation.GEN serpentinites.GEN
'Quite often, these arrays of dikes are located according to the zones of serpentinite foliation.' (NCRL)

¹⁰ This adverb is nowadays more widely used in the meaning 'once upon a time' than in the original 'one time.'

- d. ...laktona, v častice ktorogol laktonnaja funkcija povtorjalas'
 ...lactone.GEN in particle which.GEN lactone function repeated
 by dva raza.
 SUBJ two times
 '...of a lactone in whose particle the lactone function would repeat twice.' (NCRL)
- e. Ja (počti) nikogda ne xožu v školu peškom
 I (almost) never not go to school by.foot
- f. Vanja byl v Taškente dvaždy / četyreždy / mnogo raz
 John was in Tashkent twice / four times / many times
 John visited Tashkent twice / four times / many times

Verbal morphology, e.g. prefixes *na-*, *po-*, or their combination *pona-*, can sometimes contribute quantificational meanings; with such verbs, the argument quantified, which can be either an intransitive subject or a direct object, can be marked with (partitive) genitive, cf.:

- (23) a. Bežali tarakany.
 ran roaches.NOM
 '(The) cockroaches were running.'
- b. Pona = bežalo tarakanov.
 PONA = ran roaches.GEN
 'A lot of cockroaches came running.'
- c. Nataša tut blinčikov na = lepila.
 Natasha here pancakes.GEN NA = modeled
 'Natasha made a lot of pancakes.' (NCRL)

Russian A-quantification also features adverbs derived from collective numerals (see Section 14.1.5). These come in three morphological models: *v-...-om* produces 'in a group of *x*': *vdvoëm* 'in a group of two', *vpjaterom* 'in a group of five' (see examples below in the Section 14.11 on quantifier float). Adverbs in *v-...-o* modify predicates of quantity change: *uveličit' vdvoe* 'to increase (something) twofold', *sokratit'sja vpjatero* 'to shrink fivefold'. Adverbs in *na-...-o* combine with verbs of division: *razbit' nadvoe* 'to break in two', *delit' natroe* 'divide in three'. The last type is very unproductive, represented only by *nadvoe* 'in two', *natroe* 'in three', *napopolam* 'in halves', and *nacelo* 'in equal integer parts'.

14.3 Generalized Universal (Co-intersective) Quantifiers

14.3.1 D-Quantifiers

Here are some co-intersective D-quantifiers of Russian: *vse* 'all', *každyj* 'every, each', *vsjakij* 'every, each', *vse, krome pjati* 'all but five', *počti vse* 'nearly/almost

all', *vse*, *krome konečnogo čisla* 'all but finitely many', *ne vse* 'not all', *každyj ... i ...* 'every...and...' As in English, *vse* 'all' differs from *každyj* 'each', *ljuboj* 'any', and *vsjakij* 'all, any' in allowing collective or group level interpretations. For example *vse* + N occurs naturally with symmetric predicates, *každyj*, *ljuboj*, and *vsjakij* + N do not:

- (24) a. Vse studenty sobralis' včera vo dvore.
all students gathered yesterday in courtyard
'All the students gathered/met in the courtyard last night.'
- b. *Každyj / *Vsjakij / *Ljuboj prepodavatel' sobraljsja včera vo dvore.
Every / all / any instructor gathered yesterday in courtyard
'*Each instructor gathered/met in the courtyard last night'

Quantifiers with the meaning 'all but n', including 'all but finitely many,' have the following syntactic property. They can be used as a syntactic unit as in [*vse*, *krome dvux*], *roli* 'all but two roles,' but this usage is marginal (although attested: *vse*, *krome dvux*, *roli* occurred naturally). It is preferable, however, to place *krome n* 'but n' after the noun phrase restrictor, as in *vse roli*, *krome dvux* 'all but two roles.'

- (25) a. Vse poety mečtajut.
all poets daydream
'All poets daydream.' (*POET* – *DAYDREAM* = \emptyset)
- b. Každyj učeník v klasse napisal stixotvoreníe.
every / each student in class wrote poem
'Every / Each student in the class wrote a poem.'
- c. Ne vse koški sery.
not all cats grey
'Not all cats are grey.'
- d. Vse studenty v klasse, krome dvux, sdali èkzamen.
All students in class except two passed exam
'All but two students in the class passed the exam.'
- e. Vse čisla, krome konečnogo (ix) količestva, bol'se sta.
All numbers except finite (their) quantity greater 100
'All but finitely many numbers are greater than 100.'
(In this example *čislo* 'number' in the second occurrence was replaced with *količestvo* 'quantity' to avoid using *čislo* in two different meanings in one sentence. This repetition would make the sentence awkward. A naturally occurring example of 'all but finitely many', from a description of the Turing machine, is given below.)
- f. Vse jačejki, krome konečnogo (ix) čisla, zanjaty pustymi simvolami.
All cells except finite (their) number occupied empty symbols
'All but finitely many cells are occupied by empty symbols.'
- g. Každyj mužčina, ženščina i rebėnok pokinuli gorod.
every man woman and child left city
'Every man, woman and child left the city.'

14.3.2 A-Quantifiers

Co-intersective A-quantifiers can be syntactically simple or complex

Vsegda ‘always’, *počti vseгда* ‘almost always’, *vsjakij raz, kak / vsjakij raz, kogda* ‘whenever’, (*počti*) *každyj raz* ‘(almost) every time.’

- (26) a. Ja vseгда / počti vseгда ezžu v školu na avtobuse.
I always / almost always go to school on bus
‘I always / almost always ride the bus to school’
- b. Vanja režeťsja vseгда, kogda breťsja / vsjakij raz, [kogda / kak] breťsja.
John cuts himself always when shaves / every time when / as shaves
‘John cuts himself when(ever) he shaves / every time he shaves’

For a semantic analysis of major adverbial quantifiers in Russian, see Padučeva (1989b).

14.4 Proportional Quantifiers

14.4.1 D-Quantifiers Agreeing with Nouns

One proportional quantifier that agrees with plural nouns in case is the universal quantifier *vse* ‘all.’ Another variety of agreeing proportional determiners is based on *každyj* ‘every’. Such determiners combine with singular count nouns and have the structure *každyj* + ordinal numeral, e.g. *každyj pjatyj* ‘every fifth.’

The construction *X iz Y* ‘X out of Y’ combines with the restrictor noun as its numeral component that stands before the noun would. The noun can follow either numeral, as in *sem’ studentov iz desjati* ‘seven students out of ten’ vs. *sem’ iz desjati studentov* ‘seven out of ten students’. Correspondingly, numerals that end in *odin* ‘one’ combine with singular nouns and agree with them in case and gender, those ending in units 2 through 4, when in nominative, genitive or accusative, combine with the small paucal form, others with the large paucal form, and when in other cases, combine with plural nouns and agree with them. If the numeral ends in *odin*, it combines with a singular noun and agrees with it in case and gender in all cases, e.g. in *liš’ odin ... iz desjati* ‘just one ... in ten,’ *ni odin ... iz desjati* ‘not one ... in ten,’ *tridcat’ odin ... iz sta* ‘thirty one ... in one hundred.’

14.4.2 Quantifiers Assigning Genitive Case: $D + N_{Gen}$

Many proportional determiners are syntactically nouns that take a genitive (partitive) complement¹¹: *bol’sinstvo* ‘most’, *vosemdesjat procentov* ‘eighty percent of’, *dve treti* ‘two thirds of’, (*značitel’noe*) *bol’sinstvo* ‘a (large)

¹¹ Case assignment is a major reason to consider them nouns; they contrast with nounlike large numerals and value judgement cardinals that combine with the paucal form.

majority of’,¹² (*neznačitel’noe*) *men’šinstvo* ‘an (insignificant) minority of.’ These can freely combine with modifiers *bolee* ‘more than,’ *menee* ‘fewer than,’ *do* ‘up to’, etc. (see Section 14.5.1.1): *bolee dvadcati procentov* ‘more than twenty per cent of’, *menee četverti* ‘less than one quarter of’, *ot dvadcati to tridcati procentov* ‘between twenty and thirty percent of’, no direct Russian equivalent for *all but a tenth of*, (*liš’*) *nebol’šoj procent* ‘(just) a small percentage of’, *kakoj procent* ‘what percentage of?’, *kakaja dolja* ‘what fraction of?’, (*rovno*) *polovina* ‘(exactly) half (of)’, *bolee / menee poloviny* ‘more / less than half (of).’ Examples of sentences with proportional quantifiers:

- (27) a. Bol’šinstvo poetov mečtajuť.
Most poets daydream
‘Most poets daydream.’
- b. Šest’desjat procentov amerikanskix podroستkov stradajuť izbytočnym vesom.
sixty percent American teenagers suffer redundant weight
‘Sixty percent of American teenagers are overweight.’
- c. Menee odnoj pjatoj časti amerikancev dvujazyčny.
less one fifth part Americans bilingual
‘Less than a fifth of Americans are bilingual.’

14.4.3 A-Quantifiers

Russian has a variety of proportional A-quantifiers. Those lacking a one-word expression can be constructed from D-quantifiers with the noun *slučaj* ‘case’ and preposition *v* ‘in.’ Here are some examples: (*ne*) *často* ‘(in)frequently, (not) often’, *v osnovnom* / *v bol’šinstve slučaev* ‘mostly’, *obyčno* ‘usually’, *redko* ‘seldom, rarely’, *v celom* ‘generally,’ *v dvux tretjax slučaev* ‘two thirds of the time.’

- (28) a. Ženščiny v osnovnom golosovali za Rejgana.
women in basic voted for Reagan
‘Women mostly voted for Reagan.’
- b. V bol’šinstve slučaev ženščiny golosovali za Rejgana
In most cases women voted for Reagan
‘For the most part women voted for Reagan.’
- c. Obyčno, kogda prestupniki ubegajut ot policii, oni ne
usually when outlaws flee from police they not
ostanavlivajutsja vypit’ kofe.
stop drink.INF coffee
‘Usually when outlaws flee the police they don’t stop for coffee.’

¹² I am not sure whether *podavljajuščee bol’šinstvo* ‘the vast majority of,’ meaning roughly the same as *počti vse* ‘almost all,’ must be treated as a proportional or as a co-intersective quantifier.

- d. Vanja često ezdit v školu na avtobuse.
 John often goes to school on bus
 ‘John often / frequently rides the bus to school.’
- e. Vanja redko xodit v muzei po voskresen’jam
 John rarely goes to museums on Sundays
 ‘John seldom / rarely visits museums on Sundays.’

14.5 Morphosyntactically Complex Quantifiers

14.5.1 Complex D-Quantifiers

14.5.1.1 Modified Numerals

Mel’čuk (1985) classifies the specialized numeral modifiers, which he calls markers of approximateness, into three syntactic groups:

- adverbials, e.g. *priblizitel’no*, *ètak* ‘approximately,’ (*ne*) *menee čem* ‘(not) less than,’ *s gakom* ‘and more,’ *rovno* ‘exactly’; under this rubric, we may also consider promiscuous (‘focus’) particles *počti* (*čto*) ‘almost,’ *tol’ko* ‘only,’ *liš’* ‘just.’
- prepositions, e.g. *okolo* ‘about,’ *ot ... do* ‘between ... and,’ *za* ‘over’ (*emu za pjat’desjat let* ‘he is over 50’);
- comparatives *bolee*, *bol’še* ‘more (than),’ *menee*, *men’še* ‘less (than).’

These modifiers, except for the adverbials, are taken (Mel’čuk, 1985) to syntactically govern the noun phrase with the numeral and assign case to it (genitive, with the exception of prepositions *pod* and *za* which assign accusative); an alternative is to treat such prepositions as governing the numeral only, so that the noun combines with the preposition-numeral complex (Babby, 1985). The whole quantified NP with the prepositional modifying item does not exhibit the surface case normally associated with its surface position, and is used only in the contexts for nominative or accusative case (cf. Sections 14.1.4 and 14.1.6), or (more rarely) whatever surface case the QNP’s form is homophonous with, usually genitive or dative. Comparative modifiers generally pattern with prepositions, but when they include the comparative particle *čem* (*bolee čem* ‘more than’, *menee čem* ‘less than’) they exhibit the behavior of adverbial modifiers and combine with all case forms. Examples of modified numerals: *men’še pjati* ‘fewer than five,’ *rovno/tol’ko/liš’ pjat’* ‘exactly/only/just five,’ *men’še pjati* ‘less/fewer than five,’ *ne men’še/menee pjati* ‘at least five,’ *ne bol’še/bolee pjati* ‘at most five,’ *okolo desjati* ‘about ten,’ *priblizitel’no desjat’* ‘approximately ten,’ *počti sto* ‘nearly/almost a hundred,’ *ot pjati do desjati* ‘between five and ten.’

The meaning ‘approximately’ can be expressed not only by overt modifiers, but also by the inversion of the numeral-noun order (Billings, 1995). There are no case or positional restrictions on this construction, unlike with the modifiers

discussed above. This inversion has been treated as head movement since only the noun is generally inverted but not its modifiers (Pereltsvaig, 2006b). If the QNP is an object of a preposition, the head noun precedes the preposition:

- (29) a. Javilos' čelovek tridcat'.
 showed up people thirty
 'About thirty people showed up.' (NCRL)
- b. Javilos' tridcat' čelovek.
 showed up thirty people
 'Thirty people showed up.'
- c. čerez pjatnadcat' minut.
 after fifteen minutes
 'fifteen minutes later'
- d. minut čerez pjatnadcat'
 minutes after fifteen
 'about fifteen minutes later'

14.5.1.2 Modified Value Judgment Cardinals

As in English, *mnogo* 'many, much' and *malo* 'little, few' combine with adverbs building complex quantifiers: *osobenno mnogo* 'especially many or much', *sliškom mnogo* 'too many or much', *dovol'no mnogo* 'quite many or much', *sovsem malo* 'altogether little or few', *udivitel'no malo* 'surprisingly little or few', cf. also sentence examples (all examples come from NCRL):

- (30) a. V ètot raz na festivale bylo udivitel'no malo zritelej.
 in this time on festival was surprisingly few viewers
 'This time there were surprisingly few people in the festival's audience.'
- b. Odnako ètot organ zrenija ulavlivaet sliškom malo sveta.
 but this organ vision.GEN catches too little light
 'But this vision organ catches too little light.'
- c. U nas neverojatno mnogo talantlivyx ljudej.
 at us incredibly many talented people
 'We have incredibly many talented people.'

14.5.1.3 Exception Phrases

Exception phrases are introduced by the preposition *krome* or complex preposition *za isključeniem* 'with the exception of'.

- (31) a. Vse studenty, krome Vani, prišli na urok rano.
 all students except John came to class early
 'Every student but John came to class early.'

- b. Ni odin student, krome Vani, ne ušel s večerinki pozdno.
 NI one student except John not left from party late
 ‘No student but John left the party late.’

Exception phrases normally combine with universal quantifiers, including negative concord items like *ni odin* above, which are also likely to be interpreted universally (Abels, 2005). However, one can find examples with other quantifiers (examples below come from NCRL), where *krome* can be translated either as *except* or as *besides*:

- (32) a. Krome Èterpy bylo eščë vosem' muz.
 except Euterpe was more eight muses
 ‘There were eight more Muses not counting Euterpe.’
 b. Komu, krome tebjja, ja mogu eščë byt' nužna?
 who except you I can still be necessary
 ‘Who can need me if not you?’
 c. Pošli za neju mnogie, krome professorov i vrača.
 went after her many except professors and doctor
 ‘Many people followed her, with the exception of the professors and the doctor.’
 d. ... – u mnogix, krome edinstvennogo!
 at many except the only
 ‘{many of them show suffering and doubt on their faces} – many, with a single exception!’
 e. Ne znaju, zametil li ètu strannost' kto-to eščë, krome menja
 not know noticed whether this strangeness who-to else except me
 ‘I don’t know if anyone else besides me noticed this strange thing.’

14.5.1.4 Proportional Quantifiers

Proportional quantifiers are generally structurally complex, under both productive constructions: ‘*každyj* + ordinal numeral’ (*každyj pjatyj* ‘every fifth’) and ‘cardinal numeral + fraction’ (*dve desjatyx* ‘two tenths’, *tri procenta* ‘three percent’); exceptions are fraction names used on their own (including just *polovina* ‘half’, *tret'* ‘one third’, *četvert'* ‘quarter’). Proportional quantifiers can be modified by focus particles and adverbs: (*liš'*, *rovno*, *tol'ko*) *sem' iz desjati* ‘(just, exactly, only) seven out of ten.’ Comparative and prepositional modifiers as in *ne menee* / *bolee semi iz desjati* ‘at least / more than seven out of ten’ are almost never used with proportional quantifiers; if modified this way, such quantifiers are interpreted as partitive (‘seven of the ten’) rather than proportional. A rare example of such a modifier in a proportional usage comes from a 19th century text (33b). Examples:

- (33) a. Sem' iz desjati poetov mečtajut.
 Seven from ten poets daydream
 ‘Seven out of ten poets daydream.’

- b. Iz celoj armii ostalos' ne bolee dvux iz desjati čelovek.
 from whole army remained not more two from ten people
 'At most two in ten people survived from the whole army.' (NCRL)
- c. Ni odin učitel' iz desjati ne znaet otvet na vopros.
 NI one.NOM teacher.NOM from ten not knows answer on question
 'Not one teacher in ten knows the answer to that question.'¹³

14.5.1.5 Boolean Compounds of Determiners

Russian forms boolean compounds of determiners, except for conjunctions of determiners ('and') whose meanings are preferably expressed by other means (e.g. *ot X do Y* 'between X and Y' rather than *ne menee X no ne bolee Y* 'at least X but not more than Y'); sentences with conjoined determiners are improved if the shared common noun phrase is supplied with the preposition *iz* 'out of'. Boolean compounding may simply make the sentence grammatical if the selection properties of the quantifiers are otherwise incompatible, as in (34d):

- (34) a. Ot dvux do desjati studentov polučat stipendii v sledujuščem godu.
 From two till ten students get.FUT scholarships in next year
 'At least two but not more than ten students will get scholarships next year'
 is preferable over
- b. Ne menee dvux, no ne bolee desjati (iz) studentov polučat stipendii v sledujuščem godu.
 not less two but not more ten of students get.FUT scholarships in next year
 'At least two but not more than ten students will get scholarships next year.'
- c. Bol'sinstvo poetov, no ne vse (iz nix), spjat dnëm.
 Most poets but not all (of them) sleep in.the.afternoon
 'Most but not all poets sleep in the afternoon.'
- d. Bol'sinstvo, no ne vse, *(iz) poetov spjat dnëm.
 Most but not all (of) poets sleep in.the.afternoon
 'Most but not all poets sleep in the afternoon.'
- e. Ni každyj student, ni každyj učitel' ne prišël na večerinku.
 Nor every student nor every teacher not came to party
 'Neither every student nor every teacher came to the party.'

14.5.1.6 Partitives: D + iz + NP_{Gen.pl}

Russian uses syntactically complex NP partitives with the preposition *iz* with cardinal, interrogative, universal, or proportional quantifiers. Quantifiers that

¹³ As discussed, the quantifier in the last example is not interpreted as proportional but as partitive. Instead, it reads as referring to a definite set of ten teachers, and can better translated as *Not one of the ten teachers knows the answer to that question.*

usually occur without a common noun restrictor (e.g. *kto* ‘who,’ *nikto* ‘nobody,’ *malo čto* ‘few things’) can still be used in partitive constructions. Determiners that typically combine with noun restrictors can be used in the partitive construction, but this is dispreferred (e.g. collective numerals are preferred over cardinal numerals). Partitive constructions with proportional determiners are slightly degraded, too. Personal pronouns, in contrast to full NPs, can freely occur in partitive constructions with any determiners:

- (35) a. *Liš' dvoe / ?dva iz studentov / tex / moix studentov /*
 Just two of students / those / my students /
studentov Vani sdali èkzamen.
 students John.GEN passed exam
 Just two of (the /those students / my / John’s students) passed the exam.
- b. *Kto iz studentov / tex studentov sdal èkzamen?*
 who of students / those students passed exam
 Which of the / those students passed the exam?
- c. *?Kakie iz studentov / tex studentov sdali èkzamen?*
 which of students / those students passed exam
 Which of the / those students passed the exam?
- d. *Ni = kto / ni odin / ?ni = kakoj iz studentov ne sdal èkzamen.*
 NI = who / NI one / NI = which of students not passed exam
 None/neither of the students passed the exam.
- e. *Oba iz nix / ?studentov sdali èkzamen.*
 both of them / ?students passed exam
 ‘Both of them / the students passed the exam.’
- f. *?Bolee vos'midesjati procentov / pjat' šestyx iz studentov ne sdali èkzamen.*
 more eighty percent / five sixths of students not passed exam
 ‘More than eighty percent / five sixths of the students passed the exam.’
- g. *Bol'sinstvo iz nix / ?studentov sdalo èkzamen.*
 majority of them / ?students passed exam
 ‘Most of them / the students passed the exam.’

Among the universal quantifiers, *každyj* ‘every’ is preferable over *vse* ‘all’ in partitive constructions:

- (36) a. *Každyj / ne každyj iz studentov sdal èkzamen.*
 every / not every of students passed exam
 ‘All / Not all of the students passed the exam.’
- b. *??Vse / ?Ne vse iz studentov sdali èkzamen.*
 all / not all of students passed exam
 ‘All / Not all of the students passed the exam.’

14.5.2 Complex A-Quantifiers

14.5.2.1 Modification

Russian A-quantifiers are generally modified in the same ways as D-quantifiers, cf.:

- (37) a. Vanja byl v Moskve *rovno dvaždy / bolee pjati raz*.
 John was in Moscow exactly twice / more five times
 ‘John has been to Moscow exactly twice / more than five times.’
- b. Vanja počti vseгда / liš' inogda *ezdit na avtobuse*.
 John almost always / just sometimes rides on bus
 ‘John almost always / just rarely takes the bus.’
- c. Vanja *ezdit na avtobuse v dva raza čašče, čem ty*.
 John rides on bus in two times more often than you
 ‘John takes the bus twice as often as you.’

14.5.2.2 Boolean Compounds

Adverbial quantifiers can be coordinated; in those built from NPs, syntactic complexity can be added by coordinating or modifying the determiners they include:

- (38) a. Vanja *propuskal urok ot trëx do pjati raz*.
 John has missed class from two to five times
 ‘John has missed class at least twice but not more than five times.’
- b. Na *prezidentskix vyborax Marija často, no ne vseгда,*
 In presidential elections Mary frequently but not always
golosovala za demokrata.
 voted for Democrat
 ‘In presidential elections Mary has frequently but not always voted for a Democrat’

14.6 Comparative Quantifiers

14.6.1 Comparison of NP Extensions

Russian comparative constructions have largely the same structure as in English. The distribution of comparative D-quantifiers, however, is limited to the positions of the subject and direct object (cf. Section 14.1.4). Even in the case of subjects there is a strong tendency for such comparative noun phrases to be sentence final (postverbal if the sentence has a verbal predicate). (I could not illustrate any positions created by raising to object, due to the absence of clear cases of raising verbs in Russian.)

- (39) a. Na večerinku prišlo bol'she učnikov, čem učitelej.
 on party came more students than teachers
 More students than teachers came to the party
- b. Na večerinku prišlo ne men'she učnikov, čem učitelej.
 on party came not less students than teachers
 At least as many students as teachers came to the party
- c. Ja konsul'tirovala primerno stol'ko že mužčin, skol'ko i ženščin.
 I consulted approximately as many men as also women
 I consulted approximately as many men as women.
- d. Ja znaju bol'she učnikov, čem učitelej.
 I know more students than teachers
 I know more students than teachers (Direct Object)
- e. *Ja rabotal s bol'she učnikov, čem učitelej.
 I worked with more students than teachers
 I have worked with more students than teachers (Obj of Prep)
- f. *Byli ukradeny velosipedy stol'kix že učnikov, skol'ko i učitelej.
 were stolen bicycles as many students as also teachers
 Just as many students' as teachers' bicycles were stolen (Possessor)

14.6.2 Comparison of Predicate Extension (Type $\langle 1, \langle 1, 1 \rangle \rangle$)

Russian has counterparts of English quantifiers with just one conservativity domain but two predicate properties; these include *(ne) bol'she ... čem* '(not) more ... than,' *(ne) men'she ... čem* '(not) less ... than,' *te že ... čto/kotorye* 'the same ... as/which,' *stol'ko že ... skol'ko* 'as many ... as,' covering the whole range of comparative operators as in previous subsection. These, too, are generally clause-final in the main clause. Examples:

- (40) a. Na večerinku prišlo bol'she studentov, čem gotovilos' k èkzamenam.
 to party came more students than prepared for exams
 More students came to the party than studied for their exams
- b. Rano prišli te že studenty, čto / kotorye ušli pozdno.
 early came the same students that / which left late
 The same students came early as left late (\neq 'The students who came early left late' which is strictly weaker: one is a full equivalence and the other only a one-way implication)
- c. Tam rabotajut te že prepodavateli, čto i v institute.
 there work those EMPH professors that also in institute
 The same professors work there as in the institute.

14.7 Type ⟨2⟩ Quantifiers

Russian has exact counterparts of most English type ⟨2⟩ quantifiers (Keenan, 1992, Keenan, 1996) including those not reducible to the iterated application of two functions of type ⟨1, 1⟩:

- (41) a. *Kakie studenty otvetili na kakie voprosy?*
 which students answered on which questions
 Which students answered which questions?
- b. *Vse studenty otvetili na odni i te že voprosy*
 all students answered on one and the same questions
 All the students answered the same questions
- c. *Vse studenty otvetili na raznye voprosy*
 all students answered on different questions
 Each student answered a different question (for every two students, the sets of questions they answered were different)
- d. *Raznye studenty otvetili na raznye voprosy*
 different students answered on different questions
 Different students answered different questions (ambiguous between the reading of the sentence above and ‘for at least two students, the sets of questions they answered were different.’)
- e. *Vanja i Petja život v sosednix derevnjax.*
 John and Peter live in neighboring villages
 John and Peter live in neighboring villages
- f. *Oni život v raznyx kvartirax v odnom i tom že zdanii.*
 they live in different apartments in one and the same building
 They live in different apartments in the same building
- g. *Na vsex učastnikax byl galstuk odnogo cveta.*
 On all participants was necktie one.GEN color.GEN
 All the participants wore the same color necktie
- h. *Vanja tanceval s Mašej, no bol’she ni = kto*
 John danced with Mary but more NI = who
 ni s kem ne tanceval.
 NI with whom not danced.
 John danced with Mary but no one else danced with anyone else
 (Doesn’t sound right with a second *bol’she* ‘else’ after *nikto*)
- i. *Kartiny nado povesit’ v raznyx komnatax ili*
 paintings should hang in different rooms or
na protivopoložnyx stenax odnoj komnaty.
 on opposite walls one.GEN room.GEN
 The paintings should be hung in separate rooms or on opposite walls of the same room

- j. (Raznye) prisjažnye sdelali raznye vyvody iz odnix i
 (Different) jurors made different conclusions from one and
 tex že argumentov
 the same arguments
 The/Different jurors drew different conclusions from the same
 arguments

In addition to these, instances of Hybrid Coordination (Section 14.21.2) are type ⟨2⟩ (type ⟨*n*⟩, for *n* greater than 1) quantifiers which are expressed by a single syntactic constituent. Their meanings can always be paraphrased using a combination of some type ⟨1⟩ quantifiers, so the meanings expressed are Fregean (but still of type ⟨2⟩), with the possible exception of interrogative quantifiers.

14.8 Distributive Numerals and Binominal Each

In Russian the adverbial *v obščej složnosti* ‘in total’ forces group (collective) readings in pairs of QNPs, *každyj* ‘each,’ either as a determiner or as a floating quantifier, forces distributive readings:

- (42) a. Tri prepodavatelja proverili v obščej složnosti sto rabot.
 three instructors graded in total 100 exams
 Three instructors graded 100 exams between them / in total (just
 group/collective)
- b. Tri prepodavatelja proverili sto rabot každyj.
 three instructors graded 100 exams each
 Three instructors graded 100 exams apiece / each (just a distributive,
 SWS reading)

Russian forms distributive quantified phrases with numerals using the preposition *po* (so one could say that Russian has both binominal *each* and distributive numerals, albeit not morphologically marked). Distributive *po* shows peculiar selection properties. Numerals *tysjača* ‘thousand,’ *million* ‘million,’ *milliard* ‘billion,’ *odin* ‘one,’ and those ending in *odin* ‘one’¹⁴ are in the dative case when combined with the distributive *po*, while noun phrases with other numerals are used in the nominative. Numeral *odin* ‘one’ can be omitted after distributive *po* as in (44a). Here are some naturally occurring examples (all but the first one are taken from NCRL):

¹⁴ In colloquial Russian, *po* + Dative in examples like *po dvadcati odnomu* ‘twenty one each’ tend to be replaced with nominative like in *po dvadcat’ odin*. This use is restricted to inanimate masculine nouns, probably because the masculine form is underspecified for nominative vs. accusative. Such expressions, however, remain marginal. Cf. an actual example from fiction (Dmitrii Kurtsman, *Skazanie O Side*):

- (43) Nam po dvadcat’ odin god.
 Us.DAT PO twenty one year
 ‘We are twenty one year old each.’

- (44) a. Každýj govorit o predmete po (odnomu) predloženiju.
 every says about subject PO one.DAT sentence.DAT
 ‘Everybody says one sentence on the topic.’ (from a game description)
- b. Po dvadcati odnomu vagonu v každom sostave bylo.
 PO twenty.DAT one.DAT car.DAT in each train was
 ‘Every train had twenty one cars.’
- c. Každýj iz nix vložil v predpriatie po 245 tysjač dollarov.
 Each of them invested in enterprise PO 245 thousand dollars
 ‘Each of them invested 245,000 dollars into the enterprise.’

14.9 Mass Quantifiers and Count Classifiers

14.9.1 Count Noun Determiners

In Russian, numerals combine with count but not mass nouns: *desjat' domov* ‘ten houses’ / *#desjat' vodorodov* ‘ten hydrogens.’ But, as in English, numerals may induce a type reading with mass nouns: *dva neploxix vina* ‘two good wines’ = ‘two good types of wine,’ or a portion reading: *dva saxara* ‘two sugars’ = ‘two packs of sugar,’ *tri piva* ‘three beers’ = ‘three glasses of beer’. The determiners *(ne)mnoгие* ‘(not) many’ and the oblique cases of *skol'ko* ‘how many, how much’ are morphologically plural and do not combine with mass nouns: *ot skol'ki domov* ‘from how many houses?’ / *ot skol'ki *vodoroda/#vodorodov* ‘from how many *hydrogen / #hydrogens?’ (but OK *skol'ko vodoroda* ‘how much hydrogen’). *Nekotoryj* ‘(a) certain’ can be either plural or singular but is not used with mass nouns: *nekotoryj kod* ‘a certain code,’ but *#nekotoroe pivo* ‘a certain beer.’

Neskol'ko ‘several’ in the modern language also combines only with count nouns, although historically it used to mean ‘some’ and combined with both mass and count nouns as in obsolete expressions *neskol'ko vremeni* ‘some time,’ *neskol'ko deneg* ‘some money’.

14.9.2 Two-Way Determiners

Most Dets in Russian combine with both mass and count nouns. Most of these quantifiers assign genitive singular (or partitive) to mass nouns, and genitive plural (or the greater paucal form) to count nouns. This includes proportional determiners. Determiner *vs-* ‘all’ does not assign case to its NP but rather agrees with it; it selects for plural and is used in the plural when combined with count nouns, and selects for singular and has a singular form with mass nouns.

- (45) a. malo studentov / masla, desjat' procentov podroستkov / zolota
 few students.GEN / butter.GEN, ten per cent teenagers / gold
 few students / little butter, ten per cent of teenagers / ten per cent of gold

- b. vse doma / vsě pivo, mnogo okon / vina
 all.NOMPL houses.NOM / all.NOMSGN beer.NOM(N), a lot of windows / wine
 All (the) houses / all (the) beer, a lot of windows / a lot of wine
- c. skol'ko-to mašin / reziny, ni = kakie mašiny / ni = kakaja rezina
 some cars / rubber, NI = which cars / ni = which rubber
 (some/no) car(s) / (some/no) rubber,
- d. nedostatočno studentov / vina, malo studentov / vina
 not enough students wine, little students wine
 not enough students / not enough wine, few students / little wine

14.9.3 Mass Noun Determiners

There are no determiners in Russian that combine exclusively with mass nouns.

14.9.4 Numeral Classifiers

Classifiers are not grammaticized in Russian, but, as in English, there are nouns that convert mass terms into count ones, enabling us to combine them with numerals and mark plural: *sto golov skota* ‘100 head of cattle,’ *pjat' počatkov kukuruzy* ‘five ears of corn’, *odin kusok myla* ‘a bar of soap’, *neskol'ko listov bumagi* ‘several sheets of paper’, *odna buxanka xleba* ‘a loaf of bread’. In addition to this, when counting people, the classifier *čelovek* ‘person’ can be used after numerals, followed by the noun phrase in genitive plural:

- (46) Sorok pjat' čelovek rjadovyx i odin lejtenant.
 forty five people soldiers and one lieutenant
 ‘Forty five soldiers and one lieutenant.’ (From Ju. Dombrovsky,
Obez'jana prixodit za svoim čerepom)

14.9.5 Containers and Measures

Container expressions are another way to convert mass to count terms, but they retain their meaning of a physical object. A distinction between dedicated *containers* and simple *vessels* which can accidentally be used as containers has been reported to find expression in Russian, see (Borschev and Partee, 2011, Partee and Borschev, In press). Syntactically container expressions are quantified noun phrases with a mass noun dependent in genitive or partitive:

- (47) dve butylki vina; paket moloka; mnogo korobok konfet
 two bottles wine.GEN bag milk.GEN many boxes candy.GEN
 ‘two bottles of wine, a carton of milk, many boxes of candy’

For example, buying a bottle of milk usually includes buying a bottle, but it could also refer to filling one's own bottle with milk. In other words, names of containers specify quantity (as measure phrases), but in addition to that require that the measured entity be in the specified container *at some moment*.

- (48) Petja vypil paket moloka
 Peter drank bag milk
 'Peter drank a bag of milk'

Measure phrases, specifying pure quantity, have the same structure as container expressions (Russian is in this respect similar to Romanian and different from Greek, cf. Brasoveanu (2008), Stavrou (2003)). They assign partitive (or genitive) case to the mass noun:

- (49) dva funta syra / syru; kilogramm soli; mnogo tonn nefti
 two pounds cheese.GEN/PART kilogram salt.GEN many tons oil.GEN
 'two pounds of cheese, a kilogram of salt, many tons of oil'

14.9.6 Space and Time Measures

Units of time and distance, like measure phrases, follow the metric system. Non-metric measure terms like *sažen'* (distance, ≈7 feet), *versta* (distance, ≈ 3,500 feet), *puđ* (weight, ≈36 lbs) are obsolete. A bare singular measure word can be used in the meaning of 'one', e.g. *za minutu* 'in one minute'. Certain verb prefixes (*pro-*, *ot-*, *do-*, *vy-*) can add a space or time measure argument as the direct object. Space and time measure phrases in accusative case can function as adverbials (translated into English with the preposition *for*). To a limited extent such accusative adverbials are subject to the case alternation known as genitive of negation (Erschler, 2007), although whether different instances of genitive under negation can be unified is controversial (Franks and Dziwirek, 1993).

- (50) a. Petja bežal tri kilometra.
 Peter ran three kilometers
 'Peter ran for three kilometers.'
 b. Ja prospal desjat' časov.
 I slept.for ten hours
 'I slept for ten hours.'
 c. Ja vernus' čerez sem' dneĵ.
 I return.FUT after seven days
 'I will return in seven days.'
 d. V nedele sem' dneĵ.
 in week seven days
 'There are seven days in a week.'

- (51) a. Novogradovka naxodit = sja v soroka kilometrax ot Donecka.
 Novogradovka finds = REFL in forty kilometers from Donetsk
 ‘Novogradovka is forty kilometers from Donetsk.’ (from world wide web)
- b. Vanja na tri santimetra vyše, čem Petja.
 John on three centimeters taller than Peter
 ‘John is three centimeters taller than Peter.’

14.10 Existential Construction

Existential sentences in Russian have the form ‘restricting prepositional phrase + copula + subject NP,’ and are a subtype of verbal sentences rather than a standalone construction. The present tense copula *est'*¹⁵ may be omitted in the presence of the restricting prepositional phrase.

- (52) a. V klasse sejčas (est') pjat' učenikov; v prošlom godu bylo desjat'.
 in class now (is) five students; in last year was ten
 ‘There are five students in the class now; last year there were ten
 (students in the class)’
- b. V klasse sejčas net učenikov; v prošlom godu bylo mnogo.
 in class now is.no students; in last year was many
 ‘There are no students in the class now; last year there were many
 (students in the class)’
- c. V dome kto-to est'
 in house who-EXIST is
 ‘There is someone in the house’
- d. Kto (est') v dome?
 who (is) in house
 ‘Who is in the house?’
- e. Est' li kto-libo v dome?
 is whether who-LIBO in house
 ‘Is there anyone in the house?’
- f. V dome ni = kogo net
 in house NI = who is.no
 ‘There isn’t anyone in the house.’

The meaning of existence can also be expressed with a special verb *suščestvovat'* ‘exist’ (examples from NCRL):

- (53) a. Suščestvuet tak nazyvaemaja Minskaja grupa OBSE.
 exists so called Minsk:ADJ group OSCE
 ‘There is the so-called OSCE Minsk Group’

¹⁵ *Est'*, glossed ‘is,’ does not distinguish number, person, or gender forms.

- b. Suščestvuet celyj rjad takix bibliotek.
exists whole row such libraries.GEN
'There is quite a number of such libraries.'

Russian does not exhibit English-like restrictions on the determiners in existential statements:

- (54) a. V klasse est' vse studenty.
in class is all students
'All students are in the class.'
- b. V klasse est' bol'sinstvo studentov.
in class is most students
'Most students are in the class.'
- c. V klasse est' Vanja.
in class is John
'John is in the class.'

Negative existential statements, as in the examples below, use the same negative particle *ne* as in simple declarative sentences. Present tense is exceptional, though: instead of **ne est'* Russian uses the special form *net* or (colloquial) *netu*.¹⁶ Pivot NPs are in the genitive case under negation.

- (55) a. V slovare net /netu risunkov.
in dictionary is.no pictures.GEN
'There are no pictures in the dictionary'
- b. V slovare ne bylo risunkov.
in dictionary not was pictures.GEN
'There were no pictures in the dictionary'
- c. V slovare ne budet risunkov.
in dictionary not be.FUT pictures.GEN
'There will be no pictures in the dictionary'

Existential copula *byt'* 'be' is also used as the default way to express possession, with the possessor expressed by a prepositional phrase with the preposition *u*:

- (56) a. U menja net /netu risunkov.
at I.GEN is.no pictures.GEN
'I have no pictures.'

¹⁶ As *est'*, the negative present-tense copulas do not distinguish number, person, or gender forms.

- b. U menja est' risunki.
 at I.GEN is pictures.GEN
 'I have (some) pictures.'
- c. U menja byli risunki.
 at I.GEN were pictures.GEN
 'I had (some) pictures.'

Barbara Partee identified one context in Russian in which the definiteness effect does manifest itself in existential statements (Partee, 2010, 10).

- (57) U nego est' ^{OK}odna / *každaja sestra.
 of he.GEN is one / *every sister
 'He has one / *every sister.'

This applies only to possessive statements with relational nouns in them; other cases may be analyzed as ambiguous between existential and locative (Partee and Borschev, 2007).

14.11 Floating Quantifiers

Russian, as English, allows *vse* 'all' and *oba* 'both' to be part of the predicate as well as of a noun phrase. Examples:

- (58) a. Eti studenty včera oba gotovilis' k èkzamenam.
 these students yesterday both prepared to exams
 'Yesterday these students both studied for their exams.'
- b. Oba studenta včera gotovilis' k èkzamenam.
 Both students yesterday prepared to exams
 'Yesterday both students studied for their exams.'
- c. Petja i Vanja včera oba gotovilis' k èkzamenam.
 Peter and John yesterday both prepared to exams
 'Yesterday Peter and John both studied for their exams.'
- d. Èti studenty včera vse gotovilis' k èkzamenam.
 these students yesterday all prepared to exams
 'Yesterday these students all studied for their exams.'
- e. Vse èti studenty včera gotovilis' k èkzamenam.
 all these students yesterday prepared to exams
 'Yesterday all these students studied for their exams.'
- f. Maša, Petja i Vanja včera vse gotovilis' k èkzamenam.
 Mary Peter and John yesterday all prepared to exams
 'Yesterday Mary, Peter, and John all studied for their exams.'

Numerals do not usually occur in the same form in predicates as within noun phrases; instead, special adverbial forms are used: *dvvoëm* 'two in quantity,' *vtroëm* 'three in quantity,' *včetverom* 'four in quantity,' etc. These adverbs,

however, not only specify quantity but also force a group reading; this component of their meaning may be translated as ‘together.’

- (59) a. Èti dva studenta včera gotovilis' k èkzamenam.
 these two students yesterday prepared for exams
 ‘Yesterday these two students studied for their exams.’ = ‘Yesterday these students both studied for their exams.’
- b. Èti studenty včera vdvoëm gotovilis' k èkzamenam.
 these students yesterday in.two prepared for exams
 ‘Yesterday these two students studied for their exams (together)’ ≠
 ‘Yesterday these students both studied for their exams.’

To the extent that floating numerals are acceptable, collective numerals (*troe* ‘3’, *četvero* ‘4’, *pjatero* ‘5’ etc.) are preferable compared to cardinal numerals (e.g. *tri*, *četyre*, *pjat'*)

- (60) a. Èti tri studenta včera gotovilis' k èkzamenam.
 these three students yesterday prepared for exams
 ‘Yesterday these three students studied for their exams.’
- b. Èti studenty včera *tri / ?troe (OK vtroëm)
 these students yesterday *three.CARD/?COLL (OK in.three)
 gotovilis' k èkzamenam.
 prepared for exams
 ‘Yesterday these three students studied for their exams.’

14.12 Quantifiers as Predicates

In Russian, not only cardinal numerals and value judgment cardinals can function as predicates but also measure phrases and container phrases. Count terms as subjects of quantifier predicates accept the genitive plural form, even if the numeral that functions as a predicate combines with the smaller count form, as *dva* does, or with nominative singular, as *dvadcat' odin* does. One exception to this is the predicate *odin* ‘one’, which combines with nominative subjects. Mass terms take partitive (singular) form:

- (61) a. Student byl odin.
 student.NOMSG was one
 ‘The student was one in number.’
- b. Studentov bylo dva.
 student.GENPL was two
 ‘The students were two in number.’

- c. Studentov bylo pjat'.
 student.GENPL was five
 'The students were five in number.'
- d. Studentov bylo dvadcat' odin.
 student.GENPL was twenty one
 'The students were five twenty one.'
- e. Studentov bylo pjat' vagonov.
 student.GENPL was five car
 'The students were five (train) cars in volume.'
- f. Muki bylo pjat' jaščikov.
 flour.GENSG was five cases
 'The flour was five cases in volume.'
- g. Vody bylo pjat' litrov.
 water.GENSG was five liters
 'The water was five liters in volume.'

14.13 Determiners Functioning as Arguments

All determiners can function as NPs in elliptical contexts, as seen in the following example:

- (62) Galstuki byli nedorogi, tak čto ja primeril
 ties were inexpensive so I fit
 tri, neskol'ko, bol'sinstvo, mnogo, vse, každyj
 three several many most all every
 'The ties were inexpensive so I tried on three, several, a few, many, most of them, them all, each one.'

14.14 Relations Between Universal, Existential, and Interrogative Pronouns

As mentioned in the beginning of this article, many pronouns and pronominal adverbs are organized in series. This means systematic formal relations between e.g. interrogative pronouns and universal pronouns: *kogda* 'when', *vsegda* 'always' (temporal adverb), *čego* 'of what', *vsego* 'of everything' (Genitive singular inanimate), *čemu* 'to what', *vsemu* 'to everything' (Dative singular inanimate), *gde* 'where', *vezde* 'everywhere' (locative adverb, with voicing of /k/ of the interrogative stem and /s/ of the universal stem). The formal relation of interrogatives with universals (and demonstratives) is a heritage of Proto-Slavic where this relation was very regular. But synchronically the formal correspondence has been obscured in many cases by morphological innovations and semantic shifts, cf. formal differences in *kak* 'how' and *vsjako* 'in all ways';

otkuda ‘whence’ and *otovsjudu* ‘from everywhere’; sometimes the universal counterpart to interrogatives is missing as with *skol’ko* ‘how many’, *začem* ‘what for.’

The derivation of various quantifiers which are formally based on interrogative pronouns by means of prefixes or postfixes is fully regular and productive. For instance, Russian can form certain (‘free choice’) quantifiers with the universal reading from interrogative ones using the postfix *ugodno*: *kto ugodno* ‘whoever’, *čto ugodno* ‘whatever’, *kogda ugodno* ‘whenever’, *gde ugodno* ‘wherever’, *kak ugodno* ‘however’, *počemu ugodno* ‘for any reason’. Their usage as universals is licensed by a modal operator, so that they can be rendered through English *any*-pronouns, cf. examples (from world wide web):

- (63) a. *Zdes’ možno otpravit’ čto ugodno za voznagraždenie.*
 Here possible send.INF what ever for reward
 ‘For a fee, one can send anything here.’ (= for all X, one can send X here for a fee)
- b. *Ja budu kem ugodno, liš’ by byt’ s toboj.*
 I be.FUT who ever just SUBJ be.INF with you
 ‘I will be anything just to be with you.’ (= for all properties X, if being X is required to be with you, I will be X)

Existential (‘indefinite’) pronouns are all based on interrogatives, derived with a prefix (*koe-*, *ne-*) or a postfix (*-libo*, *-to*, *-nibud’*).

14.15 Decreasing Quantifiers

14.15.1 Decreasing Determiners

Russian does have determiners which build decreasing NPs. Some intersective ones are problematic due to negative concord: any sentence with *ni odin* ‘not one’ or *nikakoj* ‘no’ has to contain a sentence-level negation *ne*, itself a decreasing operator, so that these quantifiers are preferably analyzed as denoting increasing determiners.¹⁷ Two options are open and have been advocated: existential quantifiers obligatorily interpreted under the scope of negation,¹⁸ and universal quantifiers obligatorily outscoping negation (Abels, 2005).

¹⁷ The structure of *ni odin* is transparent, a negative particle + ‘one’, similar to the Italian *nessuno*. However unintuitive this may sound, elements of this structure, along with other negative concord items, have been argued to denote increasing quantifiers (Giannakidou, 2006, Penka, 2011). *Ni* certainly is a negative element historically, related to the Proto-Indo-European negative root **n*. But with the development of strict negative concord, semantic negativity apparently bleached out of the meaning of *ni*.

¹⁸ This approach is explicit in many analyses of *ni*-items, e.g. Brown and Franks (1995); Pereltsvaig (2006a), and implicit in many others like Yanovich (2005) where quantifiers like *nikakoj* are interpreted as choice functions.

- (64) Ni odin student ne prišël na lekciju.
 NI one student not came on lecture
 ‘No students came to the lecture.’ (Intersective; negative concord)

Still, there are decreasing determiners that are not involved in negative concord. Examples:

- (65) a. Prisutstvovalo men’še pjati studentov.
 attended fewer five students
 ‘Fewer than five students attended.’
 b. Ne vse deti mnogo plačut.
 Not all children a lot cry
 ‘Not all children cry a lot.’ (Co-intersective)
 c. Men’še čtvrti studentov sdali èkzamen.
 Less quarter students passed exam
 ‘Less than a quarter of the students passed the exam.’ (Proportional)
 d. Ne bolee semi iz desjati morjakov kurjat sigary.
 not more seven from ten sailors smoke cigars
 ‘Not more than seven out of ten sailors smoke cigars.’

14.15.2 *Quantificational Negative Polarity Items*

The closest Russian correspondence to English quantificational NPIs are quantifier words with the postfix *-libo* (see also Section 14.1.12). They are licensed in decreasing contexts, with the exception that they usually do not co-occur with the same-clause sentential negation *ne* (in those contexts, a *ni*-word is used instead, as in (66a)). *-libo*-quantifiers are only possible in negative contexts if they are licensed by a different operator (e.g. the conditional operator) and take scope over negation, cf. (66b):

- (66) a. Ni Vanja, ni Petja nikogda ne byli v Moskve.
 Nor John nor Peter never not were in Moscow
 ‘Neither John nor Peter have ever been to Moscow.’
 b. Esli ni Vanja, ni Petja nikogda ne byli gde-libo...
 if nor John nor Peter never not were where-LIBO...
 ‘If there’s a place that neither John nor Peter have ever been to...’
 c. Ne bolee dvux uèenikov videli na progulke kakix-libo ptic.
 Not more two students saw on walk which-LIBO birds
 ‘Not more than two students saw any birds on the walk.’
 d. Men’še poloviny zdeš = nix studentov kogda-libo byli v Pinske.
 Less half here = ADJ students when-LIBO were in Pinsk
 ‘Less than half the students here have ever been to Pinsk.’

Indefinites of the *-nibud'* series are not NPIs but may be characterized as affective polarity items (Giannakidou, 1998). They are found in the scope of modals and distributive quantifiers (Pereltsvaig, 2006a, Yanovich, 2005).

14.16 Distribution of QNPs

14.16.1 Some Restrictions on QNP Distribution

QNPs in Russian can occur in all major grammatical functions, including subject, object, object of adposition, and possessor. This is constrained by the fact that some QNPs can only be used as nominative or accusative but not oblique case (as exemplified in (67d) by a QNP with the preposition *okolo* 'about'). Examples:

- (67) a. Vanja otvetil liš' na tri vopros = a na èksamene.
John answered just on three.ACC question = GENSG on exam
'John answered just three questions on the exam.'
- b. Ja otvetil na vse vopros = y, krome odnogo.
I answered on all.ACC questions = ACC except one
'I answered all but one question / all but one of the questions.'
- c. Maša otvetila na bol'sinstvo / tri četverti voprosov.
Mary answered on most / three quarters questions
'Mary answered most / three quarters of the questions.'
- d. Biblioteka poslala izveščenie neskol'kim / vsem
library sent notice several / all
studentam / primerno polovine / *okolo poloviny studentov.
students.DAT / approximately half.DAT / *about half.GEN students
'The library sent a notice to several students / all the students / about half the students.'
- e. Byli arestovany vrači dvux studentov.
were arrested doctors two.GEN students.GEN
'Two students' doctors were arrested.'
- f. Vrač každogo studenta vysoko kvalificirovan.
doctor every.GEN student.GEN highly qualified
'Every / Each student's doctor is well qualified.'
- g. Vanja oprosil vračej bol'sinstva studentov.
John interviewed doctors most.GEN students.GEN
'John interviewed most of the students' doctors.'
- h. Vanja oprosil okolo tysjači studentov.
John interviewed about thousand.GEN students.GEN
'John interviewed about a thousand students.'
- i. Vanja znakom s (*okolo) tysjačej studentov.
John acquainted with (*about) thousand.INSTR students.GEN
'John knows about a thousand students.'

- j. *Vanja znakom s okolo tysjači studentov.
 John acquainted with about thousand.GEN students.GEN
 ‘John knows about a thousand students.’ (s assigns instrumental case,
 and an *okolo*-modified QNP can only function as nominative,
 accusative, or genitive)

14.16.2 Dislocated QNPs

QNPs generally occupy the same positions as definite NPs. Wh-quantifiers, fronted to the sentence edge, are one natural class of exceptions. Overtly negated NPs occur either topicalized (sentence-initially) or in the sentence-final position; in the latter case, they always bear the nuclear pitch accent:

- (68) a. Ne každýj student otvetil na každýj vopros.
 not every student answered on every question
 ‘Not every student answered every question.’
 b. Vanja otvetil ne na každýj vopros.
 John answered not on every question
 ‘John answered not every question.’

14.17 Scope Ambiguities

In Russian, scope ambiguities do arise when two or more arguments of a given predicate can be bound simultaneously by QNPs, but the preferred scope follows the surface order of QNPs:

- (69) a. Nekotoryj redaktor pročel každuju rukopis'.
 some editor read everj manuscript
 Some editor read every manuscript (Scope ambiguous in Russian, like
 its English counterpart)
 b. Každuju rukopis' pročel nekotoryj redaktor.
 every manuscript read some editor
 Some editor read every manuscript (Scope ambiguous in Russian, as
 its English counterpart)

Two scope readings are available:

- Subject Wide Scope (SWS, much more readily available for (69a) than for (69b)): There is one editor *x* such that *x* read all the manuscripts.
- Object Wide Scope (OWS, much more readily available for (69b) than for (69a)): Each manuscript is such that at least one editor read it (possibly different editors read different manuscripts).

- (70) Tri prepodavatelja proverili sto rabot.
 three instructors graded 100 exams
 Three instructors graded 100 exams.

As in the English translation, both SWS and OWS readings are marginal; the group reading is the prominent one:

- SWS: There are 3 instructors each one of which graded 100 exams.
- OWS: There are 100 exams such that each instructor graded them.
- Group: There is a group of 3 instructors and a group of 100 exams and the group of instructors graded the group of exams.
- Cumulative: There is a group of 3 instructors and each of them graded some exams. The total number of graded exams is 100.

Modified numerals tend to force narrow scope with regard to a preceding QNP:

- (71) Každij student pročel odnu p'esu Šekspira na kanikulax.
 each student read one play Shakespeare.GEN on vacation
 Each student read one Shakespeare play over the vacation (Scope ambiguous;
 only SWS if *odin* receives a phrasal accent)
- (72) Každij student pročel ne menee odnoj p'esy Šekspira.
 each student read not less one play Shakespeare.GEN
 Each student read at least one Shakespeare play (Just SWS reading)

The scope of negative concord items, tied to the scope of sentential negation, follows the surface order of QNPs. The following examples are interpreted with SWS:

- (73) a. Ni odin politik ne poceloval každygo reběnka na jarmarke.
 nor one politician not kissed every baby on fair
 'No politician kissed every baby at the fair.' (Just SWS)
- b. Boľšinstvo politikov ne pocelovalo ni odnogo reběnka na jarmarke.
 Most politicians not kissed nor one baby on fair
 Most politicians kissed no baby at the fair (SWS; but focusing the object QNP makes inverse scope possible, as in the question-answer pair *How many babies did most politicians kiss at the fair? – Most politicians kissed NO babies at the fair.*)
- c. Liš' odin student ne otvetil ni na odin vopros na èksamene.
 just one student not answered nor on one question on exam
 Just one student answered no question on the exam (SWS only).
- d. Vse studenty, krome odnogo, otvetili po krajnej mere na odin vopros na èksamene.
 all students except one answered at ultimate measure on one question on exam
 All but one student answered at least one question on the exam. (SWS only; OWS somewhat facilitated by focusing the object QNP as expressed by pitch accent on *na odin*)

As in English, different choices of D-quantifier lend themselves to different judgments of scope (non-)ambiguity even when the Ds are otherwise near synonyms. Namely, among universal quantifiers, the distributive *každyj* more easily gets wide scope than the collective *vse*:

- (74) a. Nekotoryj / Kako-j-to redaktor pročel vse rukopisi.
 some editor read all manuscripts
 Some editor read all the manuscripts (Just SWS)
- b. Nekotoryj / Kako-j-to redaktor pročel každyju rukopis'.
 some editor read every/each manuscript
 Some editor read every/each manuscript (both scope ambiguous)
- (75) a. (Na stole ležala) fotografija vse studentov.
 (on the table lay) picture all students.GEN
 A picture of all the students (was on the table) [Meaning conveyed:
 one picture, many students]
- b. (Na stole ležala) fotografija každygo studenta.
 (on the table lay) picture every student.GEN
 A picture of each student (was on the table) [Possibly as many pictures
 as students; some but not all of them may have joint pictures]

14.17.1 Scope Ambiguity Asymmetries in Wh-Questions

Wh-quantifiers outscope all other quantifiers in the question, except for *každyj* 'every, each,' which can scope above the wh-quantifier, giving rise to pair list readings. For example, the first two questions below just have a SWS reading.

- (76) a. Kako-j student otvetil na bol'sinstvo voprosov (na èkzamene)?
 which student answered on most questions (on the exam)?
 Which student answered the most (the largest number of) questions
 (on the exam)?
- b. Kako-j student otvetil na vse voprosy (na èkzamene)?
 which student answered on all questions (on the exam)?
 Which student answered all the questions (on the exam)?
- c. Na kako-j vopros otvetil každyj student?
 on which question answered each student
 Which question did each student answer? (Both SWS and OWS)
 SWS: For each student x, identify the question x answered
 OWS: Identify a unique question y with the property that each student
 answered y.
- d. Na kako-j vopros otvetili vse studenty?
 on which question answered all students
 Which question did all the students answer? (Just OWS)

14.17.2 Self Embedding of QNPs

The choices of Dets on the whole NP and on the embedded NP are fairly independent:

- (77) (kako_j-to) drug každogo senatora, dva druga každogo
 (some) friend every senator.GEN, two friends every
 senatora, každyj drug každogo senatora
 senator.GEN, every friend every senator.GEN
 ‘a friend of every senator, two friends of every senator, every friend of
 every senator’

These expressions are in principle scope ambiguous. They are preferably interpreted with possessor wide scope ‘for every senator, two of his friends’ or ‘for every senator *y*, a/some/every friend of *y*;

possessor narrow scope readings ‘some *x* / every *x* such that *x* is a friend of every senator’ and ‘two people each of whom is a friend of every senator’ are also available in (77).

14.17.3 A- and D-Quantifiers

Scope ambiguity between nominal and verbal quantifiers is possible:

- (78) Dva mal’čika speli triždy.
 Two boys sang three times
 ‘Two boys sang three times.’

The preferable reading of the last example is the group reading ‘there were two boys who sang three times together.’ However, both the SWS reading ‘there are two boys who sang three times each’ and the OWS reading ‘on three occasions there were two boys who sang’ are available.

14.18 One to One Dependency: The Indexing Function of Universal Quantifier

Determiners *vsě bol’she* ‘more and more’ and *vsě men’she* ‘less and less’ involve quantification over times. Sometimes the domain of quantification is expressed in a prepositional phrase with the preposition *s* ‘with,’ e.g. *s každyj godom* ‘every year,’ *so vremenem* ‘over time,’ *s vozrastom* ‘with age’ = ‘as one grows up.’ Overt quantifiers other than the universal *každyj* do not appear in the domain of quantification:

- (79) S každyj godom vsě bol’she ljudej pokupajut Tojotu.
 with every year all more people buy Toyota
 ‘More people buy Toyotas every year’ (but not **s nekotoryj godom*
 ‘*some year’, **s pjat’ju godami* ‘*five years’)

Another construction that conveys a meaning similar to that of the preposition *s* is ‘*iz* + measure + *v* + measure’:

- (80) *Iz* goda *v* god *vsë* bol’še ljudej *pokupajut* Tojotu.
 from year to year all more people buy Toyota
 ‘More people buy Toyotas every year’

The usual way to use the domain of the universal *každyj* as an index set for another quantifier over individuals is to use construction *na* + NP_{Acc} + *pri-xodit’ sja* + NP_{Nom}:

- (81) *Na* *každygo* žitelja *respubliki* *pri-xoditsja* 31,5 *hektara* zemli.
 on every resident republic.GEN corresponds 31.5 hectares of land
 ‘For each resident of the republic, there are 31.5 hectares of land.’

14.19 Rate Phrases

To indicate rate, a preposition *v* + measure_{Acc} is used:

- (82) a. *V* nedelju ja *probegaju* *pjat’desjat* kilometrov.
 In week.Acc I run fifty.Acc kilometers
 ‘I run fifty kilometers a week.’
 b. *V* *srednem* *v* *den’* *pri-xodit* *pjat’-* *sem’*
 In average in day.Acc comes five.NOM - seven.NOM
 posetitelej.
 visitors
 ‘On average, 5–7 visitors come daily.’ (NCRL)

Rate phrases are constructed in the form ‘amount A + *v* + measure m_{Acc}’, e.g. *metr v sekundu* ‘a meter per second’. For adverbial usage, a rate phrase (in nominative) is subordinated to the phrase *so skorost’ju* ‘with a speed (of)’ or *na skorosti* ‘at the speed (of)’ when indicating motion speed, e.g.:

- (83) *Ètot* *poezd* *edet* *so* *skorost’ju* *četyresta* kilometrov *v* *čas*
 this train goes with speed 400.NOM kilometers.PAUCAL in hour.Acc
 ‘That train is traveling at 400 kilometers per hour.’

No preposition is required for rate phrases with *raz* ‘time’ or adverbs in *-ždy* (see Section 14.2.4):

- (84) *Vanja* *umyvaetsja* *dvaždy* / *dva* *raza* *v* *den’* / *každyj* *den’*.
 John washes.face twice / two times in day / every day
 John washes his face twice a day / three times a day / every day

14.19.1 ‘Every *x* and *y*’

Russian, like English, uses combinations of determiners with conjunction *i* ‘and’ to form quantifiers out of multiple noun phrases. Russian uses *i* in negative contexts where English may use *or* in analogous constructions. Such coordination may be interpreted as boolean if the common nouns are assumed to be not of type (et) but of the more complex (lifted) type ((et,(et,t)),(et,t))¹⁹:

- (85) a. Každij mužčina i ženščina ... platjat po šest' šillingov v god
 every man and woman pay PO six shillings in year
 ‘Every man and woman pays six shillings a year’ (NCRL)
- b. Každij gubernator i mër soderžat ogromnoe množestvo ...
 Every governor and mayor support great set
 gazet
 newspapers.GEN
 ‘Every governor and mayor support an enormous number of
 newspapers.’ (adapted from NCRL, = ‘every governor and every
 mayor...,’ ≠ ‘everyone who is both a governor and a mayor...’)
- c. Nikakogo pistoleta i dubinki u nego net!
 no gun and truncheon at him is.not
 ‘He has no gun or truncheon!’ (NCRL)

14.20 Miscellaneous

14.20.1 Structural Complexity of Quantifiers

The following quantifier stems are synchronically monomorphemic: *k-* ‘who,’ *č-* ‘what,’ *vs-* ‘all,’ *každ-* ‘every,’ *ljub-* ‘any,’ numerals 0–10, 40, 100, 1000, *mnog-* ‘many, lots,’ *mal-* ‘few,’ *pol-* ‘half,’ *poltor-* ‘one and half,’ *ob-* ‘both.’

The following quantifiers, in addition to the ones with stems listed above, are just one phonological word. Note that prepositions, negative particle *ne*, and pronoun series markers do not form phonological words on their own but plausibly add more grammatical structure:

- *kakoj* ‘which,’ *skol'ko* ‘how many,’ *kogda* ‘when,’ *kak* ‘how,’ *gde* ‘where,’ *kuda* ‘to where,’ *otkuda* ‘from where,’ *dokuda* ‘till where,’ *začem* ‘for what purpose,’ *počemu* ‘why;’

¹⁹ This type lift may be motivated if we assume that *ili* ‘or’ is a positive polarity item (Szabolcsi, 2004). A positive polarity item could not be used in the contexts of determiners like *každyj* since these determiners create a downward entailing environment in their noun phrase. Note however that similar examples are found in English where *or* is arguably not a positive polarity item.

- *vsjakij* ‘every,’ *vsegda* ‘always,’ *vezde* ‘everywhere,’ *vsjudu* ‘to everywhere,’ *otovsjudu* ‘from everywhere;’
- *nikto* ‘nobody,’ *ničto* ‘nothing,’ *nikakoj* ‘no,’ *niskol’ko* ‘not a single,’ *nikogda* ‘never,’ *nikak* ‘no way,’ *nigde* ‘nowhere,’ *nikuda* ‘to nowhere,’ *niotkuda* ‘from nowhere,’ *nizačem* ‘for no purpose;’
- *kto-to* ‘somebody,’ *čto-to* ‘something,’ *kakoj-to* ‘some,’ *skol’ko-to* ‘some quantity of,’ *kogda-to* ‘sometime,’ *kak-to* ‘in some way,’ *gde-to* ‘somewhere,’ *kuda-to* ‘to somewhere,’ *otkuda-to* ‘from somewhere,’ *začem-to* ‘for some purpose,’ *dokuda-to* ‘till somewhere,’ *počemu-to* ‘for some reason;’
- other series of quantifiers formed from interrogatives with prefixal and postfixal clitics *koe-*, *-libo*, *-nibud’*, *ne-*²⁰;
- *bol’še* ‘more,’ *men’še* ‘less;’
- *ni odin* ‘not one,’ *nemnogo*, *nemnogie* ‘few,’ *mnogočislennyj* ‘numerous,’ (*ne*) *dostatočno* ‘(in)sufficiently many;’
- numerals 11–20, 30, 50, 60, 70, 80, 90, 200, 300, 400, 500, 600, 700, 800, 900;
- simple numerals with unaccented prepositional ‘modifiers’, including distributive *po*: *do pjati* ‘up to five’, *po dva* ‘two apiece’ etc.
- *inogda* ‘sometimes,’ *dvaždy* ‘twice,’ *triždy* ‘three times,’ *četyreždy* ‘four times;’ obsolete *odnaždy* ‘once’ and *mnogaždy* ‘many times;’
- *ne vse* ‘not everybody / not all,’ *ne vsě* ‘not everything / not all,’ *ne vsyakij* ‘not every,’ *ne vsegda* ‘not always,’ *ne vezde* ‘not everywhere,’ *ne vsjudu* ‘not to everywhere,’ *ne otovsjudu* ‘not from everywhere;’
- *bol’šinstvo* ‘a majority of,’ *men’šinstvo* ‘a minority of,’ *polovina* ‘half,’ *tret’* ‘third,’ *četvert’* ‘quarter;’
- (*ne*)*často* ‘(not) often,’ *v osnovnom* ‘mostly,’ *obyčno* ‘usually,’ *redko* ‘seldom,’ *v celom* ‘generally.’

- (1) Russian has a monomorphemic stem for ‘all’ in *vse* ‘everybody, all’ and *vsě* ‘everything, all.’
- (2) Russian has a monomorphemic stem *od(i)n-* for ‘one.’ While there is no special indefinite article and bare noun phrases can be interpreted as indefinite, *odin*, as in English, is sometimes used to express indefiniteness.
- (3) Russian has a monomorphemic proportional determiner *pol* ‘half’. However, it is a clitic rather than a separate phonological word. *Často* ‘often’ is not monomorphemic since it contains the adverb suffix *-o*.
- (4) Russian has two monomorphemic value judgment quantifier stems, *mnog-* ‘many’ and *mal-* ‘few.’
- (5) Russian lacks a monomorphemic determiner translating *no*.
- (6) Russian has at least four universal D-quantifiers: *každyj*, *vsjakij* ‘each, every,’ *vse* ‘all (the),’ *ljuboj* ‘any’. *Vse* is the only collective one. Determiner *vsjakij* is reported (Padučeva, 1989a) to quantify only over infinite sets. ‘Infinite’ here should be probably understood as ‘open-ended’. *Vsjakij* is

²⁰ All the prefixal clitics can be separated from the stem by a preposition.

thus similar to the free choice uses of English *any*. *Vsjakij* is somewhat archaic, restricted mostly to mathematical usage.

- (7) It is hard to tell whether A-quantifiers are morphosyntactically more complex than D-quantifiers in the case of *často* ‘frequently’ and *redko* ‘rarely,’ related to *častyj* ‘frequent’ and *redkij* ‘rare.’ Where adjectives have agreement markers (e.g. *-yj* for Nominative singular masculine) adverbs place a constant adverbial suffix *-o*. *Dvaždy* ‘twice,’ *triždy* ‘three times,’ *četyreždy* ‘four times’ are built from simpler *dva* ‘two,’ *tri* ‘three,’ *četyre* ‘four.’ *V osnovnom* ‘mostly’ has an internal structure of a prepositional phrase, and *n raz* ‘n times,’ *mnogo raz* ‘many times’ have the internal structure of an NP.

14.20.2 *Only*

The particle *tol’ko* ‘only’ functions like English *only*, except it cannot semantically combine with a proper subconstituent of its syntactic scope:

- (86) a. Tol’ko Vanja polučil priz.
 Only John got prize
 ‘Only John got a prize.’
 b. Tol’ko studenty prisutstvovali na ceremonii.
 Only students were on ceremony
 ‘Only students attended the ceremony.’
 (= everybody who attended the ceremony were students)
 c. Petja tol’ko pil pivo.
 Peter only drank beer
 ‘All Peter did was drink beer.’
 (not ‘All that Peter drank was beer,’ a possible meaning in English)

In addition to *tol’ko*, the meaning ‘only’ can be rendered by the particle *liš’* or the combination of the two *tol’ko liš’*

- (87) a. Botaniki priznajut liš’ 4 ‘xorošix’ vida astrofitumov.
 botanists recognize just 4 ‘good’ species astrophyta.GEN
 ‘Botanists recognize only 4 ‘true’ species of astrophyta.’ (NCRL)
 b. No vsë èto liš’ tol’ko raz v godu.
 But all this just only time in year
 ‘But all this happens only one time in a year.’ (NCRL)

Determiner *odin* ‘one’ is yet another way to express ‘only.’ Unlike the particles *tol’ko* and *liš’*, *odin* combines only with nouns and agrees with them in case, number, and gender:

- (88) a. Arestovali odnogo Andreja.
 Arrested one.ACCSGM Andrew.ACC.
 ‘Only Andrew was arrested.’ (NCRL)
- b. U nas v sem’e odni devčonki.
 at us in family one.NOMPL girl.NOMPL
 ‘There are only girls in our family.’ (NCRL)
- c. pitat’ = sja odnimi pel’menjami
 feed.INF = REFL one.INSTRPL dumpling.INSTRPL.
 ‘to eat only dumplings’ (NCRL)

14.21 Additions

14.21.1 *Obscene Quantifiers*

Some quantifier expressions in Russian are idioms based on words with emotional connotations, more specifically, on certain masculine stems. These include: *čërt* ‘devil,’ tabooed *xuj* ‘penis,’ and euphemisms of the latter: *xren* ‘horseradish,’ *xer* ‘letter X,’ *fig* ‘fig’ (*xer* and *fig* are obsolete in their literal meanings).

The following models freely combine with these words giving quantifiers: *ni Xá* ‘nothing,’ ‘not at all;’ *do Xá* or *do Xá* ‘plenty;’ *na Xá* ‘what for (usually in rhetorical questions);’ *kakogo Xá* ‘why (usually in rhetorical questions).’ In all these models the noun is in genitive singular but the stress placement is determined by the construction and may be different from the usual stress in genitive. Examples:

- (89) a. Kakogo xér = a ty pritaščila eë sjuda?
 which.GEN xer = GEN thou dragged her here
 ‘Why did you take her here?’ (NCRL)
- b. Ix tam v èto vremja do čërt = a.
 they there in this time till devil.GEN
 ‘There are plenty (of them) there at this time.’ (NCRL)
- c. Ni čert = á on ot menja ne polučit.
 NI devil = GEN he from me not get.FUT
 ‘He won’t get anything from me.’ (NCRL)

Rarely, the feminine *pizda* ‘vulva’ is found in similar constructions: *ni pizdy* (genitive) ‘nothing,’ *kakoj pizdy* (genitive) ‘why.’

14.21.2 Hybrid Coordination

Russian allows coordination of constituents (arguments or adjuncts) of different categories given that they include the same type of quantifier. Semantically, they can be analyzed as resumptive quantifiers of that type (i.e. quantifiers over pairs or tuples):

- (90) a. Vsem, vezde i vse do lampočki
 everyone.DAT everywhere and everything.NOM don't care
 'nobody cares about anything anywhere'
 = for all triples (x,y,z) [x doesn't care about y in the place z]
- b. Kto-to i kogo-to obidel
 someoneNOM and someoneACC offended
 'someone offended somebody' = for some pair (x,y) [x offended y]
- c. Ni=kto i ni ot kogo ix ne skryvaet
 NI=who and NI from whom them not conceals
 'nobody conceals them from anyone'
 = for no pair (x,y) [x conceals them from y]
- d. Kto i kogda tebe skažet pravdu?
 who and when you tell truth
 'who will tell you the truth and when?'
 = for what pair (x,y) [x will tell you the truth at moment y]

See Chaves and Paperno (2007); Kazenin (2000), Paperno (2009) for more syntactic and semantic data.

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