Diachronic evolution of Russian standard markers *kako* and *aky*

IRINA KOBOZEVA[1], NATALIA SERDOBOLSKAYA[2]

[1]LOMONOSOV MOSCOW STATE UNIVERSITY, [2]INSTITUTE OF LINGUISTICS, RUSSIAN ACADEMY OF SCIENCES/PUSHKIN STATE RUSSIAN LANGUAGE INSTITUTE

Abstract

Modern Russian uses the same marker *kak* 'how' to introduce the standard in equative and similative constructions. Historical grammars claim that the same polysemy is found in Old Russian, where three markers, *kako, aky* and *jako,* are used interchangeably. Based on the analysis of chronicles and documents of the 11th–15th centuries and queries in the Russian National Corpus, we show that it is not the case: the markers *kako* and *aky* are distributed functionally. In the 11th–15th centuries *kako* is predominantly used in specific contexts which we propose to call "implicit parameter equative" (IPE), while *aky* is the main standard marker in similatives. In the 16th and 17th centuries *kako* expands onto similative and equative constructions. The 18th century sees the complete loss of *aky* and the fossilization of the equative construction including the correlative pairs such as *tak(oj)… kak, stol'… kak* and others. As for the marker *jako,* it is a general subordinator that can be used in all the relevant contexts.

Keywords: Old Russian; manner; comparison; equative construction; similative construction

1. Introduction

In Modern Russian (MR), the comparative constructions of equality and similitude are introduced by the same manner question word and subordinator *kak* 'how/as/like':

(1) MR

    Pëtr   *takoj*   *že*   *vysokij,*   **kak** *Ivan.*

    Peter   such.M.NOM.SG PTCL smart.M.NOM.SG   how Ivan

    'Peter is as tall as Ivan.'

(2) MR

    On *poj-ot,*   **kak**   *solovej.*

    he   sings-PRS.3SG   how   nightingale

    'He sings like a nightingale.'

Kak is a standard marker (STM) in both equative (1) and similative (2) constructions. Thus, MR presents a non-differentiated system typical of SAE languages (see Haspelmath & Buchholz 1998).

    However, equative constructions also include an indication of identity, i.e. an adjectival demonstrative *takoj* 'such' (1) or a demonstrative adverb *tak* 'in such a way' (3), or much more rare *stol'* and *nastol'ko* 'to such an extent' (4) with the emphatic particle *že*.

(3) MR

    Pëtr   *begaj-et*   **tak** **že**   *bystro,*   **kak** *Ivan*

    Peter   runs-PRS.3SG   so   PTCL   quickly   how Ivan

    'Peter runs as fast as Ivan.'

(4) MR

    Ona   *stol'*   *že*   *krasiva,*   **kak** *jejë* *mat'*

    she   to.such.extent PTCL   beautiful   how   her mother

    'She is as beautiful as her mother.'

In equatives like (1), (3) and (4) the PAM and the STM form a correlative pair or construction which is attested as a prominent type of equative constructions in languages of Europe (Haspelmath & Buchholz 1998: 285).

    The construction 'demonstrative + emphatic particle' is the main explicit marker of identity used in equatives (Kobozeva & Inkova 2018: 193–199); in case it is absent the construction is ambiguous and mostly interpreted as a similative. For example,

Petr vysokij, kak Ivan is understood not as 'as tall as Ivan', rather as 'Peter is tall, and he is similar to Ivan in exceeding the neutral height of people of his age'.

Thus, the possibility to insert *takoj/tak/stol'/nastol'ko zhe* can be used as a test distinguishing between equatives and similatives in Modern Russian.

In Old Russian, both meanings could be introduced by the same marker *aki/aky*:

(5) OR (PVL)

…людіе съкуще, аки травү.

ljudi-je	*sěk-ušče,*	**aki**	*trav-u*
people-ACC.PL	cut-PTCP	like	grass-ACC

'…cutting people like grass'

(6) OR (RNC. XVI)

єсть же мѣсто то на земли ниско съз(д)ано аки ѡдръ.

jest'	*že*	*město*	*to*		*na*	*zeml-i*	*nisko*
be.PRS.3SG	EMPH	place	that.N.NOM.SG		on	soil-LOC.SG	low

sъzda-n-o	**aki**	*odrъ*
create-PTCP-N.SG	like	couch

'And that place is settled on soil as low as a couch.'

As for the predecessor of *kak*, which is *kako/kakъ*, examples can also be found of both the equative (8) and the similative (7) meanings:

(7) OR (Sreznevskij 1893: 1180)

Тамо есть Давыдовъ домъ какъ городокъ.

tamo	*jestъ*	*Davyd-ovъ*	*dom-ъ*	**kakъ**	*gorod-ok-ъ*
there	be.PRS.3SG	David-ADJ(M.SG)	house-NOM.SG	how	town-DIM-NOM.SG

'There is David's house there, [which is] **like** a small fortress.' 1392.

(8) OR (Vass. XVI)

А вы бы, бояре…, служили бы есте моему сыну, **как** есте мне служили прямо.

a	*vy*	*by,*	*bojar-e…*	*služi-l-i*	*by*	*este*	*mojemu*
and	you	IRR	gentlemen-NOM.PL	serve-PST-PL	IRR	be.PRS.2PL	my.DAT

syn-u,	***kak*** *este*	*mne*	*služi-l-i*	*prjamo.*
son-DAT	how be.PRS.2PL	I.DAT	serve-PST-PL	faithfully

'And you, gentlemen, should serve my son **as** faithfully **as** you served me.'

The question arises, first, whether actually both *aki/aky* and *kako/kakъ* could be used interchangeably in both contexts, or they were distributed according to some semantic parameters. Second, the question is how exactly the process of the loss of *aki/aky* has taken place, namely, what meanings and contexts were the first to disappear.

The paper is aimed at answering these two questions. Specifically, we claim that in the earlier period, i.e. 11th to 15th centuries, *kako/kakъ* was chiefly used in adverbial manner clauses and was extremely rare in comparative constructions, while *aki/aky* covered both relevant contexts, that of equality and that of similarity. We suppose that the expansion of *kako/kakъ* onto comparative constructions started from equative constructions, and the switch context from manner clauses to equatives was a specific meaning, which we propose to term as implicit equality.

The material of the study comes from Old Russian manuscripts from 11th to 16th century (see the List of sources), the Old Russian and the Middle Russian subcorpora of the Russian National Corpus, and from historical dictionaries of Old and Middle Russian.

For the sake of simplicity, we ignore the difference between phonetic variants and use the labels *aky* and *kako*. The labels OR and MR are used for Old Russian and Modern Russian, respectively.

In section 2, we provide background information about comparative constructions in Modern and Old Russian, and introduce some relevant terms. Section 3 is devoted to the quantitative distribution of *kako* and *aky* in OR. In section 4, we analyze their functions in OR and discuss possible paths of their evolution.

2. Russian comparative constructions in typological perspective and in reference grammars

2.1. Comparison in Modern Russian: typological perspective

Taking the typological perspective outlined in Haspelmath & Buchholz (1998) and Treis & Vanhove (2017) the realm of comparison in MR is divided into two parts with

respect to the marking of the STAN. In comparative constructions in narrow sense (those of inequality) the STAN is marked either by genitive case (9a) or by the linker *chem* (< instrumental case of interrogative-relative pronoun *chto* 'what') (9b).

(9) MR

a. *Slivk-i*   *vkusn-eje*   *molok-**a***.

   cream-NOM.PL   tasty-PAM   milk-GEN.SG

   'Cream is tastier than milk'.

b. *Slivk-I*   *vkusn-eje,*   ***čem***   *molok-o.*

   cream-NOM.PL   tasty-PAM   what.INS   milk-NOM.SG

   'Cream is tastier than milk'.

The second part comprises equative and similative constructions. As shown in (1) and (2) from the Introduction, they both make use of the same STM *kak* to introduce the standard (STAN).

Modern Russian has a specific construction to differentiate equality from similarity (Kobozeva & In'kova 2018: 193), described as a 'relative-based equative construction with both parameter and standard marker' in Haspelmath & Buchholz (1998: 297), cf. (10a,b) and (11a,b). The equative involves the demonstrative adjective *takoj* or the adverb *tak* and the emphatic particle *zhe*.

(10) MR

a. *Ivan tak-oj*   *že*   *vysok-ij,*   *kak (i) jego   otec.*

   Ivan such-M.SG.NOM EMPH   tall-M.SG.NOM   how PTCL his   father

b. *Ivan vysok-ij,*   *tak-oj*   *že*   *kak (i) jego otec.*

   Ivan tall-M.SG.NOM   such-M.SG.NOM   EMPH   how PTCL his   father

a. = b. 'Ivan is as tall as his father.'

c. *Ivan vysok-ij,*   *kak Ejfelev-a*   *bašnj-a.*

   Ivan tall-M.SG.NOM   how Eiffel-F.SG.NOM tower-NOM.SG

   'Ivan is tall, like the Eiffel tower.'

(11) MR

a. *Ivan begaj-et*   *tak že*   *bystr-o,*   *kak (i)   jego   otec.*

   Ivan run-PRS.3SG   so   EMPH   fast-ADV   how PTCL his   father

b. *Ivan begaj-et   bystr-o,   tak že   kak (i) jego otec.*
   Ivan run-PRS.3SG   fast-ADV   so   EMPH   how PTCL his   father

a. = b. 'Ivan runs as fast as his father.'

c. *Ivan begaj-et   bystr-o,   kak veter.*
   Ivan run-PRS.3SG   fast-ADV   how wind

   'Ivan runs fast like the wind.'

Thus, both examples (10a,b) and (11a,b) are interpreted as the indication of an equal extent of the parameter (PARA) 'height' and 'speed', while (10c) and (11c) are interpreted as characterization of Ivan's height and speed as exceeding the certain norm and being thus similar to the Eiffel tower and the wind, which also exceed these norms.

It is noteworthy that in MR the word order in equatives is not fixed as it is in English, cf. (10a), (11a) vs. (10b), (11b) in both examples. The difference between (a) and (b) in both (10) and (11) is minimal, and primarily consists in presentation of information: in (10a) and (11a) the focus is on the comparison, while in (10b) and (11b) the PARA (fast) is focused, and the comparison is added as additional information.

This statement can be verified if we put the figurative phrase under comparison:

(10) MR

d. # *Ivan   tak-oj   že   vysok-ij,   kak   Ejfelev-a*
      Ivan   such-M.SG.NOM   EMPH   tall-M.SG.NOM   how   Ejfel-NOM.SG.F
      bašnj-a.
      tower-NOM.SG

e. # *Ivan vysok-ij,   tak-oj   že   kak Ejfelev-a*
      Ivan tall-M.SG.NOM   such-M.SG.NOM   EMPH   how Ejfel-NOM.SG.F
      bašnj-a.
      tower-NOM.SG

(11) MR

d. # *Ivan begaj-et   tak že   bystro,   kak veter.*
      Ivan run-PRS.3SG   so   EMPH   fast-ADV   how wind

e. # *Ivan begaj-et   bystr-o,   tak že   kak veter.*
      Ivan run-PRS.3SG   fast-ADV   so   EMPH   how wind.

Indeed, figurative comparison does not really presuppose equality of the PARAs, and would not be welcome in the equative construction. This is what happens in (10d) and (10e): these examples sound awkward, because they have a pragmatically strange interpretation, namely, that Ivan is exactly as tall as the Eifel tower. The same is true of (11d) and (11e) but they are even worse because they presuppose that the wind runs. Thus, the presence and acceptability of the correlative pair in MR can be used as a test for distinguishing between equatives and similatives while translating the OR examples.

Taking the presence of *tak(oj) že* as a test, we introduce another context that seems to be close to equality constructions:

(12) MR

    Vo vremja zatmenija solnce stalo **takim že, kak** *trëxdnevnyj mesjac.*
    'During the eclipse, the sun became of same size as the moon on its third night.' (lit. became such as…)

(13) MR

    On prodal drova **tak že, kak** *včera.*
    'He sold firewood on the same conditions / paying the same tax etc. as yesterday.' (lit. in such a way as yesterday)

These constructions seem to be close to equatives because they have the same marking (the correlative pairs discussed above). Furthermore, they involve the same semantic pattern, that is, the exact equality of the PARA(s) of the comparee (size in (12) and conditions/tax in (13)) to the same PARA(s) of the STAN. It must be emphasized that these constructions are not about similarity, they express exact equality. The only difference between them and true equative is the absence of the explicit expression indicating the PARA). One step further we find the same correlative constructions with *tak(oj) že*, where, however, the exact nature of the omitted PARA is neither quantitative nor gradable unlike in (12) and (13). Still, they seem to presuppose equality, or at least identity of objective properties. Cf.:

(14) MR

    V Saksonii našli **takuju že** *rudu,* **kak** *na Jaximovskix mestoroždenijax v Čexii.*

'In Saxony the same ore was found, as in Jachimov deposits in the Czech Republic.' (Adopted example from https://cyberleninka.ru/article/n/razrabotka-uranovyh-mestorozhdeniy-i- radiatsionno-ekologicheskaya-reabilitatsiya-rayonov-saksonii-i-tyuringii)

(15) MR

*Znak na dveri snizu **takoj že, kak** tatuirovka u mojej sestry.*
'The sign of the downstairs door is the same as that tattooed on my sister.' (https://opus.nipl.eu/OpenSubtitles2016.php).

The example (14) asserts the sameness of chemical mixture and (15) the sameness of form, which can be measured on objective grounds, and thus, it does not have the meaning of similarity, rather that of equality. In the following example the PAM of comparison is binary: either the subjects participate in the parliamentary life or not, the manner of their participation is not discussed. Thus, the two situations show equality in their truth value.

(16) MR

*Jejë predstaviteli v parlamente učastvujut v parlamentskoj žizni **tak že, kak** oni delali eto raneje.*
'Its representatives in parliament participate in parliamentary life **just as** they did before.' (https://conferences.unite.un.org).

We deliberately took the examples (15) and (16) from the texts translated by professional translators to show that the English equivalents of these examples have STMs *same as* and *just as* containing *as*, which is the prototypical STM of equatives. If (15) and (16) were similatives, their English equivalent would have been (*just*) *like*.

All the examples (12) – (16) are unified by the following: they involve an objective PARA that is not expressed overtly (size, price and conditions, chemical mixture, form and truth value) and that can be measured / counted / evaluated on objective grounds. Thus, the semantics of these constructions is the indication of the equality of an implicit PARA.

It may be concluded that various constructions with *tak(oj) že* in Russian encode identity. Equality of degree of an explicit property (as tall as…) is merely a particular case of identity. For the sake of brevity we shall later use the term "equative" in a

broader sense than in Haspelmath & Buchholz (1998) and Treis (2018) and apply it for all examples that either contain "demonstrative + *že*" construction or can be transformed into such a construction in a given context without the change of meaning. To avoid any misunderstanding, we propose to call the constructions in question *implicit parameter equatives* (IPE).

It is important for our discussion to emphasize that the discussed constructions are different from manner adverbial clauses as the following:

(17) MR

> *Oformi-l*   *zakaz. Vsë dostavi-l-i*   ***kak*** *dogovori-l-i-s'.*
> register-PST(M.SG) order all deliver-PST-PL how arrange-PST-PL-REFL
> 'I placed the order. They delivered everything as it was arranged.'
> (https://medtyla.ru › page_6).

Even if they seem similar to the constructions of equality of manner like in (13), they may be distinguished by their semantic pattern. In IPE the arguments with the same semantic role are compared, the manner (including conditions, price and tax) of selling the firewood today and yesterday. By contrast, in (17) the speaker is not comparing the manner of arranging to the manner of delivering the wares; rather, the manner of delivering is the goal/theme argument of the verb "arrange". Note that manner adverbial clauses are most often encoded by *kak* without the correlative pair as above.

Thus, in what follows we are going to focus on STM in the following types of constructions: equative, similative, and IPE.

2.2. Background on description of comparative constructions in Modern and Old Russian

Descriptive grammars of MR label all the types (1-4), as well as inequality comparatives, as comparative constructions, and classify them according to various formal and semantic criteria. There is not a unanimous classification, the number and the labels of the classes introduced in different grammars do not coincide. All MR grammars distinguish between inequality vs. other types of comparative constructions (1-2). However, they do not capture the semantic difference between quantitative and qualitative comparison, i.e., equality (1) and similarity (2).

The classifications used in reference grammars of MR are mostly focused on the distinction of real vs. irreal comparison (in terms of *dostovernoje* 'credible' vs. *nedostovernoje* 'incredible' in Švedova 1980). This parameter is also considered among others by Letuchiy (2015) in the most recent Russian Corpus grammar. He also examines word order, syntactic type and referential properties of the STAN, realis vs. irrealis clauses and other parameters. However, these parameters are not relevant for the semantic types we are considering in this paper, and thus, we do not refer to them in what follows.

The main means of marking STAN in equative and similative constructions is *kak*, as shown in (1); equative constructions also include demonstratives with the emphatic particle, see section 2.1. Being the main STM in equative and similative constructions, *kak* has several other functions in Modern Russian. It can introduce subordinate clauses and phrases of various other kinds: 1) event complement clauses; 2) accord clauses 3) role phrases (in terms of Haspelmath & Buchholz 1998); 4) temporal adverbial clauses; 5) small clauses of reason; 6) conditional clauses, see Kobozeva & In'kova (2018) for the details.

Historical grammars of Russian hardly ever address comparative constructions, for example, they are not described at all in Borkovskij & Kuznecov (1965). Lomtev (1956) only considers constructions of inequality. Bulaxovskij (1958) and Stecenko (1972) analyze inequality constructions and some sub-types of equative and similative constructions without making a distinction between them.

All historical grammars testify that in constructions of inequality the STAN is marked with the genitive case:

(18) OR (Voskr. XVI)

Юрьи Кончаковичь бѣ бол-ій вс-ѣхъ Половець.

Yurъi Končakovičъ	*bě*	*bol-ij*	*vs-ěxъ*	*Polovecь*
Jurii Konchakovich	was.AOR.IPFV.3SG	big-PAM	all-GEN.PL	Polovets.GEN.PL

'Jurii Konchakovich had a bigger army than the Cumans.'

The subordinators *neželi* (< *ne* 'not' + *že* EMPH + *li* Q) and starting from the 16th century also *čem* (< *čto*-INS) are used almost exclusively in comparative-oppositive and substitution constructions (Krys'ko 2020: 399) containing the comparative form with the meaning 'better', exemplified in (Bulaxovskij 1958: 377) by *И **чем** было сосуды ковати, ино лучше бы шуба переменити* 'And **instead of** forging tableware,

it would be better to change the fur coat' (XVI). Neither of the two, *kako* or *aky*, are used in contexts like (18) until the 17ᵗʰ century when *kako* expands its use onto these contexts, as well; this use is, however, not possible in the modern language.

As for similative and equative constructions, they are analyzed in the same terms in all the sources. It is argued that they could be introduced by any of the three subordinators *aky* (with its phonetic variant *aki*), *kako* (with the variant *kakъ*) and *jako*, see also Sreznevskij (1893).

The marker *jako* is used as a general subordinator in OR, covering nearly all the functional types of complement and adverbial clauses, including eventive and propositional complements, adverbial clauses of time, reason, concession, and others. Therefore, we limit our research to *aky* and *kako*.

The first work mentioning the semantic difference between *aky* and *kako* is Stecenko (1972: 288). He notes that *aky* mainly introduces «figurative» similarity, as in the following:

(19) OR (The Moscow chronicle, cit. after Stecenko 1972, 124)

…сниде огнь съ небесе, акы облакъ велик над ручаи Лыбеди.

snid-e		*ognь sъ*	*nebes-e,*	**aky** *oblakъ*	*velik*
come.down-AOR.3SG	fire	from	sky-GEN.SG	like cloud	big(M.NOM.SG)

nad	*rucha-i*	*Lybed-i*
above	river-ACC.SG	Lybed'-ACC.SG

'A fire from heaven went down, like a big cloud above the river Lybed'.

In the recent encyclopedic dictionary "Historical Grammar of Russian Language" (Krys'ko 2020) the observation of A.N. Stecenko turns into a categorical statement: «The conjuncion *aky* (> *aki*) was used to form only similative sentences, containing figurative simile»[1].

However, examples like (20) show that *aky* also introduces similatives that do not represent a «figure of speech»:

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[1] The term *simile* is used for a subtype of similatives that have generic STAN, denoting a prototypical possessor of the high degree of the PAM (Kölbel 1993; Fortescue 2010).

(20) OR (HG)

любити ближняго своего аки себе.

ljubi-ti	*bližnj-ago*	*svoj-ego*	***aki***	*seb-e*
love-INF	neighbor-ACC.SG	REFL.ADJ-ACC.M.SG	like	REFL-ACC.SG

'to love one's neighbor as oneself'

At the same time, neither in Stecenko (1972), nor in Krys'ko (2020) it is not specified, whether *kako* can be used in such contexts.

Note that *jako* and *aky* are considered to be stylistically marked as belonging exclusively to written language (Stecenko 1972: 288; Bulaxovskij 1958: 368–372).

Thus, historical grammars do not answer the question whether OR has a differentiated system of comparative constructions. In the present paper we argue that *aky* and *kako* were semantically distributed in the 11th–15th centuries, and later *kako* has expanded onto *aky*-contexts.

3. Basic distribution of *aky* and *kako* in OR

This section is focused on the quantitative distribution of *aky* and *kako*. Given that *aky* is not used already in 19th century, we expected to find the gradual loss of *aky* and the expansion of *kako* onto the relevant contexts during the 11th–18th centuries.

At first, we estimated the frequency of both markers based on simple queries for *kako/kakъ/kak* and *aky/aki* in the Russian National Corpus (RNC). It turned out that *kako* has a larger use than *aky* even in OR, resulting in a gradual decrease and loss of the use of *aky* in 18th and 19th centuries. The exact figures are given in Table 1.

Time period	11th–16th cent.	17th cent.	18th cent.
kako	777	767	33820
aky	546	313	760
Ratio	1,4	2,4	44,5

Table 1: Number of examples with *kako* and *aky* from 11th to 18th century in RNC.

Table 1 shows that the proportion of *kako* to *aky* slightly changes in the 17th century (with *kako* attested 2,4 times more frequently than *aky*) showing sharp increase in the 18th century (with *kako* attested 44,5 times more often).

It is obvious that the use of similative and equative markers is highly influenced by the genre of the text, so we also provide the distribution of *kako* and *aky* in texts

belonging to the same genre and devoted to the same topic, i. e. non-fiction historical texts. Table 2 shows that the proportion is slightly different for these texts; however, it still reveals the sharp decrease of *aky* in the 18th century and its complete loss by the beginning of the 19th century. For example, all the 4 occurrences of *aky* in Karamzin's "Istoriya gosudarstva rossijskogo" (History of the Russian State) are found in citations of Old Russian proverbs. In archbishop Theophan's texts, written in the beginning of the century, the ratio is already different than in older chronicles, while in the beginning of the 19th century *aky* is nearly absent.

Time period	Chronicles written in 11th–16th centuries (our sample)	Archbishop Theophan, beginning of 18th century (RNC)	Historical texts of 18th century (RNC)[2]	"Istoriya…" of Karamzin, beginning of 19th century (RNC)
kako	140	207	1734	2185
aky	85	108	351	0 (4 citations)
Ratio	1,65	1,92	4,94	n/a

Table 2: Distribution of *kako* and *aky* in non-fiction historical texts of RNC and in our sample.

Thus, it seems reasonable to compare the distribution of *kako* vs. *aky* up to the 18th century, when the latter was completely lost. It can be expected that the major changes in the functions of both markers would be found in the texts of the 16th-17th centuries, as it was the time period of increase of the usage of *kako*.

4. The functional distribution of *kako* and *aky* in OR

As discussed in section 2.2, historical grammars and dictionaries of OR do not reveal any semantic and syntactic difference between *aky* and *kako*. Examples can be found of both of them in both equative and similative constructions. However, it is noteworthy that the relevant sections of historical grammars do not provide a detailed periodization, giving together examples dating from 11th century and 17th century (the relevant data are mostly discussed in sections dedicated to syntax, and they are not as detailed as the ones on historical phonetics and morphology). Another important question is the one of frequency. Even if a meaning is attested once or twice, it might

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[2] A query of documents created in the 18th century and tagged as "text type: non-fiction; topic: historical" in RNC.

be an occasional example, and the expression in question might allow such use only marginally. To reveal the main uses of words and constructions in historical corpora, recent works on historical syntax count the frequency of various uses in a limited sample of texts (Hilpert & Gries 2009; Diessel & Hilpert 2016). This allows to determine, which meaning or use is the basic meaning of the examined word/construction at a given historical period, and which use is diminishing or increasing.

Thus, to reveal the functional distribution of *aky* and *kako* in OR, we have compiled several samples of their instances attested in documents belonging to various time periods. We made a special focus on the 18th century, making a randomized search query of 400 examples with *aky* and 400 examples with *kako* texts in RNC. For the 16th and the 17th century we made randomized search queries of 150 examples with *aky* and 150 examples with *kako*. For older texts the RNC does not give the possibility of specifying a query for a given period. Therefore, we compiled our own sample of texts starting from the first available manuscripts of the 11th century up to the manuscripts of 15th century. To make our sample consistent from the point of view of language varieties, we limited our research, first, to documents created in the north or center of Russia, second, to original documents (rejecting translations). The list of sources is given at the end of the present article.

The 11th–15th centuries sample has 81 occurrences of *aky* and 164 occurrences of *kako* in it. All the examples (our sample + RNC queries) with the markers in question have been manually annotated according to the meaning represented and the presence of other markers (since both *aky* and *kako* are largely used with other subordinators and particles to form complex subordinators and markers, for example *kako ti, kako to, aki by*). Note that we have left *kako i*, since this complex marker seems to have the same distribution in comparative constructions as *kako* without *i*. Sticking to the terminology discussed in section 2.1 we use the following semantic tags: equative, similative, inequality comparative, manner adverbial clause, IPE. The examined markers have a number of functions outside these semantic domains, namely, additive, role, approximation, 'hearsay' and irrealis. The lexeme *kako* is a manner question word largely used in independent questions (21) and exclamations and subordinate adverbial clauses of manner (22), temporal adverbial clauses, parentheticals, manner and eventive complement clauses.

(21) OR (NovgB 49, XV)

оу мене бориса в животѣ нѣтъ. какъ се господо мною попецалуюте и
моими дѣтми.

u	*mene*	*boris-a*	*v*	*život-ě*	*nětъ*	***kakъ***	*se*
around	I.GEN	Boris-GEN.SG	in	life-LOC.SG	NEG.COP	how	REFL

gospod-o	*mnoju*	*popecaluj-ete*	*i*	*moi-mi*	*dět-mi*
gentleman-VOC.PL	I.INS	care-PRS.2PL	and	my-INS.PL	children-INS.PL

'My [husband] Boris passed away (lit. At/by me, there is no Boris in life).
Dear Sirs, **how** are you going to care for me and my children?'

(22) OR (NovgB 359, XIV)

осподине како ѥсьмъ порѧдилесе тако и живу а василке село пустоши.

ospodine	***kako***	*ěsьmъ*	*porědi-l-e-se*	*tako*	*i*	*živ-u*
gentleman	how	be.PRS.SG	arrange-PST-PL-REFL	so	and	live-PRS.1SG

a	*vasilke*	*selo*	*pustoši*
while	Vasilke	village	ruin.PRS.3SG

'Sir, I live **as** we have arranged (**according to the conditions** we have
discussed), while Vasilke brings the village to ruin.'

The results of our tagging are as follows. Up to the 16th century, *aky* and *kako* divide
the functions in the following way: *aky* marks the STAN in similative (23) and
equative constructions (24), approximation (25), role (26), and irrealis complement
clauses (27), while *kako* is only attested in IPEs (28) and adverbial clauses of manner
(22).

(23) OR (PVL)

постомъ явишася отци наши акы свѣтила в мирѣ

post-otъ	*javi-ša-sja*	*otc-i*	*naš-i*	***aky***	*světil-a*	*v*	*mir-ě*…
fast-INS	appear-AOR.3PL-REFL	father-PL	our-PL	like	star-PL	in	world-LOC

'our fathers appeared in the world **like** stars, through fasting…'

(24) OR (PVL)

Нѣциї видѣша рано въсходящю солнцю бысть на 3 углы яко и коврига,
<u>потомъ мнѣи бысть аки звѣзда.</u>

potomъ mněi   *bystь*   **aki** *zvězd-a*

then   small.CMPR   be.AOR.3SG   as   star-NOM.SG

'Early in the morning some people saw, as the sun was rising that it was triangle-formed, like a loaf and then became smaller, **as** a star'.

(25) OR (RNC: Chudesa Nikoly. XII)

чюдⱥхоусⱥ гл҃юще къ себѣ. акы гласъ ѥсть нашего соусѣда дьмитриѩ.

čudj-axu-sja   *glagolju-šče* *kъ seb-ě*   **aky** *glasъ*   *jestь*

surprise-IMPF.3PL-REFL say-PTCP   to REFL-DAT.SG like voice be.PRS.3SG

naš-ego   *susěd-a*   *dьmitrij-a*

our-GEN.SG   neighbor-GEN.SG   Dmitriy-GEN.SG

'[The neighbours] were surprised and told to themselves: it is, **apparently**, a voice of our neighbor, Dmitriy. (However, he has left yesterday.)'

(26) OR (PVL)

сїю бо хвалятъ Рустїе сынове, аки началницю.

sij-u   *bo*   *xvalj-atъ*   *Rusti-je*   *synov-e,*   **aki**

this.F-GEN.SG because   praise-PRS.3PL   Russian-NOM.PL son-NOM.PL   like

načalnic-u

initiator-ACC.SG

(She was the first Russian who entered the kingdom of heaven.) 'This one is praised by sons of Russia **as** their initiator.'

(27) OR (PVL)

мнѣти же всѣмъ человекомъ зряче, аки кровь прольяна на снѣгу.

mně-ti   *že*   *vsěmъ*   *čelovek-omъ*   *zrja-če,*   **aki** *krovь*

think-INF   EMPH   all.DAT.PL   person-DAT.PL see-PTCP   like blood

prol'ja-n-a   *na*   *sněg-u*

spill-PCTP-F.SG   on   snow-LOC.SG

'(There was a sign from God.) All the people saw **as if** blood was spilled over the snow.'

The STAN of IPEs may be marked by both *aky* and *kako*:

(28) OR (Novg1. XIII-XIV)

солнче… бы акы въ 5 ноціи мѣсяць.

solnč-e	*by*	***aky***	*vъ*	*5*	*nocii*	*mĕsjacь*
sun-NOM.SG	be.AOR.3SG	like	in	5	night	moon.GEN.PL

'(Describing the sun eclipse.) The sun became of the same size as a moon on its fifth night'.

(29) OR (NovgB 364. XIV)

даи намъ ржи на полтину какъ людомъ поцнешь давать.

dai	*namъ*	*rž-i*	*na*	*poltin-u*	***kakъ***	*ljud-omъ*
give.IMP.2SG	we.DAT	rye-GEN.SG	on	50.kopejka-ACC.SG	how	people-DAT.PL

posn-ešь	*dava-tь*
begin-PRS.2SG	give-INF

'Give us rye that costs 50 kopejka' price, [on the same conditions] as you are going to give to other people.'

(28) is arguably an example of the IPE, since the STAN is given a detailed description allowing to identify its exact size (the new moon as it is on its fifth day). It seems hard to interpret this example as a similative: the speaker's aim is to describe the size of the sun, rather than make a comparison (small like a moon). As for (29), it makes use of *kako* to refer to the exact conditions of selling rye, which is explicitly indicated in the context. Thus, it is not about similarity, rather the speaker aims at identifying the extent of an implicit PARA (conditions).

Thus, the IPE context is the only one where both *kako* and *aky* can be used interchangeably. As for other comparison contexts, they are chiefly introduced by *aky*. To verify this claim, we made randomized searches of *kako* in the Old Russian subcorpus of the Russian National Corpus. The results follow the pattern observed in our sample. This does not mean that *kako* could never be used as a STM of similarity or equality (historical dictionaries Sreznevskij (1893) and Slovar russkogo jazyka… (from 1975) give two similarity examples dating from the 14th and 15th centuries and one equality example dating from the end on the 15th century); however, its frequency in these constructions was low, as reflected in our sample. It may be concluded that *kako* started to expand onto similatives and equatives approximately in the 14th–15th centuries. By contrast, the IPE reading was widespread much earlier.

Further history of *aky* and *kako*, as it appears in our samples, is summarized in Table 3. For the sake of brevity, we omit non-relevant uses of both markers, such as the subordinator use and use of *kako* as a question word. The percentage is, therefore, calculated not from all uses, rather from the relevant sample. The exact figures are given in the last column. Empty cells in the table represent zero values.

Mar-ker	Time period (cent.)	Adv manner clauses	Implicit PARA equative (IPE)	Equa-tive	Simila-tive	Role	Appro-ximator	Addi-tive	Paren-the-tical	Ine-quality compar.	Total relevant examples /whole sample
aky	11–15th		10,13		83,54	6,33					79/81
kako	11–15th	66,67	33,33								15/164
aky	16th		0,93		78,7	3,7	15,74	0,93			99/150
kako	16th	10,26	56,41	5,13	28,21						35/150
aky	17th			2,34	82,03	7,81	6,25	1,56			124/150
kako	17th	23,81	33,33	4,76	28,57				9,52		21/150
aky	18th				76	12,57	10,28	1,14			237/278[3]
kako	18th	7,14	14,29	11,61	29,46	19,64	3,57	3,57	2,68	8,04	604/621

Table 3: Distribution of comparative and related meanings of *aky* and *kako* in the relevant part of the sample.

The results of the Table 3 are represented in Figure 1.

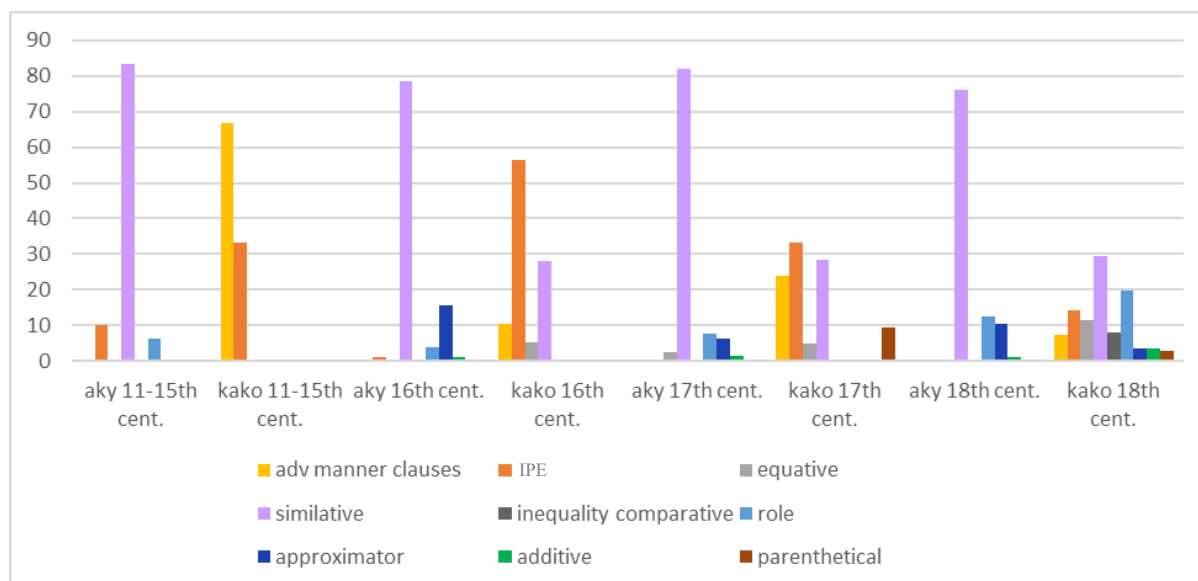[3] The whole number of examples of *aky* in this time period.

Figure 1: Functional distribution of *aky* and *kako* in OR and Middle Russian.

The distribution of meanings seems to be similar in the 16th and the 17th centuries, so further we treat them on a par. The results show that the main function of *aky* was the similative (30), since the percentage is nearly the same (about 80%) in all the time periods.

(30) OR (RNC. XVII)

молот же истребляет железо аки плевели.

molot	*že*	*istrebljaj-et*	*želez-o*	***aki***	*plevel-i*
hammer	EMPH	destroy-PRS.3SG	iron-NOM.SG	like	weed-NOM.PL

'As for the hammer, it destroys iron like weed.'

The equative and IPE meanings are not infrequent; however, they seem to show something that looks like complementary distribution: equative is absent in the earliest period, while IPE constructions decrease in frequency in the 17th–18th centuries. We will return to this below.

At large, *aky* did not significantly change its distribution among similative and semantically related contexts during the whole time period. The only significant change was a decrease in use in IPEs.

By contrast, *kako* was hardly ever used in any contexts of comparison in the earliest period. The only relevant context it could cover is the IPE, where it competed with *aky*. Sixteenth and seventeenth centuries, however, see the expansion of *kako* onto

contexts of comparison, both similative (31) and equative (32). The IPE is still well-attested (33). The parenthetical use arises in the 17ᵗʰ century.

(31) Middle Russian (RNC. XVI)

79-ть ложекъ серебряны золочены… <u>на концѣхъ какъ коруночки литые</u>.

na	*konc-ěxъ*	***kakъ***	*korunоčk-i*	*lityj-e*
on	end-LOC.PL	how	crown-NOM.PL	casted-NOM.PL

'79 gilded silver spoons… which have at their end as if casted crowns.'

(32) Middle Russian (RNC. XVII)

Да за стрелетцкие хлебные запасы <u>только взять против государева указу,</u>
<u>как збирано</u> Устюжские чети з городов во 149-м и во 150-м, и во 151-м,
и во 152-м году за стрелетцкие хлебные запасы <u>по 168 рублев с сохи</u>…

tolьko	*vzja-tь*	*protiv*	*gosudarev-a*	*ukaz-u,*	***kak***
as.many	take-INF	according	Sire-GEN.SG	law-GEN.SG	how

zbira-n-o	*[…]*	*po*	*168*	*rublev*	*s*	*sox-i*
collect-PCTP-N.SG.NOM		DISTR	168	rouble.GEN.PL	from	plough-GEN.SG

'According to the Sire's law, the streletses' (a Russian army unit) bread stock should be paid 168 roubles each plough, **as much as** it was taken from the towns in years 149, 150, 151 and 152 by in Ustjug's area.'

(33) Middle Russian (RNC. XVII)

вы бъ съ тѣхъ лавокъ тѣмъ лавочнымъ сидѣлцомъ, въ которыхъ лавкахъ
сидятъ по земь, велѣли платити къ Ивану Предтечи на годъ
по полуполтинѣ, <u>или **какъ** иные сидѣлцы платятъ</u>.

ili	***kakъ***	*inyj-e*	*sidělc-y*	*platj-atъ*
or	how	other-NOM.PL	leaser-NOM.PL	pay-PRS.3PL

'You should tell the sellers, who are earth leasers, to pay at John the Baptist's holiday 25 kopejka a year, or **on the conditions** kept by other leasers.'

In the 18ᵗʰ century *kako* (already in the form *kak*) is largely used in all contexts of comparison (34-36) and closely related meanings such as additive, approximation, role etc. Note that it can also mark STAN of inequality equatives (37); this use, however, was lost in MR.

(34) Middle Russian (RNC. XVIII)

Živ-ut *v* *les-ax,* **kak** *dikij-e* *zver-i.*
live-PRS.3PL in forest-LOC.PL how wild-NOM.PL animal-NOM.PL
'They live in forest, like wild animals do.'

(35) Middle Russian (RNC. XVIII)

prežn-ije *golov-n-yje* *ubor-y* *bud-ut* *tam*
former-NOM.PL head-ATTR-NOM.PL dress-NOM.PL be.FUT-3PL there
stol' *že* *redk-i,* **kak** *drevn-ije* *stroenij-a*
same.extent EMPH rare-NOM.PL how ancient-NOM.PL building-NOM.PL
egiptjan.
Egyptians.GEN.PL
'The old hats will be there as rare as ancient Egyptian buildings.'

(36) Middle Russian (RNC. XVIII)

Доношу же вам, что мы междо Верхотурья и Чусовой <u>нашли железной</u>
<u>руды такой же,</u> **как** у Демидова на Тагиле.

naš-l-i *železn-oj*   *rud-y*   *tak-oj* *že,*   **kak**
find-PST-PL iron-ATTR-F.GEN.SG ore-GEN.SG such-GEN.SG EMPH how
u Demidov-a   *na* *Tagil-e.*
at Demidov-GEN.SG on Tagil-LOC.SG
'I hereby report to you that we have found between Verxoturje and Chusova
iron ore, the same as Demidov has in Tagil.'

(37) Middle Russian (RNC. XVIII)

k dostiž-enij-u *blagopoluchij-a* *net* *bliže*   *i*
to attain-VN-DAT.SG prosperity-GEN.SG NEG.COP close.CMPR and
priličn-eje *sredstv,* **kak** *prjam-aja* *dobrodetel'* *i* *prjam-oj*   *razum...*
decent-CMPR means how right-F.SG virtue   and right-M.SG mind
'There is no closer and more decent means of attaining prosperity than the right
virtue and the right mind'.

The marker *aky* could also cover a number of meanings closely related to comparison,
such as approximation, additive, role etc. These uses are exclusively covered by *aky*
until the 18ᵗʰ century, while in the 18ᵗʰ century they can be introduced by *kako*, as

well. The parenthetical use is only attested with *kako* and only in the 17th and 18th centuries.

Thus, we suppose that the similarity/equality use of *kako* develops in the 16th century and slowly increases afterwards. In the 18th century *kako* shows an expansion onto all the contexts closely related to comparison, while *aky* preserves the same functions it had in older texts. The period of expansion coincides with the major increase of *kako* in contexts of comparison.

Now let us examine individual types of comparative constructions. The results on the basic comparison constructions are demonstrated in Figure 2.
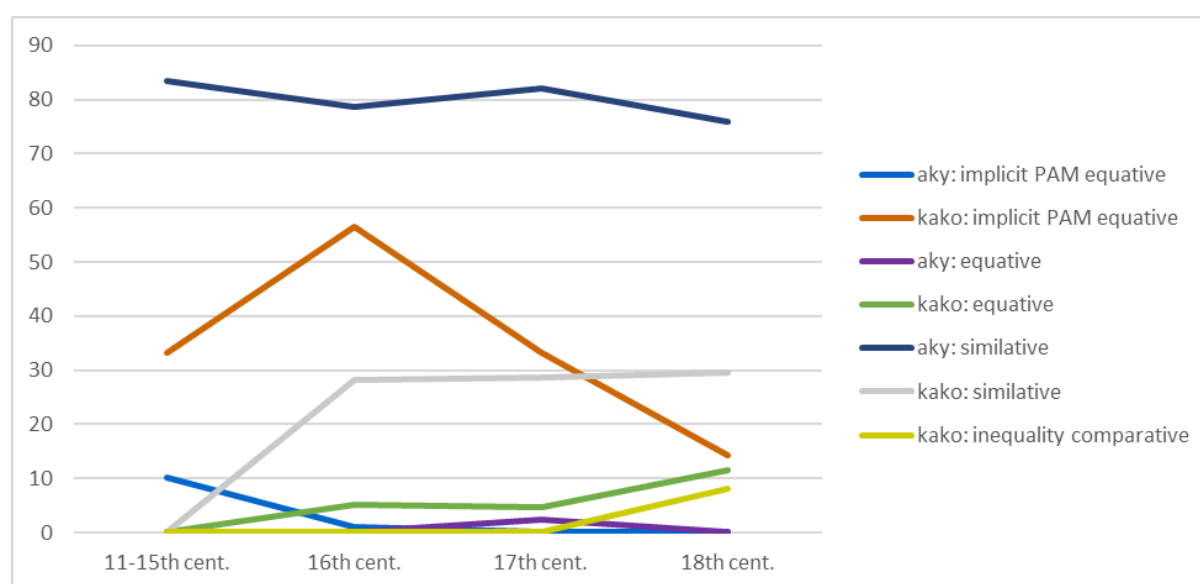

Figure 2: Functional distribution of *aky* and *kako* in the basic contexts of comparison.

The similative meaning is the majoring type of *aky* in all time periods; *kako* expands onto these contexts already in the 16th century. Thus, this type involves competition of both markers, observed in historical grammars and dictionaries.

The inequality comparative use (the yellowish green line) is only attested with *kak* in the 18th century. The development of this use happened after the complete disappearance of *aky*.

The equative and the IPE contexts show the following pattern. True equative examples are not found at all in the earliest period, neither with *aky* nor with *kako*. Yet, this does not mean that they were totally impossible. We have made several corpus queries of the type "adjective/adverb + aky/aki/kako/kakъ" and "aky/aki/kako/kakъ + adjective/adverb", with a distance from 1 to 3 words. Single

examples of equatives are found, see (6); however, this construction seems to be extremely infrequent. We also tried similar queries with *jako* (the general subordinator); however, only solitary examples are found as the following:

(38) OR (RNC. XIII)

и тако далече живоуть ѿ римланъ, ꙗко нбѓо ѿ земла.

i	*tako*	*daleče*	*živ-utь*	*otъ*	*rimljan-ъ*	***jako***	*nebo*	*otъ*
and	so	far	live-PRS.3PL	from	Roman-GEN.PL	SUB	heaven	from

zemlj-a.
earth-GEN.SG

'And they live as far from Romans as heaven from earth.'

Note that this example comes from the translation of "The Jewish War", authored by Flavius Josephus, and could be influenced by the original Greek text.

The rise of equative use is observed in the 16th century, when it is mostly introduced by *kako* as STM (the grey line); *aky* is also attested in these constructions, although very infrequently (the violet line). Hence, we assume that *kako* is the main means of encoding STAN of equative in the 16 – 18th centuries.

It is intriguing that the context of IPE decreases in frequency parallelly with the rise of the true equative. Namely, in the earliest period this context is covered by both *aky* and *kako* (*kako* being more frequent), in the 16th century it is quite widespread; however, it is predominantly covered by *kako* (39). Examples with *aky* (40) are not numerous. The 17th and 18th centuries see the decrease of this use.

(39) Middle Russian (RNC. XVI)

…on	*u*	*nix*	*korm*	*svoj*	*i*	*kon-sk-oj*	*kup-it*
he	at	they.GEN	forage	REFL.M.SG	and	horse-ATTR-NOM.SG	buy-PRS.3SG

po	*cen-e,*	***kak***	*jemu*	*prodad-ut.*
according	price-DAT.SG	how	he.DAT	sell-PRS.3PL

'He will buy from them forage for himself and for horses **at the price they will sell it**.'

(39) is arguably not a similative, rather an IPE, as can be inferred by the context: it involves the instructions that the price be equal, not similar. This meaning can also be encoded by *aky*, see (40), where the size of the sun is determined by equality to

the size of the moon on its third night. Hence, the implicit PARAs here are the price and the size.

(40) Middle Russian (RNC. XVI)

a	*solnc-e*	*že*	*osta-sja*	***aki***	*molod-ъ*
and	sun-NOM.SG	EMPH	remain.AOR.3SG-REFL	like	young-NOM.SG

měsjac-ъ	*treju*	*dnej.*
moon-NOM.SG	three.GEN	day.GEN.PL

'The sun became just as the new moon on its third night.'

We explain the observed asymmetry in frequency of the two constructions in the following way. The equative as a construction was nearly absent and only started to develop in the 11–15th centuries period; the earliest examples (coming from corpus queries (6) and historical dictionaries) date from the 13th century and are solitary. The equative meaning at this time was encoded by the construction we termed as "implicit PAM equative". Indeed, many relevant examples contain an adjective that occurs after (and not before) the STAN, see (19) and the following:

(41) OR (RNC. XIII)

и выросло у него и(з) чела <u>трояндофило(ѣ) цвѣ(т) ꙗ̈ в сыропустную н(д)лю. аки сыръ бело.</u>

trojandofil-ov-ъ	*cvět-ъ [...]*	***aki***	*syr-ъ*	***bel-o.***
rose-ATTR-NOM.SG.M	flower-NOM.SG	like	cheese-NOM.SG	white-NOM.SG.M

'And during the week before Lent a rose flower grew out of his forehead white as cheese / similar to the white cheese.'

(42) OR (HG. XIII)

Си же благочьстивии князи рязаньстии концяшася мѣсяця июля въ 20, на святого пророка Илии, и прияша вѣнця от Господа Бога, и съ своею дружиною, <u>**акы** агньцы непорочьни прѣдаша душа своя Богови.</u>

aky	*agnьc-y*	***perogočьp-i***	*prěda-ša*	*duš-a*
like	lamb-NOM.PL	innocent-NOM.PL	give-AOR.3PL	soul-NOM.DU

svoj-a	*Bogovi.*
REFL.GEN-NOM.DU	God.DAT

'They gave their souls to God, as innocent as lambs / innocent like lambs.'

All these examples are ambiguous from the point of view of their syntactic structure: they can be analyzed as "X, like a an [N Adj]" or "X, as/like a N, Adj". Given that punctuation marks are lacking these structures cannot be differentiated. Even if the syntactic structure is [N Adj], it seems that semantically they should be analyzed as constructions of equality "big as a cloud" / "white as cheese" / "innocent as lambs". The alternative interpretation seems to be problematic: it would be strange to compare a rose to a white cheese, and fire to a big cloud, while the equative interpretation seems to be pragmatically more appropriate. We termed these examples as "implicit parameter equatives"; however, we suppose that they could have the same meaning as English equatives like *as innocent as lambs*.

Note that in our sample *kako* in IPE is already attested at the turn of the 12th–13th centuries, and it is well represented afterwards. By contrast, the equative use of *kako* only starts in the 16th century and comprises a single example, see (8) in section 1. Our explanation clarifies why the equative construction is so poorly attested in the earlier period: apparently, it developed from the IPE.

Thus, we assume that the IPE constructions gave rise to the true equative constructions with the parametric adjective preceding the STAN like in (6). This explains the fall of frequency of implicit PAM constructions in the 17th century, parallel to the rise of true equatives. Perhaps, the word order illustrated in (41-42) and (19) is reflected in the later variation of word order in MR equatives, as shown in (10).

The similarity use of *kako* emerged from the IPE constructions, as well. We suggest the following pattern of semantic change for *kako*:

subordinator in adverbial clauses of manner	→	STM in IPEs	→	STM in equatives and similatives
(17)		(40)		(6)
"payed *kako* we have decided"		"payed *kako* other holders" (on the same conditions)		EQU: "payed much *kako* (as) other holders" SIM: "payed very much, *kako* (like) other holders"

Figure 3: The pattern of semantic change for *kako*.

Given that similatives encode sameness of manner (Haspelmath & Buchholz 1998: 278), it can be hypothesized that manner has served as a starting point for the expansion of the similative use in OR. We suggest that the context of IPE has served as a switch context, where PARA was a kind of manner, including quantitative PARAs, price, form, structure and other. In the 16ᵗʰ century this construction expanded onto subjective PARAs such as beauty, love (beautiful like a flower, loved them like his children etc.). At this point, however, equatives are hard to differentiate from similatives, since it is often unclear whether the author intended to mean "paid as much as X" or "paid a lot, like X did".

Another issue is the emergence of the correlative pair constructions illustrated above (3-4). We made several queries of the type "*aky/aki/kako/kakъ/jako… tako/ takъ*" with different word order and different word-to-word distance in RNC. The queries' results show that the correlate started to appear regularly in the 15ᵗʰ century, while solitary examples may be occasionally found earlier, see (44) dating from the 13–14ᵗʰ century.

(43) OR (Novg1. XIII–XIV)

тма бысть в солнци, съ запада акы м̲ѣсяць бысть въ 5 ночіи.

tma	*bystь*	*v solnc-i*	*sъ*	*zapad-a*	***aky***	*měsjac-ь*
darkness	be.AOR.3SG	in sun-LOC.SG	from	east-GEN.SG	like	moon-NOM.SG

bystь	*vъ*	*5*	*počii.*
be.AOR.3SG	in	5	night.LOC.PL

'There was darkness in the sun, [looking] from the east it was **just as** the moon on its fifth night.'

(44) OR (Novg1. XIII-XIV)

тма бысть тако же акы м̲ѣсяць 5 ночіи.

tma	*bystь*	***tako***	***že***	***aky***	*měsjac-ь*	*5*	*počii.*
darkness	be.AOR.3SG	so	EMPH	like	moon-NOM.SG	5	night.GEN.PL

'There was darkness, [the sun became] just as the moon on its fifth night.'

Note that the correlate was not obligatory, since similar examples are found in the same document, describing the same situation of the sun eclipse, with and without *tako že.*

However, the majority of examples with correlative pairs attested before the 15th century include *jako* (38) or *jako že*, rather than *aky* or *kako*. We made some counts among the equatives and IPEs in our samples. In the 16th and 17th centuries, *aky* never cooccurs with a correlate. As for *kako*, the percentage of examples with correlates rises to 39% in the 16th century and 50% in the 17th century, and in the 18th century all our examples with equative and IPE include the correlate *tako, takoj, stol'* and others.

Thus, we conclude that the correlative pairs with *aky* and *kako* spread in the 15th century, and in the 18th century the construction "*kak… tak*" / "*tak… kak*" got fossilized in the equative meaning.

In conclusion, the expansion of *kako* onto *aky*-contexts happened parallelly with the decrease of *aky* in frequency, namely, in the 16th and the 17th centuries. At the same time the correlative constructions got grammaticalized as a main means of encoding the equative meaning.

As for inequality constructions, they do not include neither *kako* nor *aky* in the considered time. This meaning is encoded by the genitive case both in OR and MR. However, in the 18th century *kako* is largely used as STM in inequality constructions. In MR this function is taken over by *chem*, the instrumental case of the question word *chto* 'what'.

5. Conclusions

The present paper studies the functional distribution of two OR markers used in the domain of comparison, *aky* and *kako*. Contrary to what is stated in historical grammars and dictionaries, we demonstrate that the two markers are not synonymous. The frequency counts show that they divide the functional domain in the following way: in 11th − 15th centuries the main function of *aky* is similative (although it could also occur in IPEs), while *kako* is mostly used as STM in IPEs.

In the 16th–17th centuries both markers could be used interchangeably in similative contexts, while *kako* (unlike *aky*) expanded onto equatives.

In 18th century *aky* was lost, concurrently with the expansion of *kako* onto similative contexts and onto comparative contexts. The marker *kako* then remained as a solitary device used for all types of comparison. At this stage the correlative pair construction has grammaticalized to encode the equative meaning. Thus, the similative and the equative became differentiated, and this differentiation is observed

until nowadays. The comparative function of *kak* was completely lost in the 20th century (Švedova 1980, v. 2: 489, § 2812).

Equative contexts are hardly ever observed in OR texts of the $11-15^{th}$ centuries. We hypothesize that the emergence of equative use of *aky* and *kako* started from the IPE contexts like "we sold rye to Ivan as to you (on the same conditions)". These contexts started to include adjectives and adverbs ('as much as'; 'as tall as') roughly in the 15th century and later this use was reserved to *kako*, unlike *aky*. This latter showed a strong preference towards the similative in all time periods.

Acknowledgements

Abbreviations

1/2/3 = 1st/2d/3d person
ACC = accusative
ADJ = adjective
ADV = adverb
AOR = aorist
ATTR = attributive
CMPR = comparative suffix
COP = copula
DAT = dative
DIM = diminutive
DISTR = distributive
DU = dual
EMPH = emphatic particle
EQU = equative
F = feminine
FUT = future

GEN = genitive
IMP = imperative
IMPF = imperfect
INF = infinitive
INS = instrumental
IPE = implicit parameter
    equative
IPFV = imperfective
IRR = irrealis
LOC = locative
M = masculine
MR = Modern Russian
N = neuter
NEG = negation
NOM = nominative
OR = Old Russian

PAM = parameter
PARA = parameter
PL = plural
PRS = present
PST = past
PTCL = particle
PTCP = participle
REFL = reflexive
SG = singular
SIM = similative
STAN = standard of comparison
STM = standard marker
SUB = subordinator
VN = verbal noun
VOC = vocative

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- *PVL*: Povest' vremennyx let (Primary Chronicle). Lavrent'jevskij spisok (copy). XI–XIIth cent.
- *Novg1*: The first Novgorod synodal chronicle. XIII–XIV.
- *Suzd*: The Suzdal chronicle. XII–XIV.
- *Voskr*: The Voskresenskaya chronicle (up to page 172). XVI.

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- *NovgB*: Novgorod birchbank letters. XII–XVth centuries.

From the electronic collection http://lib.pushkinskijdom.ru/:

- *Izb*: Izbornik (a collection of spiritual and moral texts). 1076.
- *RusP*: Russkaya Pravda (the Russian code of laws). XIV.
- *HG*: Hagiographies and sermons. XII–XIV.
- *Vass*: A story of sickness and death of Vassiliy the III. XVI.
- *ANik*: A. Nikitin. Journey beyond three sees. XV. (Cit. after Xoženije za tri morja Afanasija Nikitina / Edited by Ja. S. Lur'je and L. S. Semenov. 3-e edn. Leningrad: Nauka, 1986.)

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of the queries examples from chronicles, since most of them were copied from earlier sources.)

- The Main subcorpus of the Russian National Corpus.

CONTACT

Irina Kobozeva kobozeva@list.ru (corresponding author)

Natalia Serdobolskaya serdobolskaya@gmail.com (corresponding author)