INTERPLAY BETWEEN POSITION AND INTERPRETATION: AN EXPERIMENTAL STUDY OF RUSSIAN BARE PLURALS[1]

DARIA SERES[2], JOAN BORRÀS-COMES[3], OLGA BORIK[4]

Abstract. This article presents an experimental study of the correlation between the linear syntactic position and the interpretation of plural bare nominal external arguments of intransitive verbs in Russian. We present two experiments (pilot and main), where participants gave their acceptability judgements regarding sentences with pre- and postverbal subjects in contexts that suggest definiteness or indefiniteness of the bare nominal in question. The obtained results confirm that the preverbal position correlates with a definite interpretation, whereas the postverbal position with an indefinite interpretation. However, we found that the acceptability rate of preverbal indefinites is also reasonably high. We propose an explanation for the appearance of indefinites in preverbal subject position in terms of lexical accessibility, construed more generally as D-linking. The experiments also showed that indefinite subjects have a higher acceptability rate in any position, which may be explained by the hypothesis that bare nominals in Russian have a default indefinite interpretation, and so may freely appear in a wider range of contexts.

Keywords: (in)definiteness, reference, articleless languages, acceptability judgement test, D-linking.

1. INTRODUCTION

Our study is focused on Russian, which is a language that does not have articles in its grammatical system, so nominals may appear bare in different syntactic positions. Even though almost half of the world languages are articleless (Dryer 2013a, 2013b), the expression of different kinds of reference in such languages is understudied. The research of definiteness and indefiniteness has been mainly focused on languages with overt articles (Hawkins 1978, Heim 1982, Lyons 1999, Abbott 2004, Elbourne 2013, i.a.). However,

[1] The authors acknowledge financial support of MINECO grants FFI2014-52015-P and FFI2014-52015-P. The first and the second author also received support from ICREA Acadèmica 2015 and 2017 SGR634 awarded to the Centre for Theoretical Linguistics of UAB.

[2] Universitat Autònoma de Barcelona, daria.seres@uab.cat.

[3] Universitat Autònoma de Barcelona, joan.borras@uab.cat.

[4] Universidad Nacional de Educación a Distancia, oborik@flog.uned.es.

RRL, **LXIV**, *2*, p. 163–177, Bucureşti, 2019

most scholars agree that the referentiality of an NP does not depend only on the presence / absence of a definite / indefinite article. There are other means to express (in)definiteness, which is a universal concept of human cognition (Abraham *et al.* 2007, Leiss 2007).

In Russian (in)definiteness may be expressed with the help of lexical means: demonstratives, possessives and other determiners or quantifiers. In the presence of an overt determiner the interpretation of a nominal is straightforward (1a-b), while a bare nominal may be interpreted in more than one way (1c).

(1) a. Éti deti peli pesni
these. NOM children.NOM sang songs.ACC
'These children sang songs.'

b. Kakie-to deti peli pesni
some. NOM children.NOM sang songs.ACC
'Some children sang songs.'

c. Deti peli pesni
children.NOM sang song.ACC
'The / some children sang songs.'

Case alternations on the nominal in object position may influence its interpretation. An NP in the Genitive case is interpreted as indefinite (partitive), while in the Accusative it may be interpreted either definitely or indefinitely.

(2) a. Ja kupila jablok.
I bought apples.GEN
'I've bought some apples.'

b. Ja kupila jabloki.
I bought apples.ACC
'I've bought (the) apples.'

Another morphosyntactic factor that may be relevant in the interpretation of Russian bare nominals is the verbal aspect. Objects of imperfective verbs tend to be interpreted indefinitely, while the ones of perfectives, definitely. Leiss (2007) even suggests that the perfective aspect on verbs in Slavic languages and the definite article on nominals in Germanic languages express the same grammatical category.

(3) a. Ja čitala knigi
I read.IMPERF books.ACC
'I was reading books.'

b. Ja pročitala knigi
I read.PERF books.ACC
'I finished reading the books.'

Another way of expressing definiteness in Russian is word order. It has been claimed that in Slavic articleless languages preverbal subjects are interpreted definitely, while postverbal subjects are interpreted indefinitely (Pospelov 1970, Fursenko 1970, Krámský 1972, Tololinjska 2009, i.a.).

(4) Na stole ležit kniga.
on table lies book.NOM
'There is a book in the table.'
(5) Kniga ležit na stole
book.NOM lies on table
'The book is on the table.'

However, it is also important to notice that the SV/VS order alternation observed in (4) and (5) corresponds to a difference in the interpretation only for bare subjects (Czardybon 2017). If the subject is preceded by an overt determiner, e.g., an indefinite determiner in (6), it has an indefinite interpretation and is in preverbal position. Thus, it can be said that if word order is indeed one of the strategies of encoding reference in Russian, it is only used when the referential properties of the subject are unclear.

(6) Kakaja-to kniga ležit na stole.
some book lies on table
'There is a book on the table.'

Leiss (2007) claims that the pattern observed in Russian, where the preverbal subject is interpreted as definite and the postverbal subject as indefinite, is, in fact, universal. A similar correlation between distribution and interpretation is found in unrelated articleless languages, like Mandarin, where preverbal bare nominals are interpreted as generic or definite and indefinite interpretation is excluded, while postverbal bare nominals can be interpreted as either indefinite or definite or generic (Cheng and Sybesma 2014). Notwithstanding the claims about the universality of this pattern, there have not been many experimental studies that would test the interpretation of preverbal and postverbal subjects in articleless languages.

As for Slavic languages, it is important to single out the experiment by Šimík (2014) on Czech bare singular NPs, which showed that the initial position of the subject, related to topicality, increases the probability of a definite reading, however, it is not a sufficient force to guarantee this type of interpretation. Another experiment, carried out by Czardybon et al. (2014), is a comparative study of English and Polish texts aimed at investigating the interaction between word order and definiteness in Polish. The results of this study show that the preverbal position is indeed strongly connected to definiteness, and indefinite NPs are predominantly found in postverbal position. However, the high number of preverbal indefinite NPs was also observed, even though this result was unexpected (Czardybon et al. 2014: 147- 148).

The scarceness of experimental research on the interpretation of bare nominals in articleless languages motivated our study based on Russian. Our pilot experiment was aimed at checking the correlation between the word order alternation (SV/VS) and the corresponding interpretation for Russian bare plural (BPl)[5] nominals in subject position of intransitive verbs. The primary goal was to establish whether the position of a nominal, in the absence of articles, fully or partially determines its interpretation as definite or indefinite.

[5] All the expressions in subject position used in the experimental phrases are morphologically plural for the sake of uniformity. Bare singular subjects would be predicted to behave in the same way.

2. PILOT EXPERIMENT

In the pilot experiment we aimed at testing the following initial hypothesis: *The preverbal position of the bare subject expresses definiteness (familiarity) and the postverbal position expresses indefiniteness (novelty).*

2.1. Design, participants and materials

We examined the interpretation of bare plural subject NPs using an Acceptability Judgement Test (AJT) with a scale from 1 (not acceptable) to 4 (fully acceptable). The experiment was held online with the help of the free web-based survey software Google Forms. Participants were given short written instructions, advising them to read the items with a neutral intonation and to give their first judgement. 270 anonymous Internet users who claimed to be Russian native speakers took part in the survey.

The list of total 80 randomized items presented to participants consisted of the following scenarios:

- 10 sentences with intransitive verbs in the past tense with BPl subjects in preverbal position in contexts which negate the previous existence of the referents, thus, suggesting their novelty (i.e. indefiniteness).
- 10 sentences with intransitive verbs in the past tense with BPl subjects in postverbal position in contexts which negate the previous existence of the referents, thus, suggesting their novelty (i.e. indefiniteness).
- 10 sentences with intransitive verbs in the past tense with BPl subjects in preverbal position in contexts that suggest presupposition of existence and situational or anaphoric[6] or inferable definiteness[7] of the referents.
- 10 sentences with intransitive verbs in the past tense with BPl subjects in postverbal position in contexts that suggest presupposition of existence and situational or anaphoric or inferable definiteness of the referents.
- 40 fillers.

Examples of experimental items:

The AJT applied to the part of the sentence after suspension points (...).

(a) Preverbal subject, indefiniteness-suggesting context:

V kuxne vsegda bylo očen' čisto, nikogda ne bylo ni odnogo nasekomogo. … No nedelju nazad **tarakany** *obnaružilis*'.[8]

'The kitchen has always been very clean, there's never been any insect. But a week ago cockroaches appeared.'

[6] These are the two most typical uses of the definite article in languages with articles: anaphoric definiteness is when the NP denotes a previously introduced referent and situational definiteness is when the NP denotes the only referent that satisfies the description in a certain situation (Schwarz 2009).

[7] Also known as associative anaphora or bridging.

[8] The bold type marks the subject nominal and the italics the verb.

(b) Postverbal subject, indefiniteness-suggesting context:
Na ulice bylo tixo i pustynno. … Vdrug iz-za ugla *vyšli* **ljudi**.
'The street was silent and empty. Suddenly from around the corner (lit.) came out people.'

(c) Preverbal subject, definiteness-suggesting context:
Gonki zakončilis'. … **Mašiny** *vernulis'* v garaži.
'The race was over. (lit.) Cars returned to garages.'

(d) Postverbal subject, definiteness-suggesting context:
Včera v zooparke ja videla semju tigrov. … V uglu kletki posle obeda *spali* **životnye**.
'Yesterday at the zoo I saw a family of tigers. (lit.) In the corner of the cage after lunch slept animals.'

2.2. Results

The results of the AJT are presented in Table 1.

Table 1

Preverbal vs. postverbal subjects in indefiniteness- and definiteness-suggesting contexts

Suggested Situation/ Context	Subject Position	Response percentage (%)			
		Sounds very bad	Sounds quite bad	Sounds good	Sounds very good
Indefiniteness	preverbal	25.53	39.00	22.50	9.82
Indefiniteness	postverbal	4.47	12.56	26.21	56.79
Definiteness	preverbal	6.20	11.54	24.13	58.11
Definiteness	postverbal	45.48	34.71	13.14	6.68

As illustrated in the table, there is a clear preference for preverbal subjects in definiteness-suggesting contexts and for postverbal subjects in indefiniteness-suggesting contexts, so there is a visible correlation between the interpretation of the subject and its syntactic position. However, other combinations are still accepted by speakers. The preverbal position of indefinite subjects has rather high acceptability (22.5 % good + 9.82% very good). Such result is similar to the ones obtained in the previous studies on Slavic languages by Czardybon et al. (2014) and Šimík (2014), cited above.

Such high acceptability may be explained by the fact that if the preverbal NP is stressed, it can be interpreted indefinitely. The change in intonation may override the effect of word order. In (7) and (9) the intonation is neutral[9] (with stress on the last phonological word), whereas in (8) and (10) the first word is stressed (examples from Pospelov (1970: 182)). The noun in (8) may be interpreted indefinitely, as novel information, if it receives prosodic prominence (a nuclear accent), while the predicate lacks this prominence and is interpreted as given information[10].

[9] In Russian linguistic literature neutral intonation with a falling tone at the end of a sentence is equivalent to IK1 (intonation contour 1) (Bryzgunova 1980).

[10] See Jasinskaja (2014) for more details on deaccentuation of given information.

(7) Pojezd PRIŠËL.
train arrived
'The train arrived.'
(8) POJEZD prišël.
train arrived
'A train arrived.'
(9) Prišël POJEZD.
arrived train
'A train arrived.'
(10) PRIŠËL pojezd.
arrived train.
'The train arrived.'

The pilot experiment was conducted online and we could not control the intonation, so the participants might have stressed the nominal constituent despite the instructions, making it possible for the preverbal subject to be interpreted indefinitely. In order to exclude the possible influence of intonation on the interpretation of bare nominals, we conducted another experiment, where the items were presented to participants as audio recordings.

3. MAIN EXPERIMENT

3.1. Participants and methodology

A total of 174 Russian speakers participated in a survey administered online using the SurveyMonkey software. The results of 54 participants were discarded as they missed three or more items when answering the survey, which left the final database with 120 participants (102 female, 17 male, 1 non-binary). Their mean age in years was 36.59 (SD = 8.55), and 91 of them claimed having received university education related to linguistics, philology, translation or language teaching. Demographic information was collected from a sociolinguistics questionnaire administered right after the study that inquired about the participants' age, sex and level of studies, as well as the place where participants had spent most of their childhood, and the place where participants currently live.

3.2. Design and materials

The experiment consisted in an acceptability test of a series of sentences containing bare plural subjects in contexts suggesting either definiteness or indefiniteness in preverbal or postverbal position. The test sentences were presented in a brief situational context, and both the context and the target sentences were acoustically presented to the participants in order to control for the potential effects of prosody on the interpretation. A total of 8 (preverbal definite) + 8 (postverbal definite) + 8 (preverbal indefinite) + 8 (postverbal indefinite) experimental scenarios were prepared for each type of definiteness condition, to which a set of 16 filler sentences was added, leading to a total of 48 items to be answered by each participant.

Here are the examples of experimental items:[11]

(a) Preverbal subject, indefiniteness-suggesting context:
My živëm v dome staroj postrojki: pročnyje steny, starye derevjannye perekrytija. U nas v dome nikogda ne bylo gryzunov. No včera ja uslyšala, kak **myši** *skrebutsja*.
'We live in an old house: it has solid walls and old wooden beams. We never had rodents at home. But yesterday I heard (lit.) how mice scratch.'

(b) Postverbal subject, indefiniteness-suggesting context:
Naša derevnja sovsem na otšibe, novosti do nas doxodjat redko. Xotja v poslednee vremja kak-to načala nalaživatsja svjaz' s vnešnim mirom. Nu naprimer, ran'še nam nikogda ne prinosili počtu. No segodnja v jaščike *ležali* **pis'ma**.
'Our village is out of the way, news rarely reachs us. However, recently the connection to the outer world has improved. Well, for example, we have never received any mail. But today in the mailbox ... (lit.) were lying letters.'

(c) Preverbal subject, definiteness-suggesting context:
Insperkor znal, čto v etom dome živët molodaja sem'ja, kažetsja s det'mi. On vošël v komnatu i uvidel mal'čika i devočku. **Deti** nepodvižno *sideli* za stolom.
'The inspector knew that there lives a young family in the house, seemingly, with children. He entered the room and saw a boy and a girl. The children were sitting motionlessly at the table.'

(d) Postverbal subject, definiteness-suggesting context:
Na Roždestvo rešili pozvat' vsju sem'ju i nakryt' prazdničnyi stol. Bylo rešeno dostat' iz pyl'nyx korobok davno ne ispol'zovavšijasja starinnyi serebryanyj serviz, tol'ko nikto uže ne pomnil, gde imenno on xranilsja. Xozjaika iskala famil'noe serebro po vsem škafam. No bylo ponyatno, čto *propali* **stolovye pribory**.
'For Christmas they decided to reunite all the family and to have a big festive dinner. They decided to take out of the dusty boxes the unused old silver cutlery set, but nobody remembered where exactly it was. The landlady was looking for family silverware in all cabinets. But it was clear that (lit.) was gone the cutlery.'

3.3. Procedure

Using the free Survey Monkey software, participants had to assign each item one out of 4 categories on the Likert Scale: 1 «it sounds bad», 2 «it does not sound very good, but it's possible», 3 «it sounds good enough», and 4 «it sounds very good». The experiment was administered online, with stimuli being presented acoustically. The average time for completing the task was 22 min 38 sec.

3.4. Measures and analyses

A total of 3,840 data points was analyzed (120 participants × 2 definiteness conditions [indefinite, definite] × 8 scenarios × 2 positions in which the NP appeared in the

[11] The full list of items can be consulted following this link: https://bit.ly/2JO3nsy.

sentence with respect to the verb [preverbal, postverbal]). These responses were analyzed using a Linear Mixed Model using the GLMM interface from IBM SPSS Statistics 24.

3.5. Results

Figure 1 shows the mean perceived adequacy that our participants attributed to the experimental sentences by means of the 4-point Likert scale. The most perceptible result from the graph is that participants favored two out of the four possible combinations of Definiteness and Position namely postverbal indefinites (M = 3.399, SD = .791) and preverbal definites (M = 3.289, SD = .874), giving substantially lower ratings to preverbal indefinites (M = 1.831, SD = .885) and postverbal definites (M = 1.657, SD = .932). Additionally, an overall superior adequacy for indefinite contexts (independently of their NPs position) compared to definite ones has been observed.

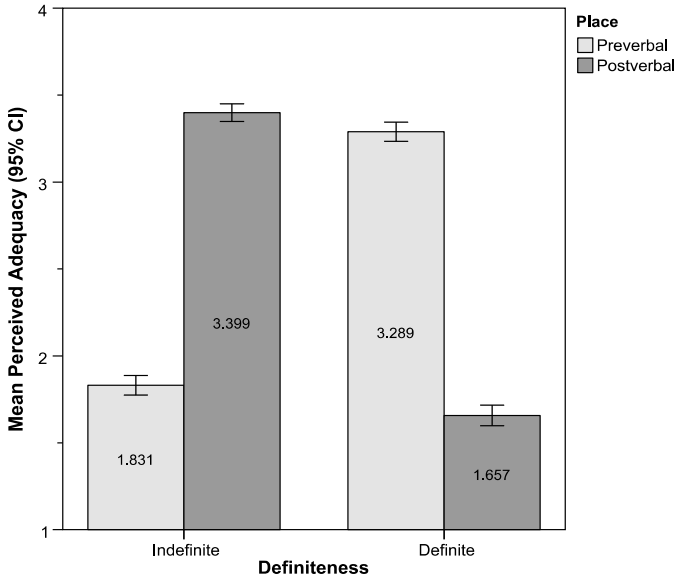

Figure 1. Average perceived adequacy that our participants attributed to the experimental sentences. Error bars depict the 95% confidence interval.

A Linear Mixed Model was applied to the data. The model was defined with Participant as the subject structure and Situation × Position as the repeated measures structure (Covariance Type: Diagonal). The participants' perceived adequacy of the sentences was set as the dependent variable. The fixed factors were Definiteness, Position, and their interaction. Regarding the random factors, a random intercept was set for Participant, with a random slope over Position (Covariance Structure: Variance Components).

The two main effects were found to be significant: Definiteness, $F(1, 3829) = 44.700$, $p < .001$, such that indefinite sentences obtained significantly more adequacy than definite sentences ($\beta = .164$, $SE = .024$, $p < .001$), and Position, $F(1, 3829) = 14.236$, $p < .001$,

indicating that preverbal NPs obtained more adequacy than postverbal NPs (β = .113, SE = .030, p < .001).

The interaction Definiteness × Position was found to be significant, $F(1, 3829)$ = 4958.853, p < .001, which could be interpreted in the following two ways. On the one hand, definites were more adequate than indefinites in preverbal position (β = –1.561, SE = .035, p < .001), but indefinites were more adequate than definites in postverbal position (β = 1.888, SE = .034, p < .001). On the other hand, indefinites were found to be more adequate in postverbal position (β = –1.612, SE = .037, p < .001), while definites were found to be more adequate in preverbal position (β = 1.837, SE = .040, p < .001).

All in all, our results indicate that two out of the four possible combinations are considered as optimal for our participants: definiteness + preverbal position and indefiniteness + postverbal position. Additionally, less relevant effects are found for both Definiteness and Position such that speakers would be a little more permissive for NPs in indefiniteness-suggesting contexts overall, regardless of their position, and for NPs in preverbal position overall, regardless of the context.

It is also important to notice that the results of the main experiment were very similar to the results of the pilot (see Table 2), which could suggest that the effect of intonation was minor and that there are other factors which are more relevant and which will be discussed below.

Table 2

Acceptability rate in the pilot and in the main experiment

	Acceptability (%)	
	Pilot	Main
Indefinite – Preverbal	39.05	27.70
Indefinite – Postverbal	78.43	79.97
Definite – Preverbal	78.06	76.30
Definite – Postverbal	27.01	21.90

3.6. Discussion of the results

3.6.1. *Preverbal definites and postverbal indefinites*

The main outcome of the experiment supports previous theories about the syntactic position and interpretation of bare nominals in Slavic: there is a clear correlation between the interpretation of a subject and its syntactic position. Russian speakers prefer the preverbal position of the subject when the context suggests that the subject is definite and the postverbal position otherwise. How can this be explained?

Russian is a language with a flexible word order due to the rich nominal morphology (case system) which determines syntactic roles, like subject or object. Even though the word order is considered to be “free”, there is a neutral or basic order of constituents, from which other possibilities are derived. The underlying canonical word order in Russian and other Slavic languages is SV(O) (Švedova 1980, Geist 2010, Baylin 2012, Jasinskaja 2014, i.a.). If the word order alternation in Russian does not encode the change of syntactic roles, it has to serve some other purpose. Many scholars suggest that it reflects a change in information

structure, according to the communicative needs of speakers (e.g. Grenoble 1998). Brun (2001) points out that Russian utterances with a neutral intonation pattern and without sentence stress manifest a strict connection between word order and discourse functions: topics always precede foci, while discourse neutral intonation intervenes. So, even though word order is relatively free in Russian, it is fixed with respect to information structure.

SV order in Russian normally represents a division into Topic and Focus, so the subject acts as given or mentioned before, and the predicate represents the new information. Topic, according to Reinhart (1981), Erteschik-Shir (2007) and many others, is what the sentence is about, and Focus expresses the added or new proposition. Generally, topics are referential expressions (Reinhart 1981), and it is natural to have a definite expression as a topic, as definiteness is related to the familiarity / identifiability (givenness) of the referent.

The preverbal argument position is strongly associated with Topic. Erteschik-Shir (2007) posits that the left periphery of the sentence is generally reserved for topics; Geist (2010) and Jasinskaja (2014) claim that topics tend to appear in the leftward position, which is a preverbal position of the subject for sentences with intransitive verbs.

As for the VS order[12], it represents a Ø-Topic sentence[13], i.e., the one that gives entirely new information (Baylin 2012: 261). Such topicless, all-new sentences are called *thetic* (Ladusaw 1994) in the Western linguistic tradition and *kommunikativno nerasčlenennye predloženija* ("communicatively undivided sentences") in the Russian linguistic tradition (Švedova 1980). The postverbal argument in such sentences is part of the Focus that is why its preferred reading is indefinite.

So, the preverbal position is associated with Topic and the postverbal position is associated with Focus. However, topicality, which strongly increases the probability of a definite reading of a bare NP, is not always sufficient for definiteness. That is why there is no clear one-to-one correspondence between the syntactic position of a bare nominal and its interpretation, there is only a preference.

Thus, it cannot be said that word order is one of the means of expressing (in)definiteness, i.e., encoding the referential status of an NP. If it were so, we would not be able to account for the statistically significant level of acceptability of preverbal subjects in the contexts that suggest indefiniteness. We consider the strict version of the initial hypothesis, based on traditional accounts, to be mistaken. The modified hypothesis is that word order reflects information packaging, in particular, it encodes topicality.

3.6.2. *Higher acceptability in preverbal position*

Another outcome of the experiment is that speakers are more permissive for NPs in preverbal position in both definiteness- and indefiniteness-suggesting contexts. Assuming that preverbal subjects in Russian are aboutness topics, they tend to be definite, although a (specific) indefinite interpretation is not ruled out for sentential topics either.

According to Reinhart (1981), a topic has to be strongly referential, that is, either definite or specific indefinite. Lyons (1999) points out that definiteness and givenness are not always the same, even though the overlap between them is remarkably strong. Givennness is

[12] Czardybon (2017:160) points out that subjects of thetic sentences in Slavic may be preverbal only when they carry the sentence stress.

[13] Ertschik-Shir (2007) claims that there is always a topic. In a so-called Ø-topic sentence, which is the answer to the question "What's happening?", the topic is the particular situation.

related to identifiability, which is one of the components of definiteness, but not the only one. An indefinite can be also given if its descriptive content has occurred in the previous discourse (Lyons 1999: 232). In this case the indefinite is specific. Specific indefinites are discourse new, but they are anchored to other discourse referents (von Heusinger 2002), or D-linked (Pesetsky 1987, Dyakonova 2009). Czardybon et al. (2014) claim that indefinite preverbal NPs could be interpreted as partitives, and so, even though the construction is indefinite, there is a definite superset involved, thus, the NP can serve as a topic.

Another relevant concept for the explanation of the results is the *information status* of discourse referents. Information status is an important pragmatic concept that shows the degree of givenness of the referent. Givenness is related to the knowledge that is assumed to be shared between the speaker and the listener. As classified by Prince (1981), information status may be brand-new, inferable or given (evoked). Baumann and Riester (2012) also suggest that for an adequate analysis of the information status of an item occurring in natural discourse, *givenness* has to be investigated at two levels: referential level and lexical level. They develop a fine-grained approach to annotation of discourse referents with respect to their information status. Using this approach, we can annotate the subject nominals in our experimental sentences.

In all definiteness-suggesting contexts, the test NPs can be labelled, according to Baumann and Riester's classification (2012: 14), as *r-given* or *r-bridging* at a referential level. *R-given* label is used when the anaphor co-refers with the antecedent in the previous discourse. *R-bridging* is assigned when the anaphor is not co-referring and depends on the previously introduced scenario. On the lexical level the items can be classified (ibid.: 18-19) as *l-given-syn* (the nouns are at the same hierarchical level, i.e. synonyms), *l-given-super* (the noun is lexically superordinate to the previous noun), *l-accessible-sub* (the noun is lexically subordinate to the previous noun) or *l-accessible-other* (two related nouns, whose hierarchical lexical relation cannot be clearly determined). The NPs that are lexically and referentially given can easily appear in preverbal position.

In indefiniteness suggesting contexts the existence of referents was negated, thus, suggesting the novelty of the target nominal. So, in Baumann and Riester's classification (2012:14), at a referential level all the target NP will be classified as *r-new*, i.e. specific or existential indefinite introducing a new referent. At a lexical level, they are either *l-accessible-sub* or *l-accessible-other*.

The item-specific analysis of the results shows that the acceptability of test items is quite uniform. The acceptability of preverbal nominals in definiteness contexts is quite high for all the items (as expected). As for indefiniteness-suggesting contexts, the acceptability of postverbal NPs is uniformly high and the acceptability of preverbal NP is rather low but uniform and statistically significant.

The item that got the lowest acceptability in preverbal position is the one that has a slightly different information status labelling. It has *l-accessible-other* label, which means that, unlike other items with clear lexical relation of hyponymy, the hierarchical relation between the context and the target NP cannot be clearly established in the given scenario. The translation of the item is given in (10):

(10) "It got darker; the night came very quickly. Lit. **In the street it was silent and empty**. Suddenly from around the corner lit. **people** came out."

It can be seen that there is no NP to which the target NP *people* could be anchored. It is linked to the whole context though. Probably, this is why the connection between the previous context and the target item is looser, and its discourse activation is lower. So, it is harder for the target NP to function as a topic, and to occupy the preverbal position.

The analysis of item-specific acceptability rate may give us some clues about how the information status of an item can influence its interpretation with respect to different degrees of givenness. In the items used in the experiment all target NPs in indefiniteness suggesting contexts were new at a referential level but accessible at a lexical level (in term of Baumann and Riester 2012), which can explain their acceptability in preverbal position.

3.6.3. *Higher acceptability of indefinites*

The experiments show an overall superior adequacy of bare NPs in the contexts suggesting their indefiniteness, independently of the syntactic position, as compared to definite contexts. This result may be considered as giving empirical support for Heim's (2011) hypothesis that NPs in articleless languages are inherently indefinite and definiteness is just a pragmatic strengthening of the indefinite (i.e. a cancellable implicature), and, thus, indefinite NPs are felicitous in a wider range of uses.

The semantics of definite vs. indefinite NPs, according to Heim (2011), can be represented in the following way:

(11) [[the cat]] = $\iota x.x$ is a cat *vs*. [[a cat]] = $\lambda P.\ \exists x.x$ is a cat and x is P

A sentence with a definite argument would always entail the corresponding sentence with an indefinite argument. Whenever (12a) is true, (12b) is also true but not the other way around.

(12) a. [[The cat ran away]] = [$\iota x.x$ is a cat] ran away
b. [[A cat ran away]]= $\exists x.\ x$ is a cat and x ran away

The English articles *the* and *a* are then construed as alternatives on a Horn scale, with the definite one chosen for the narrowest domain restriction only. For languages without articles the Horn scale does not exist, as there are no actual articles. An indefinite interpretation is thus taken to be the default one for articleless nominal arguments, which can explain why bare nominals interpreted indefinitely are more easily accepted by native speakers in different syntactic positions.

In Russian, definiteness of bare nominals may be considered a pragmatic strengthening of the "basic" indefinite interpretation[14]. The definite interpretation of bare nominals would then depend on contextual information, as in situational, anaphoric, or relational uses of definite descriptions.

[14] Cf. von Heusinger's (2013) pragmatic concept of salience as an underlying principle for definiteness.

4. CONCLUSIONS

The experimental study of the acceptability of Russian preverbal and postverbal bare subject NPs showed that word order in Russian does not strictly speaking express the referential status of a bare nominal. Rather, it reflects its information status; that is why there is a clear preference for discourse-old NPs to appear preverbally (topic position) and for discourse-new NPs to appear postverbally. Discourse-new NPs may appear preverbally if they are D-linked: the stronger the link to the previous discourse, the higher their acceptability in this position. Higher overall acceptability of NPs in indefiniteness-suggesting contexts, regardless of their position, can be explained by the hypothesis that an indefinite interpretation is the default one for bare NPs in Russian, thus, such NPs are felicitous in a wider range of contexts.

REFERENCES

Abbott, B., 2004, "Definiteness and indefiniteness", in: Horn, L. R., G. Ward (eds), *The handbook of pragmatics*, Oxford, Blackwell, 122–149.

Abraham, W., E. Stark, E. Leiss, 2007, "Introduction", *Nominal Determination: Typology, context constraints and historical emergence*, Studies in language companion series, volume 89, Amsterdam / Philadelphia, John Benjamins Publishing Company, 1–20.

Baylin, J. F., 2012, *The Syntax of Russian*, Cambridge, Cambridge University Press.

Baumann, S., A. Riester, 2012, "Referential and Lexical Givenness: Semantic, Prosodic and Cognitive Aspects", in: Elordieta G., P. Prieto (eds), *Prosody and Meaning*, Mouton De Gruyter, 119–162.

Brun, D., 2001, "Information structure and the status of NP in Russian", *Theoretical Linguistics,* 27, 109–135.

Bryzgunova, E. A., 1980, "Intonacija", in: Švedova, N. J. (ed.), *Russkaja grammatika*. Tom 1. Nauka, Moskva, 96–122.

Cheng, L. L.-S., R. Sybesma, 2014, "Bare and Not-So-Bare Nouns and the Structure of NP", in: C.T. James Huang, Y.-H. Audrey Li, A. Simpson (eds), *The Handbook of Chinese Linguistics*, Blackwell Publishers, 248–274.

Czardybon, A., O. Hellwig, W. Petersen, 2014, "Statistical Analysis of the Interaction between Word Order and Definiteness in Polish", in: A. Przepiorkowski, M. Ogrodniczuk (eds), *Proceedings of PolTAL 2014*, Springer, 144–150.

Czardybon, A., 2017, *Definiteness in a Language without Articles – A Study on Polish*. PhD thesis, Düsseldorf Univeristy Press.

Dryer, M. S., 2013a, "Definite Articles", in: M.A. Dryer, M. Haspelmath (eds), *The World Atlas of Language Structures Online*. Leipzig: Max Planck Institute for Evolutionary Anthropology.

Dryer, M. S., 2013b. "Indefinite Articles", in: M.S. Dryer, M. Haspelmath (eds.), *The World Atlas of Language Structures Online*. Leipzig: Max Planck Institute for Evolutionary Anthropology.

Dyakonova, M., 2009, *A phase-based approach to Russian free word order*. Ph.D. thesis, University of Amsterdam.

Elbourne, P., 2013, *Definite Descriptions*, Oxford, Oxford University Press.

Erteschik-Shir, N., 2007, *Information Structure*, Oxford, Oxford University Press.

Fursenko D.I., 1970, "Porjadok slov kak odno iz sredstv vyraženija neopredelënnosti / opredelënnosti imën suščestvitel'nyx", *Russkij jazyk za rubežom*, 4, 68–72.

Geist, L., 2010, "Bare Singular NPs in Argument Positions: Restrictions on Indefiniteness", *International Review of Pragmatics* 2, 191–227.

Grenoble, L., 1998, *Deixis and information packaging in Russian discourse*, Amsterdam, John Benjamins.
Hawkins, J., 1978, *Definiteness and Indefiniteness. A study in reference and grammaticality prediction*. Croom Helm. London.
Heim, I., 1982, *The Semantics of Definite and Indefinite Noun Phrases*, PhD thesis. University of Massachussets, Amherst.
Heim, I., 2011. "Definiteness and Indefiniteness", in: C. Maienborn, K. von Heusinger, P. Portner (eds), *Semantics: An International Handbook of Natural Language Meaning.* De Gruyter Mouton, 1025–1058.
von Heusinger, K., 2002, "Specificity and definiteness in sentence and discourse structure", *Journal of semantics*, 19, 245–274.
von Heusinger, K., 2013, "The Salience Theory of Definiteness", in: A. Capone, F. Lo Piparo, M. Carapezza (eds), *Perspectives on Linguistic Pragmatics, Perspectives in Pragmatics, Philosophy & Psychology* 2, Springer, 349–374.
Jasinskaja, K., 2014, "Information Structure in Slavic", in: C. Féry, Sh. Ishihara (eds), *The Oxford Handbook of Information Structure*, Oxford, Oxford University Press.
Krámský, J., 1972, *The Article and the Concept of Definiteness in Language*, The Hague, Moutoun.
Ladusaw, W., 1994, "Thetic and Categorical, Stage and Individual, Weak and Strong", in: M. Harvey, L. Santelmann (eds), *Proceedings from Semantics and Linguistic Theory IV Ithaca*, Cornell University Press, 220–229.
Leiss, E., 2007, "Covert (in)definiteness and aspect", in: W. Abraham, E. Stark, E. Leiss (eds), *Nominal Determination: Typology, context constraints and historical emergence*, Studies in language companion series, volume 89, Amsterdam / Philadelphia, John Benjamins, 73–102.
Lyons, C., 1999, *Definiteness*, Cambridge, Cambridge University Press.
Pospelov, N., 1970, "O sintaksičeskom vyraženii kategorii opredelënnosti – neopredelënnosti v sovremennom russkom jazyke", *Issledovanija po sovremennomu russ. jazyku*, Moskva, 182–189.
Prince, E. F., 1981, "Toward a taxonomy of given-new information", in: P. Cole (ed.), *Radical Pragmatics*, New York, Academic Press, 223–256.
Reinhart, T., 1981, "Definite NP Anaphora and C-Command Domains", *Linguistic Inquiry*, 12, 4, 605–635.
Schwarz, F., 2009, *Two types of definite in natural language*. PhD thesis, University of Massachussets, Amherst.
Šimík, R., 2014, *Definiteness and articleless languages*. Ms. University of Potsdam / SFB632.
Švedova, N. J., 1980, *Russkaja grammatika*. Tom II. Sintaksis. Moskva: Nauka.