Chapter 13

Definiteness in the absence of uniqueness: The case of Russian

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This paper is devoted to the study of the interpretation of bare nominals in Russian, revisiting the issues related to their perceived definiteness or indefiniteness. We review the linguistic means of expressing definiteness in Russian, showing that none of them is sufficient to encode this meaning. Taking the uniqueness approach to definiteness as a point of departure, we explore the differences in the interpretation of definite NPs in English and in Russian, arguing that Russian bare nominals do not give rise to the presupposition of uniqueness. The perceived definiteness in Russian is analysed as a pragmatic effect (not as a result of a covert type-shift), which has the following sources: ontological uniqueness, topicality, and familiarity/anaphoricity.

Keywords: definiteness, uniqueness, articleless languages, Russian

1 Introduction

The category of definiteness is mostly discussed in the literature in relation to languages with articles. Russian, however, does not possess an article system, like most Slavic languages, except for Bulgarian and Macedonian that have a postpositive affix to mark definiteness. Cross-linguistically, it is not uncommon for languages to lack articles (Lyons 1999; Dryer 2013; i.a.), and yet, the semantic properties of nominal phrases in such languages have not been clearly determined yet. This article makes a contribution to the discussion of referential properties of bare nominals in Russian as a representative of languages without articles, as well as the concepts that are associated with definiteness cross-linguistically.

In order to achieve a better understanding of the category of definiteness and the concepts related to it in articleless languages, we look at lexical, grammatical, syntactic, and prosodic means that contribute to a perceived definite interpretation of bare nominals in Russian (§2). Then, we compare the interpretation of definite NPs in languages with articles and in languages without articles. We show that, unlike English NPs with a definite article, Russian NPs, perceived as definite, lack the presupposition of uniqueness (§3). On the basis of the empirical discussion in §3, we propose that bare nominals in Russian are semantically indefinite (see Heim 2011) and definiteness in Russian is a pragmatic effect, thus, it is not derived by a covert type-shift (contra a long-standing assumption in the formal linguistic literature, e.g. Chierchia 1998), but is a result of pragmatic strengthening. We suggest that there are at least three sources of the perceived definiteness in Russian: ontological (or situational) uniqueness, topicality, and familiarity/anaphoricity (§4).

Our discussion in this paper is limited to Russian and we do not make any claims about the interpretation of bare nominals in other articleless languages. However, in the future this proposal can be tested against the data and possibly extended to other languages, which will contribute to our understanding of definiteness as a universal phenomenon.

2 Definiteness without articles

The distinction between definite and indefinite reference is often assumed to be an important element of human communication, therefore, it is natural to expect it to be universally present in natural languages, regardless of whether they have lexical articles (Brun 2001; Zlatić 2014; i.a.).

Looking at Russian one can see that, even though this language does not express definiteness as a binary grammatical category [\pm definite] in a strict sense, the values of definiteness and indefiniteness appear to be perceptible to its speakers. The English translation of the Russian examples in (1) reveals the difference in the interpretation of the bare nominal, whose morphological form (the nominative case) and syntactic function (the subject) stay the same, even though the linear word order is altered.¹

¹All examples in the paper are from Russian or English, unless indicated otherwise.

- (1) a. V uglu spit koška. in corner.LOC sleeps cat.NOM 'A cat is sleeping in the corner.' / 'There is a cat sleeping in the corner.'
 - b. Koška spit v uglu. cat.NOM sleeps in corner.LOC
 'The cat is sleeping in the corner.'

In (1a) the interpretation of the subject nominal koška seems to be equivalent to the English expression *a cat*, which has an indefinite interpretation, while in (1b) it is rather comparable to the definite description *the cat*, thus, the contrast between a definite and an indefinite interpretation seems to be expressible in Russian. An important question that immediately arises in this respect is how these readings are encoded in the absence of articles.

In the linguistic literature it has been generally assumed that, even though languages like Russian do not have a straightforward way of expressing (in)definiteness, this semantic category would still be present in the language and there would be certain means to express it (Galkina-Fedoruk 1963; Pospelov 1970; i.a). In particular, it has been claimed that in order to encode the values of (in)definiteness, Russian speakers use a number of strategies, which include lexical, morphological, syntactic, and prosodic means, as well as their combination. In the following subsections we show how these strategies are implemented in Russian.

2.1 Lexical means

Russian has a number of lexical elements that determine the referential status of a nominal in the most straightforward way; these include demonstrative pronouns, determiners, quantifiers. Padučeva (1985) calls such elements "actualizers" as they mark or indicate the referential status of a bare noun, as illustrated in (2b). While unmodified bare nominals may have various interpretations, as indicated in the English translation of (2a), NPs modified by an adjective of order (a superlative, an ordinal, *poslednij* 'last', *sledujuščij* 'next', etc.) or by a complement establishing uniqueness (PP, relative clause, genitive attribute) will be construed as definite, as illustrated in (2c).

- (2) a. Rebënok pel pesnju. child.NOM sang song.ACC 'The/a child sang the/a song.'
 - b. Tot rebënok pel kakuju-to pesnju. that child.NOM sang some song.ACC 'That child sang some song.'

 c. Samyj mladšij rebënok sestry pel pesnju, kotoruju ona most young child.NOM sister.GEN sang song.ACC that she sama sočinila. herself composed 'My sister's youngest child sang the song that she had composed.'

Nevertheless, the use of actualizers is optional in Russian, so the speakers cannot truly rely on their presence and therefore have to use other strategies to encode and decode the referential status of a nominal expression.

2.2 Morphological means

Apart from lexical means, Russian and other Slavic languages use morphological tools to encode the reference of a nominal phrase. The two grammatical categories that may affect the definiteness status of a bare nominal in direct object position are the aspect of the verbal predicate and the case of the nominal itself.

Aspect (perfective or imperfective) in Russian is a grammatical category, obligatorily present on the verb, and generally expressed by verbal morphology. Any given verb belongs to one of the two aspects, however, there is no uniform morphological marker of aspect in Russian (Klein 1995; Borik 2006).² The relation between perfectivity of the verbal predicate and the interpretation of its direct object in Slavic languages has been widely discussed in the literature (Wierzbicka 1967; Krifka 1992; Schoorlemmer 1995; Verkuyl 1999; Filip 1993; i.a.).

Let us look at some examples. In (3) the direct object of a perfective verb is interpreted definitely, while the direct object of an imperfective verb in (4) may be interpreted definitely or indefinitely, depending on the context.³

- (i) a. Ivan pi vino. Ivan drank.IPFV wine.ACC
 'Ivan drank / was drinking wine.'
 - b. Ivan izpi vino*(-to).Ivan drank.PFV wine.ACC-DEF'Ivan drank the wine.'

(Bulgarian; Dimitrova-Vulchanova 2012: 944)

²There is a relatively small class of biaspectual verbs whose aspectual value can only be established in context.

³The correlation between the verbal aspect and the interpretation of the direct object is clearly present in other Slavic languages, e.g. in Bulgarian, which has an overt definite article. The following example shows that at least in some cases, the definite article cannot be omitted if the verb is perfective.

- (3) Vasja s"el jabloki. Vasja ate.PFV apples.ACC 'Vasja ate the apples.'
- (4) Vasja el jabloki.
 Vasja ate.IPFV apples.ACC
 'Vasja ate / was eating (the) apples.'

It is possible to get an indefinite interpretation of the object in combination with a perfective verb, like in (3); in order to do so, the case of the nominal has to be changed from the accusative into the genitive and, thus, the object gets interpreted as partitive (5).

(5) Vasja s"el jablok.
 Vasja ate.PFV apples.GEN
 'Vasja ate some apples.'

This kind of case alternation can be considered a morphological means of encoding indefiniteness. It should be noted, however, that case alternations are restricted to inanimate plural and mass objects, and due to this restriction, the effects of the case alternation cannot be considered strong enough to postulate a strict correspondence between the case of the direct object and its interpretation.⁴

Moreover, as claimed in Czardybon (2017), only a certain lexical class of perfective verbs, i.e., incremental theme verbs, such as *eat, drink, mow*, etc. trigger a definite reading of a bare plural or a mass term in Slavic languages.⁵ The phenomenon is explained in Filip (2005: 134–136), where she posits that arguments of perfective incremental theme verbs "must refer to totalities of objects" falling under their descriptions and that "such maximal objects are unique", thus, have a definite referential interpretation.

⁴Other languages, such as Turkish, Persian (Comrie 1981) or Sakha (Baker 2015), seem to exhibit a really strong correlation between case marking and interpretation of the nominal, especially in direct object position.

⁵The term "incremental theme verb" was introduced by Dowty (1991), following Krifka's (1989) distinction of a "gradual patient" (of verbs, like *eat*) and a "simultaneous patient" (of verbs, like *see*). There are three types of incremental theme verbs: (i) verbs of consumption (*eat, drink, smoke*), (ii) verbs of creation/destruction (*build, write, burn, destroy*), and (iii) verbs of performance (*sing, read*).

2.3 Syntactic means

Another strategy of (in)definiteness-encoding in Russian extensively described in the literature (Pospelov 1970; Fursenko 1970; Chvany 1973; i.a.) is the linear word order alternation: preverbal subjects are interpreted definitely and postverbal ones, indefinitely. This kind of observation is made over sentences containing intransitive verbal predicates. Examples (6a) and (6b) are modelled on Krámský's (1972: 42) examples from Czech.

- (6) a. Kniga ležit na stole. book.NOM lies on table.LOC 'The book is on the table.'
 - b. Na stole ležit kniga.
 on table.LOC lies book.NOM
 'There is a book on the table.'

Such a pattern, observed in Russian, where the preverbal subject is interpreted as definite and the postverbal subject as indefinite, has been claimed to be universal (Leiss 2007).⁶ A similar correlation between distribution and interpretation has been reported for other articleless languages, such as Mandarin Chinese, where preverbal bare nominals are interpreted only as generic or definite, while postverbal bare nominals can be interpreted as either indefinite or definite or generic (Cheng & Sybesma 2014).

However, perceived definiteness of the preverbal subject may depend on the information structure of the sentence, i.e., topicality of the subject. As the change in the linear constituent order is not conditioned by the change of the corresponding syntactic function (subject vs. object) in Russian, many researchers suggest that word order alternations are determined by information structure (Mathesius 1964; Sgall 1972; Hajičová 1974; Isačenko 1976; Yokoyama 1986; Comrie 1981; i.a.). The subject in (6a) is in topic position, expressing given (discourse old) information, while the subject in (6b) is the focus, containing discourse new information.⁷ Apparently, topicality strongly increases the probability of a definite reading of a bare NP. Many researchers have claimed that elements appearing in topic posi-

⁶It has been also argued (Šimík & Burianová 2020) that definiteness of bare nominals in Slavic is affected not by the relative (i.e., preverbal vs. postverbal) position of this nominal in a clause, but by the absolute (i.e., clause initial vs. clause final) position.

⁷We assume that the leftmost/preverbal position is reserved for topics in Russian (Geist 2010; Jasinskaja 2016).

tion can only be referential, i.e., definite or specific indefinite (see Reinhart 1981; Erteschik-Shir 1998; Portner & Yabushita 2001; Endriss 2009).⁸

Experimental studies which explore the phenomenon of linear position alternation for bare subjects of intransitive verbs in Slavic languages have also shown that topicality is not always sufficient for definiteness. The studies by Šimík (2014) on Czech, Czardybon et al. (2014) on Polish, and Borik et al. (2020) and Seres et al. (2019) on Russian have shown that there is no clear one-to-one correspondence between the syntactic position of the nominal and its interpretation, there is only a preference.

Thus, the linear position of a bare subject cannot be considered sufficient for determining its type of reference, moreover, this condition may be overridden by the use of prosody, as we show below.

2.4 Prosodic means

Another means of encoding reference that should not be underestimated is prosody. Correlating with information structure, prosody may influence the interpretation, e.g. the constituent carrying the nuclear accent may indicate a contrastive topic. The examples below show how the change in the sentential stress pattern may override the effect of the word order alternation. In (7) and (9) the intonation is neutral, i.e., the stress is on the last phonological word).⁹

- (7) Poezd PRIŠËL. train.NOM arrived
 'The train arrived.'
- (8) POEZD prišël. train.NOM arrived 'A train arrived.'
- (9) Prišël POEZD. arrived train.nom 'A train arrived.'

⁸However, this is not always the case. As suggested by Leonetti (2010), non-specific or weak indefinites may also appear in topic position under certain conditions, i.e., when they are licensed by certain kinds of contrast or when they are licensed in the sentential context with which the topic is linked.

⁹Capital letters represent sentence stress. The examples are taken from Pospelov (1970: 185, examples 1–4).

(10) PRIŠËL poezd. arrived train.NOM 'The train arrived.'

It can be seen that the nominal in (8), although preverbal, may be interpreted indefinitely as novel information if it receives prosodic prominence (a nuclear accent), while the constituent that lacks this prominence is interpreted as given information.¹⁰

As has been shown in this section, Russian bare nominals may acquire a definite interpretation through several lexical, grammatical, syntactic, and prosodic means or a combination thereof. None of these means is strong enough, though, to encode definiteness in all possible cases.

3 The meaning of definiteness in languages with and without articles

In the previous sections, we have seen that under certain conditions Russian bare nominals can be interpreted as definite, or, at least, perceived as equivalent to English nominals with a definite article. But how feasible is it to assume that what we perceive as a definite bare nominal in Russian is semantically equivalent to a definite nominal in English or other languages with articles? This is the question we address below.

In this section we are going to argue that what is understood by "definiteness" in languages with an article system might be rather different from what is found in Russian. In particular, we adopt a so-called uniqueness theory of definiteness as a point of departure and argue that, unlike in English or other languages with articles, there is no uniqueness/maximality presupposition in Russian bare nominals that are perceived as definites. This claim is in accordance with the classical view (Partee 1987) that uniqueness/maximality is something that is actually associated with or contributed by the definite article itself, and not by an iota operator, as proposed by Chierchia (1998), Dayal (2004), or Coppock & Beaver (2015).

In order to sustain our hypothesis about the lack of uniqueness/maximality in nominals perceived as definites in Russian, we are going to first review the uniqueness theory of definiteness and then provide empirical support for the claim that Russian bare nominals do not bear any uniqueness presupposition.

¹⁰See Jasinskaja (2016) for more details on deaccentuation of given information.

3.1 What is definiteness?

To begin with, let us look at English, where definiteness is expressed by means of articles. Definite NPs have various uses, the most typical of which are the following: situational definites (11), anaphoric definites (12), cases of bridging (Clark 1975) (13), and weak definites (14).¹¹

- (11) It's so hot in the room. Open the door!
- (12) I saw a man in the street. The man was tall and slim.
- (13) I'm reading an interesting book. The author is Russian.
- (14) Every morning I listen to the radio.

There have been many approaches to definiteness in linguistics starting from Frege (1892). A widely accepted view on definiteness in the formal semantic literature is based on the so-called theory of uniqueness. Singular definite descriptions show the property of uniqueness (Russell 1905), which is considered to be part of the presupposition associated with definite nominals (Frege 1879; Strawson 1950). For instance, if we compare an indefinite NP in (15a) with a definite one in (15b), it is clear that (15b) is about a contextually unique mouse, while (15a) may have more than one possible referent.

- (15) a. I've just heard a mouse squeak.
 - b. I've just heard the mouse squeak.

Uniqueness presupposes the existence of exactly one entity in the extension of the NP that satisfies the descriptive content of this NP in a given context, therefore, uniqueness entails existence.¹² Thus, Russell's (1905) famous example *The king of France is bald* can be interpreted as neither true nor false, as there is no such entity that would (in our world and relative to the present) satisfy the description of being the king of France, but the existence and the uniqueness of the king of France are still presupposed in this example.

The semantic definiteness in argument position is standardly associated with the semantic contribution of the definite article itself, formally represented by the ι (iota) operator. The iota operator shifts the denotation of a common noun from type $\langle e, t \rangle$ to type e, i.e., from a predicate type to an argument type (see Heim

¹¹In the case of weak definites, there is no requirement for the definite DP to have a single referent. Aguilar-Guevara & Zwarts (2011) treat weak definites as kind nominals.

¹²With the notable exception of Coppock & Beaver's (2015) proposal.

2011: 998), and thus, denotes a function from predicates to individuals (Frege 1879; Elbourne 2005; 2013; Heim 2011).¹³ The meaning of the definite article can be represented as in (16).

(16) $\llbracket \text{the} \rrbracket = \lambda P : \exists x. \forall y [P(y) \leftrightarrow x = y]. \iota x. P(x),$ where ιx abbreviates 'the unique x such that'.

Plural definite NPs naturally violate the presupposition of uniqueness. In this case uniqueness is reformulated as maximality (Sharvy 1980; Link 1983), i.e., reference to a maximal individual in the domain, which is picked out by the definite article.

The above-mentioned concepts related to definiteness (i.e., uniqueness, existence, maximality) have all been postulated in relation to languages with articles and therefore are associated with the presence of the definite article on the nominal. The relevant question that arises when one analyses languages without articles is whether the expressions perceived as definite in such languages would give rise to the same effects as the ones found in languages with articles.

From a theoretical perspective, there are two possible answers to this question. The first one is to attribute definiteness effects to the presence of the article itself. In this case, the uniqueness of definite descriptions will follow directly from the semantics of the definite article, as in classical uniqueness/type-shifting theories (e.g., Frege 1892; Partee 1987). We expect that languages without articles do not show the same type of definiteness effects as languages with overt articles, simply because the former do not have any lexical element that would make the same semantic contribution as a definite article.¹⁴

Another option is to follow Chierchia (1998) and Dayal (2004) and claim that articleless languages use the same inventory of type shifting operators with the only difference that these operators are not lexicalized. Should the iota operator be responsible for deriving a definite interpretation of nominal arguments in Russian, the predictions are clear: the uniqueness effects associated with definite descriptions in English should also exist in Russian. However, the empirical facts that we discuss in the next section seem to indicate that the perceived definiteness in Russian does not give rise to the same semantic effects as in English, which, in principle, argues against the Chierchia/Dayal type of analysis.

As a side note, we would like to emphasize that we do not associate the iota operator with any particular syntactic projection or any particular syntactic head.

¹³Predicative uses of definites also exist. They can either be derived from argumental ones (Partee 1987; Winter 2001) or taken as basic ones (Graff Fara 2001; Coppock & Beaver 2015).

¹⁴This approach is fully compatible with the indefiniteness hypothesis that we present in §4.

Thus, the question about a possible syntactic structure of referential bare nominals in Russian and, in particular, the presence or absence of the D-layer, is not straightforwardly connected to whether or not a language employs a certain semantic operator to derive its arguments. An iota operator, should it exist, does not entail any syntactic projection, because the function of this operator (namely, to derive expressions of type e) is semantically defined and whether or not all expressions of this type should have the same syntactic structure associated with them across languages or within a language is an independent question.

3.2 Uniqueness in English vs. Russian

Let us now compare two sets of matching empirical data from English and Russian and see whether the same semantic definiteness effects emerge in both languages in the case of nominals which are either marked (English) or perceived (Russian) as definite.

- (17) The director of our school appeared in a public show. #The other / #Another director (of our school)....
- (18) A director of our school appeared in a public show. Another director (of our school)...

Let us first look at (17). The subject of the first sentence is definite: it is marked by a definite article, semantically derived by the *i* operator and has a strong uniqueness presupposition that cannot be cancelled, as witnessed by the unacceptability of the suggested continuations. The only possible interpretation of the second sentence in (17) would be 'the other director of the other school', which would not violate the presupposition of uniqueness of the definite description 'the director of our school' in the first sentence. However, any continuation with 'our school' in the second part of (17) is impossible.

In (18), on the other hand, the first subject is indefinite and does not give rise to any uniqueness effects. In this case, as the example illustrates, it is possible to conceive the interpretation 'another director of the same school', even though it might sound pragmatically unusual. The two examples thus clearly illustrate the effects created by the uniqueness presupposition of a definite description.

Now let us have a look at similar data from Russian. To narrow down our empirical coverage, we only look at singular bare preverbal subjects in this paper, considering them strong candidates for definite nominals, due to their position and a default definite-like interpretation that they receive in native speakers' judgements.

- (19) a. Direktor našej školy pojavilsja v tok-šou. director.NOM our school.GEN appeared in talkshow 'The director of our school appeared in a talkshow.'
 - b. Drugoj direktor (našej školy) vystupil na radio. other director.NOM our school.GEN spoke on radio.LOC 'The other director (of our school) spoke on the radio.'

The Russian example (19a) taken in isolation seems to be equivalent to the first part of the English example in (17), in the sense that the nominal phrase '(the) director of our school' in both cases is interpreted as definite and, thus, the default interpretation is 'the unique director' in both languages. However, is this interpretation semantically encoded in both languages? Given the theory of uniqueness, if what appears to be a definite nominal in Russian is also associated with the uniqueness presupposition, just like a definite description in English, the effects of violating this presupposition should be comparable to those observed in the English example (17). Should we find the same type of uniqueness effects both in English and in Russian, we can conclude that the same semantic operator, namely, an iota operator, is responsible for deriving definiteness in both languages. In search of an answer, we turn to (19b).

Crucially, we observe a substantial difference in the interpretation of example (17) on the one hand, and example (19), on the other hand. In particular, the subject in (19b) can be interpreted as 'another director of the same school', as opposed to the English example in (17). This means that there seems to be no uniqueness presupposition associated with the subject 'director of our school' in (19a).¹⁵ Examples (20) and (21) show the same effect, i.e., there seems to be no uniqueness presupposition associated with bare nominals that are perceived as definite. In the examples below, the judgments are given for 'another doctor of the same patient' and 'another author of the same essay', respectively.

- (20) a. Vrač prišel tol'ko k večeru. Drugoj vrač prosto doctor.NOM came only to evening other doctor.NOM simply pozvonil. called
 'Doctor came only towards the evening. Other doctor simply called.'
 - b. The doctor came only towards the evening. #The other doctor simply called.

¹⁵In this paper we rely on our own judgements. A reviewer points out that the data we discuss should be tested experimentally and we completely agree with this remark. In fact, this is the next step on our research agenda.

- (21) a. Avtor ėtogo očerka polučil Pulitcerovskuju premiju. author.NOM this essay.GEN received Pulitzer prize.ACC Drugoj avtor daže ne byl upomjanut. other author.NOM even not was mentioned 'Author of this essay got a Pulitzer prize. Other author was not even mentioned.'
 - b. The author of this essay got a Pulitzer prize. #The other author was not even mentioned.

Taking into consideration the English and Russian data discussed in this section, we can conclude that the mechanism that yields a definite interpretation for bare nominals in Russian is crucially different from the mechanism that derives definiteness in English. If both definite descriptions in English and bare singulars in Russian perceived as definites were derived by the same semantic operation, we would expect the same semantic effects associated with definite expressions in both languages. The data, however, show that uniqueness effects are, indeed, very prominent with definite nominals in English, but seem to be absent in Russian.¹⁶ This means that what we call a "definite interpretation" in Russian is of a different nature. Unlike in (17), there is no violation of the presupposition of uniqueness in the Russian examples discussed in this section. Rather, the effect found in (19)–(21) is comparable to cancelling an implicature.

A real presupposition violation can be illustrated by the following examples with factive predicates (*know, be glad*, etc.). The continuations in (22) and (23) are clearly unacceptable, whereas in the examples (19)-(21) above only some pragmatic adjustment is required.

(22) Tolja znaet, čto Anja zavalila ėkzamen. #Ona polučila Tolja.NOM knows that Anja.NOM failed exam.Acc she got otlično.
excellent.
'Tolja knows that Anja failed her exam. She got an 'excellent'.'

¹⁶An anonymous reviewer suggests that if presupposition is considered a pragmatic phenomenon, it should be possible to (easily) cancel it. This, according to the reviewer, would mean that *director* in (19a) does have a presupposition of uniqueness, unless (19b) is added. We still think that our argument stands: whether presupposition is a semantic or a pragmatic phenomenon, it should behave in a uniform way, independently of the language. The fact that it cannot be cancelled in English but can in Russian means (to us) that, if we are dealing with uniqueness presupposition in the case of English, Russian should be treated differently.

(23) Tolja ne znaet, čto Anja zavalila ėkzamen. #Ona polučila Tolja.NOM not knows that Anja.NOM failed exam.ACC she got otlično.
excellent.
'Tolja doesn't know that Anja failed her exam. She got an 'excellent'.'

The absence of uniqueness/maximality in Russian bare nominals has also received empirical evidence in a recent experimental study by Šimík & Demian (2020), who have found that there is no uniqueness/maximality for bare nominals in sentence-initial position, which is generally associated with topicality (Geist 2010 i.a.). Bare singulars behave rather as indefinites, which is in line with Heim's (2011) hypothesis about the default interpretation of bare nominals in articleless languages, the proposal we discuss right below. Bare plurals show some maximality effects, which, however, are rather weak and are probably related to pragmatic exhaustivity, construed as a conversational implicature.

4 "Definiteness effects" in languages with and without articles

4.1 An indefiniteness hypothesis: Heim (2011)

In this section we briefly present an indefiniteness hypothesis based on Heim (2011) and discuss its repercussions for languages without articles. We suggest that this hypothesis can straightforwardly account for the data discussed in the previous section and that it makes the right predictions for the interpretative possibilities of bare nominals in languages without articles. We will keep the discussion at a rather informal level for the purposes of this paper, acknowledging the need to develop a formal analysis in the future.

Let us first have a look at the English data. A crucial observation for the indefiniteness hypothesis is that a sentence with a definite argument in English would always entail a corresponding sentence with an indefinite argument: whenever (24a) is true, (24b) is also true, but not the other way around.

- (24) a. The director joined our discussion.
 - b. A director joined our discussion.

According to Heim (2011), the articles *the* and *a* could be construed as alternatives on a Horn scale (see also Hawkins 1978), which generates a conversational implicature: the > a. Thus, if the speaker uses (24b), the hearer concludes that

this is the strongest statement to which the speaker can commit under given circumstances (following Grice's maxim of quantity). The hearer, in her turn, infers that the stronger statement is false, or its presuppositions are not satisfied. Heim (2011) postulates that the choice of the logically weaker indefinite will trigger an inference that the conditions for the definiteness (existence and uniqueness) are not met.

The crucial difference between a definite and an indefinite description in English is that the definite nominal is construed with the narrowest possible domain restriction, which accounts for the uniqueness effects. However, in languages without articles, by hypothesis, a bare nominal is compatible with the whole range of domain restrictions simply because there is no element that would signal that the speaker is committed to the strongest possible statement, as in the case with the definite article in English. It follows, then, that no implicature about a 'stronger statement' is triggered and a definite reading is not ruled out for an 'indefinite' bare nominal in a language like Russian. Since there is no competing expression for the narrower domain restriction, semantically indefinite nominal phrases are compatible with a (contextually triggered) definite interpretation. Nothing prevents them from being used in situations where a definite description is used in a language with articles, e.g. in English, as they lack both uniqueness and non-uniqueness implicatures. This would mean that the domain restriction attributed to each particular bare nominal is pragmatically derived and is, in principle, a matter of (a strong) preference.

Thus, according to Heim (2011: 1006), bare nominals in languages without articles are "simply indefinites", i.e., they get a default indefinite (existential) interpretation. There is plenty of empirical evidence that Russian bare nominals can have an indefinite interpretation. For instance, they can be used in distributive contexts (25) and in existential sentences (26). Moreover, two identical (except for case) bare singular nominals can be used in the same sentence (27).

- (25) V každom dome igral rebënok. in every house played child.NOM 'A child played in every house.'
- (26) V komnate ležal kovër.in room lied carpet.NOM'There was a carpet in the room.'
- (27) Durak duraka vidit izdaleka. fool.NOM fool.ACC sees from.afar 'A fool sees a fool from afar.'

Following Heim (2011), we propose that for any bare nominal phrase in Russian, an indefinite interpretation is the only one derived semantically. Although a formal semantic analysis for Russian bare nominals remains to be developed, we can make a first step by assuming that there are two semantic mechanisms involved in the semantic derivation of indefinites in Russian, just like in other languages (Reinhart 1997): existential quantification and choice functions; see (28).

(28) a. $\exists x.P(x) \land Q(x)$ b. $f_{CH}\{x : P(x)\}$

Quantificational indefinites are considered to be non-referential, whereas a choice function analysis could account for those cases where an indefinite refers to a (specific) individual. A full formal analysis of bare nominals in Russian will need to determine how precisely the labor is divided between the two mechanisms (or, perhaps, just one mechanism suffices, as proposed by Winter 1997), whereas we can conclude this section by stating that under the indefiniteness hypothesis presented here, the perceived definiteness of Russian bare nominals must be of a pragmatic nature. In the next section, we will describe some of the pragmatic factors responsible for definiteness effects in Russian.

4.2 Deriving definiteness in Russian

Definiteness under the hypothesis presented above is achieved by pragmatic strengthening, and is not derived by a covert iota type-shift. The definite interpretation of bare nominals will only be felicitous in contexts where there is exactly one individual that satisfies the common noun predicate. Such contexts, which facilitate pragmatic definiteness, may be of different types. The ones that are discussed below include ontological uniqueness, topicality, and anaphoricity.

We use ONTOLOGICAL UNIQUENESS to refer to those cases when uniqueness is conveyed not so much by the definite article, but by the descriptive content of a nominal phrase itself, e.g., *the earth, the sun, the moon*, etc., in English. For instance, when we want to use an expression with the noun *sun*, a usual case is that we want to refer to the sun of our solar system, which is a unique object. We could also use *sun* with an indefinite article, but then we would overrule the assumption that we are talking about the sun of our solar system. This is the case of ontological uniqueness, i.e., the case when a definite article does not necessarily impose but rather reflects the uniqueness of the object in the actual world.

In Russian, those unique objects are usually referred to by bare singular nominals, as illustrated in (29): (29) Solnce svetit. sun.NOM shines 'The sun is shining.'

The interpretation of *solnce* (sun.NOM) in (29) seems to certainly be definite, although it can be argued that definiteness effects in this case are simply due to the fact that the reference is made to a unique object in the real world (i.e., there are no other objects like this). Thus, in the absence of any evidence to the contrary, the subject of (29) is understood as 'the sun of our solar system', which is a unique object. If so, there is no uniqueness presupposition associated with the nominal *sun* in (29). Rather, it is simply the fact that there is only one such object so the noun *sun* by default denotes a singleton set. If we apply a choice function analysis to this type of case, the function will simply yield this unique object.¹⁷

The next source of definiteness is TOPICALITY, which strongly favors a definite interpretation cross-linguistically (Reinhart 1981; Erteschik-Shir 2007; i.a.). Although there is a strong preference for a definite reading of a nominal in topic position, specific indefinites are not excluded from being topics either (Reinhart 1981). Specific indefinites are discourse new, but they are anchored to other discourse referents (von Heusinger 2002), or D-linked (Pesetsky 1987; Dyakonova 2009), and thus can appear in topic position.

Topicality in Russian is associated with clause-initial position (Geist 2010; Jasinskaja 2016, i.a.). The majority of the examples discussed above involve bare nominals that are actually topics, as in (30), repeated from (21):

(30) Avtor ėtogo očerka polučil Pulitcerovskuju premiju. author.NOM this essay.GEN received Pulitzer prize.ACC 'The author of this essay got a Pulitzer prize.'

As was argued in §3, preverbal nominals in Russian, like the one illustrated in (30), do not give rise to uniqueness presuppositions, however, the existence of their referents is certainly presupposed. This existence presupposition is not necessarily a counterargument to the absence of semantic definiteness in bare nominals in languages without articles. In particular, those elements that appear in topic position can only be referential (see, for instance, Reinhart 1981; Erteschik-Shir 1998; Endriss 2009). An intuitive idea behind this generalization is that if there is no entity that the nominal topic refers to, this expression cannot be an aboutness topic because then there is no entity to be talked about.

¹⁷Ontological uniqueness accounts for counterexamples that Dayal (2017) gives for Heim's (2011) theory.

Another important source of definiteness is FAMILIARITY/ANAPHORIC REFER-ENCE, when an antecedent is provided by the previous context or, more generally, is retrievable from shared encyclopedic knowledge of the participants of communication. This kind of definiteness is completely discourse- and situationdependent. One example to illustrate the phenomenon is given in (31):

(31) Včera v zooparke ja videla sem'ju tigrov. Životnye spokojno yesterday in zoo I saw family.ACC tigers.GEN animals calmly spali v uglu kletki posle obeda.
slept in corner cage.GEN after lunch
'Yesterday at the zoo I saw a family of tigers. The animals were calmly sleeping in the corner of the cage after lunch.'

Once again, this type of examples do not pose any threat to the indefiniteness theory of bare nominals proposed in the previous section. First of all, anaphoric definites are usually not explained by appealing to the uniqueness theory of definites that we are testing here, but by a familiarity hypothesis developed in Kamp (1981) and Heim (1982). According to this hypothesis, definite descriptions introduce a referent that is anaphorically linked to another previously introduced referent. Anaphoric definites need not have any uniqueness presupposition, their referent is simply established and identified by a link to a previous antecedent.¹⁸

To sum up, in this section we have considered three factors that facilitate a definite interpretation of bare singular nominals in Russian: ontological uniqueness, topicality, and anaphoricity. We have shown that none of these cases need to rely on a presupposition of uniqueness to explain the definiteness effects that arise in any of the contexts discussed here.

5 Conclusions

In this paper we have focused on the questions related to (in)definiteness in languages that do not have an overt straightforward strategy to encode/decode reference. Apparently, the contrast between the definite and indefinite interpretation is still perceptible to speakers of such languages. Taking Russian as an example of a language without articles, we have looked at various lexical, grammatical, syntactic, and prosodic means that are used in this language to express (in)definiteness, showing, however, that none of them is strong enough to be

¹⁸There have been attempts in the literature to unify a uniqueness approach with the familiarity approach to definites, e.g. Farkas (2002).

considered equivalent to a definite article in languages which have it. Based on the empirical evidence from Russian, we hypothesized that what is perceived as definiteness in languages with and without articles may be semantically different. Russian bare nominals with a perceived definite reading, unlike their English counterparts, seem to lack the presupposition of uniqueness, which should thus be linked to the semantics of the definite article. Following this line of reasoning, we claim that the perceived definiteness of Russian bare nominals in certain contexts is due to a pragmatic strengthening of an indefinite, a semantically default interpretation of a bare nominal. Thus, we conclude that there is no semantic definiteness in Russian if we assume the uniqueness theory of definiteness. Instead, we suggest that bare nominals in Russian are semantically indefinite and definiteness effects are achieved by pragmatic strengthening. The pragmatic definiteness effects emerge in the case of 'ontologically unique' referents, nominals in topic position or familiar/anaphoric nominals, whose interpretation is strongly dependent on the discursive or situational context.

Abbreviations

ACC	accusative	LOC	locative
DEF	definite article	NOM	nominative
GEN	genitive	PFV	perfective
IPFV	imperfective		

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References

- Aguilar-Guevara, Ana & Joost Zwarts. 2011. Weak definites and reference to kinds. In Nan Li & David Lutz (eds.), *SALT 20: Proceedings of the 20th Semantics and Linguistic Theory Conference*, 179–196. Ithaca, NY: CLC Publications. DOI:10.3765/salt.v20i0.2583
- Baker, Mark C. 2015. *Case: Its principles and its parameters*. Cambridge: Cambridge University Press. DOI:10.1017/CBO9781107295186
- Borik, Olga. 2006. Aspect and reference time. Oxford: Oxford University Press. DOI:10.1093/acprof:oso/9780199291298.001.0001

- Borik, Olga, Joan Borràs-Comes & Daria Seres. 2020. Preverbal (in)definites in Russian: An experimental study. In Kata Balogh, Anja Latrouite & Robert D. Van Valin, Jr. (eds.), *Nominal anchoring: Specificity, definiteness, and article systems* (Topics at the Grammar-Discourse Interface), 51–80. Berlin: Language Science Press. DOI:10.5281/zenodo.4049681
- Brun, Dina. 2001. Information structure and the status of NP in Russian. *Theoretical Linguistics* 27(2–3). 109–135. DOI:10.1515/thli.2001.27.2-3.109
- Cheng, Lisa Lai-Shen & Rint Sybesma. 2014. The syntactic structure of noun phrases. In C.-T. James Huang, Y.-H. Audrey Li & Andrew Simpson (eds.), *The handbook of Chinese linguistics*, 248–274. Chichester: Wiley. DOI:10.1002/9781118584552.ch10
- Chierchia, Gennaro. 1998. Reference to kinds across languages. *Natural Language Semantics* 6(4). 339–405. DOI:10.1023/a:1008324218506
- Chvany, Catherine V. 1973. On the role of presuppositions in Russian existential sentences. In Claudia Corum & T. Cedric Smith-Stark (eds.), *Papers from the 9th regional meeting of the Chicago Linguistic Society*, 68–77. Chicago, IL: Chicago Linguistic Circle.
- Clark, Herbert H. 1975. Bridging. In Proceedings of the 1975 Workshop on Theoretical Issues in Natural Language Processing (TINLAP '75), 169–174. Cambridge, MA: Association for Computational Linguistics. DOI:10.3115/980190.980237
- Comrie, Bernard. 1981. Language universals and linguistic typology: Syntax and morphology. Chicago, IL: University of Chicago Press. https://b-ok.cc/book/ 1162136/e8b0fe.
- Coppock, Elizabeth & David Beaver. 2015. Definiteness and determinacy. *Linguistics and Philosophy* 38(5). 377–435. DOI:10.1007/s10988-015-9178-8
- Czardybon, Adrian. 2017. *Definiteness in a language without articles a study on Polish*. Düsseldorf: Düsseldorf University dissertation. http://dup.oa.hhu.de/ 579/.
- Czardybon, Adrian, Oliver Hellwig & Wiebke Petersen. 2014. Statistical analysis of the interaction between word order and definiteness in Polish. In Adam Przepiórkowski & Maciej Ogrodniczuk (eds.), *Advances in natural language processing: NLP 2014* (Lecture Notes in Computer Science 8686), 144–150. Cham: Springer. DOI:10.1007/978-3-319-10888-9_15
- Daval. Veneeta. 2004. Number marking and (in)definiteness Philosophy in kind terms. Linguistics and 27(4). 393 - 450.DOI:10.1023/b:ling.0000024420.80324.67
- Dayal, Veneeta. 2017. (In)definiteness through genericity. Presentation at The Generic Notebook Workshop, Humboldt-Universität zu Berlin, June 2, 2017.

- Dimitrova-Vulchanova, Mila. 2012. Voice. In Robert I. Binnick (ed.), *The Oxford handbook of tense and aspect*, 937–959. Oxford: Oxford University Press. DOI:10.1093/oxfordhb/9780195381979.013.0033
- Dowty, David. 1991. Thematic proto-roles and argument selection. *Language* 67(3). 547–619. DOI:10.2307/415037
- Dryer, Matthew S. 2013. Definite articles. In Matthew S. Dryer & Martin Haspelmath (eds.), *The world atlas of language structures online*. Leipzig: Max Planck Institute for Evolutionary Anthropology. https://wals.info/chapter/37.
- Dyakonova, Marina. 2009. A phase-based approach to Russian free word order (LOT Dissertation series 230). Utrecht: LOT. https://www.lotpublications.nl/Documents/230_fulltext.pdf.
- Elbourne, Paul. 2005. *Situations and individuals* (Current Studies in Linguistics). Cambridge, MA: MIT Press. https://mitpress.mit.edu/books/situations-andindividuals.
- Elbourne. Paul. Definite descriptions (Oxford Studies Se-2013. in mantics and Pragmatics). Oxford: Oxford University Press. DOI:10.1093/acprof:oso/9780199660193.001.0001
- Endriss, Cornelia. 2009. *Quantificational topics: A scopal treatment of exceptional wide scope phenomena* (Studies in Linguistics and Philosophy 86). Dordrecht: Springer. DOI:10.1007/978-90-481-2303-2
- Erteschik-Shir, Nomi. 1998. *The dynamics of focus structure* (Cambridge Studies in Linguistics 84). Cambridge: Cambridge University Press. DOI:10.1017/cbo9780511519949
- Erteschik-Shir, Nomi. 2007. Information structure: The syntax-discourse interface (Oxford Surveys in Syntax & Morphology). Oxford: Oxford University Press. https://b-ok.cc/book/949201/752c5d.
- Farkas, Donka. 2002. Specificity distinctions. *Journal of Semantics* 19(3). 213–243. DOI:https://doi.org/10.1093/jos/19.3.213
- Filip, Hana. 1993. Aspect, situation types and nominal reference. Berkeley, CA: University of California dissertation. https://escholarship.org/content/qt6dm5t1tr/ qt6dm5t1tr.pdf.
- Filip, Hana. 2005. On accumulating and having it all: Perfectivity, prefixes and bare arguments. In Henk J. Verkuyl, Henriëtte de Swart & Angeliek van Hout (eds.), *Perspectives on aspect* (Studies in Theoretical Psycholinguistics 32), 125–148. Dordrecht: Springer. DOI:10.1007/1-4020-3232-3_7
- Frege, Gottlob. 1879. *Begriffsschrift, eine der arithmetischen nachgebildete Formelsprache des reinen Denkens.* Halle (Saale): Verlag von Louis Nebert. http://resolver.sub.uni-goettingen.de/purl?PPN538957069.

- Frege, Gottlob. 1892. Über Sinn und Bedeutung. Zeitschrift für Philosophie und philosophische Kritik 100. 25–50. http://www.deutschestextarchiv.de/book/view/frege_sinn_1892?p=11.
- Fursenko, Diana I. 1970. Porjadok slov kak odno iz sredstv vyraženija neopredelënnosti / opredelënnosti imën suščestviteľnyx. Russkij jazyk za rubežom 4. 68–72.
- Galkina-Fedoruk, Evdokia M. 1963. Vyraženie neopredelënnosti v russkom jazyke neopredelënnymi mestoimenijami i narečijami. Moskva: Moskovskij gosudarstvennyj universitet.
- Geist, Ljudmila. 2010. Bare singular NPs in argument positions: Restrictions on indefiniteness. *International Review of Pragmatics* 2(2). 191–227. DOI:10.1163/187731010x528340
- Graff Fara, Delia. 2001. Descriptions as predicates. *Philosophical Studies* 102(1). 1–42. DOI:10.1023/a:1010379409594
- Hajičová, Eva. 1974. Meaning, presupposition, and allegation. *Philologica Pragensia* 17. 18–25.
- Hawkins, John A. 1978. *Definiteness and indefiniteness: A study in reference and grammaticality prediction* (Routledge Library Edition: The English Language). London: Routledge. https://b-ok.cc/book/2580162/53582b.
- Heim, Irene. 1982. The semantics of definite and indefinite noun phrases. Amherst, MA: University of Massachusetts dissertation. https://scholarworks.umass. edu/dissertations/AAI8229562.
- Heim, Irene. 2011. Definiteness and indefiniteness. In Klaus von Heusinger, Claudia Maienborn & Paul Portner (eds.), *Semantics: An international handbook* of natural language meaning, vol. 2 (Handbooks of Linguistics and Communication Science 33/2), 996–1025. Berlin, New York: De Gruyter Mouton. DOI:10.1515/9783110255072.996
- Isačenko, Aleksandr V. 1976. O grammatičeskom porjadke slov. In Opera selecta: Russische Gegenwartssprache, russische Sprachgeschichte, Probleme der slavischen Sprachwissenschaft (Forum Slavicum 45), 365–372. München: Fink.
- Jasinskaja, Katja. 2016. Information structure in Slavic. In Caroline Féry & Shinichiro Ishihara (eds.), *The Oxford handbook of information structure*. Oxford: Oxford University Press. DOI:10.1093/oxfordhb/9780199642670.013.25
- Kamp, Hans. 1981. A theory of truth and semantic representation. In Jeroen A. G. Groenendijk, Theo M. V. Janssen & Martin B. J. Stokhof (eds.), *Formal methods in the study of language*, vol. 1, 277–322. Amsterdam: Mathematisch Centrum.
- Klein, Wolfgang. 1995. A time-relational analysis of Russian aspect. *Language* 71(4). 669–695. DOI:10.2307/415740

- Krámský, Jiří. 1972. The article and the concept of definiteness in language (Janua Linguarum. Series Minor 125). The Hague: Mouton. DOI:10.1515/9783110886900
- Krifka, Manfred. 1989. Nominal reference, temporal constitution and quantification in event semantics. In Renate Bartsch, Johan van Benthem & Peter van Emde Boas (eds.), *Semantics and contextual expression*, 75–116. Dordrecht: Foris. DOI:10.1515/9783110877335-005
- Krifka, Manfred. 1992. Thematic relations as links between nominal reference and temporal constitution. In Ivan A. Sag & Anna Szabolcsi (eds.), *Lexical matters* (CSLI lecture notes 24), 29–53. Stanford, CA: CSLI Publications.
- Leiss, Elisabeth. 2007. Covert patterns of definiteness/indefiniteness and aspectuality in Old Icelandic, Gothic, and Old High German. In Elisabeth Stark, Elisabeth Leiss & Werner Abraham (eds.), *Nominal determination* (Studies in Language Companion Series 89), 73–102. Amsterdam, Philadelphia: John Benjamins. DOI:10.1075/slcs.89.06lei
- Leonetti, Manuel. 2010. Specificity and topicality: Some thoughts on their complex interaction. Talk given at the workshop Specificity from Empirical and Theoretical Points of View. Stuttgart University, August 31–September 2, 2010. http://gerlin.phil-fak.uni-koeln.de/kvh/konf/2010_specificity2010/program.html.
- Link, Godehard. 1983. The logical analysis of plurals and mass terms: A latticetheoretical approach. In Rainer Bäuerle, Christoph Schwarze & Arnim von Stechow (eds.), *Meaning, use and interpretation of language*, 127–146. Berlin, Boston: De Gruyter. DOI:10.1515/9783110852820.302
- Lyons, Christopher. 1999. *Definiteness* (Cambridge Textbooks in Linguistics). Cambridge: Cambridge University Press. DOI:10.1017/cbo9780511605789
- Mathesius, Vilém. 1964. On some problems of the systematic analysis of grammar. In Josef Vachek (ed.), *A Prague School reader in linguistics* (Indiana University studies in the history and theory of linguistics), 306–319. Bloomington, IN: Indiana University Press.
- Padučeva, Elena V. 1985. Vyskazyvanie i ego sootnesënnost' s dejstvitel'nost'ju (referencial'nye aspekty semantiki mestoimenij). Moskva: Nauka.
- Partee, Barbara H. 1987. Noun phrase interpretation and type-shifting principles. In Jeroen A. G. Groenendijk, Dick de Jongh & Martin J. B. Stokhof (eds.), *Studies in Discourse Representation Theory and the Theory of Generalized Quantifiers*, 115–143. Dordrecht: Foris. DOI:https://doi.org/10.1002/9780470758335.ch15
- Pesetsky, David. 1987. Wh-in-situ: Movement and unselective binding. In Eric Reuland & Alice G. B. ter Meulen (eds.), *The representation of (in)definiteness*

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(Current Studies in Linguistics 14), 98–129. Cambridge, MA: MIT Press. https://mitpress.mit.edu/books/representation-indefiniteness.

- Portner, Paul & Katsuhiko Yabushita. 2001. Specific indefinites and the information structure theory of topics. *Journal of Semantics* 18(3). 271–297. DOI:10.1093/jos/18.3.271
- Pospelov, Nikolaj. 1970. O sintaksičeskom vyraženii kategorii opredelënnosti neopredelënnosti v sovremennom russkom jazyke. In Timofej Lomtev & Aleksandra Kamynina (eds.), *Issledovanija po sovremennomu russkomu jazyku*, 182– 189. Moskva: Izdatel'stvo Moskovskogo universiteta.
- Reinhart, Tanya. 1981. Pragmatics and linguistics: An analysis of sentence topics. *Philosophica* 27(1). 53–94. https://www.philosophica.ugent.be/wp-content/uploads/fulltexts/27-4.pdf.
- Reinhart, Tanya. 1997. Quantifier scope: How labor is divided between QR and choice functions. *Linguistics and Philosophy* 20. 335–397. DOI:10.1023/A:1005349801431
- Russell, Bertrand. 1905. On denoting. *Mind* 14(4). 479–493. DOI:10.1093/mind/XIV.4.479
- Schoorlemmer, Maaike. 1995. *Participial passive and aspect in Russian*. Utrecht: Utrecht University dissertation.
- Seres, Daria, Joan Borràs-Comes & Olga Borik. 2019. Interplay between position and interpretation: An experimental study of Russian bare plurals. *Revue roumaine de linguistique* 64(2). 163–177. https://www.lingv.ro/images/RRL% 202%202019%20%2005-Seres.pdf.
- Sgall, Petr. 1972. Topic, focus, and the ordering of elements of semantic representations. *Philologica Pragensia* 15. 1–14.
- Sharvy, Richard. 1980. A more general theory of definite descriptions. *The Philosophical Review* 89(4). 607–624. DOI:10.2307/2184738
- Šimík, Radek. 2014. *Definiteness and articleless languages*. Handout, Letní škola lingvistiky, Dačice.
- Šimík, Radek & Markéta Burianová. 2020. Definiteness of bare NPs as a function of clausal position: A corpus study of Czech. In Tania Ionin & Jonathan MacDonald (eds.), Formal Approaches to Slavic Linguistics 26: The Urbana-Champaign meeting 2017, 343–361. Ann Arbor, MI: Michigan Slavic Publications.
- Šimík, Radek & Christoph Demian. 2020. Definiteness, uniqueness, and maximality in languages with and without articles. *Journal of Semantics* 37(3). 311–366. DOI:10.1093/jos/ffaa002

- Strawson, Peter Frederick. 1950. On referring. *Mind* 59(235). 320–344. http://www.jstor.org/stable/2251176.
- Verkuyl, Henk J. 1999. *Aspectual issues: Studies on time and quantity* (CSLI lecture notes 98). Stanford, CA: CSLI Publications.
- von Heusinger, Klaus. 2002. Specificity and definiteness in sentence and discourse structure. *Journal of Semantics* 19(3). 245–274. DOI:10.1093/jos/19.3.245
- Wierzbicka, Anna. 1967. On the semantics of verbal aspect in Polish. In *To honor Roman Jakobson: Essays on the occasion of his 70. birthday, 11. october 1966*, vol. 3 (Janua Linguarum. Series Maior 33), 2231–2249. The Hague: De Gruyter Mouton. Reprint 2018. DOI:10.1515/9783111349138-037
- Winter. Yoad. 1997. Choice functions and the scopal semanindefinites. tics of Linguistics and Philosophy 20. 399 - 467. DOI:https://doi.org/10.1023/A:1005354323136
- Winter, Yoad. 2001. Flexibility principles in Boolean semantics: The interpretation of coordination, plurality and scope in natural language (Current Studies in Linguistics 37). Cambridge, MA: MIT Press.
- Yokoyama, Olga T. 1986. Discourse and word order (Pragmatics and beyond. Companion series 6). Amsterdam, Philadelphia: John Benjamins. DOI:10.1075/pbcs.6
- Zlatić, Larisa. 2014. Definiteness and structure of NPs in Slavic. In Lilia Schürcks, Anastasia Giannakidou & Urtzi Etxeberria (eds.), *The nominal structure in Slavic and beyond* (Studies in Generative Grammar 116), 17–38. Berlin, Boston: De Gruyter Mouton. DOI:10.1515/9781614512790.17