# GENITIVE OBJECTS AND SYNTACTIC CATEGORIES

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Abstract. This paper investigates the functional structure of genitive objects in Russian. While all types of genitive objects have been claimed in the literature to denote properties, the paper argues that they differ in terms of their syntactic "size". Thus, nominals that appear in Genitive of Negation and Intensional Genitive (unified under the term Irrealis Genitive) can be full DPs. In contrast, objects that appear in Partitive Genitive are bare NPs that lack the DP, QP/NumP and even the Div(ider)P(hrase) projections. Finally, genitive case is assigned especially productively to objects of verbs that contain certain prefixes, such as the accumulative *na*-. This case, referred to in the paper as Prefixational Genitive, is similar to Partitive Genitive in that it cannot be assigned to DPs and QPs/NumPs; however, unlike Partitive Genitive, it can be assigned to DivPs. Thus, Russian genitive objects can be bare NPs, DivPs and full DPs.

**Keywords:** Genitive Objects, Small Nominals, Mass/Count Distinction, Russian.

### 1. INTRODUCTION

Genitive constitutes the Russian counterpart of partitive case observed in such languages as, e.g., Finnish and Estonian. Thus, in addition to such classical genitive functions as adnominal case that indicates relations like possession (1a), we get non-canonical genitive marking on objects, illustrated in (1b-c). In (1b), the genitive marking contributes quantificational interpretation "some (amount of) water". In (1c), under the genitive version, the phrase *sledov* 'traces' is interpreted as indefinite and non-specific; moreover, it is possible that the relevant documents do not even exist.

- (1) a. kurtka učitelja jacket teacher.GEN.SG 'a/the teacher's jacket'
  - Vitja vypil vodu / vody.
     Vitja drank.PERF water.ACC / water.GEN
     'Vitja drank the water / some water.'
  - c. Ivan ne obnaružil sledy / sledov.
    Ivan NEG discovered.IMP trace.ACC.PL / trace.GEN.PL
    'Ivan didn't find (the) traces / any traces.'

DOI: 10.59277/RRL.2024.3-4.14

RRL, LXIX, 3-4, p. 247-266, București, 2024

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Non-canonical genitive is assigned to the internal argument of a verb (more rarely, to an adjunct) and alternates with the more expected structural accusative and, in certain instances, nominative. Several instances of non-canonical genitive have been reported for Russian: Partitive Genitive (illustrated in 1b; genitive marking is accompanied by a quantificational interpretation), Genitive of Negation (illustrated in 1c; licensed under sentential negation), Intensional Genitive (licensed by certain intensional verbs). Finally, Kagan (2015) coins the term Prefixational Genitive for those instances of Partitive Genitive that are licensed especially productively in the presence of certain verbal prefixes, such as the accumulative na-. Each of these cases will be discussed in more detail in Section 2.

Crucially, all types of non-canonical genitive are associated with low referentiality and low individuation of the marked nominal. These cases have been linked in the literature to such characteristics as indefiniteness, non-specificity, narrow scope, mass-hood, and non-commitment to the existence of the referent (cf. Jakobson 1957/1971, Babby 1978, Pesetsky 1982, Timberlake 1986, Neidle 1988, Bailyn 1997, Pereltsvaig 1999, Borschev and Partee 2001, Harves 2002, Babyonyshev 2003, Kagan 2013, among many others). Further, genitive objects of all types have been argued to denote properties, thus instantiating the semantic type <e,t> or, from an intensional perspective, <s,<e,t>>. Partee and Borschev (2004) and Kagan (2005), (2013) make this proposal for nominals appearing in Genitive of Negation and Intensional Genitive. In turn, Khrizman (2011) puts forward the property type analysis for Partitive Genitive (which covers the instances of what Kagan 2015 refers to as Prefixational Genitive). Thus, all instances of non-canonical genitive case are unified by the property type, which, in turn, accounts for the low referentiality level of the corresponding nominals.

This raises a question regarding the syntactic structure of genitive objects. We know that there are certain correlations between semantic type and functional structure. For instance, bare NPs are generally taken to denote properties or kinds, whereas the DP level is linked to referentiality. A natural question to ask is whether all genitive objects are bare NPs, given their semantic property-type nature. The present paper is dedicated to the investigation of this aspect of genitive objects.

In what follows I argue that genitive objects cannot be unified on the basis of their functional "size". While Partitive Genitive is indeed assigned only to bare NPs, Genitive of Negation and Intensional Genitive may mark full DPs. Finally, Prefixational Genitive has an intermediate status: it is compatible with nominals that are slightly bigger than bare NPs, specifically, with Divider Phrases (Borer 2005). The latter fact further supports the desirability of distinguishing between Partitive Genitive and Prefixational Genitive: while the two cases have much in common, they are assigned to expressions of different sizes. I will further address the intricate relation between Partitive Genitive assignment and the mass-count distinction. The new data point to the bare NP nature of the corresponding nominals and provides support for Grimm's (2012) view of individuation as a scale.

The paper is organized as follows. Section 2 introduces the different types of genitive objects and presents their classification that will be assumed in what follows. Section 3 presents the nominal structure that will be adopted in the present paper. Sections 4–6 address the syntactic structure of the three types of genitive objects determined in Section 2: Irrealis Genitive (a unification of Genitive of Negation and Intensional Genitive), Partitive Genitive, and Prefixational Genitive, respectively. Section 5, which is dedicated to Partitive Genitive, also establishes the sensitivity of this case to the individuation scale. Section 7 concludes the discussion.

### 2. TYPES OF GENITIVE OBJECTS

### 2.1. Genitive of Negation and Intensional Genitive

Genitive of Negation, illustrated in (1c) above and (2) below, is a phenomenon whereby the internal argument of a verb appears in genitive case within the scope of sentential negation. This results in a genitive/accusative alternation on direct objects of transitive verbs and in a genitive/nominative alternation on arguments of certain intransitive and passive verbs. Superficially, genitive marking is in most instances optional (in the sense that we can also get an accusative or nominative alternative). However, its assignment has been linked in the literature to specific syntactic structures and semantic conditions (e.g., Pesetsky 1982, Bailyn 1997, 2004, Pereltsvaig 1999, Brown 1999, Harves 2002, Babyonyshev 2003, Borschev et al. 2008, etc.) This case is prototypically assigned to NPs that appear within the scope of the negative operator. They tend to be interpreted as indefinite, non-specific and non-referential (although we will see a number of exceptions in Section 4). Thus, in (2) below, the genitive variant is best translated as "any documents"; if, in contrast the speaker has specific documents in mind, or if the documents in question have already been referred to in the discourse, accusative case is preferable.

(2) Pëtr ne našol dokumenty / dokumentov.
Peter NEG found.PERF document.ACC.PL / GEN.PL
'Peter didn't find the documents / any documents.'

In turn, Intensional Genitive case is assigned to objects of certain intensional verbs, including *xotet*' 'want', *zasluživat*' 'deserve', *trebovat*' 'demand', *prosit*' 'ask', *ždat*' 'wait', etc. These verbs belong to the class of so-called *weak intensional predicates* (see Farkas 1985, 2003 and Heim 1992 for the relevant classification of intensional predicates). The same verbs are special in that they license subjunctive mood in their complement clauses or, if they take a DP object, in the relative clause that modifies it. Turning to case-marking, here, too, we observe a genitive / accusative alternation; however, the data are more complex than (superficial) optionality. For some verb-object combinations, the object is obligatorily accusative, for others, it is obligatorily genitive, and yet for others, both case-marking options are available. (3a) and (3b) below illustrate obligatory and optional assignment of Intensional Genitive, respectively:

- (3) a. Rebënok xočet vnimanija. child want.IMP attention.GEN
  - 'The child wants attention.'
  - b. Ty zasluživaeš medali / medal'.

You deserve.IMP medal.GEN.SG / medal.ACC.SG.

'You deserve a medal.'

Genitive case-assignment in (3a) is due to the abstract and indefinite nature of the object. In (3b), similar to (2) above, the genitive variant is associated with the indefinite, non-specific meaning.

Neidle (1988), Partee and Borshev (2004) and Kagan (2005, 2013) argue that Genitive of Negation and Intensional Genitive should receive a uniform account and be treated as two instances of the same phenomenon. This claim is based on a range of characteristics that are shared by these case-marking patterns. Similarities listed by Kagan (2013) include the fact that within both alternations, the genitive variant is licensed within the scope of a non-veridical operator; high variation in native speaker judgments; the increased likelihood of genitive case-assignment to abstract, plural, indefinite and non-specific nominals as opposed to concrete, singular, definite and specific ones, etc. Kagan coins the term *Irrealis Genitive*, by analogy with irrealis mood, in order to unify the two instances of genitive marking. I will use this term in what follows both for the sake of simplicity and because, as we will see, Genitive of Negation and Intensional Genitive pattern similarly as far as their functional structure is concerned (thereby providing further support for the uniform approach.)

Turning to uniform semantic analyses, Partee and Borshev (2004) and Kagan (2005) propose that both types of genitive objects denote properties and are thus of type <e,t> or <s,<e,t>>. This approach accounts for a wide range of data, including the tendency of the genitive nominals to be interpreted as indefinite, non-specific and non-referential, and to receive narrow scope relative to the licensing operators (negation and intensional verbs).

In addition, Kagan (2005, 2013) proposes that Irrealis Genitive objects are characterized by the absence of *existential commitment*. Roughly, this means that these objects are neither entailed nor presupposed to have a referent (or to quantify over a nonempty set.) To illustrate, the genitive version of (2) does not entail the existence of the relevant documents: it is possible that Peter did not find them because they do not exist. Analogously, (3b) does not entail the existence of a relevant (kind of) medal; it may simply be uttered in order to assert that the addressee is a great person.

With this information about Irrealis Genitive in mind, let us turn to another type of genitive objects.

### 2.2. Partitive Genitive

Partitive Genitive case is assigned to objects of certain perfective verbs, thereby alternating with the accusative, as illustrated in (1b) above and (4) below:

(4)	a.	Ja kupil	tebe	jabloki.
		I bought.PERF	you.DAT	apples.ACC.PL
	'I bought (the) apples for you.'			
	b.	Ja kupil	tebe	jablok.
		I bought.PERF	you.DAT	apples.GEN.PL
		'I bought you some apples.'		

As suggested by the translations, the genitive variant receives an indefinite interpretation and is intuitively associated with quantificational meaning (some apples, some water). It can only be assigned to homogenous nominal phrases, such as bare plurals and mass terms; it is unacceptable with count singular nouns. Further details will be discussed in Section 5; at this stage, it is important to point out that the assignment of this case is subject to additional restrictions. Not every perfective verb can take a genitive object, and not every homogeneous object can be assigned the Partitive Genitive. A detailed discussion of the

properties listed above can be found in Klenin (1978), Pesetsky (1982), Franks (1995), Khrizman (2011), Kagan (2013) and Chuikova (2022), among others.

Partitive Genitive and Irrealis Genitive share some properties and differ in others. They are similar in that both involve genitive/accusative alternations with genitive nominals being less individuated than their accusative counterparts. In both instances, genitive objects tend to receive indefinite, non-specific interpretations. Khrizman (2011) formally captures these similarities by proposing that Partitive Genitive objects denote properties and are of the semantic type <e,t>. This approach accounts for the indefinite, non-specific, non-referential nature of such nominals. It also explains the similarities that Khrizman notes between partitive genitives and such overt measure phrases as three glasses of wine.

On the other hand, Kagan (2013) notes a set of differences which suggest that Irrealis Genitive and Partitive Genitive should be distinguished at least on some level. For instance, Irrealis Genitive is not limited to homogenous objects; it is easily assigned to objects of imperfective verbs (whereas Partitive Genitive is typically observed with perfectives). In turn, Partitive Genitive does not require a non-veridical operator (in fact, it does not receive narrow scope relative to any operator in 1b and 4b); further, it can easily carry existential commitment (thus, 4b entails the existence of apples that the subject bought.)

Thus, while Irrealis Genitive and Partitive Genitive share some characteristics, as captured by the proposal that both denote properties, the distinction between the two phenomena should still be maintained. We will see below that the distinction is at least partially based on the syntactic nature of the genitive nominals. But before we turn to the functional structure, we should discuss one more (sub)type of non-canonical genitive.

### 2.3. Prefixational Genitive

I have mentioned above the restricted productivity of Partitive Genitive. Still, in the presence of certain verbal prefixes, it becomes highly productive. The most classical example is the accumulative prefix  $na^{-2}$ , illustrated in (5b) below. (The meaning component of high quantity is contributed by the prefix.)

(5) a. Lena sorvala cvety / \*cvetov.
Lena tore.PERF flower.ACC.PL / flower.GEN.PL
'Lena picked (the) flowers.'

b. Lena narvala cvetov / \*cvety.
Lena na-tore.PERF flower.GEN.PL / flower.ACC.PL

'Lena picked many flowers.'

Not only is genitive marking licensed by the prefix *na*- in (5b), it even becomes obligatory. Such examples stand out given the typically optional nature of Partitive Genitive. In light of the high productivity and unexpected obligatoriness, Kagan (2015) tentatively suggests that such instances should receive a separate treatment and coins for them the term Prefixational Genitive. In what follows, we will see that Prefixational Genitive indeed behaves differently from Partitive Genitive as far as the internal structure of the nominal is concerned. Therefore, the distinction between these two types will be adhered to in this paper.

<sup>&</sup>lt;sup>2</sup> The precise set of prefixes that facilitate genitive case-assignment remains to be determined. It includes, for example, the additive *do*-. The present paper will concentrate on verbs prefixed with *na*-.

To sum up this section, the following classification of genitive objects will be assumed in the present paper:

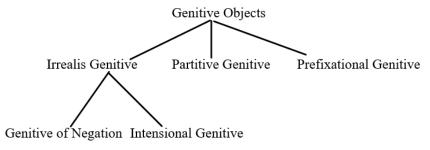
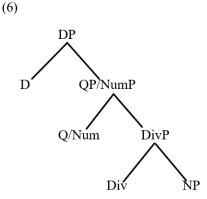


Figure 1. Genitive Objects.

### 3. DP STRUCTURE

In the following discussion, I will adopt the extended DP structure represented in (6) below. Following Pereltsvaig (2006) and Pereltsvaig and Kagan (2018), among others, I take the DP projection to exist in Russian, even though this language lacks articles. (At the same time, in the spirit of Pereltsvaig 2006 and Pereltsvaig and Kagan 2018, this paper will show that not all Russian nominals contain this projection). The DP is responsible for reference; the D<sup>0</sup> head hosts demonstratives and the [+/-Def] feature. NumP, Q(uantifier)P or Card(inal)P stands for the projection that hosts numerals and some other quantifiers (following e.g. Ritter 1991 for NumP; Shlonsky 1991 and Pereltsvaig 2006 for QP, and Sapp and Roehrs 2016 for CardP.) Following Borer (2005), I take Div(ider)P to be responsible for mass-to-count shifts; Div<sup>0</sup> is thus the locus of numeral classifiers and singulative morphemes; it may also contain a phonologically null mass-to-count operator. However, I am not committed to Borer's (2005) view that all count nouns start out with a mass interpretation (for further discussion of this point, see Section 5.3 and Kagan 2024.) Finally, an NP can be property- or kind-denoting (e.g. Chierchia 2010, 2021, Kagan and Pereltsvaig 2011, Pereltsvaig and Kagan 2018); for the purposes of the present paper, I will concentrate mainly on the property-type denotation.



In the literature on the nominal syntax, multiple additional projections have been proposed which host various features and additional functional elements that may appear in a DP (see Alexiadou et al. 2007 for an overview). However, for the sake of simplicity, I will concentrate on those projections that are relevant for the discussion of genitive objects.

#### 4. IRREALIS GENITIVE IS ASSIGNED TO DP

This section argues that Irrealis Genitive case can be assigned to nominals as high as DPs. This does not rule out the possibility that some objects appearing in Genitive of Negation or Intentional Genitive are small nominals, but, crucially, such objects *may* be DPs; in other words, a DP is compatible with the constructions in question.

It should be noted that Irrealis Genitive is not particularly widespread with nominals that contain overt D-level elements. After all, this case is assigned to property-denoting nominals, type <e,t>, whereas DPs prototypically instantiate the individual type e and the quantificational type <<e,t>,t>. However, under certain conditions they may undergo a type-shift to the property type (Partee 1987), and if this happens, nothing in the syntax eliminates the occurrence of a DP in the constructions under discussion.

In this section, I show that nominals appearing in Irrealis Genitive may contain Divlevel elements, Q/Num/Card-level elements and, most importantly, D-level elements.

### 4.1. Irrealis Genitive and D-Level Elements

Let us begin with the D-level. Irrealis Genitive can be assigned to proper names, as well as to nominals containing demonstratives and 'high', D-level, adjectives. Each of these possibilities is illustrated below.

<u>Proper names</u>. It has been shown in the literature that although Genitive of Negation is relatively unlikely to mark proper names (Timberlake 1986), such marking is possible in certain environments. It is especially likely with objects of perception verbs and in negated existential sentences (Babyonyshev 2003, Partee and Borschev 2004, Kagan 2013). In these environments, lack of existential commitment is relativized to a salient location (the subject's field of perception or the location specified in an existential sentence.) The nominal gets interpreted as a property that is not instantiated in these locations. Several examples of genitive proper names are provided below:

- (7) Dimy net doma.

  Dima.GEN NEG\_BE home

  'Dima is not at home.'
- (8) Ja ne videl tam Erielly.
  I NEG saw there Eriella.GEN

'I didn't see Eriella there.'

(Kurtz, K. 1993, Xroniki Derini 'The Chronicles of the Deryni')

(9) Ja nikogda...ne videl Morgauzy.

I never NEG saw Morgausa.GEN

'I had never met Morgausa.' (Stewart, M. *The Wicked Day*)

In all the above examples, Genitive of Negation is assigned to a proper name, showing that this case is compatible with this type of nominal. Assuming that proper names are syntactically DPs (Longobardi 1994), we conclude that Genitive of Negation can be assigned to DPs.

<u>Demonstratives</u>. Further, Irrealis Genitive is compatible with nominals that contain demonstratives, again, as long as the whole nominal is of the property type. This is illustrated in (10)-(11) for Genitive of Negation and in (12) for Intensional Genitive. In all these sentences, the genitive object contains the demonstrative *étot* 'this' in its different forms (plural, masculine singular and feminine singular, respectively.) Semantically, the choice of genitive is associated with the absence of commitment to existence. According to (10), the facts are not present in the report; in (11), the conversation is absent from the speaker's memory, and the sentence implicates that it may have never taken place; finally, the object in (12) refers to a hypothetical future meeting which has not yet been instantiated in the actual world.

- (10) Tvoj otčot ne soderžit étix faktov. Your report NEG contain [these facts].GEN.PL 'Your report doesn't contain these facts.'
- (11) Ja ne pomnju étogo razgovora.

  I NEG remember [this conversation].GEN.SG
  'I don't remember this conversation.'
- (12) Vasja ždjot étoj vstreči.
  Vasja waits [this meeting].GEN.SG
  'Vasja is waiting for this meeting.'

Crucially for our current purposes, the genitive objects in all these sentences contain a demonstrative, which is presumably a D-level element that marks the referent as familiar from the context (albeit not necessarily existing). I conclude that DPs can appear in both Genitive of Negation and Intensional Genitive, as long as appropriate semantic conditions are satisfied.

<u>D-level adjectives</u>. Pereltsvaig and Kagan (2018) discuss the range of positions in which Russian adjectives may appear. Importantly for our purposes, they argue for the existence of particularly high adjectives that appear above numerals and, rather than modifying the property denoted by the NP, help **determine the referent** of the nominal. These adjectives include: *pervyj* 'first', *poslednij* 'last', *opredelënnyj* 'a certain', *sledujuščij* 'next', 'the following', etc. The authors propose that these adjectives appear in the DP area. It is worth noting though that some of them are compatible with different positions; if they appear below the numeral, they behave like prototypical adjectives and modify the property denoted by the NP. (See Pereltsvaig and Kagan 2018 for details.)

High adjectives may appear in nominals that receive Irrealis Genitive, as illustrated in the sentences below. These are naturally occurring examples taken from the Internet:

(13) Nigde ne najti **pervyx** šesti knig. nowhere NEG find.INF first.GEN.PL six.GEN bookGEN.PL 'It's impossible to find the first six books anywhere.'

- (14) Nižnij Novgorod ždjot **pervogo** matča. Nizhnyj Novgorod waits first.GEN.SG match.GEN.SG 'Nizhnyj Novgorod is waiting for the first match.'
- (15) Udalenie trojanskogo virusa s kompjutera deletion Trojan.GEN virus.GEN from computer.GEN trebujet **sledujuščix** dejstvij: [...] requires next.GEN.PL. action.GEN.PL 'The deletion of a Trojan horse virus requires the following actions: ...'

(13) above illustrates Genitive of Negation, and (14)–(15), Intensional Genitive. The genitive object in each sentence contains a high adjective. In (13), we can even see that the adjective *pervyx* 'first' appears to the left of, i.e. above, a numeral. This is evidence that the adjective indeed occupies a high position.

To sum up this section, Irrealis Genitive can be assigned to full DPs, including proper names, phrases containing demonstratives, and phrases with D-level adjectives.

It is to be expected that if genitive phrases may be full DPs, they may also contain lower projections, such as QP or DivP. Below, I show explicitly that this holds for Irrealis Genitive nominals. This will be particularly important for the purposes of their comparison to objects that appear in Partitive Genitive.

### 4.2. Irrealis Genitive and Quantifiers

Irrealis Genitive nominals may contain both numerals and other kinds of quantifiers. Expressions with weak quantifiers, such as numerals, may easily receive property-type denotation, hence they are predicted to be compatible with the genitive. The prediction is borne out (16–17). Nominals containing strong quantifiers are generally of type <<e,t>,t> and as such are not easily compatible with non-canonical genitive case. Still, under certain conditions, even such nominals may receive a property-type interpretation, as shown by McNally (1998) and Lumsden (1988) for existential sentences. This makes such quantifiers sometimes acceptable in genitive objects as well (18–19).

- (16) Lena ne našla i **pjati** statej.

  Lena NEG found and five.GEN articles.GEN.PL

  'Lena didn't find even five articles.'
- (17) V Minske prokuror prosit **trëx** let kolonii dlja Nekljaeva in Minsk prosecutor asks three.GEN year.GEN.PL. colony for Nekljaev 'In Minsk, the prosecutor is asking for three years in colony for Nekljaev.'
- (18) Oboix studentov ne bylo v zale. both.GEN student.GEN.PL NEG was in hall 'Both students were not in the hall.'
- (19) On ždjot každoj transljacii. he waits each.GEN.SG broadcast.GEN.SG

(II. in annial and from the first terms of the second seco

'He is waiting for each broadcast.'

(Internet)

Syntactically, we conclude that Irrealis Genitive can be assigned to objects that contain the NumP/QP projection.

### 4.3. Irrealis Genitive and Divider Phrase

Finally, I would like to show that Irrealis Genitive nominals may contain the DivP projection. First of all, Irrealis Genitive may be assigned to both mass and count nouns. Within Borer's (2005) framework, the latter fact means that such nominals may contain the DivP projection. However, the question of whether all count nouns necessarily project DivP is subject to theory-internal considerations. Therefore, I believe that stronger evidence comes from those nominals that contain an overt mass-to-count operator. In Russian, this is the singulative suffix *-in*.

Singulative suffixes are natural candidates for the role of divider heads, since their prototypical function is to apply to a mass noun and to create a count noun out of it. To illustrate, -in may attach to the Russian mass aggregate noun gorox 'pea', which results in the creation of the count noun goroš-in-a 'a pea'. Mathieu (2012, 2014) argues that singulative morphemes occupy the Div<sup>0</sup> position. Specifically for the Russian -in, this is proposed by Kagan and Nurmio (2023) and Geist et al (2023). Crucially, nouns containing this singulative suffix may easily appear in Irrealis Genitive:

- (20) Princessa ne zametila **gorošiny**.

  princess NEG noticed pea-in.GEN.SG

  'The princess didn't notice a/the pea.'
- (21) ...ja uže ždu pervyx **snežinok**I already wait first.GEN.PL snow-in.GEN.PL
  '...I am already waiting for the first snowflakes.'

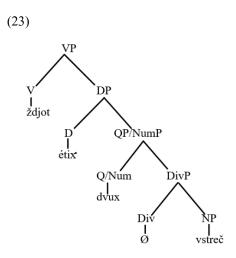
To sum up thus far, nominals appearing in Irrealis Genitive (both Genitive of Negation and Intensional Genitive) may contain the DivP, QP/NumP, and DP projections. Thus, these nominals are maximally full DPs. The structure of the VP in (22), which contains an intensional verb and an object in Intensional Genitive case, is provided in (23). In the next section, we will turn to Partitive Genitive case and see that its assignment is much more restricted.

(22) Lena ždët étix dvux vstreč.

Lena waits these.GEN.PL two.GEN meeting.GEN.PL

'Lena is waiting for these two meetings.'

<sup>&</sup>lt;sup>3</sup> It is suggested in these articles that the suffix fulfills a dual function, occupying both little n<sup>0</sup> and Div<sup>0</sup> head positions, either by head movement or via fusion. For the present paper, the part concerning n<sup>0</sup> head is irrelevant.



### 5. PARTITIVE GENITIVE IS ASSIGNED TO BARE NP

In this section, I argue that Partitive Genitive case is assigned exclusively to small nominals (a term due to Pereltsvaig 2006), and specifically, to bare NPs which lack the DP, the QP/NumP/CardP and arguably even the DivP projection.<sup>4</sup>

# 5.1. Partitive Genitive and D-Level Elements

Let us begin with the fact that Partitive Genitive objects cannot contain D-level elements. Specifically, they cannot be realized as proper names, nor can they contain demonstratives or 'high' adjectives. To begin with proper names, (24) below is ungrammatical. If the object DP appeared in accusative case (*Dimu*), the sentence would be weird out of context, but is still grammatically acceptable. It would become pragmatically appropriate in a context of slavery or corruption and bribery. However, (24) with a genitive object is unacceptable independently of contextual factors.

(24) \*Lena kupila Dimy.
Lena bought.PERF Dima.GEN
'Lena bought Dima.'

Partitive Genitive nominals are also bad with demonstratives (25) or high, reference-oriented adjectives (26). In (26), the adjective *sledujuščix* (literally 'next') is interpreted as 'the following'; the sentence is unacceptable. If the conjunction *dva jabloka i grušu* 'two apples and a pear' is omitted, the adjective will get interpreted as 'next'. In both instances, the adjective is high and reference-oriented, and the resulting sentence is ungrammatical.

<sup>&</sup>lt;sup>4</sup> The bareness of such objects plays an important role in Khrizman's (2011) comparison between partitive genitives and classified measure NPs.

- (25) \*Vika prinesla étix jablok.
  Vika brought.PERF this.GEN.PL apple.GEN.PL
  - 'Vika brought some amount of these apples.'

(26) \*Katja prinesla sledujuščix fruktov: dva jabloka i grušu.

Katja brought [next fruit.GEN.PL] two apple.GEN.SG and pear.ACC.SG

'Katja brought the following fruits: two apples and a pear.'

It is worth noting that (25) may be marginally acceptable if the object is interpreted as 'this kind of apples'. In this case, the demonstrative relates to the kind APPLES, rather than to particular instances of this kind. Such a reading is, in turn, associated in the literature with a low position, specifically, with NP-level, with higher projections hosting operators that shift the meaning (e.g. Krifka 1995, Cheng et al. 2017, Pereltsvaig and Kagan 2018, and references therein.) Pereltsvaig and Kagan (2018) propose that such readings result when a potentially high adjective or a demonstrative (which has adjective-like properties in Russian) appears in a low position and is adjacent to NP.

To sum up, the above-discussed facts suggest that Partitive Genitive nominals cannot contain D-level elements.

#### 5.2. Partitive Genitive and Quantifiers

Neither strong nor weak quantifiers, including numerals, can appear in the Partitive Genitive case:

(27) \*Lena poela pjati / oboix pirožkov.

Lena ate five.GEN both.GEN pie.GEN.PL

'Lena ate (some of) five / both pies.'

This suggests that such projections as QP or CardP are absent in Partitive Genitive objects.

### 5.3. Partitive Genitive and Divider Phrase

Let us now turn to the DivP projection. Interestingly, nouns with the singulative suffix -in do not sound good in Partitive Genitive. Thus, while (28) below, which contains the mass noun gorox 'pea' in the genitive case, is perfectly acceptable, its counterpart in (29) is not. The only difference between the two sentences has to do with the fact that in (29), the object is realized as the count plural noun gorošin 'peas', which contains the singulative suffix. Assuming that mass nouns do not project DivP, whereas singulative ones do, we can capture the contrast in grammaticality by proposing that Partitive Genitive can only be assigned to bare NPs which lack even the DivP projection. The VPs in (28) and (29) have the structures represented in (30) and (31), respectively.<sup>5</sup> Partitive Genitive is only acceptable in (30).

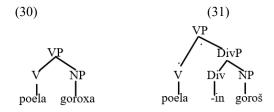
<sup>&</sup>lt;sup>5</sup> It is possible that the prefix *po*- should appear higher in the structure, in the area of AspP. As this is irrelevant for our current purposes, I place the whole verb in the VP for the sake of simplicity. For the syntactic approach to Slavic verbal prefixes, the reader is referred to Svenonius (2004), Romanova (2004) and Tatevosov (2008), among others.

(28) Lena poela goroxa. Lena ate.PERF pea.GEN 'Lena ate some pea.'

(29) \*Lena poela goro**šin**.

Lena ate.PERF pea-in.GEN.PL

'Lena ate some peas.'



However, the above proposal raises the following question: how do we treat homogenous count plural nominals which do not contain a singulative suffix and which can appear in Partitive Genitive? After all, count nominals are predicted by Borer (2005) to uniformly contain DivP. But firstly, the latter view is largely theory internal. Many approaches take nouns like *chair* or *book* to be count already in the lexicon (e.g. Link 1983, 1987, Landman 2020, Sutton and Filip 2021). This view is not entirely incompatible with the idea that all count nouns are accompanied by DivP: lexical countness could in some way trigger the appearance of such a projection. However, the lexical approach is definitely compatible with the absence of DivP in count nouns, except for those cases in which an overt mass-to-count operator (like a classifier or a singulative suffix) is merged. It thus follows that morphologically simple count nouns may, in fact, be bare NPs.

Secondly, the acceptability level of Partitive Genitive assignment to count plurals is far from clear. In the literature, it is generally stated that Partitive Genitive is assigned to homogenous, or cumulative, nominals, including both (bare) mass terms and count plurals (see, e.g., Franks 1995, Chuikova 2022, and references therein). It appears, however, that in modern spoken Russian, the assignment of this case is more restricted. Specifically, informal judgment elicitation reveals that native speakers tend to dislike count plural objects in Partitive Genitive. To illustrate, while (32) below is judged as perfectly acceptable, (33) is generally disliked. The difference between the two sentences has to do with the fact that (32) contains a mass genitive object, whereas the object in (33) is count plural.

(32) Lena kupila kartoški. (mass) potato.GEN Lena bought.PERF 'Lena bought some potatoes. (33) \*Lena (count plural) kupila knig. Lena bought.PERF book.GEN.PL 'Lena bought some books.'

This contrast in judgments is consistent with the view that Partitive Genitive is only assigned to bare NPs, while count objects, unlike mass ones, contain the DivP projection, along the line of Borer.

The respective trees of the acceptable (32) and the unacceptable (33) are provided in (34) and (35) below:

In fact, the data are even more complex. Some count plural nouns, especially ones that denote food, are more easily accepted in Partitive Genitive than *knig* 'books'. These include such nominals as *fruktov* 'fruits', *jablok* 'apples', *jagod* 'berries'. Native speaker judgments vary, but the tendency is for sentences like (36) to be judged as better than (33) but worse than (32). In other words, their status is marginal.

(36) ??Lena kupila **fruktov**Lena bought fruit.GEN.PL
'Lena bought some fruits.'

What is the difference between *fruits* and *books*? Apparently, it has to do with the degree of individuation. Books are more highly individuated: we care about their individual properties, such as content, cover, title, author, etc. If we buy several books, we can probably name each of them. In contrast, if we buy apples, we care much less about those properties that distinguish one apple from the other. We may very well not know the exact number of apples we have taken (but rather their weight) and we may be unable to identify each of them.

This suggests that instead of a two-may mass-count distinction we deal with an **individuation scale** to which the assignment of Partitive Genitive is sensitive. This proposal is in the spirit of e.g. Timberlake (1986) and Grimm (2018) who propose scalar treatments of individuation, albeit they concentrate on different contrasts. Our ranking would be along the line of (37):

### (37) mass nouns < food-denoting count nouns < book-type count nouns

The lower a noun is on this scale, the more acceptable it is in Partitive Genitive.

A detailed analysis of the sensitivity of Partitive Genitive to the lexical semantics of nouns falls beyond the scope of the present paper and is left for future research. What we can conclude from the above discussion is that (i) Partitive Genitive cannot be assigned to nominals that contain an overt element in Div<sup>0</sup> (such as a singulative suffix) and (ii) in modern spoken Russian, this case is assigned to mass nominals much more easily than to count ones. This combination of facts suggests that Partitive Genitive is assigned to bare NPs that do not contain DP, QP/NumP and plausibly even the DivP projection (or at the very least, its compatibility with DivP is restricted.)

(39) a.

### 6. PREFIXATIONAL GENITIVE IS ASSIGNED TO DIVP

Finally, let us consider Prefixational Genitive. As pointed out above, this case is quite similar to Partitive Genitive and is typically treated as such; however, it is special in being particularly productive. In this section, I argue that the higher productivity results from the fact that Prefixational Genitive is assigned not only to bare NPs but also to Divider Phrases.

#### 6.1. Prefixational Genitive and D-Level Elements

As far as the higher projections such as QP and DP are concerned, Prefixational Genitive is subject to the same restrictions as Partitive Genitive: it cannot mark such "big" nominals.

Let us begin with the DP projection, as has been done in the previous sections. Prefixational Genitive cannot be assigned to proper names:

(38) \*Lena nakupila Pesni L'da Ognja Lena na-bought [Song ice and fire 1.GEN.SG Intended: 'Lena bought many A Song of Ice and Fire volumes.'

\*Lena nabrala sledujuščix

Further, it is unacceptable with high adjectives and demonstratives. Whenever nominals with such elements appear in Prefixational Genitive, a low, kind-related, reading is forced.

knig. Lena na-took next.GEN.PL book.GEN.PL 'Lena took the next books, which were high in number.' \*Lena nabrala sledujuščix Garri Pottera knig: Lena na-took next.GEN.PL book.GEN.PL [Harry Potter].GEN i Vojny i mira. and [War and peace].GEN 'Lena took the following books: Harry Potter and War and Peace'. (The number of the books (volumes) was high.)

c. ??Lena nabrala étix knig. Lena na-took this.GEN.PL book.GEN.PL 'Lena took these/such books (whose number was high.)'

(39) illustrates sentences with a verb containing the prefix na-. We can see that the examples with the high adjective *sledujuščij* are unacceptable, independently of whether it is used under the meaning of 'next' (39a) or 'the following' (39b). In (39c), the genitive object contains a demonstrative. Crucially, the sentence is only acceptable under the meaning of 'this kind of books', or 'such books'. This meaning, as pointed out in Section 5.1 and discussed by Kagan and Pereltsvaig (2011), corresponds to a low appearance of étix 'these', where it semantically applies to the NP. Importantly for our purposes, the definite object cannot be used deictically, while pointing at specific books, with the intended meaning 'Lena bought the books I am pointing at, and their number is high'.

The examples in (40) show that the same configuration holds for a verb containing the additive do. Note that (40c), the example with a demonstrative, is bad under any reading, which makes it altogether worse than (39c) above. And, just as with (39c) above, it is definitely impossible to utter (40c) while pointing at a specific set of books.

(40) a. \*Lena dokupila sledujuščix knig.

Lena do-bought next.GEN.PL book.GEN.PL

'Lena bought the next books (in addition to what she had bought before.)'

b. \*Lena dokupila sledujuščix knig: Garri Pottera Lena do-bought next.GEN.PL book.GEN.PL [Harry Potter].GEN

i Vojny i mira.
and [War and peace].GEN

'Lena bought the following books: *Harry Potter* and *War and Peace* (in addition to what she had bought before.)'

c. \*Lena dokupila étix knig.

Lena do-bought this.GEN.PL book.GEN.PL

'Lena bought these books (in addition to what she had bought before).'

To sum up thus far, Prefixational Genitive is similar to Partitive Genitive in not allowing D-Level elements.

### 6.2. Prefixational Genitive and Quantifiers

Further, genitive complements of verbs with such prefixes as the accumulative *na*-and additive *do*- cannot contain quantifiers, including numerals (41-42). It is worth noting that in the accusative, the range of acceptable quantifiers is restricted as well, but some quantifiers and measure expressions are possible. This is illustrated in (43-44).

- (41) \*Lena nakupila pjati / sotni / kuči / bol'shinstva knig.

  Lena na-bought five.GEN/ hundred.GEN / heap.GEN / majority.GEN book.GEN.PL

  'Lena bought five / a hundred / a heap of / most books (and their number was high).'
- (42) \*Lena dokupila pjati / sotni / kuči / bol'shinstva knig. Lena do-bought five.GEN/ hundred.GEN / heap.GEN / majority.GEN book.GEN.PL 'Lena bought five / a hundred / a heap of / most books (in addition to what she had bought before.)'
- (43) Lena nakupila sotnju / kuču knig.

  Lena na-bought hundred.ACC / heap.ACC book.GEN.PL

  'Lena bought a hundred books / a pile of books.'
- (44) Lena dokupila pjat' / sotnju / kuču knig.
  Lena do-bought five.ACC / hundred.ACC / heap.ACC book.GEN.PL
  'Lena bought five / a hundred of / a heap of books (in addition to what she had bought before.)'

We can safely conclude that Prefixational Genitive nominals lack the DP and the QP/NumP projections.

### 6.3. Prefixational Genitive and Divider Phrase

Up till now, Prefixational Genitive seemed to behave exactly the same way as Partitive Genitive, suggesting that the division between the two is artificial and unnecessary. However,

when it comes to DivP, the pattern turns out to be more complex. Unlike their partitive counterparts, Prefixational Genitive nominals are perfectly acceptable with the singulative suffix -in. This is illustrated in (45), whose object  $\check{z}em\check{c}u\check{z}in$  'pearls' is derived via attaching the singulative suffix -in to the root  $\check{z}em\check{c}ug$ . While  $\check{z}em\check{c}ug$  'pearl' is a mass noun,  $\check{z}em\check{c}u\check{z}ina$  'a pearl' is count.

(45) Lena nakupila žemčužin. Lena na-bought pearl-in.GEN.PL

'Lena bought many pearls.'

Further, Prefixational Genitive does not show any dispreference for count plural nouns. Thus, while (33), repeated below as (46), is quite bad, its counterpart with the prefix *na*- in (47) is perfectly acceptable:

(46) \*Lena kupila knig.

Lena bought.PERF book.GEN.PL

'Lena bought some books.'

(47) Lena nakupila knig.

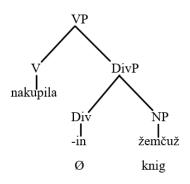
Lena na-bought book.GEN.PL

'Lena bought many books.'

The compatibility of Prefixational Genitive with singulative and count nouns suggests that this case can be assigned not only to NPs but also to DivPs. I propose that this is the difference between Prefixational Genitive and Partitive Genitive: the former is compatible with DivPs, whereas the latter is not. This explains the observation that Prefixational Genitive is more productive than Partitive Genitive. It is plausible that the two should, in fact, be unified (as Partitive Genitive), with the specification that they are assigned to nominals of different sizes.

The structure of the VPs *nakupila žemčužin* (45) and *nakupila knig* (47) is represented in (48):

# (48)



## 7. CONCLUSION

To sum up, while Irrealis Genitive, Partitive Genitive and Prefixational Genitive are unified by the property-type denotation, they differ in terms of their syntactic structure. Irrealis Genitive nominals are (maximally) DPs. Such phrases may contain the singulative suffix, numerals and other quantifiers, high adjectives and demonstratives; further, Irrealis Genitive may, under certain conditions, be assigned to proper names. While the property type denotation is not prototypical for full DPs (which are more likely to be of the individual type <e> if referential or of the quantificational type <<e,t>,t> if quantificational), this kind of denotation is still compatible with "big" nominals. It is exactly to such property-denoting phrases (which also lack existential commitment) that Irrealis Genitive is assigned. In contrast, Prefixational Genitive is assigned to the smallest kind of nominal, a bare NP which arguably lacks even the DivP projection. Finally, Prefixational Genitive is similar to Partitive Genitive in that it cannot be assigned to nominals that contain DP- and QP/NumP/CardP-level elements; however, unlike Partitive Genitive, it freely combines with count nouns and nouns containing the singulative suffix -in.

Future research is needed in order to determine the set of prefixes that facilitate the assignment of genitive case to objects (largely by making it compatible with count nominals.) Here, the corpus data reported by Chuikova (2022) can be particularly valuable. One possibility to be considered is whether this facilitation is due to a quantificational meaning of the prefixes. Intuitively, when we deal with a small number of books, we are likely to be aware of the individuating properties of each of them, such as titles, genres, content, etc. But once a big pile of books is involved, such properties are less likely to be salient. We are less likely to remember (or to care about) the characteristics of each individual book; in some sense, books become more apple-like in terms of our attitude. It is thus possible that the accumulative, "high quantity" meaning of *na*- lowers the individuation degree of the object, which, in turn, licenses non-canonical genitive.

We have observed a tentative three-way contrast between mass nouns, apple-type count nouns and book-type count nouns, which has been suggested to reflect an individuation scale. The least individuated objects, i.e. mass nominals, are particularly likely to appear in Partitive Genitive; in contrast the most individuated, book-type ones, are reluctant to appear in this case in modern spoken Russian. An experimental study should be conducted within future research in order to evaluate the role of this three-way distinction in the assignment of Partitive Genitive. If experimentally supported, this interrelation will enrich our understanding of the nature of the individuation scale and its impact on natural language phenomena.

#### REFERENCES

Alexiadou, A., L. Haegeman, M. Stavrou, 2007, Noun phrase in the generative perspective, Berlin, Mouton de Gruyter.

Babby, L., 1978, Negation and Subject Case Selection in Existential Sentences: Evidence from Russian, Bloomington, Indiana University Linguistics Club.

Babyonyshev, M., 2003, "The Extended Projection Principle and the Genitive of Negation Construction", in: S. Brown, A. Przepiorkowski (eds), Negation in Slavic, Bloomington, Slavica Publishers, 31-69.

- Bailyn, J. F., 1997, "Genitive of Negation is Obligatory", in: W. Browne, E. Dornisch, N. Kondrashova, D. Zec (eds), Annual Workshop on Formal Approaches to Slavic Linguistics: The Cornell Meeting, Ann Arbor, Michigan Slavic Publications, 84-114.
- Bailyn, J. F., 2004, "The Case of Q", in: O. Arnaudova, W. Browne, M. L. Rivero and D. Stojanović (eds), Annual Workshop on Formal Approaches to Slavic Linguistics 12, Ann Arbor, Michigan Slavic Publications, 1-36.
- Borer, H., 2005, Structuring sense volume I: In name only, Oxford, Oxford University Press.
- Brown, S., 1999, *The Syntax of Negation in Russian: A Minimalist Approach*, Stanford, CSLI Publications.
- Chuikova, O., 2022, "Partitive Genitive and Aktionsarten in Russian (based on dictionary and corpus data)", Russian Linguistics, 46, 25-54.
- Borschev, V., E. V. Paducheva, B. H. Partee, Y. G. Testelets, I. Yanovich, 2008, "Russian Genitives, Non-Referentiality, and the Property-Type Hypothesis", in: A. Antonenko, J. F. Bailyn and C. Y. Bethin. (eds), Formal Approaches to Slavic Linguistics: The Stony Brook Meeting (FASL 16), Ann Arbor, Michigan Slavic Publishers, 48–67.
- Cheng, L. L-S., C. Heycock, R. Zamparelli, 2017, "Two levels for definiteness", in: M. Y. Erlewine (ed.), Proceedings of GLOW in Asia XI: MIT working papers in linguistics 1, Massachusetts, MIT, 79–93.
- Chierchia, G., 2010, "Mass nouns, vagueness and semantic variation", Synthese, 174(1), 99-149.
- Farkas, D. F., 1985, *Intensional Descriptions and the Romance Subjunctive Mood*, New York, Garland Publishing, Inc.
- Farkas, D. F., 2003, "Assertion, Belief and Mood Choice", paper presented at the workshop on Conditional and Unconditional Modality, ESSLLI, Vienna.
- Franks, S., 1995., Parameters of Slavic Morphosyntax, Oxford, Oxford University Press.
- Geist, L., O. Kagan, D. Erschler, 2023, "Mass-Count Distinction and the Russian Singulative Suffix in-", *Journal of Slavic Linguistics*, 31, 1-17.
- Grimm, S., 2018, "Grammatical number and the scale of individuation", Language, 94, 3, 527-574.
- Harves, S., 2002, Unaccusative Syntax in Russian, Ph.D. dissertation, Princeton University.
- Heim, I., 1992, "Presupposition Projection and the Semantics of Attitude Verbs", Journal of Semantics, 9, 183-221.
- Jakobson, R. O., 1957/1971, Selected Writings II, The Hague, Mouton.
- Kagan, O., 2005, "Genitive Case: A Modal Account", in: Y. Falk (ed.), Proceedings of IATL 21.
- Kagan, O., 2013, Semantics of Genitive Objects in Russian: A Study of Genitive of Negation and Intensional Genitive Case, Dordrecht, Springer.
- Kagan, O., 2015, Scalarity in the Verbal Domain: The Case of Verbal Prefixation in Russian, Cambridge, Cambridge University Press.
- Kagan, O., 2024, "The Slavic suffix -in/-yn as partition shifter", Natural Language Semantics, 32, 35-63.
- Kagan, O., S. Nurmio, 2023, "Diminutive or Singulative? The Suffixes -in and -k in Russian", in: S. Manova, L. Grestenberger, K. Korecky-Kröll (eds), *Diminutives across languages, theoretical frameworks and linguistic domains. Trends in Linguistics. Studies and Monographs*[TiLSM] 380, Berlin, De Gruyter Mouton.
- Kagan, O., A. Pereltsvaig, 2011, "Bare NPs and Semantic Incorporation: Objects of Intensive Reflexives at the Syntax-Semantics Interface", in: W. Browne, A. Cooper, A. Fisher, E. Kesici, N. Predolac, D. Zec (eds), Formal Approaches to Slavic Linguistics (FASL 18): The Cornell Meeting, Ann Arbor, MI, Michigan Slavic Publications, 226–240.
- Khrizman, K., 2011, *Imperfective Aspect and Partitive Case in Russian*, M.A. Thesis, Bar-Ilan University.
- Klenin, E., 1978, "Quantification, Partitivity, and Genitive of Negation in Russian", in: B. Comrie (ed.), Classification of Grammatical Categories, Edmonton, Linguistic Research, Inc, 163–182.
- Krifka, M., 1995, "Common nouns: A contrastive analysis of Chinese and English", in: G.N. Carlson, F.J. Pelletier (eds), *The generic book*, University of Chicago Press, 398–411.

- Landman, F., 2020, *Iceberg semantics for mass nouns and count nouns*, Springer International Publishing.
- Link, G., 1983, "The logical analysis of plurals and mass terms: A lattice-theoretical approach", in: P. Portner, B.H. Partee (eds), Formal semantics: The essential readings, Oxford, Blackwell, 127–147.
- Link, G., 1987, "Generalized Quantifiers and Plurals", in: P. Gärdenfors (ed.), *Generalized Quantifiers*. *Studies in Linguistics and Philosophy*, vol 31, Springer, Dordrecht, 151–180.
- Longobardi, G., 1994, "Reference and proper names: A theory of N-movement in syntax and logical form", Linguistic Inquiry, 25, 609–665.
- Lumsden, M., 1988, Existential Sentences: Their Structure and Meaning, Croom Helm, London.

Mathieu, É., 2012, "Flavors of division", Linguistic Inquiry, 43, 650-679.

- Mathieu, É., 2014, "Many a plural", in: A. Aguilar-Guevara, B. Le Bruyn, J. Zwarts (eds), *Weak Referentiality*, Amsterdam, John Benjamins, 157-181.
- McNally, L., 1998, "Existential Sentences without Existential Quantification", Linguistics and Philosophy, 21, 353–392.
- Neidle, C., 1988, The Role of Case in Russian Syntax, Dordrecht, Kluwer Academic Publishers.
- Partee, B. H., 1987, "Noun phrase interpretation and type shifting principles", in: J. Groenendijk, D. de Jongh, M. Stokhof (eds), Studies in Discourse Representation Theory and the Theory of Generalised Quantifiers, Foris, Dordrecht, 115–143.
- Partee, B. H., V. Borschev, 2004, "The Semantics of Russian Genitive of Negation: The Nature and Role of Perspectival Structure", Paper presented at SALT 14.
- Pereltsvaig, A., 1999, "The Genitive of Negation and Aspect in Russian", in: Y. Rose, J. Steele (eds.), McGill Working Papers in Linguistics, 14, 111–140.
- Pereltsvaig, A., 2006., "Small nominals", Natural Language & Linguistic Theory, 24.2, 433-500.

Pereltsvaig, A., O. Kagan, 2018, "Adjectives in Layers", Rhema, 4, 125–165.

Pesetsky, D. M., 1982, Paths and Categories, Ph.D. dissertation, Cambridge, MIT.

- Ritter, E., 1991, "Two functional categories in noun phrases: Evidence from Modern Hebrew", *Syntax and Semantics*, 25, 37–62.
- Romanova, E., 2004, "Superlexical vs. lexical prefixes", in: P. Svenonius (ed.), *Slavic prefixes*, Special issue of *Nordlyd*, 32, 2, 255–78.
- Sapp, C., D. Roehrs, 2016, "Head-to-modifier reanalysis: The rise of the adjectival quantifier *viel* and the loss of genitive case assignment", *Journal of Germanic Linguistics*, 28, 2, 89-166.
- Shlonsky, U. 1991, "Quantifiers as functional heads: A study of quantifier float in Hebrew", *Lingua* 84, 159–180.
- Sutton, P. R., H. Filip, 2021, "The Count/Mass Distinction for Granular Nouns", in: H. Filip (ed.), Countability in Natural Language, Cambridge University Press.
- Svenonius, P., 2004, "Slavic prefixes inside and outside VP", in: P. Svenonius (ed.), *Slavic prefixes*, Special issue of *Nordlyd*, 32(2), 205–253.
- Tatevosov, S., 2008, "Intermediate prefixes in Russian", in: A. Antonenko, J.F. Bailyn, C.Y. Bethin (eds.), *Annual workshop on formal approaches to Slavic linguistics: The Stony Brook meeting*, Ann Arbor, Michigan Slavic Publications, 423–445.
- Timberlake, A., 1986, "Hierarchies in the Genitive of Negation", in: R.D. Brecht, J.S. Levine (eds), *Case in Slavic*, USA, Slavica Publishers, Inc, 338–360.