

## Genitive adnominal dependents in Russian: Surface-syntactic relations in the $N \rightarrow N_{\text{GEN}}$ Phrase\*

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The paper proposes six surface-syntactic relations [SSyntRels] for the syntactic description of the Russian  $N \rightarrow N_{\text{GEN}}$  phrase; they are discussed in detail and illustrated. Three criteria for distinguishing SSyntRel types (C1–3) are presented. The problem of pronominalization of adnominal genitives is considered.

**Keywords:** adnominal genitive, criteria for distinguishing surface-syntactic relations, pronominalization, Russian syntax, surface-syntactic relations

## Генитивные приименные зависимые в русском языке: поверхностно-синтаксические отношения в словосочетаниях вида $N \rightarrow N_{\text{ГЕН}}$

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Предлагаются шесть поверхностно-синтаксических отношений [ПСинТО] для синтаксического описания русских словосочетаний вида  $N \rightarrow N_{\text{ГЕН}}$ ; эти ПСинТО подробно обсуждаются и иллюстрируются. Представлены три критерия различения типов ПСинТО (C1–3). Рассматривается проблема прономинализации приименных генитивов.

**Ключевые слова:** критерии различения поверхностно-синтаксических отношений, поверхностно-синтаксические отношения, приименной генитив, прономинализация, русский синтаксис

## Introduction

The following discussion is framed strictly within what is known as the Meaning–Text approach; more specifically, my formal perspective is dependency syntax — as presented, for instance, in [Mel'čuk 1974: 207–310; 1988; 2009; 2015: 387–505].

## 1. The Problem Stated

Russian has several types of  $N \rightarrow N_{\text{GEN}}$  phrases: a noun  $N$  with a syntactic nominal dependent in the genitive case without preposition. For the convenience of a brief overview, the  $N_{\text{GEN}}$  syntactic dependents in these phrases can be grouped according to the type of the semantic relation between  $N$  and  $N_{\text{GEN}}$ . (By “semantic relation” is meant here the relation between ‘ $N$ ’ and ‘ $N_{\text{GEN}}$ ’ — that is, between the sources of  $N$  and  $N_{\text{GEN}}$  in the underlying semantic structure; ‘ $X$ ’ stands for “the meaning of a linguistic entity  $X$ .”) Four major cases are logically possible:

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- $N_{GEN}$  implements one of N's semantic actants,  
N expressing a semantic predicate (or quasi-predicate) : ' $N(N_{GEN})$ '
- $N_{GEN}$  expresses a semantic predicate,  
and N implements one of  $N_{GEN}$ 's semantic actants : ' $N_{GEN}(N)$ '
- $N_{GEN}$  is semantically linked to N by a predicate  
(or a configuration of predicates) ' $\sigma$ ' : ' $\sigma(N, N_{GEN})$ '

**NB:** The predicate ' $\sigma$ ' typically has no segmental (= phonemic) expression; the corresponding meaning is either carried by the surface-syntactic relation that links N and  $N_{GEN}$  or remains unexpressed, to be accessed by the Addressee through the context. (One exception, leading to a semantic-syntactic mismatch, is presented in Subsection 3.5.)

- $N_{GEN}$  and N are semantically not linked, since neither  $N_{GEN}$  nor N have separate semantic sources — they form together a semantic unit; in other words, the  $N \rightarrow N_{GEN}$  phrase is a non-compositional phraseme — that is, an idiom or a nomineme [Mel'čuk 2015: 293–362]<sup>1</sup> : ' $N\_N_{GEN}$ '

All these cases are represented in Russian  $N \rightarrow N_{GEN}$  phrases; the respective examples follow. For the ease of reference, each group of examples is given a conventional Latin name; all glosses are literal.

(1) ' $N(N_{GEN})$ '

- a. **Genitivus Subjectivus:**  $N_{GEN-subj}$  expresses deep-syntactic actant [DSyntA] I of N, e. g.: *zasedanie komiteta<sub>I</sub>* 'meeting of.committee', *otsutstvie [neskol'kix] lic<sub>I</sub>* 'absence of.several persons', *steny tualeta<sub>I</sub>* 'walls of.bathroom'
- b. **Genitivus Objectivus:**  $N_{GEN-obj}$  expresses DSyntA II of N (or, in some rather infrequent cases, N's DSyntA III, see [Raxilina 2010: 253]), e. g.: *sozдание komiteta<sub>II</sub>* 'creation of.committee', *arest [neskol'kix] lic<sub>II</sub>* 'arrest of.several people', *pokupatel' ryby<sub>II</sub>* 'buyer of.fish' ~ *pokupatel' Fedi<sub>III</sub>* 'buyer of.Fedya' = 'buyer from.Fedya'

**NB:**  $N_{GEN-obj-II}$  and  $N_{GEN-obj-III}$  do not cooccur with the same syntactic Governor (*\*pokupatel' ryby<sub>II</sub> Fedi<sub>III</sub>* vs. *pokupatel' ryby<sub>II</sub> u Fedi<sub>III</sub>* 'buyer of.fish from Fedya'), which allows us to not distinguish them at the surface-syntactic [SSynt-]level — that is, to use the same SSynt-relation for both.

(2) ' $N_{GEN}(N)$ '

**Genitivus Qualitatis**, e. g.:

*ploščadka [nebol'sogo] razmera* 'area [of.small] size', *čelovek [redkogo] uma* 'man [of.rare] intelligence', *suščestvitel'noe [množestvennogo] čisla* 'noun [of.plural] number', *devuška [moej] mečty* 'girl [of.my] dream'

(3) ' $\sigma(N, N_{GEN})$ '

- a. ' $N \leftarrow 1 - \sigma - 2 \rightarrow N_{GEN}$ ': the noun N is semantic actant [SemA] 1 of the predicate ' $\sigma$ '
  - i. **Genitivus Possessivus:** ' $N \leftarrow 1 - \text{belong} - 2 \rightarrow N_{GEN}$ ' ['belong' = 'be owned'], e. g.: *igruški Miši* 'toys of.Misha', *fabrika otca* 'factory of.father', *al'bom Anny* 'album of.Anna'

<sup>1</sup> The components of a compositional phraseme — a collocation or a cliché — have their independent semantic sources;  $N_{GEN}$  in these phrasemes is subordinated to N by the **attr-adnom** SSyntRel: see Section 4, Item 5).

ii. **Genitivus Attributivus**: ' $N \leftarrow 1 - \sigma - 2 \rightarrow N_{\text{GEN}}$ ', e. g.:

*vozdux Pariža* 'air of.Paris' = 'air **existing.in** Paris', *ženy [šaxskogo] garema* 'wives [of.Shah's] harem' = 'wives **being.elements.of** the Shah's harem', *putešestvija prošlogo veka* 'travels of.past century' = 'travels **that.took.place.in** the past century', *Mefistofel' Šaljapina* 'Mephisto of.Shalyapin' = 'Mephisto **as.interpreted.by** Shalyapin', *Saskija Rembrandta* 'Saskia of.Rembrandt' = 'Saskia **as.painted.by** Rembrandt', *kontinent l'vov i žirafov* 'continent of.lions and giraffes' = 'continent **inhabited.by** lions and giraffes'

b. ' $N \leftarrow 2 - \sigma - 1 \rightarrow N_{\text{GEN}}$ ': the noun N is SemA 2 of the predicate ' $\sigma$ '

**Genitivus Metaphoricus**: ' $N \leftarrow 2 - \text{similar} - 1 \rightarrow N_{\text{GEN}}$ ' [ $N_{\text{GEN}}$  is similar to N' = 'as if  $N_{\text{GEN}}$  were N'], e. g.:

*sutany dyma* 'soutanes of.smoke', *okean tajgi* 'ocean of.taiga', *čaša utra* 'cup of.morning' (F. García Lorca in M. Cvetaeva's translation); *raduga [jarkostrekočuščix] kryl* 'rainbow [of.brightly.chirping] wings' (the title of an article about a congress of entomology)

(4) ' $N_{\text{GEN}}$ '

**Genitivus Phrasemicus**: no semantic link between N and  $N_{\text{GEN}}$ , both forming together a semantic unit (the phrase  $N \rightarrow N_{\text{GEN}}$  is a non-compositional phraseme: an idiom or a nomineme); N and  $N_{\text{GEN-phras}}$  have no separate semantic sources in the underlying semantic structure:

a.  $N_{\text{GEN-phras}}$  in an idiom (the top corners '...' enclose idioms), e. g.:

*džentel'men udači* 'gentleman of.fortune'  $\approx$  'bandit',  
*trubka mira* 'pipe of.peace', *čaška Petri* 'cup of.Petri' = 'Petri dish',  
*kapli [datskogo] korolja* 'drops [of.Danish] king' = 'expectorant cough syrup'

b.  $N_{\text{GEN-phras}}$  in a nomineme, e. g.:

*Ostrova [Zelėnogo] Mysa* 'Islands [of.Green] Cape', *Mys [Dobroj] Nadeždy* 'Cape [of.Good] Hope', *ploščad' Puškina* 'Square of.Pushkin', *korifej [vsex] vremėn i narodov* 'corypheus [of.all] times and peoples' [Comrade Stalin]

As far as I know, there is no in-depth description of SSyntRels linking an  $N_{\text{GEN}}$  to its syntactic governor N in Russian. In [Mel'čuk 1974: 224], all Russian  $N \rightarrow N_{\text{GEN}}$  phrases (and a host of others) were described by three SSyntRels:

- the **agentive** SSyntRel (*priezd ministra* 'arrival of.minister'), corresponding to deep-syntactic relation [DSyntRel] I;
- the **1<sup>st</sup> completive** SSyntRel (*provody ministra* 'send-off of.minister'), corresponding to DSyntRel II or III; and
- the **attributive** SSyntRel (*mal'čik [vysokogo] rosta* 'boy [of.tall] height') — with the admission that the **attributive** SSyntRel is a "dump ground" for all non-agreeing postmodifiers of a Russian noun N that do not correspond to N's DSynt-actants.

This tripartite division — two actantial and one "general-attributive"  $N_{\text{GEN}}$ s — was retained in [Iomdin 2010: 26–43] and then in [Mel'čuk 2012a: 137–140] (different names of SSyntRels being used). But today I think that the time is ripe for a substantive linguistic analysis of Russian  $N \rightarrow N_{\text{GEN}}$  phrases, which must allow me to better determine their SSynt-description.

The question asked in this paper is straightforward:

- || How many different surface-syntactic relations — and, of course, which ones — are needed to describe  $N \rightarrow N_{\text{GEN}}$  phrases in Russian?

Note that the problem of acceptability — that is, of linguistic correction — of particular  $N \rightarrow N_{\text{GEN}}$  phrases is left out of consideration (see [Raxilina 2010; Borščėv, Parti 2011], as well as many other studies mentioned in these titles). Only correct  $N \rightarrow N_{\text{GEN}}$  phrases are considered in this paper.

## 2. Criteria for Distinguishing Surface-Syntactic Relations within $N \rightarrow N_{\text{GEN}}$ Phrases

To establish an inventory of SSyntRels in a language the linguist has to observe two types of requirements [Iordanskaja, Mel'čuk 2009].

- Linguistic requirements: all dependents of an SSyntRel must exhibit identical (or quite similar) syntactic properties relevant in the given language.
- Formal requirements: an SSyntRel must satisfy formal Criteria A – C of the definition of SSyntRel [Mel'čuk 1988: 130–144; 2009: 25–40; 2015: 411–433].

In our particular case — that is, the Russian  $N \rightarrow N_{\text{GEN}}$  phrases — the linguistic requirements are satisfied trivially: all phrases considered are of the same structure, and all dependent  $N_{\text{GEN}}$ s have the same syntactic properties except for their mutual ordering; this latter property is used for distinguishing the SSyntRels involved. As far as Criteria A – C are concerned, Criteria A (presence of a syntactic dependency relation between two lexemes in an utterance) and B (orientation of the syntactic dependency relation between two lexemes in an utterance) are irrelevant for the present discussion. Only Criteria C need to be used for the definition of SSyntRels within Russian  $N \rightarrow N_{\text{GEN}}$  phrases. For the reader's convenience, I will reproduce these criteria here.

### Criteria C1 – C3: TYPE of the syntactic dependency between two lexemes in an utterance

**Criterion C1** (presence of semantic contrast: Minimal Pair test)

**Notation:** L is a lexeme;  $w_i(L)$  is a wordform of lexeme L.

A hypothetical SSyntRel  $r$  should not describe two phrases

$w_1(L_1) - r \rightarrow w_2(L_2)$  and  $w_3(L_1) - r \rightarrow w_4(L_2)$

if Conditions 1 and 2 are simultaneously satisfied:

1. These phrases contrast semantically, the contrast being manifested either in the form of the phrases themselves or in the syntactic behavior properties of their members.
2. If these phrases differ in their form, they differ only by some syntactic means of expression — by word order of their elements, syntactic prosody, or syntactic grammemes.

If Criterion C1 is satisfied — that is, if Conditions 1 and 2 are both satisfied,  $r$  should be split into two different SSyntRels,  $r_1$  and  $r_2$ ,  $r_1 \neq r_2$ .

For example, the Russian phrases  $\text{žena-synt} \rightarrow \text{drug}$  'wife of.friend' and  $\text{žena-synt} \rightarrow \text{drug}$  [ $\text{žena-drug}$ ] 'wife who is a friend' should be described by two different SSyntRels, since these phrases semantically contrast and formally differ only by the case of DRUG: the genitive case in the first phrase and the same case as that of ŽENA in the second.

**NB:** Criterion C1 is formulated here with an addition, previously absent. Namely, Condition 1 now foresees the possible physical manifestation of the semantic contrast not only in the form of the phrases under analysis, but also "...in the syntactic behavior properties of their members" ("syntactic behavior" includes combinability and word order with respect to other phrases). This is an important amendment, which makes Criterion C1 more sensitive.

Since this paper only deals with the phrases of the same form (namely,  $N \rightarrow N_{\text{GEN}}$ ), Condition 2 of Criterion C1 is irrelevant, because it is always satisfied; therefore, our reasoning is based on a semantic contrast that manifests itself "outside" the phrase in question; and this can be only in its syntactic behavior with respect to other cosubordinated  $N \rightarrow N_{\text{GEN}}$  phrases — in particular, in their mutual ordering.

**Criterion C2** (syntactic substitutability: Substitution test)

An SSyntRel  $r$  must have a prototypical dependent that is allowable with any governor.

For example, the Russian phrases  $\text{xocu-synt} \rightarrow \text{vypit'}$  [ $\text{kofe}$ ] 'I.want drink [coffee]' and  $\text{mogu-synt} \rightarrow \text{vypit'}$  [ $\text{kofe}$ ] 'I.can drink [coffee]' should be described by two different SSyntRels — **direct-objectival** and **infinitive-objectival**, because:

- The **direct-objectival** SSyntRel has a prototypical dependent, possible with any governor:  $N_{ACC}$ ; some — but not all — governors accept also  $V_{INF}$  and ČTO/ČTOBY-clause:

*xoču-dir-obj* → *kofe*<sub>ACC</sub> 'I.want coffee',  
*xoču-dir-obj* → *vypit'* [*kofe*] 'I.want drink [coffee]',  
*xoču-dir-obj* → *čtoby* [*on pil kofe*] 'I.want that [he drink coffee]'.

- The **infinitive-objectival** SSyntRel also has a prototypical dependent, possible with any governor:  $V_{INF}$ ; no governor accepts  $N_{ACC}$ :

*mogu-inf-obj* → *vypit'* [*kofe*] 'I.can drink [coffee]',  
*\*mogu-inf-obj* → *kofe*<sub>ACC</sub> 'I.can coffee'

If these SSyntRels are not distinguished, the “unified” SSyntRel will have no prototypical dependent.

Similar to Condition 2 of Criterion **C1**, Criterion **C2** is not relevant in our case either: it is satisfied all the time.

**Criterion C3** (no limited repeatability: Cooccurrence test)

An SSyntRel **r** must be either unlimitedly repeatable or non-repeatable — that is, it cannot be limitedly repeatable.

The phrases *write-synt* → *after lunch*, *write-synt* → *in the next room*, *write-synt* → *out of frustration*, etc. can all be described by the same SSyntRel: **circumstantial**, since the number of such dependents appearing simultaneously with the same governor is theoretically unlimited. On the contrary, the phrases [*They*] *returned-synt* → *all* and [*They*] *returned-synt* → *drunk* require two different SSyntRels (**floating-copredicative** and **subject-copredicative**), since otherwise the dependent will be repeatable exactly twice (*They returned all really drunk*).

Criterion **C3** is actively exploited in the following reasoning.

Now we are fully equipped to take on the problem formulated in Section 1: What is or what are the SSyntRel **r<sub>i</sub>** in an  $N-r_i \rightarrow N_{GEN}$  Russian phrase?

### 3. The Problem Solved

For the Russian  $N \rightarrow N_{GEN}$  phrases, as stated above, Criterion **C2** proves irrelevant, since all these phrases have the same Governor and the same Dependent. Only Criteria **C1** (Condition 1) and **C3** are used. Following their indications, the description of the  $N \rightarrow N_{GEN}$  phrases requires six SSyntRels, which will be introduced below.

Our examples are meant to illustrate only the grammatical possibilities, so that some of them are not quite natural out of appropriate context. Each pair of  $N \rightarrow N_{GEN}$  phrases being contrasted must be compared strictly under the “everything else being equal” condition, the latter understood in the following sense:

— The cosubordinated noun phrases being mutually ordered are of the same weight — roughly, of the same number of stressed syllables and of the same syntactic complexity. As is known (see, for instance, [Wasow, Arnold 2003]), in a string of cosubordinated phrases postposed to their governor, heavier phrases tend to follow lighter ones. Thus, the dubious expression *’perevod Bunina “Gajjavaty”* ‘translation of Bunin of *Hiawatha*’ becomes perfect with a heavier  $N_{GEN-obj}$  phrase: *perevod Bunina zamečatel’noj poëmy Longfello* ‘translation of Bunin of brilliant poem of Longfellow’.

— No communicative factors intervene (such as topicalization, focalization, emphasis, etc.). This means, among other things, that all the examples are considered under neutral prosody; emphatic intonation can make acceptable otherwise ungrammatical expressions.

— All cosubordinated noun phrases considered below are restrictive modifiers, since descriptive modifiers, characterized by special prosody, can violate the standard ordering: *kovry nebol’sogo razmera ètogo perioda* ‘carpets of small size of this period’ ~ *\*kovry ètogo perioda nebol’sogo razmera* [restrictive modifier], but *kovry ètogo perioda, nebol’sogo razmera, ...* [descriptive modifier].

— No ambiguity is created by the given linear arrangement.

### 3.1–2. Genitivus Subjectivus vs. Genitivus Objectivus: The subjective-adnominal and objective-adnominal SSyntRels

Criterion C1, Condition 1:

- (5) a. Semantic contrast between  $N_{\text{GEN-subj}}$  and  $N_{\text{GEN-obj}}$   
*perevod Bunina* ‘translation of.Bunin’: either Bunin translated somebody / something, or somebody translated Bunin;  
 b. Different syntactic behavior of  $N_{\text{GEN-subj}}$  and  $N_{\text{GEN-obj}}$   
 i. *perevod “Gajjavaty” Bunina*  $N_{\text{GEN-obj}}$   $N_{\text{GEN-subj}}$  ‘translation of.Hiawatha of.Bunin’ vs.  
 ?*perevod Bunina “Gajjavaty”*  
 ii. *portret devočki Serova*  $N_{\text{GEN-obj}}$   $N_{\text{GEN-subj}}$  ‘portrait of.young.girl of.Serov’ vs.  
 ?*portret Serova devočki*

$N_{\text{GEN-subj}}$  (Genitivus Subjectivus) that corresponds to N’s SemA 1 and  $N_{\text{GEN-obj}}$  (Genitivus Objectivus) that corresponds to N’s SemA 2 semantically contrast, see (5a). Everything else being equal,  $N_{\text{GEN-obj}}$  precedes  $N_{\text{GEN-subj}}$ , that is, it is positioned closer to their common governor N than  $N_{\text{GEN-subj}}$ ; see (5b). The word order difference in these phrases’ syntactic behavior is the manifestation of their semantic contrast.

The semantic contrast of  $N_{\text{GEN-subj}}$  and  $N_{\text{GEN-obj}}$  is rather limited in scope—in the sense that it is possible only in the context of a handful of governing nouns. However, in typological perspective it is important. On the one hand, the same contrast is found in Russian modificative adjectives: *repinskie ženské portrety* ‘Repin women’s portraits’ ~ *ženské repinskie portrety*, where the “objectival” adjective must be closer to the governor than the “subjectival” one. On the other hand, the linear precedence of  $N_{\text{GEN-obj}}$  with respect to  $N_{\text{GEN-subj}}$  in Russian  $N \rightarrow N_{\text{GEN}}$  phrases corresponds to a universal typological feature of natural languages: the direct object manifests closer semantic ties to its governor than the subject. Two well-known examples suffice to illustrate this point: 1) the wide-spread ergative construction, where the DirO is marked by the nominative case and controls the agreement of the Main Verb, while the Subject is in an oblique case and does not affect the form of the Main Verb; 2) V–dir-obj  $\rightarrow$  N collocations, whose base N is the direct object of the support verb, like *launch an attack* or *pay attention*, are the most frequent among verbal collocations.

Following Criterion C1, Condition 1 (the  $N_{\text{GEN-subj}}$  and  $N_{\text{GEN-obj}}$  phrases do not differ in their form, but show a semantic contrast manifested in different syntactic behavior—different word order),  $N_{\text{GEN-subj}}$  and  $N_{\text{GEN-obj}}$  must be subordinated to their Governor N by two different SSyntRels: **subjectival-adnominal** and **objectival-adnominal**. (The names **subjectival** and **objectival** are meant strictly as conventional labels, without any semantic load. Thus, in the phrases *stakan-subj-adnom*  $\rightarrow$  *moloka* ‘glass of.milk’, *člen-subj-adnom*  $\rightarrow$  *partii* ‘member of.party’, *serdce-subj-adnom*  $\rightarrow$  *materi* ‘heart of.mother’ or *pjatoe-subj-adnom*  $\rightarrow$  *janvarja* ‘[the] fifth of.January’ the **subj-adnom** SSyntRel shows only that the  $N_{\text{GEN-subj}}$  expresses DSyntA I of N, whatever its semantic role.)

Criterion C3 confirms the proposed solution: the **subj-adnom** and **obj-adnom** SSyntRels are both non-repeatable; if **subj-adnom** and **obj-adnom** are not distinguished, the dependent  $N_{\text{GEN}}$  will be repeatable exactly twice, which is forbidden.

In traditional descriptions of Russian, the proper semantic representation of predicate nouns is, as a rule, lacking. Thus, the genitive *peska* ‘of.sand’ in *kuča peska* ‘pile of.sand’ is treated as Genitivus Quantitatis, while *brat Ivana* ‘brother of.Ivan’ is said to manifest Genitivus Possessivus. In point of fact, PESOK ‘sand’ expresses SemA 1 (DSyntA I) of KUČA (our Genitivus Subjectivus), and IVAN, SemA 2 (DSyntA II) of BRAT (our Genitivus Objectivus). The overwhelming majority of Russian adnominal genitives turn out to be Genitivus Subjectivus or Objectivus.<sup>2</sup> (For

<sup>2</sup> [Mel’čuk 2016] proposes a slightly different syntactic description of Russian  $N \rightarrow N_{\text{GEN-subj}}$  and  $N \rightarrow N_{\text{GEN-obj}}$  phrases. Namely: 1. The present **subj-adnom** SSyntRel was called **agentive-attributive**; the



more on semantic predicates and semantic / deep-syntactic actants, see [Mel'čuk 2012b: 215 ff.; 2015: 4 ff.].)

The **subj-adnom** SSyntRel describes only  $N \rightarrow N_{\text{GEN}}$  phrases; semantically close phrases with the instrumental case or with a preposition are represented in the SSynt-structure in a different way: by the **agentive** SSyntRel (*rassmotrenie-agentive*  $\rightarrow$  *komitetom* 'study by.committee'; *dogovor-agentive*  $\rightarrow$  *meždu stranami* 'treaty between countries').

The **obj-adnom** SSyntRel also describes only  $N \rightarrow N_{\text{GEN}}$  phrases; the  $N_i$  that depends on  $N$  and is not in the genitive is subordinated to  $N$  by the **indir-objectival** or **oblique-objectival** SSyntRel (*podarok-indir-objectival*  $\rightarrow$  *Ivanu<sub>DAT</sub>* 'gift to.Ivan'; *zanjatiya-oblique-objectival*  $\rightarrow$  *matematiko<sub>INSTR</sub>* 'studying with.mathematics' = 'studying mathematics').

### 3.3. Genitivus Qualitatis: The qualificative-adnominal SSyntRel

Criterion C1, Condition 1:

- (6) a. Semantic contrast between  $N_{\text{GEN-qual}}$  and  $N_{\text{GEN-subj}} / N_{\text{GEN-obj}}$   
*portret neobyčnoj formy* 'portrait of.extraordinary form':  
 either the form of the portrait is extraordinary ( $N_{\text{GEN-qual}}$ ),  
 or the portrait was painted by somebody called "Extraordinary Form" ( $N_{\text{GEN-subj}}$ ),  
 or else the portrait represents somebody / something called "Extraordinary Form" ( $N_{\text{GEN-obj}}$ );
- b. Different syntactic behavior of  $N_{\text{GEN-qual}}$  with respect to both  $N_{\text{GEN-subj}}$  and  $N_{\text{GEN-obj}}$
- i. *portret neobyčnoj formy* <sub>$N_{\text{GEN-qual}}$</sub>  *Adeli Blox* <sub>$N_{\text{GEN-obj}}$</sub>  *blestjaščego Klimta* <sub>$N_{\text{GEN-subj}}$</sub>   
 'portrait of. extraordinary form of.Adel Bloch of.brilliant Klimt' and  
*neobyčnoj formy portret Adeli Blox blestjaščego Klimta* vs.  
 \**portret Adeli Blox blestjaščego Klimta neobyčnoj formy* and  
 ?*portret Adeli Blox neobyčnoj formy blestjaščego Klimta*
- ii. *tovary vyššego sorta* <sub>$N_{\text{GEN-qual}}$</sub>  *našego magazina* <sub>$N_{\text{GEN-obj}}$</sub>   
 'products of.highest class of.our store' vs.  
 \**tovary našego magazina* <sub>$N_{\text{GEN-obj}}$</sub>  *vyššego sorta* <sub>$N_{\text{GEN-qual}}$</sub>

As in the preceding case, the semantic contrast in (6a) is manifested through different syntactic behavior of  $N_{\text{GEN-qual}}$  with respect to  $N_{\text{GEN-subj}} / N_{\text{GEN-obj}}$ , see (6b): everything else being equal,  $N_{\text{GEN-qual}}$  precedes  $N_{\text{GEN-subj}}$  and  $N_{\text{GEN-obj}}$ . Similarly:

- (7) *statuja ogromnogo razmera Aleksandra Tret'ego Paolo Trubeckogo*  
 'statue of.huge size of.Alexander III of.Paolo Trubetzkoy' and  
*ogromnogo razmera statuja Aleksandra Tret'ego Paolo Trubeckogo* vs.  
 ?*statuja Aleksandra Tret'ego Paolo Trubeckogo ogromnogo razmera* and  
 \**statuja Aleksandra Tret'ego ogromnogo razmera Paolo Trubeckogo*

#### Deviation (from the standard ordering $N_{\text{GEN-qual}} + N_{\text{GEN-subj}}$ )

If  $N$  denotes a set or a quantity that measures the denotation of  $N_{\text{GEN-subj}}$ , then  $N_{\text{GEN-subj}}$  precedes  $N_{\text{GEN-qual}}$ , see (8).

- (8) a. *kuča morskogo peska ogromnogo razmera* 'pile of.sea sand of.huge size' vs.  
 ?*kuča ogromnogo razmera morskogo peska*

**agentive-attributive** SSyntRel covers also  $N \rightarrow N_{\text{INSTR}}$  phrases, for which I reserve now the **agentive** SSyntRel. 2. The present **obj-adnom** SSyntRel was called **patientive-attributive**. 3. There was the **actantial-attributive** SSyntRel, designed to describe the  $N \rightarrow N_{\text{GEN}}$  phrases in which  $N_{\text{GEN}}$  expresses  $N$ 's DSyntA I or II not corresponding to the syntactic subject or the direct object.

Now I believe that this description is too semantic and replace it.

- b. *tolpa studentov-fizikov ogromnogo razmera*  
 ‘crowd of students physicists of huge size’ vs.  
 ?*tolpa ogromnogo razmera studentov-fizikov*

In what follows, we will see other cases where the meaning of N or of  $N_{\text{GEN}}$  plays a role in determining the mutual ordering of different  $N_{\text{GEN}}$ s, see Subsection 3.5.

The indicated standard ordering can be violated, for instance, by the weight of the phrase under consideration:

- (9) a. *statuja Friny Praksitelja neobyčajnogo izjaščestva*  
 ‘statue of Phryne of Praxiteles of extraordinary elegance’ vs.  
 \**statuja neobyčajnogo izjaščestva Friny Praksitelja*  
 b. *fragmenty DNK fiksirovannogo razmera* ‘fragments of DNA of fixed size’ vs.  
*fragmenty fiksirovannogo razmera različnyx dezoksiribonukleinovyx kislot*  
 ‘fragments of fixed size of various desoxyribonucleic acids’

In this construction, N typically expresses  $N_{\text{GEN}}$ ’s SemA 1: ‘ $N \leftarrow 1 - N_{\text{GEN}}$ ’, as, for instance, in *portret<sub>N</sub> neobyčajnoj krasoty<sub>N<sub>GEN</sub></sub>* ‘portrait of extraordinary beauty’; less frequently, N can be SemA 2 of  $N_{\text{GEN}}$ : ‘ $N \leftarrow 2 - N_{\text{GEN}}$ ’, as, e. g., in *devuška moej mečty* ‘girl of my dream’ [= ‘a girl of whom I dream’], *losos’ xolodnogo kopčeniya* ‘salmon of cold smoking’ [= ‘salmon that has been smoked cold’] or *sumka ručnoj raboty* ‘bag of handiwork’ [= ‘the bag that has been manufactured manually’].

#### Criterion C3:

$N_{\text{GEN-qual}}$  is repeatable; we can have, for instance, three cosubordinated  $N_{\text{GEN-qual}}$ s:  
*neobyčajnoj krasoty<sub>N<sub>GEN-qual</sub></sub> šarfik jarko-golubogo cveta<sub>N<sub>GEN-qual</sub></sub> nebol’sogo razmera<sub>N<sub>GEN-qual</sub></sub>*  
 ‘of extraordinary beauty little scarf of bright light blue color of small size’

The repeatability of the **qualificative-adnominal** SSyntRel raises the following question. Suppose a noun N has two or more **qual-adnom** dependents; what should be their mutual linear arrangement? How do we specify it, since a particular order may be preferable? The problem of mutual ordering of different cosubordinated  $N_{\text{GEN}}$ s is not considered as such in this paper; however, since the main tool for establishing different SSyntRels in  $N \rightarrow N_{\text{GEN}}$  phrases is exactly their mutual ordering, this problem cannot be completely avoided. Thus, *sumka krasnogo cveta sovremennogo dizajna* ‘handbag of red color of modern design’ is OK, while ?*sumka sovremennogo dizajna krasnogo cveta* ‘handbag of modern design of red color’ is not; shouldn’t this force us to distinguish the SSyntRel subordinating CVET ‘color’ from the SSyntRel subordinating DIZAJN ‘design’:  $N - r_1 \rightarrow \text{CVET}$  and  $N - r_2 \rightarrow \text{DIZAJN}$ , where  $r_1 \neq r_2$ ? The answer is no, and the reason is as follows:

The linear position of a **qual-adnom** dependent  $N_{\text{GEN-1}}$  with respect to another **qual-adnom** dependent  $N_{\text{GEN-2}}$  is determined by the meaning of these dependent  $N_{\text{GEN}}$ s: an  $N_{\text{GEN}}$  that denotes the color (of N’s denotation) tends to precede an  $N_{\text{GEN}}$  denoting its design, etc.

The situation is identical to what holds for many codependent (= cosubordinated) adjectives modifying the same noun: as shown in [Iordanskaja 2000] for Russian and in [Iordanskaja, Mel’čuk 2017: 221–237] for French (based on the classic work [Vendler 1968]), a string of anteposed codependent adjectives is linearized according to their meanings:

“SUBJECTIVE ESTIMATE” > “SIZE” > “SPACIAL POSITION” > “FORM” > “COLOR” > “MATERIAL” > “KIND” N  
*(udivitel’naja ogromnaja vnešnjaja kruglaja krasnaja kirpičnaja protivolavinnaja stena*  
 ‘amazing enormous external round red brick anti-avalanche wall’)

Note that the order of anteposed modifiers is (roughly) a mirror image of that of postposed modifiers. In point of fact, we deal here with the **proximity** of different modifiers to the noun modified.

Different **qual-adnom**  $N_{\text{GEN}}$ s are linearly ordered between themselves based on the same principle, viz. according to their meanings. It must, however, be emphasized that this rule works,



of course, only under the condition “everything else being equal” — if the cosubordinated genitive-noun phrases being mutually ordered are of the same weight, etc.

Genitivus Qualitatis has at least three relevant particularities:

—  $N_{\text{GEN-qual}}$  requires a modifying adjective: *\*portret krasoty* ‘portrait of.beauty’; some  $N_{\text{GEN-qual}}$ s (lexically marked) allow — instead of an adjective — a modifying genitive noun or an apposition: *statuetka raboty*  $N_{\text{GEN-qual}}$  *Čellini*  $N_{\text{GEN}}$  ‘statuette of.work of.Cellini’, *traktor zavoda “Krasnyj Molot”* ‘tractor of.plant «Red Hammer»’.  $N_{\text{GEN-qual}}$  can also be modified by an idiom: *gostinica “srednej ruki”* ‘hotel of.middle hand’ = ‘hotel of mediocre quality’ ~ *“srednej ruki” gostinica*.

—  $N_{\text{GEN-qual}}$  can be anteposed with respect to  $N$  — under three additional conditions.

1)  $N$  corresponds to SemA 1 of  $N_{\text{GEN-qual}}$ :

*moego razmera tufli* ‘of.my size shoes’ (‘razmer-1→tufli’) vs.

*\*moej mečty devuška* ‘of.my dream girl’ (‘mečta-2→devuška’);

2)  $N_{\text{GEN}}$  has a corresponding syntactic feature:

*neobyčajnoj krasoty portret* ‘of.extraordinary beauty portrait’ vs.

*\*množestvennogo čisla suščetvitel’noe* ‘of.plural number noun’;

3)  $N_{\text{GEN}}$  does not have a modifying noun in the genitive:

*golobugo cveta lenta* ‘of.light.blue color ribbon’ vs.

*\*cveta morskoy volny lenta* ‘of.color of.sea wave ribbon’ [= ‘aquamarine ribbon’]

⟨the correct expression: *lenta cveta morskoy volny*⟩.

— Not every noun can appear as  $N_{\text{GEN-qual}}$ :

*devuška neobyčajnoj sud’by* ‘girl of.extraordinary destiny’ vs.

*\*devuška neobyčajnoj učasti* ‘girl of.extraordinary fate’.

This constraint seems to be lexical (rather than semantic); therefore, all nouns that can be  $N_{\text{GEN-qual}}$  (or those that cannot?) must be supplied with a special syntactic feature.

The same considerations as in Subsection 3.2 (based on Criteria C1 and C3) allow for postulating the third SSyntRel for Russian  $N \rightarrow N_{\text{GEN}}$  phrases: **qualificative-adnominal**.

The **qual-adnom** SSyntRel describes not only the  $N \rightarrow N_{\text{GEN}}$  phrases, but also three other constructions:

—  $N \rightarrow [N_{1(\text{parameter})\text{INSTR}} + V \text{ ‘in’} + \text{NUM} \leftarrow N_{2(\text{measure})\text{ACC}}]$ ; for instance, *most<sub>N</sub>-qual-adnom*  $\rightarrow$  *širinoj<sub>N1-INSTR</sub> v 10 metrov<sub>N2</sub>* ‘bridge by.width in 10 meters’ (the case indicated for  $N_2$  is actually the case of the whole phrase  $\text{NUM} + N$ ; on the surface it “percolates” to  $\text{NUM}$ , and the form of  $N_2$  is determined by the rules for this phrase).

—  $N \rightarrow [N_{1(\text{parameter})\text{INSTR}} + \text{NUM} \leftarrow N_{2(\text{measure})\text{NOM}}]$ ; for instance, *most<sub>N</sub>-qual-adnom*  $\rightarrow$  *širinoj<sub>N1-INSTR</sub> 10 metrov<sub>N2</sub>* ‘bridge by.width 10 meters’.

—  $N \rightarrow [V \text{ ‘in’} + N_{1(\text{parameter})\text{ACC}} + \text{NUM} \leftarrow N_{2(\text{measure})\text{NOM}}]$ ; for instance, *most<sub>N</sub>-[10 metrov]-qual-adnom*  $\rightarrow$  *v širinu<sub>N1-ACC</sub> 10 metrov* ‘bridge 10 meters into width’.

In the perspective of text synthesis, the choice between these constructions and **-qual-adnom**  $\rightarrow N_{\text{GEN-qual}}$  is made according to the dependent of  $N_{1(\text{parameter})}$ : if  $N_{1(\text{parameter})}$  has a dependent of the form **-qual-adnom**  $\rightarrow N_{2(\text{measure})} \rightarrow \text{NUM}$  (= expressing a numerical value), then  $N_{1(\text{parameter})}$  has the instrumental case or is introduced by the preposition  $V \text{ ‘in’}$  and cannot be anteposed; otherwise,  $N_{1(\text{parameter})}$  is in the genitive and can be anteposed. Cf.:

*most širin+oj (v) 10 metrov*

*most neobyčajnoj širin+y* ‘bridge of.extraordinary width’

~ *\*širin+oj (v) 10 metrov most* vs.

~ *neobyčajnoj širin+y most*.

In all the remaining types of the  $N \rightarrow N_{\text{GEN}}$  phrase, ‘ $N_{\text{GEN}}$ ’ is semantically not linked to ‘ $N$ ’ directly by a predicate-argument relation: either ‘ $N_{\text{GEN}}$ ’ and ‘ $N$ ’ are linked indirectly — via an additional predicate (or a configuration of predicates), or they are semantically not linked at all, forming a non-compositional phraseme.

### 3.4 Genitivus Possessivus: The genitive-possessive SSyntRel

$N_{\text{GEN-poss}}$  and N are semantically linked indirectly — via the predicate ‘belong.to’ [= ‘be.owned.by’]:

- (10) *sad otca* ‘garden of.Father’ = ‘garden **belonging.to** Father’  
*derev'ja sosedja* ‘trees of.neighbor’ = ‘trees **belonging.to** the neighbor’  
*stadion universiteta* ‘stadium of.University’ = ‘stadium **belonging.to** the University’  
*bol'nica ministerstva* ‘hospital of.ministry’ = ‘hospital **belonging.to** the ministry’  
*[zamorskie] territorii Francii*  
‘[overseas] territories of.France’ = ‘territories **belonging.to** France’

Consequently,  $N_{\text{GEN-poss}}$  denotes a person in the broadest sense: an individual, an organization, a country, etc., and N, an entity that can be owned. This means that ‘N’ can be only a semantic name or a quasi-predicate, so that the possibility of a semantic contrast between  $N_{\text{GEN-poss}}$  and  $N_{\text{GEN-subj/obj}}$  is limited, although not excluded.

Criterion C1, Condition 1:

- (11) a. Semantic contrast between  $N_{\text{GEN-poss}}$  and  $N_{\text{GEN-subj}}/N_{\text{GEN-obj}}$   
*skul'ptura Nikolaeva* ‘sculpture of.Nikolaev’:  
either *skul'ptura Nikolaeva* $_{\text{GEN-poss}}$  ‘sculpture belonging to Nikolaev’;  
or *skul'ptura Nikolaeva* $_{\text{GEN-subj}}$  ‘sculpture created by Nikolaev’;  
or else *skul'ptura Nikolaeva* $_{\text{GEN-obj}}$  ‘sculpture representing Nikolaev’.
- b. Different syntactic behavior of  $N_{\text{GEN-poss}}$  with respect to  $N_{\text{GEN-subj}}/N_{\text{GEN-obj}}$  and  $N_{\text{GEN-qual}}$
- skul'ptury Nikolaeva* $_{\text{GEN-subj}}$  [*Omskogo*] *muzeja* $_{\text{GEN-poss}}$  ‘sculptures created by Nikolaev belonging to Omsk Museum’ ~ \**skul'ptury* [*Omskogo*] *muzeja Nikolaeva*
  - fabriki* [*kuxonnoj*] *mebeli* $_{\text{GEN-obj}}$  [*našego*] *goroda* $_{\text{GEN-poss}}$  ‘factories of kitchen furniture belonging to our town’ ~ \**fabriki* [*našego*] *goroda* [*kuxonnoj*] *mebeli*
  - park* [*ogromnogo*] *razmera* $_{\text{GEN-qual}}$  [*našego*] *goroda* $_{\text{GEN-poss}}$  ‘park [of.huge] size [of.our] town’ ~ \**park* [*našego*] *goroda* [*ogromnogo*] *razmera* (for the meaning ‘huge-size park’)

As far as linear ordering is concerned,  $N_{\text{GEN-poss}}$  follows all other  $N_{\text{GENs}}$ .

Since  $N_{\text{GEN-poss}}$  expresses the semanteme ‘belong.to’, it is quite natural to introduce the corresponding SSyntRel: **genitive-possessive**.<sup>3</sup>

Criterion C3:

The **genitive-possessive** SSyntRel is non-repeatable, just as the **subj-adnom** and **obj-adnom** SSyntRels.

At the DSynt-level, the  $N_{\text{GEN-poss}}$  is marked by the fictitious lexeme «PRINADLEŽAT'» [= «BE-LONG»].<sup>4</sup>

The “possessive” syntactic relation — interpreting “possession” in the most liberal way possible — occupies a place of honor in linguistic typology (see, e. g., [Aikhenvald 2013]). On the one hand, all actual uses of the genitive case developed out of its possessive use (in the strict sense

<sup>3</sup> The **possessive** SSyntRel was proposed for English [Mel'čuk, Pertsov 1987: 139–140; Mel'čuk 2016: 97] to describe N's←N phrases (*Dad's arrival*, *a whole month's work*).

<sup>4</sup> A fictitious lexeme is a conventional symbol introduced by a linguist in order to represent, in the deep-syntactic structure, the meaning of a meaning-carrying syntactic construction, without adding new DSynt-relations [Mel'čuk 2013: 37–42; 2018].

of ownership); on the other hand, languages manifest a multitude of formal means to express “possession.” This is a weighty argument in favor of introducing the **genitive-possessive** SSyntRel.

The **genitive-possessive** SSyntRel describes exclusively  $N \rightarrow N_{\text{GEN}}$  phrases.

### 3.5. Genitivus Attributivus: The attributive-adnominal SSyntRel

$N_{\text{GEN-attr}}$  and  $N$  are semantically linked by an “additional” predicate ‘ $\sigma$ ’ ( $\langle N \leftarrow i - \sigma - j \rightarrow N_{\text{GEN-attr}} \rangle$ ), which can be almost any general binary predicate, as is seen in (12):<sup>5</sup>

- (12) *vozdux gor* ‘air of.mountains’ = ‘air that **exists.in** the mountains’  
*životnye savanny* ‘animals of.savannah’ = ‘animals that **live.in** the savannah’  
*filosofija dvadcatogo veka* ‘philosophy of.twentieth century’ = ‘philosophy **practiced.in** 20<sup>th</sup> century’  
*strana l'vov* ‘country of.lions’ = ‘country that **is.inhabited.by** lions’  
*dela [minuvšix] dnei* (Puškin) ‘events [of.past] days’ = ‘events that **took.place.in** the past’  
*krik boli* ‘cry of.pain’ = ‘cry **caused.by** pain’  
*[dva] časa dnja / noči* ‘[two] o'clock of.day [AM] / of.night [PM]’ = ‘... o'clock **during** the day / the night’  
*KADEŠ [drevneegipetskix] xronik* ‘KADESH [of.ancient.Egyptian] chronicles’ = ‘KADESH that **is.mentioned.in** ancient Egyptian chronicles’

Criterion C1, Condition 1:

- (13) a. Semantic contrast between  $N_{\text{GEN-attr}}$  and  $N_{\text{GEN-subj}}$   
 i. *lob borca* <sub>$N_{\text{GEN-attr}}$</sub>  ‘forehead of.wrestler’ (A. Žolkovskij) = ‘forehead **typical.for** a wrestler’ vs.  
 ii. *lob [ètogo] borca* <sub>$N_{\text{GEN-subj}}$</sub>  ‘forehead [of.this] wrestler’  
 iii. *polovina [18-go] veka* <sub>$N_{\text{GEN-attr}}$</sub>  ‘half of.18<sup>th</sup> century’ = ‘a half [of an artifact] **manufactured.in** the 18<sup>th</sup> century’ (while the other half was manufactured in a different century) vs.  
 iv. *polovina [18-go] veka* <sub>$N_{\text{GEN-subj}}$</sub>  ‘[one] half of.18<sup>th</sup> century’  
 b. Different syntactic behavior of  $N_{\text{GEN-attr}}$  with respect to  $N_{\text{GEN-subj}}$  /  $N_{\text{GEN-obj}}$ ,  $N_{\text{GEN-qual}}$  and  $N_{\text{GEN-poss}}$   
 i. *lob borca* <sub>$N_{\text{GEN-attr}}$</sub>  *[našego] polkovnika* <sub>$N_{\text{GEN-subj}}$</sub>  ‘forehead of.wrestler [of.our] colonel’ ~ \**lob [našego] polkovnika borca*  
 ii. *bjust karrarskogo mramora* <sub>$N_{\text{GEN-attr}}$</sub>  *molodoj ženščiny* <sub>$N_{\text{GEN-obj}}$</sub>  ‘bust of.Carrara marble of.young woman’ = ‘bust **made.of** Carrara marble’ ~ ?*bjust molodoj ženščiny karrarskogo mramora*

**NB:** The construction in (13b-ii) is quite similar to the constructions described by the **qual-adnom** SSyntRel, see Subsection 3.3. However, in spite of this similarity, there are two essential differences:

- Semantic difference:  $N_{\text{GEN-qual}}$  expresses a predicate denoting a property and takes  $N$  as its Sem-actant, while  $N_{\text{GEN-attr}}$  in (13b-ii) denotes a substance — material of which the denotation of  $N$  is made.

<sup>5</sup> “Almost” is necessary since some constraints do exist. First, this ‘ $\sigma$ ’ is, of course, different from ‘belong.to’ (the **possessive** SSyntRel) and ‘similar.to’ (the **metaphorical** SSyntRel). Second, as Raxilina [2010: 253] noted, the predicative semanteme ‘ $X$  prednaznačen dlja  $Y$ -a’  $\approx$  ‘ $X$  is for  $Y$ ’ cannot be expressed by  $N_{\text{GEN}}$  but requires an explicit expression: ‘book that is.for Petya’  $\Leftrightarrow$  *kniga dlja Peti* ‘book for Petya’ / \**kniga Peti* ‘book of.Petya’. And, of course, there can be other such cases.

- Syntactic difference:  $N_{\text{GEN-qual}}$  can precede N, but  $N_{\text{GEN-atrr}}$  cannot: *neobyčajnoj krasoty bjst molodoj ženščiny* ‘of.extraordinary beauty bust of.young woman’ vs. *\*karrarskogo mramora bjst molodoj ženščiny* ‘of.Carrara marble bust of.young woman’.
- iii. *vozdux [neobyčajnoj] čistoty* $_{\text{N}_{\text{GEN-qual}}}$  *[gimalajskix] vysot* $_{\text{N}_{\text{GEN-atrr}}}$  ‘air [of.extraordinary] purity [of.Himalayan] heights’ [= ‘air **existing.in** Himalayan heights’] ~ *\*vozdux gimalajskix vysot neobyčajnoj čistoty*
- iv. *mašina [moskovskogo] avtozavoda* $_{\text{N}_{\text{GEN-atrr}}}$  *[ětogo] general-majora* $_{\text{N}_{\text{GEN-poss}}}$  ‘car [of.Moscow] automaker [of.this] major-general’ [= ‘car **manufactured.by** the Moscow automaker **belonging.to** this major-general’] ~ *\*mašina ětogo general-majora moskovskogo avtozavoda*

**Deviations (from the standard ordering  $N_{\text{GEN-atrr}} + N_{\text{GEN-obj}}$  and  $N_{\text{GEN-qual}} + N_{\text{GEN-atrr}}$ )**

1. If  $N_{\text{GEN-atrr}}$  denotes localization (of N), it follows the cosubordinated  $N_{\text{GEN-obj}}$ , see (14a).
  2. If  $N_{\text{GEN-atrr}}$  denotes material or kind (of N), it precedes a cosubordinated  $N_{\text{GEN-qual}}$ , see (14b-c).
- (14) a. *fabriki obuvi* $_{\text{N}_{\text{GEN-obj}}}$  *Italii* $_{\text{N}_{\text{GEN-atrr}}}$  ‘factories of.shoes of.Italy’ = ‘factories situated.in Italy’ ~ *\*fabriki Italii obuvi*
- b. *stol krasnogo dereva* $_{\text{N}_{\text{GEN-atrr}}}$  *ogromnyx razmerov* $_{\text{N}_{\text{GEN-qual}}}$  ‘table of.red wood of.huge dimensions’ ~ *\*stol ogromnyx razmerov* $_{\text{N}_{\text{GEN-qual}}}$  *krasnogo dereva* $_{\text{N}_{\text{GEN-atrr}}}$

The versatility of the predicate ‘ $\sigma$ ’, which semantically underlies the  $N \rightarrow N_{\text{GEN-atrr}}$  phrase, reminds one of nominal compounds, e. g. in English. The attempts at describing semantic relations between the members of an English nominal compound — that is a phrase of the  $N_1 + N_2$  type — are astronomically numerous; suffice it to indicate, for instance, the classic [Hatcher 1960; Levi 1978] and more recent [Weiskopf 2007] ones. The researchers specify a couple dozen meanings, insisting, however, that their inventory is not and cannot be exhaustive. That is what I think as well; but in this paper I will not try to circumscribe more precisely the range of possible ‘ $\sigma$ ’ in the Russian configuration ‘ $N \leftarrow i - \sigma - j \rightarrow N_{\text{GEN-atrr}}$ ’.

The  $N \rightarrow N_{\text{GEN-atrr}}$  phrase is described by the **attributive-adnominal** SSyntRel.

As the examples in (13) show, the **attr-adnom** SSyntRel is opposed to the **subj-adnom**, **obj-adnom**, **qual-adnom**, and **genitive-possessive** SSyntRel.

**Criterion C3:**

Since ‘ $\sigma$ ’ is so variegated, the  $N_{\text{GEN-atrr}}$  is repeatable:

- (15) *kol'co [dutogo] zolota* $_{\text{N}_{\text{GEN-atrr}}}$  *[18-go] veka* $_{\text{N}_{\text{GEN-atrr}}}^6$  ‘ring [of.filled] gold [of.18<sup>th</sup>] century’

Because of the semantic versatility of the  $N \rightarrow N_{\text{GEN-atrr}}$  phrase, its description requires two additional remarks.

— Not every  $N_{\text{GEN}}$  semantically fit for the  $N \rightarrow N_{\text{GEN-atrr}}$  construction can be freely used in it. First, several  $N_{\text{GEN-atrr}}$ s are subject to **semantic** constraints [Raxilina 2010]; for instance, in the  $N \rightarrow N_{\text{GEN-atrr}}$  phrase with the underlying predicate ‘be.in’ the noun N must be used generically: *devuški Moskvy* or *každaja devuška Moskvy*, but not *\*ěta devuška Moskvy*. Second, there are also **lexical** constraints: thus, *mebel' [krasnogo] dereva* ‘furniture [of.red] wood’ = ‘of mahogany’ is perfectly OK, while *\*mebel' [karel'skoj] sosny* ‘furniture [of.Karelian] pine’ is impossible (the correct expression is *mebel' iz [‘from’] karel'skoj sosny*). Similarly, *kolonny [čěrnogo] mramora* ‘columns [of.black] marble’ vs. *\*kolonny [zolistogo] peščanika* ‘columns [of.golden] sandstone’ (the correct expression is *kolonny iz [zolistogo] peščanika*). Therefore, the nouns that can be used as dependents of the **qual-adnom** SSyntRel must be lexically marked — that is, they must be supplied with a special syntactic feature. This applies at least to the names of materials.

<sup>6</sup>  $N_{\text{GEN-atrr}}$  denoting material requires an adjectival modifier: *\*kol'co zolota* $_{\text{N}_{\text{GEN-atrr}}}$  ‘ring of.gold’.

— Since the **attributive-adnominal** SSyntRel is so “loose,” it can cover cases of semantic-syntactic mismatches in which an  $N_{GEN}$  participates; here is one such case, linked to particular lexical units (or classes of lexical units).

### The semantic-syntactic mismatch linked to lexical units of LJUBIMYJ ‘favorite’ type:

$$\begin{aligned} \langle \underline{X} \leftarrow 1\text{-ljubimyj-2} \rightarrow Y \rangle &\Leftrightarrow \text{LJUBIMYJ} \leftarrow \text{ATTR-L}(\langle X \rangle) \text{--ATTR} \rightarrow \text{L}(\langle Y \rangle) \\ \textit{ljubimyj šokolad}_X \textit{ Peti}_Y &\text{ ‘favorite chocolate of.Petya’} \end{aligned}$$

The noun  $N_Y$ , which semantically depends on ‘ljubimyj’ (it is its Sem-actant 2), depends syntactically (as an  $N_{GEN\text{-attr}}$ ) on the noun  $N_X$ , modified by LJUBIMYJ. (Cf. [Partee, Borschev 2000] on the similar behavior of the English adjective FAVORITE.)

The adjective RODNOJ ‘native’ [= ‘where someone was born’] behaves in the same way:

$$\begin{aligned} \langle \underline{X} \leftarrow 1\text{-rodnoj-2} \rightarrow Y \rangle &\Leftrightarrow \text{RODNOJ} \leftarrow \text{ATTR-L}(\langle X \rangle) \text{--ATTR} \rightarrow \text{L}(\langle Y \rangle) \\ \textit{rodnoj gorod}_X \textit{ Peti}_Y &\text{ ‘native town of.Petya’} \end{aligned}$$

To this we have to add all superlatives:

$$\begin{aligned} \langle \underline{X} \leftarrow 1\text{-samyj.znamenityj-2} \rightarrow Y \rangle &\Leftrightarrow \text{ZNAMENITYJ}_{\text{SUPERL}} \leftarrow \text{ATTR-L}(\langle X \rangle) \text{--ATTR} \rightarrow \text{L}(\langle Y \rangle) \\ \textit{samyj znamenityj xokkeist}_X \textit{ Kanady}_Y &\text{ ‘the.most famous hockey-player of.Canada’} \end{aligned}$$

The corresponding formal representations are given in Section 4. This mismatch is due to the fact that the predicate ‘σ’ linking N and  $N_{GEN}$  is, in this case, expressed by a lexeme that does not accept  $N_{GEN}$  as syntactic dependent.

Along with the  $N \rightarrow N_{GEN\text{-attr}}$  phrases, the **attributive-adnominal** SSyntRel describes as well all  $\text{PREP} \rightarrow N$  phrases functioning as adnominal attributes:

- (16) a. *knigi s poželtevšimi stranicami v kožanyx pereplětax*  
           books with yellowish pages in leather bindings  
       b. *prestuplenija komunizma protiv čelovečestva v točnom smysle slova*  
           crimes of.Communist against humanity in proper meaning of.the.word

### 3.6. Genitivus Metaphoricus: The metaphorical SSyntRel

$N_{GEN\text{-metaph}}$  and N are semantically linked indirectly — via the predicate ‘be.similar.to’, but with what is known as head-switching:

$$\begin{aligned} \langle \underline{X} \leftarrow 1\text{-similar-2} \rightarrow Y \rangle &\Leftrightarrow \text{L}(\langle Y \rangle) \text{--ATTR} \rightarrow \langle \text{PREDSTAVLJAT'} \rangle \text{--II} \rightarrow \text{L}(\langle X \rangle) \\ \textit{zvězdy}_X, \textit{poxožíe na iskry}_Y &\text{ ‘stars similar to sparks’ } \Rightarrow \textit{iskry zvězd} \text{ ‘sparks of.stars’} \end{aligned}$$

This construction is marked in the DSynt-structure by the fictitious lexeme «PREDSTAVLJAT'» [= «REPRESENT'»], which marks the expression as metaphoric.

$N_{GEN\text{-metaph}}$  expresses the basis of a metaphoric transfer to N. Suppose that the Speaker wants to compare the Moon — the basis of a metaphoric transfer — to a cold eye, which is the metaphor: the Moon is similar to a cold eye; and he says [*xolodnyj*] *glaz luny* ‘[cold] eye of.moon’ (see [Mixeev 2000]).

- (17) *iskry zvězd* ‘sparks of.stars’; *sutany dyma* ‘soutanes of.smoke’  
*lenta dorogi* ‘ribbon of.road’; *bacilly straxa* ‘bacilli of.fear’  
*poluxleb ploti* ‘half-bread of.flesh’ (O. Mandelštam)  
 [opozdavšie] *pticy gazet* (R. Roždestvenskij) ‘[belated] birds of.newspapers’  
*bljudečki-očki [spasatel'nyx] krugov* (V. Majakovskij) ‘saucers-eyeglasses of.life.buoys’

Criterion C1, Condition 1:

- (18) a. Semantic contrast between  $N_{\text{GEN-metaph}}$  and  $N_{\text{GEN-subj}}/N_{\text{GEN-obj}}/N_{\text{GEN-qual}}/N_{\text{GEN-attr}}/N_{\text{GEN-poss}}$
- i. *kolesnica solnca* ‘chariot of.Sun’:  
*kolesnica solnca* <sub>$N_{\text{GEN-metaph}}$</sub>  ‘Sun as if it were a chariot’ vs.  
*kolesnica Solnca* <sub>$N_{\text{GEN-subj}}/N_{\text{GEN-poss}}$</sub>  ‘chariot of somebody [e. g., a god] called Sun’
  - ii. *pytka ljubvi* ‘torture of.love’:  
*pytka ljubvi* <sub>$N_{\text{GEN-metaph}}$</sub>  ‘love as if it were a torture’ vs.  
*pytka ljubvi* <sub>$N_{\text{GEN-obj}}/N_{\text{GEN-attr}}$</sub>  ‘torture applied to love / induced by love’
  - iii. *požar cvetov* ‘fire of.colors’:  
*požar cvetov* <sub>$N_{\text{GEN-metaph}}$</sub>  ‘colors as if they were a fire’ vs.  
*požar [raznyx] cvetov* <sub>$N_{\text{GEN-qual}}$</sub>  ‘fire [of.different] colors’
- b. Different syntactic behavior of  $N_{\text{GEN-metaph}}$  with respect to  $N_{\text{GEN-qual}}$  and  $N_{\text{GEN-attr}}$  (with all other  $N_{\text{GENS}}$ ,  $N_{\text{GEN-metaph}}$  cannot cooccur for semantic reasons)
- i. *iskry [neobyčajnoj] jarkosti* <sub>$N_{\text{GEN-qual}}$</sub>  [*takix dalëkix*] *zvëzdz* <sub>$N_{\text{GEN-metaph}}$</sub>  ~  
‘sparks [of.extraordinary] brightness [of.so faraway] stars’  
\**iskry [takix dalëkix] zvëzd neobyčajnoj jarkosti* [for the meaning ‘sparks are extraordinarily bright’]
  - ii. *poluxleb ploti* <sub>$N_{\text{GEN-metaph}}$</sub>  *Mandelštama* <sub>$N_{\text{GEN-attr}}$</sub>  ‘half-bread of.flesh of.Mandelstam’ [= ‘expression “half-bread of flesh” used by Mandelstam’] ~  
\**poluxleb Mandelštama ploti*

The SSyntRel for  $N_{\text{GEN-metaph}}$  can be called **metaphorical**.

Criterion C3:

The **metaphorical** SSyntRel is non-repeatable.

Note that the **metaphorical** SSyntRel is used in the collocations with the Figur LF:<sup>7</sup>

<i>stena-metaph</i> → <i>doždja</i> ‘wall of.rain’	<i>červ'-metaph</i> → <i>sommenija</i> ‘worm of.doubt’	<i>plamja-metaph</i> → <i>strasti</i> ‘flame of.passion’
<i>grad-metaph</i> → <i>pul'</i> ‘hail of.bullets’	<i>luč-metaph</i> → <i>nadeždy</i> ‘ray of.hope’	<i>znamja-metaph</i> → <i>bor'by</i> ‘banner of.fight’

The **metaphorical** SSyntRel describes only  $N \rightarrow N_{\text{GEN}}$  phrases.

### 3.7. Genitivus Phrasemicus: No Special SSyntRel

$N_{\text{GEN-phrasS}}$  appear within phrasemes and come in two major types: an  $N_{\text{GEN-phras}}$  being part of a compositional phraseme (a collocation or a termeme) and an  $N_{\text{GEN-phras}}$  being part of a non-compositional phraseme (an idiom or a nomineme). This difference is relevant since, in the deep-syntactic structure, a compositional phraseme is represented by its complete subtree (so that the  $N_{\text{GEN}}$  must be present already at this level), while a non-compositional phraseme appears as a single node (and the  $N_{\text{GEN}}$  enters the scene only in the surface-syntactic structure).

- (19) a. Collocations
- i. *čelovek dela* ⟨*dolga, slova, česti*⟩ ‘man of.business ⟨of.duty, of.word, of.honor⟩’  
*dom [našix] grëz* ‘house [of.our] dreams’; *roman veka* ‘novel of.century’
  - ii. *gvardii seržant* ‘of.Guards sergeant’  
*ordena [Lenina] zavod «Molot»* ‘of.Order [of.Lenin] factory «Hammer»’ =  
‘«Hammer» factory decorated with the Order of Lenin’

<sup>7</sup> Lexical function Figur returns for a lexical unit L the lexical unit L' that expresses the standard metaphor for L:

Figur(*tuman* ‘fog’) = *pelena* [*tumana*] ‘curtain of.fog’ or Figur(*gnev* ‘anger’) = *plamja* [*gneva*] ‘flame of.anger’.



## b. Termemes

*dvigatel'* [vnutrennego] *sgoranija* 'engine [of.internal] combustion'  
*zakon Oma* 'law of.Ohm'; *bolezn' Al'cgejmera* 'disease of.Alzheimer'

## (20) a. Idioms

*čaiška Petri* 'cup of.Petri' = 'Petri dish'; *'koktejl' Molotova* 'cocktail of.Molotov'  
*'roza vetrov* 'rose of.winds' = 'compass rose'  
*'krik duši* 'scream of.soul' = 'verbal expression of very strong emotions'  
*'pojas vernosti* 'belt of.fidelity' = 'chastity belt'  
*'dama serdca* 'lady of.heart' = 'beloved woman'; *'pir Valtasara* 'feast of.Belshazzar'  
*'lico [kavkazskoj] nacional'nosti* 'person [of.Caucasian] ethnicity' = 'native of Caucasus region'

## b. Nominemes

*More Laptevyyx* 'Sea of.Laptevs'; *sozvezdie Gončix Psov* 'Constellation of.Greyhounds'  
*Ostrova Zel'nogo Mysa* 'Islands [of.Green] Cape'

An  $N_{\text{GEN-phras}}$  is special only in that it is an element of a phraseme, since from a purely syntactic viewpoint it is like any other, not phraseologized  $N_{\text{GEN}}$ . However, exactly because of its phraseological nature, it linearly precedes all other  $N_{\text{GEN}}$ s and, in some cases (specified lexically), it can or must be anteposed to its  $N$ . These particularities of an  $N_{\text{GEN-phras}}$  can be indicated in the surface-syntactic structure in one of two ways: either by a special SSyntRel or by special features to be introduced into the syntactics of the  $N_{\text{GEN-phras}}$ . Postulating for  $N_{\text{GEN-phras}}$  a **genitive-phrase-mic** SSyntRel seems, at first blush, an easy solution, but, unfortunately, it cannot be accepted. The reason is simple: there are lots of phraseologized clause elements that show unusual word order and other "deviations." Thus:

— Phraseologized modifiers, with obligatory postposition of the modifying adjective, e. g.: *papa-modificative* → *Rimskij* 'Pope Roman' or *xmyr'-modificative* → *bolotnyj* 'douche.bag swampy' ≈ 'insignificant, despicable man'.

— Phraseologized subjects, either with obligatory anteposition of the subject, e. g.: *Čěrt←subjectival*–[ego]–*poberi!* 'Devil him take!' = 'Let the devil take him!', or with obligatory postposition of the subject, e. g.: *Ne daj←subjectival* → *Bog!* 'Not allow God!' = 'God forbid'.

— Phraseologized direct objects with obligatory anteposition of the DirO, e. g.: *pal'čiki←direct-objectival*–*oblizeš'* 'fingers you.will.lick' = 'this is very tasty' or *sobaku←direct-objectival*–*s'est'* 'dog [to] eat' = 'be very experienced'.

— Phraseologized circumstantials, with obligatory anteposition of the circumstantial (and of the DirO), e. g.:

direct-objectival

↓

*Moju ustalost' kak←circumstantial*–[rukoj]–*snjalo* 'My tiredness as with.hand [it] took away' = 'My tiredness vanished in a trice'.

direct-objectival

↓

*Ivana kak←circumstantial*–[vetrom]–*sdulo* 'Ivan as by.wind [it] blew away' = 'Ivan disappeared in a trice'.

— Phraseologized preposition complements, with obligatory postposition of the PREP, e. g.: *ne korysti←prepositional*–*radi* 'not gain for' = 'not for gain'.

If we systematically apply this solution — that is, if we introduce special  $X$ -phrasemic SSyntRels, we will have to double all SSyntRels whose dependents can be phraseologized and as a result acquire "exotic" syntactic properties within phrasemes. Therefore, we are forced to accept the opposite solution: a lexeme that manifests deviant behavior because it is part of a phraseme must receive the corresponding syntactic features at the moment where the node of this phraseme is expanded into its subtree. The conclusion: there is no special

**phrasemic** SSyntRel; an  $N_{\text{GEN-phras}}$  is subordinated to its governing N by the **attr-adnom** SSyntRel. For instance:

*koktejl'*–**attr-adnom**→*Molotova* ‘cocktail of Molotov’ =  
‘incendiary weapon — a glass bottle with flammable liquid...’

4. Overview of the Six SSyntRels Proposed

Six SSyntRels are proposed for the description of the Russian  $N \rightarrow N_{\text{GEN}}$  phrases:

- 1) **subjectival-adnominal**
- 2) **objectival-adnominal**
- 3) **qualificative-adnominal**
- 4) **genitive-possessive**
- 5) **attributive-adnominal**
- 6) **metaphorical**

For each of these 6 SSyntRels the corresponding formal representations are given: the semantic subnetwork — its semantic source, the deep-syntactic subtree, the surface-syntactic subtree, as well as an example.

Table 1

1) Subjectival-adnominal SSyntRel

Sem	$\text{'Y-I} \rightarrow \text{X'}^8$
DSynt	$L(\text{'Y'})_{(N)}\text{-I} \rightarrow L(\text{'X'})_{(N)}$
SSynt	$L(\text{'Y'})_{(N)}\text{-subj-adnom} \rightarrow L(\text{'X'})_{(N)}$
Example	$\text{'spat'}_{\text{'Y'}}\text{-I} \rightarrow \text{Ivan}_{\text{'X'}}$ [= ‘Ivan <i>sleeps</i> ’]
	SON-I→IVAN ‘Ivan’s sleep’
	SON-subj-adnom→IVAN: <i>son Ivana</i>

Table 2

2) Objectival-adnominal SSyntRel

Sem	$\text{'Y-2} \rightarrow \text{X'}$
DSynt	$L(\text{'Y'})_{(N)}\text{-II} \rightarrow L(\text{'X'})_{(N)}$
SSynt	$L(\text{'Y'})_{(N)}\text{-obj-adnom} \rightarrow L(\text{'X'})_{(N)}$
Example	$\text{'nagrada'}_{\text{'Y'}}\text{-2} \rightarrow \text{Ivan}_{\text{'X'}}$ [= ‘[Somebody] decorates Ivan [with a medal]’]
	NAGRAZDENIE-II→IVAN ‘decorating of Ivan’
	NAGRAZDENIE-obj-adnom→IVAN: <i>nagrazdenie Ivana</i>

<sup>8</sup> Underscoring of a semanteme ‘ $\sigma$ ’ in a semantic structure ‘S’ shows its communicatively dominant status: ‘ $\sigma$ ’ is a minimal paraphrase of the whole ‘S’, such that ‘S’ can be reduced to ‘ $\sigma$ ’ with loss, but without distortion, of information. Thus, ‘dog←1-sleeps’ represent *A / The dog sleeps*, and ‘dog←1-sleeps’ underlies *a / the sleeping dog* and *a / the dog who is sleeping*.

Table 3

## 3) Qualificative-adnominal SSyntRel

<b>Sem</b>	' $\underline{X} \leftarrow 1 - Y \leftarrow 1 - Z$ '
<b>DSynt</b>	$L('X')_{(N)} - \text{ATTR} \rightarrow L('Y')_{(N)} - \text{ATTR} \rightarrow L('Z')_{(ADJ)}$
<b>SSynt</b>	$L('X')_{(N)} - \text{qual-adnom} \rightarrow L('Y')_{(N)} - \text{modificative} \rightarrow L('Z')_{(ADJ)}$
<b>Example</b>	' $\text{dom}_{\cdot X} \leftarrow 1 - \text{krasivyj}_{\cdot Y} \leftarrow 1 - \text{očen' očen'}_{\cdot Z}$ ' [= 'an extraordinarily beautiful house']
	$\text{DOM} - \text{ATTR} \rightarrow \text{KRASOTA} - \text{ATTR} \rightarrow \text{Magn} [\text{Magn} \Rightarrow \text{NEOBYČAJNYJ 'extraordinary'}]$ 'house of extraordinary beauty'
	$\text{DOM} - \text{qual-adnom} \rightarrow \text{KRASOTA} - \text{modificative} \rightarrow \text{NEOBYČAJNYJ}$ : <i>dom neobyčajnoj krasoty / neobyčajnoj krasoty dom</i>

Only the case where N implements Sema 1 of  $N_{\text{GEN}}$  is presented. Similarly:

- (21) a. 'čelovek $\leftarrow 1$ -duša $\leftarrow 1$ -kristal'nejšij'  $\Leftrightarrow$   
'human.being $\leftarrow 1$ -soul $\leftarrow 1$ -crystal.purest'  
ČELOVEK-ATTR  $\rightarrow$  DUŠA-ATTR  $\rightarrow$  KRISTAL'NEJŠIJ  $\Leftrightarrow$   
ČELOVEK-attr-adnom  $\rightarrow$  DUŠA-modificative  $\rightarrow$  KRISTAL'NEJŠIJ  $\Leftrightarrow$   
*Kristal'nejšej duši čelovek!* 'Of.crystal.purest soul human.being!'  
(V. I. Lenin about his wife, N. K. Krupskaja, in a risqué political joke)

Table 4

## 4) Genitive-possessive SSyntRel

<b>Sem</b>	' $\underline{X} \leftarrow 1 - \text{prinadležat}' - 2 \rightarrow Y$ ' [= ' $\underline{X} \leftarrow 1 - \text{belong} - 2 \rightarrow Y$ ']
<b>DSynt</b>	$L(X)_{(N)} - \text{ATTR} \rightarrow \langle \text{PRINADLEŽAT} \rangle - \text{II} \rightarrow L(Y)_{(N)}$ [ $\langle \text{PRINADLEŽAT} \rangle$ 'belong' is a fictitious lexeme marking the possessive relationship]
<b>SSynt</b>	$L(X)_{(N)} - \text{genitive-possessive} \rightarrow L(Y)_{(N)}$
<b>Example</b>	' $\text{dom}_{\cdot X} \leftarrow 1 - \text{prinadležat}' - 2 \rightarrow \text{ministr}_{\cdot Y}$ ' [= 'house that belongs to the minister']
	$\text{DOM} - \text{ATTR} \rightarrow \langle \text{PRINADLEŽAT} \rangle - \text{II} \rightarrow \text{MINISTER}$ 'house of.minister'
	$\text{DOM} - \text{genitive-possessive} \rightarrow \text{MINISTER}$ : <i>dom ministra</i>

Table 5

## 5) Attributive-adnominal SSyntRel

<b>Sem</b>	' $\underline{X} \leftarrow 1 - \text{naxodit'sja} - 2 \rightarrow Y$ ' [= ' $\underline{X} \leftarrow 1 - \text{be.located} - 2 \rightarrow Y$ ']
<b>DSynt</b>	$L('X')_{(N)} - \text{ATTR} \rightarrow \langle \text{NAXODIT'SJA} \rangle - \text{II} \rightarrow L('Y')_{(N)}$ [ $\langle \text{NAXODIT'SJA} \rangle$ 'be.located' is a fictitious lexeme marking the localization relationship]
<b>SSynt</b>	$L('X')_{(N)} - \text{attr-adnom} \rightarrow L('Y')_{(N)}$
<b>Example</b>	' $\text{mosty}_{\cdot X} \leftarrow 1 - \text{naxodit'sja} - 2 \rightarrow \text{Pariž}_{\cdot Y}$ ' [= 'bridges that are in Paris']
	$\text{MOST}_{\text{PL}} - \text{ATTR} \rightarrow \langle \text{NAXODIT'SJA} \rangle - \text{II} \rightarrow \text{PARIŽ}$ 'bridges of.Paris'
	$\text{MOST}_{\text{PL}} - \text{attr-adnom} \rightarrow \text{PARIŽ}$ : <i>mosty Pariža</i>

Only the case where ‘σ’ = ‘be.located’ is presented. Similarly:

- (22) a. ‘putešestvija←1–proisxodit’←1–vremja–2→vek←1–vosemnadcatyj’ ⇔  
‘travels←1–happen←1–time–2→century←1–eighteenth’  
PUTEŠESTVIE<sub>PL</sub>–ATTR→«PROISXODIT’»–II→VEK–ATTR→VOSEMNADCATYJ ⇔  
PUTEŠESTVIE<sub>PL</sub>–attr-adnom→VEK–**modificative**→VOSEMNADCATYJ ⇔  
*putešestvija vosemnadcatogo veka* ‘travels of the 18<sup>th</sup> century’  
b. ‘opyt←1–[priobretennyj]v\_tečenie–2→nedelja←1–ètot’ ⇔  
‘experience←1–[acquired]during–2→week←1–this’  
OPYT–ATTR→«V\_TEČENIE»–II→NEDELJA–ATTR→ÈTOT ⇔  
OPYT–attr-adnom→NEDELJA–**modificative**→ÈTOT ⇔  
*opyt ètoj nedeli* ‘experience of this week’

Special Cases of N<sub>GEN-attr</sub>

Table 6

The semantic-syntactic mismatch caused by the adjective LJUBIMYJ ‘favorite’  
(see Section 3.5)

Sem	‘X←1–ljubimyj–2→Y’ [= ‘X←1–favorite–2→Y’]	
DSynt	LJUBIMYJ←ATTR–L(‘X’) <sub>(N)</sub> –ATTR→L(‘Y’) <sub>(N)</sub>	
SSynt	LJUBIMYJ← <b>modificative</b> –L(‘X’) <sub>(N)</sub> –attr-adnom→L(‘Y’) <sub>(N)</sub>	
Example	‘fil’m <sub>X</sub> ←1–ljubimyj–2→Petja <sub>Y</sub> ’ [= ‘film that is favorite of Petya’]	LJUBIMYJ←ATTR–FIL’M–ATTR→PETJA ‘favorite film of.Petya’
	LJUBIMYJ← <b>modificative</b> –FIL’M–attr-adnom→PETJA: <i>ljubimyj fil’m Peti</i>	

Table 7

N<sub>GEN-attr</sub> in a non-standard collocation

Sem	‘X←1–Y’	The meaning ‘Y’ corresponds to a non-standard collocational LF Ψ in the lexical entry for L(‘X’)
DSynt	L(‘X’) <sub>(N)</sub> –ATTR→L <sub>(phras, synt1, ...)</sub> [The DSynt-structure contains the lexeme L, which is the value of the non-standard LF Ψ(L(‘X’)) taken, together with additional syntactic features, from the lexical entry for L(‘X’).]	
SSynt	L(‘X’) <sub>(N)</sub> –r→L <sub>(phras, synt1, ...)</sub> [The SSyntRel r is also taken from the lexical entry for L(‘X’) — together with L.]	
Example	‘seržant <sub>X</sub> ←1–služit’–2→gvardija <sub>Y</sub> ’ [= ‘sergeant that serves in the Guards’]	SERŽANT <sub>L(‘X’)</sub> –ATTR→GVARDIJA <sub>(phras, antepos)SG–L(‘Y’)</sub> ‘sergeant of.Guards’
	SERŽANT–attr-adnom→GVARDIJA <sub>(phras, antepos)SG</sub> : <i>gvardii seržant</i> ‘of.Guards sergeant’	

Table 8

 $N_{\text{GEN-attr}}$  in a termeme

<b>Sem</b>	‘ $\underline{X} \leftarrow \mathbf{I} - \mathbf{Y}$ ’ The meaning ‘Y’ corresponds to a non-standard termemic LF $\Psi$ in the lexical entry for $L(\text{'X'})$	
<b>DSynt</b>	$L(X)_{(N)} - \mathbf{ATTR} \rightarrow \langle \text{«TERMIN»} - \mathbf{II} \rightarrow L$ [The lexeme L, which is the value of $\Psi(L(\text{'X'}))$ is taken, together with additional syntactic features, from the lexical entry for $L(\text{'X'})$ ; the fictitious lexeme «TERMIN» means ‘term’.]	
<b>SSynt</b>	$L(X)_{(N)} - \mathbf{r} \rightarrow L$ [The SSyntRel $\mathbf{r}$ is also taken from the lexical entry for $L(\text{'X'})_{(N)}$ — together with L.]	
<b>Example</b>	‘bolezň’ <sub>X</sub> ← $\mathbf{I}$ – affecting the brain of older people... <sub>Y</sub> ’ [= ‘Alzheimer’s disease’]	$\text{BOLEZN}'_{L(\text{'X'})} - \mathbf{ATTR} \rightarrow \langle \text{«TERMIN»} - \mathbf{II} \rightarrow \text{AL'CGEJMER}_L$ ‘disease of. Alzheimer’
	$\text{BOLEZN}' - \mathbf{attr-adnom} \rightarrow \text{AL'CGEJMER}$ : <i>bolezň Al'cgejmera</i>	

Table 9

 $N_{\text{GEN-attr}}$  in an idiom

<b>Sem</b>	‘X’	
<b>DSynt</b>	‘ $L_1\_L_2\_$ ’ [one node]	
<b>SSynt</b>	$L_1 - \mathbf{r} \rightarrow L_{2(\text{phraseological})}$ [The SSyntRel $\mathbf{r}$ is specified in the lexical entry for the idiom ‘ $L_1\_L_2\_$ ’ — in its SSynt-tree]	
<b>Example</b>	‘ničtožnaja ličnost’ [= ‘totally unimportant person’, ‘a nobody’]	‘OTSTAVNOJ <sub>L<sub>3</sub></sub> KOZY <sub>L<sub>2</sub></sub> BARABANŠČIK <sub>L<sub>1</sub></sub> ’ [one node] ‘of. retired goat drummer’
	$\text{BARABANŠČIK} - \mathbf{attr-adnom} \rightarrow \text{KOZA}_{(\text{phras, antepos})\text{SG}} - \mathbf{modificative} \rightarrow \text{OTSTAVNOJ}$ : <i>otstavnoj kozy barabanščik</i>	

Table 10

 $N_{\text{GEN-attr}}$  in a nomineme

<b>Sem</b>	‘X’	
<b>DSynt</b>	$L_1\_L_2\_$ [one node]	
<b>SSynt</b>	$L_1 - \mathbf{r} \rightarrow L_{2(\text{phraseological})}$	
<b>Example</b>	‘Zemlja_Franca-Iosifa’ [a polar archipelago] [= ‘Franz-Joseph Land’]	$\text{ZEMLJA\_FRANC-IOSIF}$ [one node] ‘Land of. Franz-Joseph’
	$\text{ZEMLJA}_{\text{SG}} - \mathbf{attr-adnom} \rightarrow \text{FRANC} - \mathbf{appositive} \rightarrow \text{IOSIF}$ : <i>Zemlja Franca-Iosifa</i>	

Table 11

## 6) Metaphorical SSyntRel

<b>Sem</b>	$\langle \underline{X} \leftarrow 1 - \text{poxožij} - 2 \rightarrow Y \rangle [= \langle \underline{X} \leftarrow 1 - \text{similar} - 2 \rightarrow Y \rangle]$	
<b>DSynt</b>	$L(\langle Y \rangle)_{(N)} - \text{ATTR} \rightarrow \langle \langle \text{PREDSTAVLJAT} \rangle - \text{II} \rightarrow L(\langle X \rangle)_{(N)} \rangle$ [ $\langle \langle \text{PREDSTAVLJAT} \rangle$ 'represent' is a fictitious lexeme marking a metaphoric relationship.]	
<b>SSynt</b>	$L(\langle Y \rangle)_{(N)} - \text{metaphorical} \rightarrow L(\langle X \rangle)_{(N)}$	
<b>Example</b>	$\langle \text{zvězdy}_{X \leftarrow 1} - \text{poxožij} - 2 \rightarrow \text{iskry}_{Y \leftarrow 2} \rangle$ [= 'stars similar to sparks']	$\text{ISKRA}_{PL} - \text{ATTR} \rightarrow \langle \langle \text{PREDSTAVLJAT} \rangle - \text{II} \rightarrow \text{ZVEZDA}_{PL} \rangle$ 'sparks of stars'
	$\text{ISKRA}_{PL} - \text{metaphorical} \rightarrow \text{ZVEZDA}_{PL}$ : <i>iskry zvězd</i>	

5. Closing remarks: Pronominalization of  $N_{GEN}$ 

The SSyntRels proposed above for the description of the Russian  $N \rightarrow N_{GEN}$  phrases have the following syntactic property: their dependent, i. e.  $N_{GEN}$ , cannot be pronominalized by a nominal personal pronoun (JA 'I', TY 'you<sub>SG</sub>', ON 'he', ...). For the **qual-adnom** SSyntRel this is obvious, since the  $N_{GEN-qual}$  must have a dependent adjective, and this is impossible for a personal pronoun. The other five SSyntRels could in principle allow for such a pronominalization, but they don't (with one exception, to be mentioned right away):

- (23) *son-subj-adnom*  $\rightarrow$  *Ivana* vs. *\*son-subj-adnom*  $\rightarrow$  *menja*  
 'sleep of.Ivan' 'sleep of.me'  
*portret-obj-adnom*  $\rightarrow$  *Ivana* vs. *\*portret-obj-adnom*  $\rightarrow$  *menja*  
 'portrait of.Ivan' 'portrait of.me'  
*dom-gen-possess*  $\rightarrow$  *Ivana* vs. *\*dom-gen-possess*  $\rightarrow$  *menja*  
 'house of.Ivan' 'house of.me'  
*mosty-attr-adnom*  $\rightarrow$  *Pariza* vs. *\*mosty-attr-adnom*  $\rightarrow$  *menja*  
 'bridges of.Paris' 'bridges of.me' [Paris is speaking, e. g. in a fantastic tale]  
*iskry-metaph*  $\rightarrow$  *zvězd* vs. *\*iskry-metaph*  $\rightarrow$  *nas*  
 'sparks of.stars' 'sparks of.us' [stars are speaking, e. g. in a fantastic tale]

At the same time, the pronominalization by a pronominal possessive adjective remains possible: *moj son* 'my sleep', *moj portret* 'my portrait', *moj dom* 'my house', *moi mosty* 'my bridges', *naši iskry* 'our sparks'.<sup>9</sup> Therefore, the impossibilities in (23) have to be blocked by the following general rule of Russian:

The "nominal" personal pronouns in the genitive case cannot syntactically depend on a noun — the corresponding possessive pronominal adjective must be used instead.

There is, however, an interesting exception: some **obj-adnom**  $N_{GEN}$ s can be pronominalized by a nominal personal pronoun, cf.:

- (24) *vklučenje-obj-adnom*  $\rightarrow$  *menja* v *sostav komiteta* 'inclusion of.me in body of.committee'  
*presledovanie-obj-adnom*  $\rightarrow$  *menja policiej* 'persecution of.me by.police'  
*otpravka-obj-adnom*  $\rightarrow$  *menja obratno* 'sending of.me back'

<sup>9</sup> The pronominal possessive adjectives are used here in the 1<sup>st</sup> person because in the 3<sup>rd</sup> person the forms of the nominal personal pronoun and those of the pronominal possessive adjective are homophonous: EGO 'of.him/his', EĖ 'of.her/her', IX 'of.them/their'.



These expressions are highly constrained — both semantically (process-denoting nouns accept personal pronouns in the genitive more easily) and/or lexically (the capacity of having a genitive actant pronominalized has to be specified in the Government Pattern of the corresponding nouns).<sup>10</sup> (See relevant remarks in [Apresjan 2010: 12–14].)

## Conclusions

Three important conclusions can be drawn from the above discussion.

1. The six SSyntRels proposed for the SSynt-description of the Russian  $N \rightarrow N_{\text{GEN}}$  phrases are necessary (barring my possible mistakes), but not sufficient for this task — not because more SSyntRels are needed, but simply because establishing the necessary SSyntRels for a particular type of phrase is but a very first step. To ensure a proper treatment of Russian  $N_{\text{GEN}}$ s, and in the first place, their correct linear ordering (with respect to other  $N_{\text{GEN}}$ s as well as to different dependents of the modified noun) we need a set of syntactic features for nouns that allow/disallow their appearance in particular construction of the  $N \rightarrow N_{\text{GEN}}$  type. As the next step, the following three sets of rules must be elaborated:

— The SSynt-rules for the  $N \rightarrow N_{\text{GEN}}$  phrases; these rules stipulate how the actual phrases (strictly speaking, their deep-morphological representations) are obtained from their SSynt-representations and positioned with respect to their governor and other cosubordinated  $N_{\text{GEN}}$  phrases. These rules need a thorough description of linear ordering of Russian cosubordinated  $N_{\text{GEN}}$ s.

— The DSynt-rules for the  $N \rightarrow N_{\text{GEN}}$  phrases; these rules stipulate how their SSynt-representations are obtained from their DSynt-representations.

— The Sem-rules for the  $N \rightarrow N_{\text{GEN}}$  phrases; these rules stipulate how their DSynt-representations are obtained from their Sem-representations.

2. Linear ordering of cosubordinated  $N_{\text{GEN}}$  phrases must be studied within a much broader frame of mutual ordering of all types of cosubordinated modifiers, in the first place — cosubordinated adjectives. Various semantic, referential, communicative, and phonological factors play a role and must be taken into account.

3. Since this paper aims at a linguistically and typologically valid justification for the SSyntRels proposed, it is necessary to widen its linguistic base — that is, to compare our solution to the description of adnominal dependents in other languages.

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<sup>10</sup> Once again, we see the special nature of direct objects, which was mentioned in Subsection 3.1–2, p. 30.

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