

Reviews

P. V. Graščenkov. *Grammatika prilagatel'nogo: Tipologija ad'jektivnosti i atributivnosti* [Grammar of the adjective: Typology of adjectivity and attributivity]. Moscow: Izdatel'skij dom JaSK, 2018. 432 pp.

Reviewed by Egor Tsedryk

1. Introduction

It seems inconceivable to describe syntactic properties of a given language without reference to parts of speech (noun, verb, adjective, adverb, preposition, and so on). They are inherited from traditional grammars of well-known languages and are usually taken for granted. Nonetheless, one may wonder whether or not they are universal and how languages encode them in their systems. Focusing on the adjective, Graščenkov (hereafter: G) in his book scrutinizes the morphosyntactic properties of this category from a crosslinguistic perspective, with Russian being the most representative (in addition to being the language of the book). As the author points out from the outset, Russian embraces a large “zone of grammatical phenomena typologically related to adjectives” (p. 10).¹ Nevertheless, the reader avid for crosslinguistic data will find a wealth of examples from many other typologically unrelated languages; next to Russian, these are Ossetic, Altaic, and Nakh-Daghestanian languages. Overall, the book covers an impressive array of languages, listed at the end of the book (pp. 427–29), with a total of 73 tokens. It is clear that such a volume of data is impossible to cover without the use of secondary sources, but the author also reports data collected during his own fieldwork, including expeditions dating back to his work under the supervision of Aleksandr Evgenievič Kibrik. In the preface, the author acknowledges Kibrik's influence on his broader typological view of adjectives. He also mentions Ekaterina Anatolievna Lyutikova, who influenced his choice of syntax as a main field of interest. In fact, G's keenness for syntactic analysis emerges through the book (selected structures from chapters 2 and 3 will be presented in sections 2.2

¹ As the book is written in Russian, I provide direct quotes in English based on my own translation.

and 2.3). The book has four chapters, which I will report on sequentially in §2. Starting from chapter 2, the material presented in the book is quite dense (and sometimes it goes beyond the realm of adjectives in their strict understanding). For this reason, I have to limit myself to selected highlights. For expository purposes, I will mostly focus on Russian, with only a couple of examples taken from Altaic and Nakh-Daghestanian languages (see §2.4). In §3 I revisit the extended projections that G proposes for the adjectives in Russian, and I briefly conclude in §4.

2. Summary

2.1. Chapter 1

The book starts with an overview of approaches to parts of speech, presenting both functionalist and generativist perspectives (e.g., Croft 1991; Baker 2003) and incorporating insights from the Russian philological tradition, including works of Peškovskij and Ščerba. Seeking a broad definition of a part of speech, G relies on the concept of markedness, as it is used in typological studies (understood as the presence of formal markers when a lexical category is to fulfill a function). More precisely, he defines a part of speech as “a derivationally unmarked distributional class with a specific set of grammatical categories in a given language” (p. 34). Furthermore, zooming in on the adjectives, he singles out attributivity as a distinctive distributive class. In fact, the key message of this chapter (and of the entire book) is that adjectivity and attributivity should be differentiated on a categorial level. Attributivity is a universal function, encoded in a syntactic head, labeled as A, while adjectivity can be realized as a language-specific adjectival category (prominent in European languages) or it can be part of the verbal category (in languages of Southeast Asia). From the terminological point of view, *prilagatel'noe* in Russian (commonly translated as “adjective”) includes both *ad”jektiv* (adjective in its language-specific sense) and *atributiv* (a more general attributive function). The former forms a subset of the latter, and hence the following implicational generalization holds: the existence of the adjectival category in a language implies the existence of the attributive function, but not vice versa. That is, adjectives are universal to the extent to which A is a universal category.

In some languages, A is manifested as a marker that can turn a range of phrasal elements into an attributive nominal modifier. Tsakhur and Mandarin Chinese are mentioned as such languages in chapter 1. Thus, G takes *de* in Mandarin Chinese as an attributive marker (i.e., exponent of A), which can make a prenominal modifier out of nominal, adjectival, prepositional, and

clausal phrases.² In languages like Russian, which have productive adjectival morphology, A usually selects an adjectival category, but selection of an NP is also possible in the case of the so-called “genitive of quality” (see §2.4). As G points out, Russian encodes adjectivity and attributivity at the level of morphology by *n*- and *sk*-suffixation, respectively:

- | | | | |
|--------|---|--------|---|
| (1) a. | čeloveč-n-yj
human-ADJ-M.SG.NOM
'human' | (2) a. | čeloveče-sk-ij
human-ATTR-M.SG.NOM
'human' (proper to humanity) |
| b. | predstavitel'-n-yj
representative-ADJ-M.SG.NOM
'representative' | b. | predstavitel'-sk-ij
representative-ATTR-M.SG.NOM
'representative' |
| c. | romantič-n-yj
romantic-ADJ-M.SG.NOM
'romantic' | c. | romantiče-sk-ij
romantic-ATTR-M.SG.NOM
'romantic' |
| d. | specifič-n-yj
specific-ADJ-M.SG.NOM
'specific' | d. | specifiče-sk-ij
specific-ATTR-M.SG.NOM
'specific' |
- (selected examples from G's (53), p. 51)

The semantic contrast between these two types of word formation is not always transparent, but there is a list of properties characterizing the *n*-suffixation, as opposed to the *sk*-suffixation. For example, the adjectival derivation (but not the attributive one) allows the formation of a short form (*čelovečen* 'human' vs. **čelovečesk*), a comparative form (*čelovečnee* 'more human' vs. **čelovečeskee*), and abstract nouns (*čelovečnost* 'humanity' vs. **čelovečeskost*), among other distinctive properties.

Interestingly, G claims that the stems selected by A can be either attributive or adjectival. In this regard, he deviates from the framework of Distributed Morphology, in which the roots are assumed to be category-neutral. However, I am not entirely convinced how far this deviation is warranted, since G mostly discusses the categorial status of the stems, which are arguably not the smallest morphological units. If A is a universal head that has an independent categorial status (i.e., it signals attributivity), it should be able to categorize roots as well as larger structural units.

² The categorial status of *de* in Mandarin Chinese is notoriously hard to define. One of the options found in the literature is a complementizer analysis of *de* (e.g., see Cheng 1986; Xu 1997).

2.2. Chapter 2

Chapter 2 spans over 144 pages and could easily be expanded into a separate monograph. It brings up a range of phenomena and issues related to adjectives, including their hierarchical order in the nominal spine, attributive and predicative occurrences, prenominal and postnominal positions, long and short forms, comparative structures, depictive secondary predicates, and left-dislocated appositives. Adjectives are analyzed as lexical items capable of projecting their own argument structure, extended by functional projections. These projections determine the morphosyntactic shape of the whole adjectival structure and its occurrence within a clause (e.g., attributive vs. predicative).

For the sake of illustration, let me outline G's analysis of the long/short-form dichotomy in Russian, going now into certain technical details. This dichotomy received a fair amount of attention in the literature, going back to Babby 1973 and, more recently, Babby 2009, Geist 2010, and Borik 2014, among others. For a quick overview of data, consider (3) and (4) below (examples are mine).³ The long form in (3) bears a case value (along with gender and number) and it can be attributive, (3a–b), or be used as a clausal predicate, (3c). The short form in (4) does not have case;⁴ it cannot be attributive, (4a–b); and it occurs only as a clausal predicate, (4c).⁵

- (3) a. (v dom zašla) krasivaja devuška
 (into house entered) beautiful_{F.SG.NOM} girl_{F.SG.NOM}
 'a beautiful girl (entered into the house)'
- b. (ja vižu) krasivuju devušku
 (I see) beautiful_{F.SG.ACC} girl_{F.SG.ACC}
 '(I see) a beautiful girl'
- c. Ona byla krasivaja /krasivoj.
 she was beautiful_{F.SG.NOM} /beautiful_{F.SG.INSTR}
 'She was beautiful.'
- (4) a. (v dom zašla) *krasiva devuška
 (into house entered) beautiful_{F.SG.NOM} girl_{F.SG.NOM}
 Intended: 'a beautiful girl (entered into the house)'

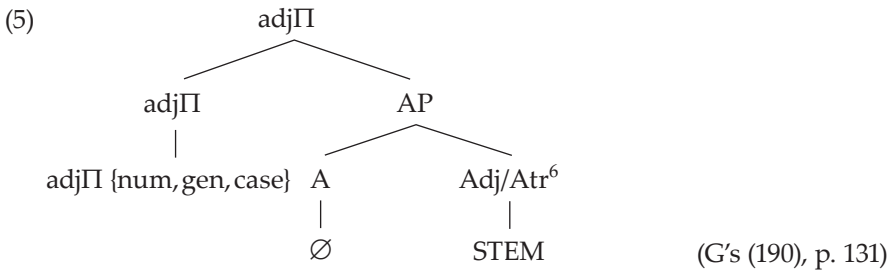
³ When no reference is provided, the example is mine.

⁴ A putative accusative form is used in (4b). Also, the case is glossed in (4a) only for expository purposes.

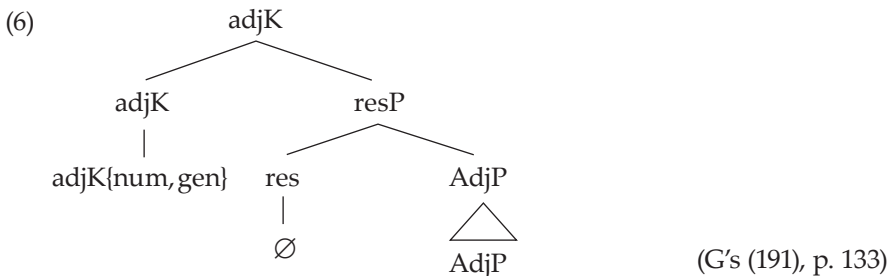
⁵ There are expressions like *krasna devica* 'beautiful girl' (involving a short form), but they are archaic and not productive in Modern Russian.

- (4) b. (ja vižu) *krasivu devušku
 (I see) beautiful_{F.SG.ACC} girl_{F.SG.ACC}
 Intended: 'I see) a beautiful girl'
- c. Ona byla krasiva.
 she was beautiful_{F.SG}
 'She was beautiful.'

According to G, the long form has the structure in (5), in which the attributive head A selects either an adjectival or an inherently attributive stem. The inflectional category on the top encodes number, gender, and case (the Cyrillic letter Π stands for *polnaja* 'full', as in *polnaja forma prilagatel'nogo* 'full/long form of adjective').



The short form, on the other hand, has the structure in (6). A resultative head selects an adjectival phrase, and the inflectional head on the top encodes only number and gender—no case (the Cyrillic letter K stands for *kratkaja* 'short', as in *kratkaja forma prilagatel'nogo* 'short form of adjective').⁷

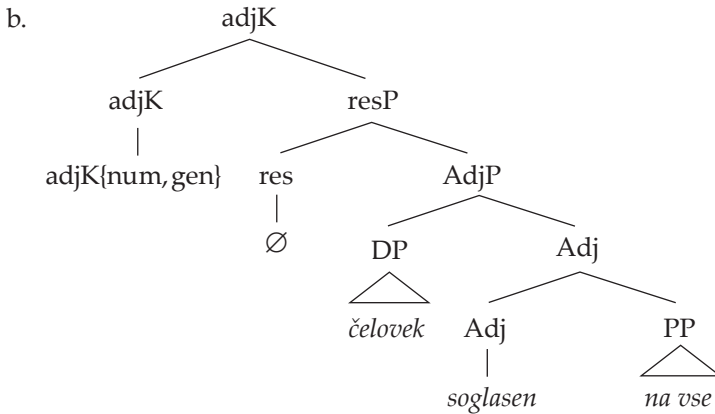


⁶ G uses "Atr" (with a single "t"), based on the transliteration of the Russian word *atributiv* 'attributive'.

⁷ For some reason, G refers to STEM in (5), but not in (6). As it becomes clear from further discussion related to depictive secondary predicates, A can also take AdjP as its complement (e.g., see G's (248), p. 162)

To motivate the structure in (6), G draws a parallel between the short form of adjectives and the passive participles, arguing that both denote a final state. Furthermore, he admits that AdjP can have an internal logical subject. Thus, the subject of the clause in (7a) is introduced in the specifier position of AdjP, as shown in (7b). It would subsequently raise to the clausal subject position (Spec, TP), once T takes adjK as its complement (but see §3.2 for an alternative analysis).

- (7) a. Čelovek soglasen na vse.
 person_{M.SG.NOM} agree_{ADJ.M.SG} on everything
 'A person/human being is agreeable to everything.'



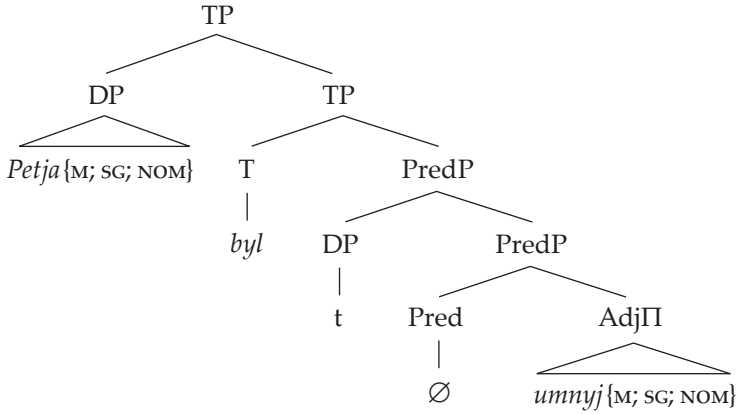
(G's (221), p. 146)

As for (5), G resorts to an additional predicative head (Pred) to introduce the external argument. Thus, for a sentence like (8a), he proposes the structure in (8b).⁸ Note that the example below features a nominative adjective.

- (8) a. Petja byl umnyj.
 Petja_{M.SG.NOM} was smart_{M.SG.NOM}
 'Petja was smart.'

⁸ "AdjΠ" and "adjΠ" are the same labels; this is just an editorial glitch. I keep the structures as they appear in the book.

(8) b.



(G's (226), p. 151)

An immediate question arises: Why can the DP not be base-generated within AdjP (embedded in AdjΠ, as we know it from the structure in (5))? G simply stipulates that this derivation would be impossible because PredP is a phase. The phasehood of PredP precludes the DP from moving out of the domain of Pred (see G's (227), p. 153).⁹ At the same time, he claims that after the DP moves to Spec, TP, the subject's features (case, number, and gender) are percolated downward to AdjΠ (across the phase). This is a contradiction: feature sharing (however it is formalized) is one of the operations that cannot happen across a phase boundary.

The above problem would be avoided if the pattern with the nominative case, as in (8b), did not involve PredP at all. In fact, G does not use PredP in his analysis of secondary predication instances that feature case agreement. For example, consider (9a), as opposed to (9b) with the instrumental case marking (standardly attributable to the Pred head).

- (9) a. Petja prišel domoj [adjΠ p'janyj].
 Petja_{M.SG.NOM} came home drunk_{M.SG.NOM}
 'Petja came home drunk.'
- b. Petja prišel domoj [PredP p'janym].
 Petja_{M.SG.NOM} came home drunk_{M.SG.INSTR}
 'Petja came home drunk.'

⁹ G seems to assume in this particular case the condition in (i), but he does not state it explicitly.

(i) Phase-Impenetrability Condition (Chomsky 2000: 108)

In a phase α with head H, the domain of H is not accessible to operations outside α , only H and its edge are accessible to such operations.

Under G's account, the DP *Petja* in (9a) is base-generated inside AdjP—more precisely, within AdjP—and then it moves to a subject position, passing by a VP-internal theta-position, as shown in (10) (cf. his structure in (228), p. 162).¹⁰

- (10) [_{TP} *Petja* [_{VP} [_{VP} ⟨*Petja*⟩ *prišel*] [_{adjP} [_{AP} [_{AdjP} ⟨*Petja*⟩ *p'janyj*]]]]]
-

In the last section of chapter 2 (§2.4), G discusses comparative structures. After reviewing previous analyses (e.g., Matushansky 2002, 2013; Ionin and Matushansky 2013), he offers his own account. He suggests that a bare AdjP can be dominated by a degree phrase (DegP), but an attributive structure, as in (5), cannot. The latter option can only lead to an analytical comparative (e.g., *bolee krasiv-yj* 'more beautiful-M.NOM'), while the former option would derive a morphological comparative (e.g., *krasiv-* 'beautiful-' → *krasiv-ee* 'beautiful-DEG').

2.3. Chapter 3

One of the key messages of this chapter is that adjectives are able to project their own argument structure, which is comparable to that of verbs, with one crucial difference: adjectives are unable to assign structural accusative case. This chapter is mostly descriptive, with some elements of dependency grammars (as developed by Mel'čuk, Apresjan, and others). Overall, it provides a very good reference for researchers interested in lexical semantics. The chapter is divided into two sections: the first one focuses on adjectival classes in Russian, while the second deals with complex predicates in Ossetic, using Ramchand's (2008) theory of argument structure. The second section is more about the verbal structures built on top of an adjective-like root. In what follows, my focus will be on the first section of chapter 3.

G distinguishes nine semantic classes of adjectives (enumerated below) and delves into a thorough description of the complements they can take.

(11) a. EVALUATIVE

važnyj 'important', *vtorostepennyj* 'secondary', *gadkij* 'nasty, ugly',
dorogoj 'dear', *žutkij* 'scary', *zabavnyj* 'entertaining', *zagadočnyj*
 'mysterious', *zamančivyj* 'tempting', *zanjatnyj* 'amusing',
zarazitel'nyj 'contagious', *interesnyj* 'interesting', *omerzitel'nyj*
 'disgusting', *otvratitel'nyj* 'disgusting, heinous', *skučnyj* 'boring',
udačnyj 'lucky', ...

¹⁰ G assumes sideward movement (Nunes 2004) and Hornstein's (2001) Movement Theory of Control.

(11) b. TEMPORAL

dolgij 'long, lingering', *kratkij* 'short', *novyj* 'new', *staryj* 'old'

c. SPATIAL

bližnij 'near, neighboring', *blizkij* 'near, close', *dalekij* 'far', *dal'nij* 'further'

d. IDENTITY

ženatyj 'married', *identičnyj* 'identical', *odinakovyj* 'same', *parallel'nyj* 'parallel', *poxožij* 'similar, resembling', *ravnyj* 'equal', *različnyj* 'different', *raznyj* 'different', *sxožij* 'similar', *toždestvennyj* 'identical, selfsame', *ekvivalentnyj* 'equivalent'

e. EMOTIONAL ATTITUDE

agressivnyj 'aggressive', *bezrazličnyj* 'indifferent', *bespristrastnyj* 'impartial', *blagoželatel'nyj* 'benevolent', *vežlivyj* 'polite', *vnimatel'nyj* 'polite, attentive', *vraždebnyj* 'hostile', *gostepriimnyj* 'hospitable', *grubyj* 'rude', *dobroželatel'nyj* 'benevolent, well-wishing', *dobryj* 'kind', *druželjubnyj* 'friendly', *zabotlivyj* 'caring', *zloj* 'evil', *miloserdnyj* 'merciful', ...

d. BENEFACTIVE

vednyj 'harmful', *vygodnyj* 'favorable', *opasnyj* 'dangerous', *poleznyj* 'useful', *udobnyj* 'convenient', *cennyj* 'valuable', *črevatyj* 'fraught'

e. NOTORIETY

znakomyj 'familiar', *znamenityj* 'famous', *izvestnyj* 'known', *populjarnyj* 'popular', *proslavlennyj* 'glorified'

f. TYPICALITY

obyknovennyj 'ordinary', *obyčnyj* 'ordinary', *privyčnyj* 'habitual', *svojtvennyj* 'characteristic, inherent, proper', *tipičnyj* 'typical', *xarakternyj* 'characteristic', ...

g. CONTENTFUL

bogatyj 'rich', *bednyj* 'poor', *polnyj* 'full', *pustoj* 'empty'

(G's (425), p. 222)

For each class of adjectives, there is a characteristic set of semantic roles. For example, spatial adjectives can introduce a reference point, (12a); evaluative adjectives can take a beneficiary, (12b); adjectives of emotional attitude may select an addressee, (12c); adjectives of identity can have a co-participant¹¹,

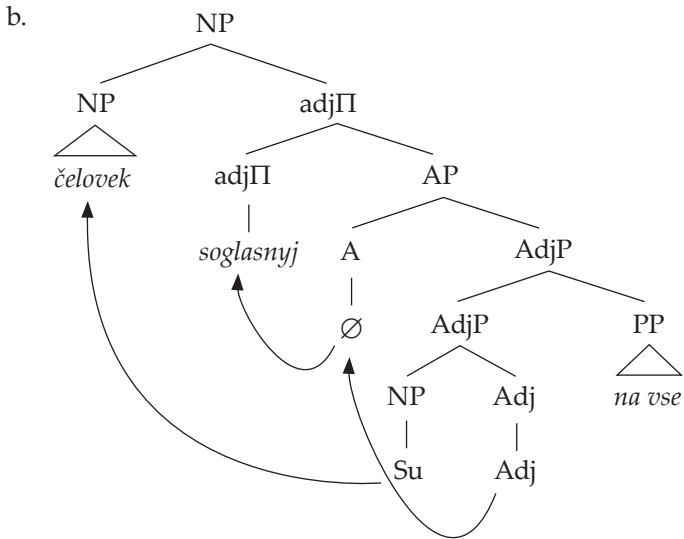
¹¹ G uses the term *kontragent*, which he defines as a non-agentive participant complementing the adjective in addition to the clausal subject (p. 228).

(12d); and so on. Note that, in most cases, these semantic roles are expressed by specific prepositions, but they can also be associated with a specific case marking (without an overt preposition), as in (12e–g).

- (12) a. dalekij ot nas gorod
 far_{M.SG.NOM} from us_{GEN} town_{M.SG.NOM}
 Lit.: ‘a far-from-us town’
- b. važnoe dlja nix putešestvie
 important_{N.SG.NOM} for them_{ACC} trip_{N.SG.NOM}
 ‘a person important to them’
- c. dobroželatel’nyj k svoim učenicam učitel’
 well.wishing_{M.SG.NOM} towards his_{DAT} pupils_{DAT} teacher_{M.SG.NOM}
 Lit.: ‘a well-wishing-towards-his-pupils teacher’
- d. poxožaja na menja doč’
 resembling_{F.SG.NOM} on me_{ACC} daughter_{F.SG.NOM}
 Lit.: ‘a resembling-to-me daughter’
- e. blizkij mne čelovek
 close_{M.SG.NOM} me_{DAT} person_{M.SG.NOM}
 Lit.: ‘a close-to-me person’
- f. svojstvennoe emu povedenie
 characteristic_{N.SG.NOM} him_{DAT} behavior_{N.SG.NOM}
 Lit.: ‘a characteristic-of-him behavior’
- g. bogatyj istoriej gorod
 rich_{M.SG.NOM} news_{INSTR} day_{M.SG.NOM}
 ‘a town rich in history’

As can be seen, the adjective phrase (Adj + its complement) is linearized to the left of the noun. G reports that this pattern is also observed in Kyrgyz, German, Swedish, and Polish, but not in the Romance languages (see pp. 258–59). As far as Russian is concerned, G derives the N-final word order by moving the whole adjective phrase leftward. Let us first see how the N-initial word order, (13a), would be derived. The relevant derivational steps are shown in (13b), where “Su” below NP stands for the subject of a small clause (this is G’s original notation).

- (13) a. *čelovek* *soglasnyj* *na vse*
 person_{M.SG.NOM} agreeing_{M.SG.NOM} on everything
 'a person agreeing with everything'

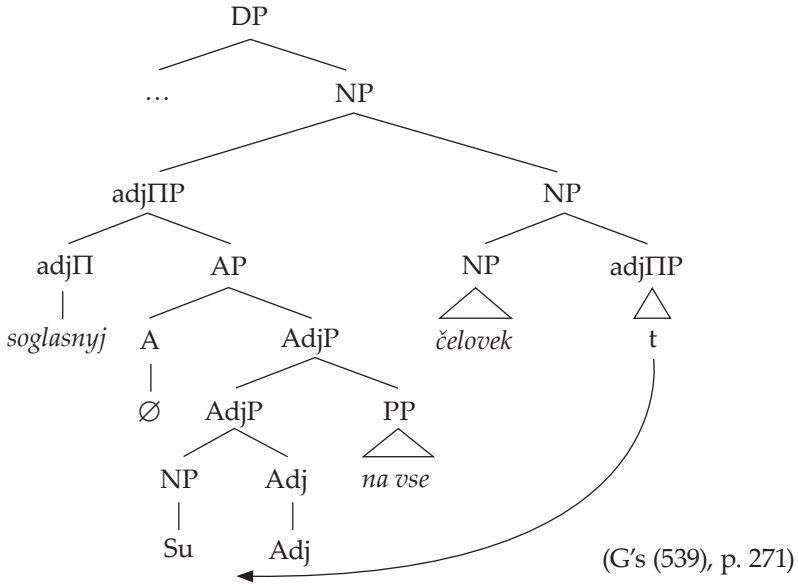


(G's (536), p. 270)

It is not clear to me why the PP is base-generated as a right-adjunction to AdjP, while in chapter 2 it was presented as a complement of the head (cf. the structure in (7b)). Also, it is not clear why the moving NP projects in its landing site. Be it as it may, G takes the structure in (13b) as an input for the structure in (14b) to derive a noun-final string in (14a). In (14b) the adjΠ phrase moves to an NP-adjoined position.

- (14) a. *soglasnyj* *na vse* *čelovek*
 agreeable_{M.SG.NOM} on everything person_{M.SG.NOM}
 'a person agreeable with everything'

(14) b.



Why do we need all these movements to derive the attributive modification, which could just be a matter of a single application of Merge (the adjectival phrase with all its arguments is merged with the modified NP)? As far as I can see, nothing motivates the derivational complexity depicted in (13b) and (14b). See §3 for an alternative.

2.4. Chapter 4

In addition to Russian, chapter 4 presents data from Altaic and Nakh-Daghestanian languages to show that the assumed attributive head can occur with constituents of different sizes, X or XP. As G puts it, “functional head A [...] operates between lexicon and syntax” (p. 331).

Thus, the following data from Komi (Altaic family) shows that an attributive head can be attached to a phrasal constituent.¹² The attributive in (15a) resembles an adjectival compound in Russian (cf. *sineglazyj* ‘blue-eyed’), but the subsequent example in (15b) shows that the nominal within the attributive phrase can be plural, which is impossible in Russian compounds (but see (i) in fn. 13).

- (15) a. Me radejtli [löz sinm]-a nylös.
 I loved [blue eye]-ATTR girl
 ‘I loved a blue-eyed girl.’

(Komi; G's (643), p. 332)

¹² The Latin transliteration of the examples in (15–17) is based on the Russian transliteration provided by G.

- (15) b. löz sinjas-a pilot
 blue eye.PL-ATTR pilot
 'a blue-eyed pilot' (Komi; G's (644), p. 333)

According to G, comitative and caritive (privative) markers are also instances of the same attributive head, as in the following examples from Mishar (Tatar). Note that the comitative and caritive are glossed alike.

- (16) a. [zeŋger küz]-le kyz
 blue eye-ATTR girl
 'blue-eyed girl'
 b. [zur jÿrt]-syz awyl
 big house-ATTR village
 'village without big houses' (lit.: 'big-house-less village')
 (Mishar; G's (664), p. 338)

G also reports interesting data from the Bagwalin language (Nakh-Daghestanian family), in which an attribute can be expressed in two ways: (i) as a genitive-marked NP, (17a), or (ii) as an adjectival phrase agreeing with the modified noun head, (17b). Note that the adjective hosts two clitics: the proclitic carries the agreement features of the modifier-internal noun in (17b), and the enclitic carries the features of the modified noun. In (17a) both the proclitic and enclitic carry the features of the modified noun in genitive case.

- (17) a. r=eč'at'u=r mica-ł jaš
 N.PL=black=N.PL hair.PL-GEN girl
 'black-haired girl' (lit.: 'girl of black hair')
 (Bagwalin; G's (674a), p. 342)
 b. miča r=eč'at'u=j jaš
 hair.PL N.PL=black=F girl
 'black-haired girl' (Bagwalin; G's (675a), p. 342)

In the last two sections of chapter 4, G discusses adjectival compounds and the genitive of quality (*genetiv kačestva*) in Russian.

To start with compounds, two types of compounds are considered. The first type is based on syntactico-semantic subordination (e.g., *glubokovodnyj* 'deep-water' ~ *glubokaja voda* 'deep water'; *dvoxcvetnyj* 'two-colored' ~ *dva cveta* 'two colors'; *vodoočistitel'nyj* 'water-purifying' ~ *očistit' vodu* 'purify water'). G shows that this type of compounding involves binary branching and does not accept more than one stem. The second type involves a flat (coordinated) structure, which can have more than two stems (e.g., *kislo-sladko-solenyj* 'sour-

sweet-salty'). Both types can co-occur in a single compound, creating the illusion of a subordinate compound with multiple stems (e.g., *vodo-grjaze-ottalkivajuščij* 'water-dirt-repelling' ~ *ottalkivat' vodu i grjaz'* 'repel water and dirt').

G's discussion of compounds is not free from theoretical inconsistency, as far as his lexicalist position is concerned. On the one hand, he concludes that Russian compounds are formed in the lexicon (p. 377), as opposed to the syntactic formation of the attributives in Altaic and Nakh-Daghestanian languages. At the same time, he resorts to late insertion in order to account for stress patterns in Russian compounds (p. 360). Late insertion is assumed in Distributed Morphology, which is incompatible with any version of lexicalism (i.e., word creation in the lexicon, before syntactic derivation). As for stress distribution, Russian compounds show the following patterns. When a two-stem compound is formed, the stress usually falls on the final syllable of the second stem (excluding the inflection), as in (19). Compare this pattern with the one in (18), where a corresponding non-compound form, featuring the second stem from (20), has the stress falling on the inflection.

(18) One-stem form (stem ₂)	(19) Two-stem form (stem ₁ -stem ₂)
a. bol'-n-ój pain-ADJ-M.SG.NOM 'sick'	a. serdo-ból'-n-yj heart-pain-ADJ-M.SG.NOM 'compassionate' (lit.: 'heartsick')
b. les-n-ój forest-ADJ-M.SG.NOM 'forest/wooded' (area)	b. melko-lés-n-yj small-forest-ADJ-M.SG.NOM 'small-forest/lightly-wooded' (area)
c. voln-ov-ój wave-ADJ-M.SG.NOM 'wave' (transmitter)	c. korotko-voln-óv-yj short-wave-ADJ-M.SG.NOM 'shortwave' (transmitter)
d. vek-ov-ój century-ADJ-M.SG.NOM 'secular'	d. sredne-vek-óv-yj middle-century-ADJ-M.SG.NOM 'medieval'

(selected examples from G's (712), p. 360)

The above data indicates that the distribution of stress depends on two factors: (i) the type of the inflectional exponent attached to the stem (strong inflection -ój, with stress, vs. weak inflection -yj, without stress) and (ii) the presence of an additional stem (which in most—but not all—cases correlates with a weak inflection). If the stress is distributed upon vocabulary insertion into the syntactic terminal nodes (i.e., late insertion), both of these factors would be taken care of in the phonological component, after the relevant structure

is created in syntax (we thus can formulate structure-sensitive stress assignment rules). A lexicalist approach would need to stipulate stress assignment in the lexicon independently from the syntactic structure involved, which may lead to a bracketing paradox (that is, stress assignment indicates one structure, whereas syntax indicates another structure). For example, consider the compound in (20a).¹³ The stress assignment in (20a) is exactly the same as in a one-stem form, shown in (20b).

- (20) a. *dvux-vint-ov-ój*
 two-screw-adj-m.sg.nom
 'twin-screw' (propeller)
- b. *vint-ov-ój*
 screw-adj-m.sg.nom
 'screw' (propeller)

Thus, stress assignment indicates that the strong inflection should be attached before the compound is created, based on the pattern in (18). In other words, the structure predicted from the general pattern of stress assignment is [stem₁ [-stem₂-suffix]]. However, the compound in (20a) is syntactically related to the NP in (21), implying the structure [[stem₁-stem₂]-suffix], hence the bracketing paradox.

- (21) a. *dv-á* *vint-á*
 two-m.pl.nom screw-m.pl.nom
- b. *dv-úx* *vint-óv*
 two-pl.gen screw-pl.gen¹⁴
 'two screws'

In (21) I provide two case forms of the same NP. To be more precise, the compound in (20a) is related to the genitive form in (21b) (see fn. 13).

¹³ More accurately, the glosses in (20a) could be detailed as follows:

- (i) *dv-ux-vint-ov-ój*
 two-pl.gen-screw-pl.gen-sg.m.nom
 'twin-screw' (propeller)

Quite interestingly, the numeral stem is clearly in genitive form (cf. (21b)). The suffix *-ov-*, glossed as an adjectival marker in (18–20), seems to be a grammaticalized genitive case marker. The pattern with a numeral in genitive case is proper to compounds with numerals greater than 'one'.

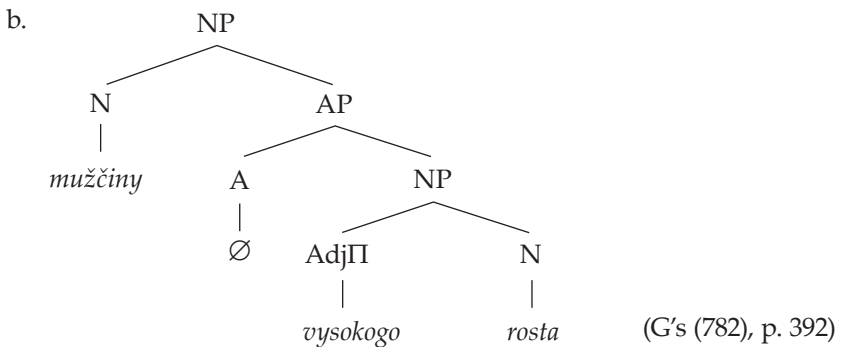
¹⁴ Russian shows gender syncretism in genitive case (hence, no gender specification in the glosses).

As G claims, Russian has a rich derivational morphology, which contributes to the creation of adjectives as a separate attributive class in the lexicon. As he puts it, “Russian went ‘far’ enough in the development of [a lexical] category adjective” (p. 377). Being mostly lexical, the process of attributive formation has a limited space in syntax, but this does not mean that Russian is fully exempt from syntactic attributives. In the very last section of the chapter, G focuses on what, in his view, constitutes a syntactic instantiation of attributive formation in Russian, namely, the genitive of quality, illustrated in (22) (cf. (17a)). For such cases, he suggests that the head A should take an NP as its complement, as shown in (23b), representing the structure of (23a).

- (22) a. *dlja detej staršego vozrasta*
 for kids_{GEN} old_{GEN} age_{GEN}
 ‘for older kids’ (G’s (742a), p. 378)

- b. *vse èti potrijasajušcej roskoši izdelija*
 all_{NOM} those_{NOM} stunning_{GEN} luxury_{GEN} crafts_{NOM}
 ‘all those crafts of stunning luxury’ (G’s (755a), p. 383)

- (23) a. *mužčiny vysokogo rosta*
 men_{NOM} high_{GEN} height_{GEN}
 ‘tall men’



G remains vague with respect to the source of the genitive case for the lower NP in (23b). Just before concluding his last section, he elusively suggests that this NP is an adjunct (even though it is structurally represented as a complement of the A head) and the genitive case in the nominal environment is the same as the accusative case assigned to VP adjuncts (e.g., *ja ee proždal [dva časa]* ‘I waited for her_{ACC} [two hours]_{ACC}’) (p. 394).

3. Discussion

In what follows, I revisit G's analysis of attributive adjectives in Russian. In §3.1 I motivate a structure in which the adjectival stem is split into a root and a categorizing head. In §3.2 I discuss the universal head A and show that the long- and short-form adjectives in Russian are minimally differentiated by the presence (or absence) of a case projection in their extended structure.

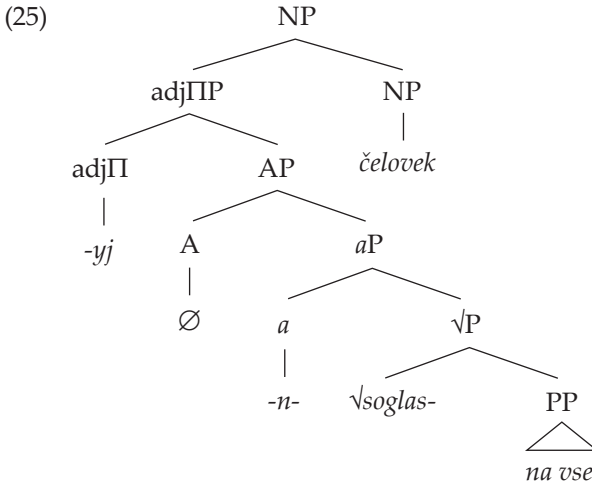
3.1. Decomposing the Adjectival Stem

As was pointed out in §2.3, G's (13b) and (14b) have a number of derivational steps that raise the question of their necessity. Other than obtaining the right word order, they do not have independent motivation. Intuitively, the adjectival modification does not seem to need any sophisticated machinery other than a single application of Merge between the NP and its adjectival modifier. At the same time, G oversimplifies the morphosyntactic structure of the adjectives, assuming a lexically prebuilt adjectival stem, which has its own selectional properties in syntax. There is a problem with this type of analysis.

Let us return to the example in (14a), repeated below in (24a). The relevant element here is the PP linearly sandwiched between the adjective and the nominal. In chapter 2, G took this PP to be the complement of the adjectival stem (see the structure in (7b) on p. 334). In chapter 3, he presents it as an adjunct of AdjP (see the structure in (14b) on p. 340). In any case, he associates this PP with the adjectival category as a whole, in line with his theory of adjectival dependents (see §2.3). In (24b) we can see that the same PP appears with a noun that has the same root. It means that the PP is not associated with the adjective as a whole, but with one of its subparts that is not category-specific, namely, the root. In derivational terms, this implies that the merger of this PP is independent of the categorization of the root.

- (24) a. *soglas-n-yj* *na vse* *čelovek*
 agree-ADJ-M.SG.NOM on everything person_{M.SG.NOM}
 'a person agreeable to everything'
- b. *soglas-ie* *na vse* */na brak* */na razvod*
 agree-NMLZ.N.SG.NOM on everything/on marriage/on divorce
 'agreement to everything/to marriage/to divorce'

In structural terms, the root is thus expected to form a constituent with the PP prior to its merger with a categorizing head. The corresponding structure, representing (24a), is shown in (25) on the following page.



If you compare this structure with the one in (5), you will see that the adjectival stem (Adj) is now replaced by a categorizing head (*a*) and the root. For the moment, I leave the other two categories, A and adjII, but I will return to them in §3.2. The phonological exponents are shown for the sake of illustration; vocabulary insertion would otherwise take place post-syntactically, after the root cyclically head-moves to adjII (passing through *a* and A on its way up).¹⁵

As for linearization, the pre- or post-nominal occurrence of the attributive phrase can be handled at the interface between the syntax and the phonological form, depending on the constraints imposed by the information structure and, possibly, by the phonological weight of the modifying phrase. There is no need to stipulate multiple syntactic movements to derive the N-initial or N-final word order, as in (13b) and (14b).

In the next section, I propose to relabel the remainder of the tree in (25), questioning the relevance of the null head A. After relabeling the structure in (25), I show that with a minimal set of assumptions the distributional difference between the short- and the long-form adjectives can be derived from Chomsky's (2013) labeling algorithm. More precisely, when two XPs are merged, the structure is labeled either (i) under identity between these two phrases or, if identity is impossible, (ii) under a symmetry-breaking operation, namely, raising.

¹⁵ Whether the root in (25) has a predetermined phonological matrix or is subject to late insertion is orthogonal to the current discussion.

3.2. Case and Agreement in the Extended Adjectival Projection

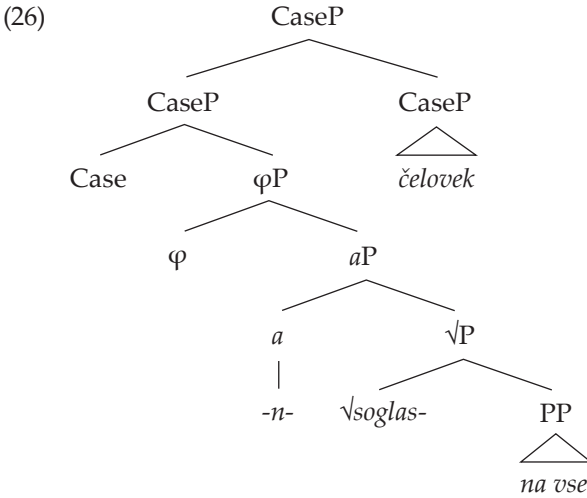
In order to delve into the question related to labeling of the uppermost node in (25), we need to assess the categories above *aP*, including the supposedly universal attributive head *A*.

Any universal head has the burden of empirical motivation in specific languages, which may exhibit different forms of multifunctionality (see Wiltschko 2014: ch. 2 for discussion). In languages where the purported head does not have a phonetic realization (in any syntactic contest), this burden is even more pressing. Recall that *G* divides the adjectival stems into properly adjectival and attributive (see (1–2) on p. 331). At the same time, he admits that any of these stems can be selected by the null head *A* in syntax, making this head a spurious redundant element (see (5) on p. 333). Moreover, this head requires a set of additional stipulations: it has to be selected by *adjΠ* (not by *adjK*), it cannot be dominated by the degree phrase, it cannot select any other *XP* but *AdjP* and *NP*, etc. In fact, motivating *A* in Russian is not as straightforward as it may seem, which raises the following methodological questions: Do we actually need it? What is the function of other categories and features in the extended adjectival structure? Note that other languages can have their own heads that fulfill a linking function between a noun and its modifier (e.g., *ezafe* in Iranian and Turkic languages), but it does not mean that such linking elements are ubiquitous.

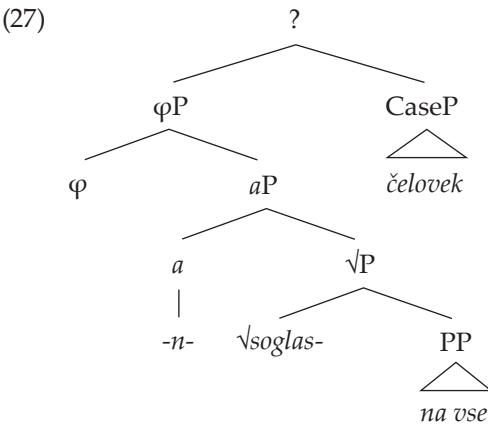
Independently from the attributive modification, Russian has an elaborated case system. Case is a grammatical category, which has its own function in the language. We can follow Wiltschko (2014: ch. 2) and assume that case is the uppermost category (*CaseP*)¹⁶ in the nominal spine, fulfilling a linking function—that is, *CaseP* links the nominal to a structural position within a clause. Likewise, *CaseP* can be the linking category for adjectives if they are to be used as attributive modifiers. In fact, under the assumption that *CaseP* is the uppermost projection of a nominal in Russian, it becomes straightforward that attributive adjectives have to bear the same label. It makes them fit for Chomsky's labeling algorithm when two phrases are merged under label identity. In this case, there is no ambiguity for labeling: when two *CaseP*s are merged, *CaseP* automatically becomes the projected label. Thus, the structure in (25) can now be relabeled as follows:¹⁷

¹⁶ Wiltschko's (2014) notation is "*KP*" and "*K*", but for this review, I am writing "*CaseP*" and "*Case*" to avoid confusion with *G*'s use of "*K*" (as in "*adjK*", where the Cyrillic "*K*" stands for *kratka* 'short'; see (6) on p. 333).

¹⁷ The mere existence of short-form adjectives in Russian indicates that Case and agreement (*phi*)-features can structurally be split into two categories. That is, peeling off the highest structural layer (*CaseP*) results in a reduced adjectival structure, shown in (27). Languages can eventually be parameterized as to whether or not Case proj-



φ P is the projection of phi-features (gender and number). The inflectional exponent *-yj* (as in *soglas-n-yj* ‘agree-ADJ-M.SG.NOM’) would spell out the φ -Case complex created by the cyclic head movement of the root to Case. Correspondingly, the short-form adjective would just be a φ P without the Case layer, as in (27) below (see fn. 17).¹⁸



ects as a separate category in the adjectival structure or is bundled with agreement features in a single head.

¹⁸ φ P in (27) is to be compared with G’s structure in (6), which has another null head (res). I am not convinced that a null resultative head is warranted for all short-form adjectives. Adjectives denote properties without necessarily being the final states of events. In other words, a short-form adjective does not entail a resultative state.

Unlike in (26), CaseP cannot project in (27), since there is no identity between CaseP and φ P. The only way to label the structure in (27) is to merge a copula and to move CaseP to a higher position. Once CaseP (the nominal) moves, its lower copy becomes irrelevant for labeling, and it is φ P (the adjective) that projects (based on Chomsky 2013: 44). We thus predict that the short (Caseless) form of the adjective, as in (27), can only have a predicative occurrence, as in (7a), repeated in (28a) with some modifications. The corresponding structure is shown in (28b).

- (28) a. Čelovek (byl) soglasen na vse.
 person_{M.SG.NOM} was agree_{ADJ.M.SG} on everything
 'A person (was) agreeable to everything.'
- b. [_{TP} [_{CaseP} Čelovek]_i BE [_{φ P} [_{φ P} soglasen na vse] _{t_i]]}

All in all, the difference between the long- and the short-form adjectives is derived from a minimal set of assumptions that have independent motivation in the system (i.e., Chomsky's labeling algorithm), coupled with the well-attested category in Russian, assumed to be part of the extended nominal spine (Wiltschko 2014). The A head appears to be a superfluous element in this picture.

4. Conclusion

In his book, G claims that there is a universal attributive head A. This head does not have an overt realization in Russian and appears to be just a mnemonic element in the adjectival extended projection. Introduction of this head, coupled with a predominantly lexicalist view of adjectival morphology, leads to a series of structures with a number of stipulations. After summarizing the main points of G's proposal (§2), I proposed to revisit his structure of attributive (long-form) adjectives in Russian (§3), accounting for distributional differences with respect to their short-form counterparts, as presented in (3) and (4), respectively. The revisited structure requires a minimal set of categories (independently attested in the language) and independently needed assumptions (the labeling algorithm). Notwithstanding the proposed alternative, G's contribution is an impressive volume, which is commendable for its empirical coverage and its comprehensive overview of the issues related to adjectives and other nominal modifiers. It is a valuable reference for anyone interested in comparative syntax and morphology.

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