Functional Categories in the Nominal Domain

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0. Proposal.
A central debate in the study of phrase structure concerns the nature of functional projections which dominate lexical ones. At one extreme is the position, advocated by Cinque (1999, 2002), that grammars employ a universal set of functional categories and that their number and relative order is the same across languages, regardless of properties of the lexical head. At the other extreme is the weaker position, adopted among others by Grimshaw (1994) and Bošković (1997), that only independently motivated phrase structure is projected, with considerable disagreement about what constitutes appropriate "motivation". While the literature is overwhelmingly concerned with resolving this issue with respect to clausal structure (i.e., the extended projection of the verb), here we consider nominal structure and argue for the weaker position. We conclude that ***not*** all potential functional categories of the extended projection of the noun are realized in all structures.

1. Conceptual motivation.
We assume that the features of a lexical head determine the functional projections which must dominate it. Hence, the *raison d'être* of the particular functional categories in the extended projection of any given lexical head is simply to satisfy requirements imposed by the formal properties of that head. One implementation of this idea, following Bošković (1997), is for the numeration to consist of lexical but not functional categories. Since these lexical categories bear grammatical features corresponding to features of functional categories, in the course of the derivation appropriate functional heads are introduced to check the formal features of the corresponding lexical items. We adopt this general scheme, but reject feature checking *per se* and recast it

in terms of evaluation of unvalued features, following the system developed in Franks (1995) and elsewhere. So far as case is concerned, this means that a noun will be drawn from the lexicon with alpha values for its case features, which must be specified (or "valued") in the course of the derivation. The need to specify the open feature values on lexical heads, which is partly an accident of a language's morphology, in fact determines exactly what functional projections dominate any given lexical head. This is an empirical matter.

The evidence seems to us compelling that argument VPs exist of various sizes, ranging from "small" Small Clauses through full CPs, as roughly catalogued in (1); cf. Wumbrand (2001).

(1) a. The movie made [$_{VP}$ John cry].
b. We expected [$_{TP}$ Mary to leave].
c. Everyone thinks [$_{AgrP}$ the dance should be held outdoors].
d. I cannot understand [$_{CP}$ why they brought their dog].

For Russian as well, the need for clauses of various sizes has been demonstrated. Babby and Franks (1998), for example, argue that subject control infinitives are bare VPs, whereas object control are full sentences. This difference in structure is revealed through the case form of the semipredicative *sam* 'alone, of his own volition': in (2a) the null case PRO is nominative by virtue of control by *on* 'he', whereas in (2b) it is dative under Spec-head agreement with infinitival T°.

(2) a. On [$_{VP}$ xočet [$_{VP}$ PRO$_{\mathbf{NOM}}$ ujti sam]].
he wants to-leave himself.**NOM**
'He wants to leave of his own volition.'
b. Ja [$_{VP}$ ugovoril ego [$_{TP}$ PRO$_{\mathbf{DAT}}$ T° [$_{VP}$ ujti samomu]]].
I convinced him to-leave himself.**DAT**
'I convinced him to leave of his own volition.'

In this paper, we apply similar reasoning and criteria within the nominal domain. So far as are aware, the issue of the extent of the extended projection of N in Russian has not been investigated. In what follows, we examine a number of constructions in Russian and conclude that only motivated functional categories are projected above NP.

2. Case on DPs and NPs.

As a point of departure, it seems to us that the necessity for morphological case, not only in Russian in particular, but in grammar in general, needs to be divorced from considerations of thematic roles or argumenthood. Factors such as these presumably motivate the existence of case in general as a nominal category, but they are both too broad and too narrow. In Russian, for example, nouns are paradigmatic; some form must be chosen, so all nouns (and adjectives that modify them, including numerals when oblique) must have some case. It is a matter of form. On the other hand, clauses that are arguments are not marked with case, although when they do find themselves in positions where an oblique case is called for, that oblique case must somehow be instantiated. Compare (3a), where *dumat'* 'to think' assigns no case, to (3b), where the preposition *o* 'about' requires locative:

(3) a. Ja dumaju, čto nel'zja uexat'.
I think that not-possible to-leave

b. Ja dumaju o *(tom), čto nel'zja uexat'.
I think about that.LOC that not-possible to-leave
both: 'I think that it is impossible to leave.'

Here, the CP headed by *čto* 'that' in (3a) has no case. The same CP in (3b) similarly cannot bear locative, but here it must be embedded in a DP that realizes this case.

In contrast, in languages like Japanese or Korean, where case particles attach to nominals (or even clauses) and there is one such marker per phrase, the relationship between grammatical role and

morphology is more transparent. In these languages predicate nominals, since they lack thematic roles, are not case-marked:

(4) John-ga gakusei desu. (Japanese)
John-NOM student COP
both: 'John is a student.'

Similarly, so-called "light" verbs in these languages, since they do not assign thematic roles, also do not assign case to their "incorporated" object nominals, as shown for Japanese in (5):

(5) John-ga Mary-ni denwa-suru.
John-NOM Mary-DAT telephone-does
'John phones Mary.'

In Russian, in contrast, nouns can be morphologically instantiated only in fully inflected forms. It is precisely for this reason that it is not so easy to differentiate a bare NP from a nominal that projects all the way up to a DP, in that both are equally inflected for case. We can thus contrast (4) with Russian (6), where case is simply a morphological fact of life. Indeed, there are, as is well-known, two distinct options – nominative or instrumental:[1]

(6) a. Ivan byl student.
Ivan was student.**NOM**
b. Ivan byl studentom.
Ivan was student.**INSTR**
both: 'John was a student.'

[1] In some contexts, such as in the present tense, only the nominative is possible, while in others, such as with an infinitive *byt'* 'to be', only the instrumental is possible. We do not discuss this issue here. Also, the nominative-instrumental case alternation correlates with subtle differences in meaning, not easily expressible in English translation. For an overview and discussion of traditional and generative accounts and a new proposal, the reader is referred to Pereltsvaig (2001:191-197).

As discussed in more detail in section 3.3 below, we follow the extensive argumentation in Pereltsvaig (2001) and claim that the predicate nominative marks a DP, whereas the predicate instrumental marks an NP. But first we examine two genitive case constructions in Russian.

3. Empirical support.

In this section, we offer some diagnostics for distinguishing different degrees of nominal projection.

3.1. The Genitive-of-Quantification Construction.

First, allowing only motivated projection of functional categories provides us with a principled account of the two classes of genitive-of-quantification (GEN-Q) in Russian, as in (7):

(7) a. V ètom restorane obedali desjat' čelovek.
in this restaurant ate-lunch.**PL** ten people.GEN-Q
b. V ètom restorane obedalo desjat' čelovek.
in this restaurant ate-lunch.**NEUT** ten people.GEN-Q

The original analysis dates back to Pesetsky (1982); updating his account to incorporate X-bar syntax and functional categories, Franks (1995) proposed that the subject of (7a) is a DP as in (8a), whereas the subject of (7b) is a bare QP as in (8b):[2]

(8) a. $[_{DP}\ [_{D^0}\varnothing]\ [_{QP}$ *desjat'* $[_{NP}$ *čelovek*]]]
b. $[_{QP}$ *desjat'* $[_{NP}$ *čelovek*]]]

This analysis in terms of the syntactic category of the nominal is further supported by the fact that an insertion of DP-related material (such as a demonstrative) makes the non-agreeing pattern in (7b) ungrammatical:

[2] These structures are revised slightly below.

(9) *V ètom restorane obedalo [$_{DP}$ èti desjat' čelovek].
in this restaurant ate-lunch.**NEUT** these ten people.GEN-Q

An alternative analysis of these facts, proposed by Bošković (2003), relies on the association between agreement and nominative case. According to him, the subjects in (7a) and (7b) differ not in syntactic category but in their case marking: the subject in (7a) is nominative, whereas the one in (7b) is caseless. Thus, the apparent optionality of agreement in (7) is due to the syncretism between nominative and caseless forms of the numeral *desjat'* 'ten'. He further argues that the ungrammaticality of (9) is due to the insertion of a clearly nominative-marked demonstrative *èti* 'these'. However, his analysis fails to extend to data involving Qs with a clear nominative form, such as *bol'šinstvo* 'majority', as in (10) from Graudina et al. (1976:27):[3]

(10) Bol'šinstvo kiprskix grekov… bylo … vozmuščeno…
majority.**NOM** Cypriot Greeks.GEN was.**NEUT** resentful.**NEUT**
'The majority of Cypriot Greeks … was resentful…'

Here, we propose further that only the subject in (7a) is referential, hence has an individuated reading, has ϕ-features needed for agreement, and participates in processes such as control (11a) and binding (11b), which are indicated using coindexing:

(11) a. [$_{DP}$ Pjat' ženščin]$_i$ staralis'/*staralos' [PRO$_i$ sest'].
five women.GEN-Q tried.PL/*NEUT to-sit
'Five women tried to sit.'
b. [$_{DP}$ Pjat' ženščin]$_i$ uvažali /*uvažalo sebja$_i$.
five women.GEN-Q respected.PL/*NEUT themselves
'Five women respected themselves.'

[3] Graudina et al. (1976:27) note that although *bol'šinstvo* 'majority' can also appear with a plural agreement on the predicate, about 67% of tokens from their corpus exhibit the neuter form, in (10).

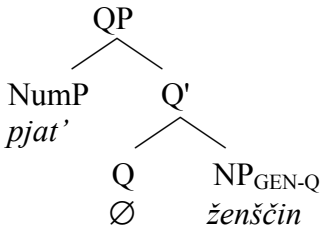
Since these are referential relations, they require that the numeral phrase be a DP, which is why only the plural is acceptable on the verb.[4] Pereltsvaig (2001), following Longobardi (1994), formalizes this idea by demonstrating that "referentiality (and therefore, the possibility of argumenthood) is to be associated with D° and not N°" (p. 50). Thus, bare QPs cannot in principle be referential. Whenever forced to be referential, they must project up to a DP, in order that the relevant features be expressed.

Note, however, that even though bare QPs are not referential, they can be arguments, as in (7b). Thus, we depart from the standard assumption that only referential expressions can be arguments and from Longobardi's (1994) claim that only DPs can be arguments (although we agree with him that only DPs are referential). Space limitations do not allow us to go deeper into this matter here, but the reader is referred to Pereltsvaig (to appear) for a detailed discussion of this issue.

Furthermore, we depart from standard views on case assignment in claiming that not only full DPs but also QPs and NPs can receive structural case. Such a departure is independently necessary in order to accommodate examples like (11) above, where the numeral and its complement NP appear in different morphological cases, which we take to be realizations of different structural cases. Franks (1995) goes on to argue that the numeral actually appears in Spec-QP and that QP has an empty head. We can thus posit a more articulated QP structure as in (12), where NumP is the locus of the actual numeral (cf. Bailyn, this volume). This is Babby's (1987) "heterogeneous" pattern, where the NP receives case from Q°, whereas the QP (or the DP containing it) receives case from outside in the usual fashion.

[4] See Pereltsvaig (to appear) for an analysis of control and binding in terms of matching of fully valued φ-features.

(12)



A major question that remains is how to incorporate into the analysis oblique, agreeing numerals – i.e. Babby's "homogeneous" pattern, as in (13):

(13) [$_{PP}$ o [$_{DP}$ pjati (krasivyx) ženščinax]]
about five.LOC beautiful.LOC women.LOC

Franks (1995), following Neidle (1988), assimilates these to ordinary adjectives, adopting an Abney-style structure where AP dominates NP (Bošković 2003 also adopts a similar analysis). This is however not necessary, given that, assuming (12), the numeral itself is ***not*** a functional head, but rather a specifier of one. As we show in section 3.3 below, this is not even desirable, since there is evidence that numerals are introduced above NP, unlike ordinary adjectives but like demonstratives. Adjective phrases merge directly with (some projection of) N. Numerals, on the other hand, merge as specifiers of QP. This will be necessary because the data reveal numeral phrases always to be larger than NPs.

Our formalization of this involves assimilating case government/assignment and agreement/percolation to the same minimalist mechanism, recasting the approach in a bottom-up framework and adapting Chomsky's "Probe and Agree" system. For the sake of explicitness, we adopt the case feature system in Franks (2002). Franks argues that GEN-Q is a special [–oblique] genitive, essentially a pure quantificational case. Now, recall that lexical items are selected for the numeration with open feature values for syntagmatic properties such as case. The case features on a Goal XP with open case features are subsequently valued

under Agree by a head Y° merged with a XP (or a ZP dominating XP) that bears valued case features. Percolation can then be treated as a kind of multiple Agree. In (12), the Q° values GEN-Q case on its complement NP and itself projects. Spec-QP is then occupied by some kind of quantitative operator.

The difficult technical question is then how the homogenous pattern in (13) obtains in oblique case contexts. Our approach to this takes advantage of Chomsky's notion of "phases". These are akin to the cycles of earlier transformational periods, but dictate periodic discharging of information to the interpretative PF and LF components rather than iterative rule application. Much attention has been paid to the phase nature of the clause, and in particular the idea that CP, but not the lower clausal IP projection, is a phase.

It is desirable, we contend, also to treat the maximal extended projection in the nominal system as a phase, but not lower units.[5] Specifically, at the end of each phase the syntax interfaces with the morphology, which forces the unvalued features at that point to be valued. Here is where the difference between plus feature values (which we take to be marked) and minus ones comes into play. Crucially, we assume that [α oblique] is specified as [–oblique] (that is, its unmarked value) only at the end of the phase, when the structure is being shunted off to the morphology. Since GEN-Q is a [–oblique] case, it is only valued at the end of the phase.[6] Thus, any oblique case in the same phase will appear to override it. That is why numerals in oblique contexts agree and the GEN-Q of the null Q° is essentially ignored. In this way, the kinds of frequently observed interactions between direct and oblique cases can be made to follow automatically from our system.

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[5] For a more detailed discussion of phases in the nominal domain, see Svenonius (2004).

[6] Franks (1995) exploits the GB distinction between D-structure for inherent case and S-structure for structural case to obtain the homogeneous-heterogeneous dichotomy. In earlier minimalism this may have been reworked in terms of strong vs. weak features. In this paper, we distinguish between features which immediately probe once merged into the tree (marked) and those that wait until the end of the phase and are filled in by default at the morphological interface (unmarked).

3.2. The Genitive-of-Negation construction.

Let us extend this reasoning to the genitive-of-negation (GEN-NEG) construction, which, as is well-known, applies in Russian only to *non-referential* direct objects (examples from Gundel 1974).

(14) a. Ja ne vižu [$_{DP}$ dno].
I NEG see bottom.**ACC**
'I can't see the bottom.' (But it's there.)

b. Ja ne vižu [$_{NP}$ dna].
I NEG see bottom.**GEN**
'I don't see any bottom.' (It seems bottomless.)

There is a vast literature on the GEN-NEG in Russian, but one thing is generally agreed upon: the accusative in (14a) presupposes existence, whereas the genitive in (14b) does not. We thus take the accusative to be an ordinary full DP and the genitive not to project all the way up to DP. It is, presumably, a bare NP, hence it is not referential. Of course, the issue of exactly why it is marked genitive remains. One could either imagine an Agree mechanism with Neg probing down the tree, or one could follow Bailyn (this volume) in taking advantage of a structure as in (12), but with a null operator that needs to be licensed and identified through Neg. Here, we opt for the former approach for a number of reasons based on the observation that, to the extent morphological differences can be detected, GEN-NEG patterns with the regular oblique genitive rather than with GEN-Q. Moreover, the numeral itself can be included in the scope of the negation, as in (15):

(15) On ne čital i [$_{QP}$ četyrex knig].
he NEG read even four.GEN books.GEN
'He did not read even four books.'

Clearly, the entire QP is being marked genitive, as an oblique case, which immediately specifies the values of all the case features therein, bypassing any conceivable effect of the putative null Q°.

This is not to say there are no QPs that lack phonetic exponence, either within Q° or Spec-QP. For example, Franks (1995) adopts such an analysis for partitives and large-quantity expressions. The crucial difference between these two kinds of constructions is that, unlike in (15), in such expressions a QP is selected for, with the value of the null operator in Spec-QP syntactically licensed and identified. This selectivity can most clearly be demonstrated by verbs whose semantics causes them to take QP rather than NP (or DP) complements, such as verbs with the cumulative prefix *na*-, as in (16):[7]

(16) Ivan nakupil [$_{QP}$ ∅ [$_{NP}$ knig]].
Ivan *na*-bought books.GEN
'Ivan bought a lot of books.'

When compared with (17), we see that what is selected in (16) is actually not the genitive case, but rather a QP.

(17) Ivan nakupil [$_{QP}$ mnogo /* mnogix [$_{NP}$ knig]]
Ivan *na*-bought many / *many.GEN books.GEN
'Ivan bought a lot of books.'

To summarize, nominals in Russian do not need to be fully projected as DPs. Examples of nominals that we hypothesize to lack the DP include: (i) non-agreeing (Babby's "heterogeneous") QPs; (ii) GEN-NEG NPs; (iii) QPs selected by verbs with quantificational semantics. These analyses require NPs and QPs to be able to receive case directly and, following the insights of Babby (1987), allow for different morphological cases on different projections within a single nominal domain.

[7] For detailed argumentation for the claim that *na*-verbs select a QP rather than a DP or a bare NP, the reader is referred to Pereltsvaig (to appear).

3.3. Predicative nominals in Russian.

Our claim is that, in addition to the bare QPs and NPs discussed above, non-referential NPs occur in other contexts as well. Below, we demonstrate that they play a considerably more prominent role in Russian grammar than previously imagined. Let us now turn to predicative nominals in Russian, which, as mentioned in section 2 above, can be either nominative or instrumental. We follow Pereltsvaig (2001), who treats predicate instrumental as a bare NP, as opposed to the predicate nominative DP.

(18) Oleg byl [$_{NP}$ durakom] / [$_{DP}$ durak].
Oleg.NOM was fool.**INSTR** / fool.**NOM**
'Oleg was a fool.'

Before we discuss the association of cases with syntactic structures, a word or two on our assumptions about the two structures instantiated in (18) is in order. As argued in Pereltsvaig (2001), *byt'* 'to be' with a predicative instrumental is a light verb, introduced in *v*°, that governs the instrumental and selects a (non-referential) NP. Since, as argued in Franks (1995), inter alia, *byt'* is formally (if not semantically) perfective, its conjugated form results in future rather than present tense meaning. Hence, instrumental is possible only with past or future forms of *byt'*. In contrast, the structure with a predicative nominative is equative, and *byt'* is inserted directly into T° to bear tense and agreement features. The subject DP, here *Oleg*, raises from a small clause where it had merged with the DP *durak* 'fool'.

Why do we associate the predicate instrumental with a bare NP and the predicate nominative with a DP, rather than the other way around? It turns out that if a predicative nominal includes material normally associated with the DP projection, then it has to be marked with the nominative case and cannot be instrumental. For instance, as shown in (19) from Pereltsvaig (2001), only the DP is allowed in a context which requires referentiality:

(19) On byl {tot brat /*tem bratom},
he was that.**NOM** brother.**NOM** /* that.**INSTR** brother.**INSTR**
kotoryj vsegda popadal v bedu.
which.NOM always got into trouble
'He was that brother who always got into trouble.'

Presence of the demonstrative element *tot* 'that' forces the projection of a DP; since the resulting phrase can only be nominative, we conclude that the predicate instrumental is limited to bare NPs. Pereltsvaig observes that a similar situation arises for numerals, as shown by the contrast in (20):

(20) a. Oleg i Ivan byli [$_{QP}$ dva xorošix parnja].
Oleg and Ivan were two good.GEN chaps.GEN
'Oleg and Ivan were the two good chaps.'
b. Oleg i Ivan byli (*dvumja) [$_{NP}$xorošimi parnjami].
Oleg and Ivan were two.INSTR good.INSTR chaps.INSTR
intended: 'Oleg and Ivan were two good chaps.'

Since the predicate instrumental is only licensed on bare NPs, it is incompatible with *dvumja* 'two.INSTR' in (20b). The status of this example is particularly telling. The fact that an instrumental adjective is perfectly acceptable, whereas the instrumental numeral is not, shows that when *dvumja* is present the phrase must be larger than an NP. Since the light verb *byt'* 'to be' selects an instrumental NP as its complement, (20b) with *dvumja* is impossible.

Furthermore, as shown in (21), negative polarity items, which are non-referential, must be instrumental and not nominative.

(21) On ne byl nič'im drugom. / * ničej drug.
he NEG was [nobody's friend].INSTR / * NOM
'He wasn't anybody's friend.'

The flip side of this observation is that pronouns, which are often assumed to be D°s, normally appear in the nominative case:

(22) Èto byl on / * im.
this was he.NOM / *INSTR
'It was him.'

There have been noted in the literature, however, certain apparent counterexamples where pronouns appear in the post-copular position in the instrumental case. Two such examples, suggested for a Dr. Jekyll–Mr. Hyde situation and cited by Nichols (1981:206), are given in (23). In this example, the pronoun does not have its characteristic referential interpretation.

(23) Kogda ja byl im, to ja soveršal užasnye
when I was he.**INSTR** then I committed terrible
prestuplenija.
crimes
'When I was him, I committed terrible crimes.'

Because of this, we argue that pronouns in Russian are not merged in D°. Instead, we propose to merge them in N° and move them to D° (this possibility is also explored in Cardinaletti 1993, Progovac 1998 and Rutkowski 2003). In these exceptional cases where the pronoun has a non-referential interpretation *and appears in the instrumental case*, as in (23), it cannot, by hypothesis, be in D°, since no DP is projected. The possible N° status of pronouns is further corroborated by examples such as those in (24), where they can be modified by adjectives and preceded by determiners:

(24) a. Silnaja ja smogu èto preodolet'.
strong I.NOM will-manage this overcome
'A strong me will manage to overcome this.'
b. Ja ljublju togo tebja, kotorogo ja znaju.
I love that.ACC you.ACC which I know
'I love the you that I know.'

In the typical referential cases, however, the pronoun raises from N° to D°, when there is a DP above it. This is why, for example, we find the relative orders in (25):[8]

(25) a. [ego$_i$ samogo t_i]
him.ACC self.ACC
'himself'

b. [samogo direktora]
self.ACC director.ACC
'the director himself'

To recap, we have argued that nominative post-copular phrases are DPs and instrumental ones are NPs. One of our basic points was that nominative but not instrumental post-copular phrases presuppose the existence of an individual. This is further supported by the coordination test for an equative reading, given in (26) from Holmberg (1993:130):

(26) a. Peter is a teacher, and Lisa is a teacher, too.
b. ?? Peter is the teacher, and Lisa is the teacher, too.

Adapting this test to Russian, a similar contrast emerges for copular sentences. Since instrumental post-copular NPs do not refer, they cannot give rise to an equative reading. This is demonstrated by the minimal pair in (27):

(27) a. Piter byl doktorom, i Andrej tože byl doktorom.
Peter was doctor.INSTR and Andrew too was doctor.INSTR
'Peter was a doctor, and Andrew was too.'
b. ?? Piter byl doktor, i Andrej tože byl doktor.
Peter was doctor.NOM and Andrew too was doctor.NOM
intended: 'Peter was the doctor and Andrew was too.'

3.4. Approximative Inversion.

Further support for our claim that nominals in Russian need not project all the way up to DP can be seen in the behavior of the

[8] For a detailed discussion of similar facts in Serbian/Croatian and Polish, see Progovac (1998) and Rutkowski (2003), respectively.

curious "approximative inversion" construction, typologically peculiar to East Slavic. In this construction, the noun inverts around the numeral (stranding the adjectives – if any – behind) with the resulting meaning of approximation. Franks (1995:165-174) argues at length that this only occurs in bare QPs, never in DPs. Although either the heterogeneous (28a) or the homogenous pattern (28b) is allowed in the absence of approximative inversion,[9] only the heterogeneous pattern is allowed with approximative inversion, as shown in (28c-d):[10]

(28) a. Ja videl [$_{QP}$ četyre soldata].
I saw four soldiers.GEN
b. Ja videl [$_{DP}$ četyrex soldat].
I saw four.GEN soldiers.GEN
both (a) and (b): 'I saw four soldiers.'
c. ?Ja videl [$_{QP}$ soldata četyre].
I saw soldiers.GEN four
'?I saw about four soldiers.'
d. * Ja videl [$_{DP}$ soldat četyrex].
I saw soldiers.GEN four.GEN
'intended: same as (28c)

Pereltsvaig (to appear) explains this distribution in terms of the semantic interpretations of QPs and DPs: only the former are non-referential (i.e., non-individual denoting) as required by the semantics of the approximative inversion. Further corroboration for this account can be seen in the fact that *na*-verbs, which select QPs, always tolerate approximative inversion:

[9] As discussed in section 3.5, the homogenous pattern in (28b) is the effect of animacy, which imposes genitive form on the entire DP; cf. (31b).
[10] The sentence in (28c) is slightly odd pragmatically because 'four' is not easily seen as an approximation. However, crucially, there is a real contrast between (28c), which is slightly odd, and (28d), which is outright ungrammatical.

(29) Ivan nakupil [$_{QP}$ knig sorok].
Ivan *na*-bought books.GEN forty
'Ivan bought about 40 books.'[11]

Finally, approximative inversion is not possible in contexts where the referentiality is forced by control or binding:

(30) a.* [ženščin sorok]$_i$ staralis' [PRO$_i$ vstat'].
women.GEN-Q forty tried.PL to-get-up
b.* [ženščin sorok]$_i$ uvažali sebja$_i$.
women.GEN-Q forty respected.PL themselves

3.5. Animacy.
Finally, we tie animacy, as reflected in how accusative is realized, into referentiality, hence presence of a DP. We assume, following e.g. Fraser and Corbett (1995), that in the morphology there is a rule which invokes either the nominative or genitive form when the accusative is called for (and when there is no distinct accusative entry). In other words, this is *not* an instance of syncretism (contra Franks 1995), but rather obeys a rule like (31):

(31) Accusative prediction rule:
a. Accusative + inanimate nominative
b. Accusative + animate genitive

Let us return in this light to the difference between (28a) and (28b). The latter, we maintain, is a DP. It has an individuated reading, meaning that a total of four separate soldiers were perceived, as opposed to (28a), which is a QP and therefore favors a group reading. This clearly correlates with the application of the

[11] Although it is possible to have an overt numeral in examples like (29), it must fulfill two conditions: (i) it must be a (contextually determined) large enough number to be compatible with the meaning of the quantifier 'a lot of' implicit in the cumulative prefix *na-*, (ii) it must be a round number, which can be easily seen as an approximation. Thus, *sorok* 'forty' is acceptable, but neither *pjat'* 'five' nor *sorok vosem'* 'forty eight' is appropriate here.

accusative prediction rule, in that the QP functions as inanimate, the DP as animate. Concomitantly, (28c-d) shows that approximative inversion is only possible when the accusative is mapped into nominative rather than genitive.

Consider also (32), in which the non-referential, metaphorical use of *dve ženy* 'two wives' as a temporal phrase causes the accusative to be mapped into nominative rather than genitive.

(32) Èto slučilos' dve ženy/ *dvux
that happened two wives.ACC=NOM/ two.GEN
žen tomu nazad.
wives.ACC=GEN ago
'This happened two wives ago.'

This follows from the assumption that Russian adjuncts are not DPs, since there is no referential feature of NP that would require merger of D° in order to be valued. The expression is thus treated as inanimate and mapped, by (31a) into the nominative form.

A similar account can conceivably explain (33) as an instance of necessarily non-referential hence inanimate accusative:

(33) On pošel v soldaty/ *soldat.
he went into soldiers.ACC=NOM/ soldiers.*ACC=GEN
'He became a soldier.'

This is sometimes regarded as an idiomatic construction, an exceptional use of the nominative.[12] It would however be a unique instance of nominative selected by a preposition. Moreover, as shown by an illustrative list of collocations in (34), this a quite a productive expression:

[12] According to Zolotova (1988:170-172), this construction expresses "a characteristic of an individual according to his belonging to a category, a group of people, usually a socially meaningful one" (translation – A.P.).

(34) *pojti v povara* 'become a cook'; *pojti v gosti* 'go visiting'; *postupit' na službu v kamerdinery* 'get employment as a valet'; *podat'sja v lingvisty* 'become a linguist'; *godit'sja v njan'ki* 'be suited for a nanny'; *godit'sja v otcy* 'be of a father's age'; *vzjat' v ženy* 'take as a wife, marry'; *kandidat v prezidenty* 'presidential candidate', etc.

Under out account, what is unusual about *v* in this meaning is that it selects for an NP, rather than a DP; hence, there are no animacy features to trigger (31b).

4. Conclusion.

In this paper, we have argued for a system in which NP can be dominated by a range of functional projections, encompassing at least QP and DP. The level of projection ultimately depends on the kinds of functional categories required in order to value the features of the nominal selected from the numeration. We hope to have shown that this kind of approach to the nominal domain opens up interesting new avenues of analysis of some familiar (and not so familiar) problems in Russian morphosyntax.

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