## Revisiting Russian small nominals

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## Background

## Approaches to noun-phrase structure

(1) the six green books
(2)


## Asymmetries between clauses and nominals (Bruening et al. 2018) i

Selection in clauses targets the highest head and ignores the rest:

- Question vs. declarative
a. Sue thinks that/*whether the world is flat.
b. Sue wonders whether/*that the world is flat.
- Finite vs. non-finite
a. Bertrand wants the world to be flat.
b. *Bertrand wants that the world is flat.
- Subjunctive vs. indicative
a. Sue asked that the answer be/*is two.
b. Sue thinks that the answer *be/is two.

Different verbs select clauses of various size

- The police seems [Tp to have left ]
- Mary had [vp her brother open the door ]
- I want [vp it understood that the order was given ]


## Asymmetries between clauses and nominals (Bruening et al. 2018) if

Selection in nominals does the exact opposite: if a verb selects a nominal, it ignores all of its functional structure.

- Non-existing selection pattern A
- Samuel is streading a book/*the book.
- Non-existing selection pattern B
- John glorped books/*his books.
(Bruening et al. 2018 have another selectional asymmetry between clauses and nominals based on form determination, but I omit it from today's discussion.)


## Larson (2019) on selection

Salzmann (2020), citing Larson (2019), claims that the following facts support the DP-hypothesis and disfavour the NP-hypothesis

- every man/happiness/*happy
- D ('every') c-selects N ('man/happiness') and doesn't c-select A ('happy'), and projects a DP

However, in that instance adjectives in $\mathrm{A}+\mathrm{N}$ combinations must be heads, since the pattern is identical:

- beautiful flowers/*floral
- A ('beautiful') would have to c-select N ('flowers') without c-selecting A ('floral'), and project an AP

Larson's argument doesn't work as intended.

## Selection of functional structure inside nominals?

Recall the non-existing selection pattern B:

- John glorped books/*his books.
- John glorped three books/*the three books.

If such a selection pattern were attested, one could mount a feasible defence of the DP-hypothesis.

## Small nominals

## Terminological clarifications

- 'truncated', pseudo-/semi-incorporated noun (phrase)
- have lunch, be in prison/être en prison, have a heart of gold etc.
- noun phrase containing some functional material but lacking a D-element
- e.g. a projection of $Q$ (Pereltsvaig 2006)


## Properties of small nominals (Pereltsvaig 2006: 494)

According to Pereltsvaig (2006), small nominals in this sense cannot
a. have an individuated interpretation
b. be specific
c. have a partitive interpretation
d. take non-isomorphic wide scope
e. serve as controllers of PRO
f. bind reflexives and reciprocals
g. trigger external agreement

Moreover, small nominals cannot be replaced by pro-DP elements but can be replaced by pro-QP elements.

Finally, 'not only can Small Nominals appear in argument positions, but they can be specifically selected by a head.' (Pereltsvaig 2006: 455)

## Basic distributional contrasts (Pereltsvaig 2006: §2.2)

Objects of verbs with cumulative prefix na- can be articleless:
(3) Dzheĭms Bond skopiroval chertezhi.

James Bond copied blueprints.Acc
'James Bond copied \{some/the\} blueprints.'
(4) Dzheǐms Bond na-kopiroval chertezheǐ.

James Bond cml-copied blueprints.gen
'James Bond copied (many) blueprints.'

And they cannot be bigger than QP:
(5) * Dzheǐms Bond na-priglashal [ ètu dyuzhinu krasotok ] James Bond cml-invited this dozen babes ('James Bond invited these dozen babes.')
(6) * Dzheǐms Bond na-priglashal [ nas / menya ] James Bond смl-invited us me ('James Bond invited \{us/me\} a lot.')
(7) * Dzheĭms Bond na-priglashal [ Ivanovȳkh / Ivanova ] James Bond cml-invited Ivanovs Ivanov (‘James Bond invited \{the Ivanovs/Ivanov\} a lot.')

I share these judgements.

## Selection of QP by na-

Pereltsvaig (2006) analyses the aforementioned distributional patterns as following from a selectional requirement imposed by the perfectivising cumulative prefix na-.
(8)


I now show that this structure cannot be correct because the observation it aims to capture does not hold.

## Let's recall the generalisation

'My claim here is that they [i.e. objects of cumulative na- verbs - PVR] crucially cannot be DPs, as evidenced by the fact that these nominals cannot include D-level elements, such as a demonstrative, a pronoun, or a proper name.' (Pereltsvaig 2006: 457)

I have searched the web for sentences containing a cumulative na- verb with an internal argument modified by a demonstrative or possessive pronoun, or realised as a personal pronoun.

## Cumulative na- verbs are compatible with demonstratives

(9) Esli vȳ na-priglashali ètikh gosteǐ, to sami ikh i rasselyaĭte if you CML-invited these guests that yourselves them and settle 'If you have invited these guests here, then feel free to settle them yourselves.' https://echo.msk.ru/blog/echomsk/1694466-echo/
(10) Po suti, na-priglashali tekh, kto obelyaet vȳrodka by essence смl-invited those who whitewash bastard
'They essentially invited those who had been whitewashing the bastard.' https://twitter.com/Ponasenkov/status/1229410467694727171?s=20

## Cumulative na- verbs are compatible with possessives

(11) Na èpizodicheskie roli Lyuk Besson na-priglashal svoikh on supporting roles Luc Besson cml-invited poss:refl druzeǏ-rezhissërov Lui Leter'e, Zherara Kravchika, Èrika Roshana i friends-directors Louis Leterrier Gérard Krawczyk Éric Rochant and drugikh
others
‘Luc Besson invited his film-director friends Louis Leterrier, Gérard Krawczyk, Éric Rochant and others to play supporting roles.'
https://afishaplus.ru/valerian-and-the-city-of-a-thousand-planets-review

## Cumulative na- verbs are compatible with pronouns

(12) Na-priglashal ikh vsekh na svoyu registratsiyu... teper' ne znayu, kak CmL-invited them all on poss registration now not know how vsë razrulit'
all sort.out
II invited them lot to my wedding ceremony... and I don't know how to sort it all out now.' https://proza.ru/2012/02/05/1047
(13) Dochka osvoila planshet i skoree vsego na-priglashala vas daughter mastered tablet and likely CmL-invited you kuda ni popadya
where.not.going
'My daughter has mastered the tablet and has likely invited you lot to all sorts of places.'
(14) Na-vezli nas syuda so vseǐ stranȳ i brosili.

смL-brought us here from all country and left
'They have brought us here from the entire country and left for good.'

## Other verbs

Other verbs in addition to na-priglashat' 'смL-invite':

- naestsya 'eat oneself full'
- nakopirovat' 'copy'
- nasobirat' 'pick/collect'
- napridumȳvat' 'invent'

There are bound to be many others, since the pattern of na-prefixation is completely productive.

## Internet data: summary

Internet data reveal many naturally occurring sentences that the c-selection for QP analysis predicts should not exist.

I have informally queried a couple dozen Russian-speaking colleagues, all of whom find the examples like the above completely natural and acceptable.

## Two hypotheses with distinct predictions

Our two hypotheses - the NP hypothesis and the DP/QP hypothesis - make very clear and diverging predictions.

## DP/QP hypothesis

- clear contrast in acceptability between 'QP'- and 'DP'-sized objects of cumulative na- verbs


## NP hypothesis

- roughly identical acceptability of 'QP'- and 'DP'-sized objects of cumulative na- verbs

These can be tested experimentally.

## Online acceptability survey

## Ibex Farm ${ }^{1}$

- 8 pairs of sentences containing cumulative na- verbs and an internal argument
- 4 corpus sentences containing a D-element (condition has_D)
- 4 matching sentences without a D-element (condition no_D)
- 1 pair member per subject
- 7-point Likert scale
- 16 pairs of fillers, half grammatical, half ungrammatical

[^0]- 82 subjects recruited through personal connections and via social media
- 24 sentences per subject in total
- separate list for each subject
- comprehension question after each sentence


## Example experimental items

(15) 'no_D'

Na-vezli lyudeǏ syuda so vseĭ stranȳ, a potom brosili смL-brought people here from all country and then left
'They brought people from the entire country here, and then just left them.'
(16) 'has_D'

Na-vezli nas syuda so vseǐ stranȳ, a potom brosili cmL-brought us here from all country and then left
'They brought us here from the entire country, and then just left us.'

## Example filler items

(17) Nikto ne znaet gde rabotaet ego mama nobody not knows where works his mum 'Nobody knows where his mother works.'
(18) * Nikto ne znaet rabotaet ego mama gde nobody not knows works his mum where 'Nobody knows where his mother works.'

## Results

All data manipulations were performed using R (R Core Team 2018). ${ }^{2}$

| Condition | Mean | Sd |
| :--- | :--- | :--- |
| filler-GOOD | 6.24 | 1.3 |
| filler-BAD | 3.03 | 2.04 |
| has_D | 5.19 | 1.76 |
| no_D | 5.32 | 1.82 |

[^1]This can be visualised by condition type in a violin plot:


## Ratings for experimental items

| Sentence | has_D-mean | no_D-mean | has_D-median | no_D-median | has_D-sd | no_D-sd |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| napridumȳval1 | 5.428 | 5.784 | 6.0 | 6.0 | 1.436 | 1.071 |
| napriglashal | 5.763 | 6.25 | 6.0 | 7.0 | 1.182 | 1.112 |
| nasobirala1 | 5.333 | 4.108 | 6.0 | 4.0 | 1.758 | 2.081 |
| napriglashala | 5.659 | 4.757 | 6.0 | 5.0 | 1.681 | 1.687 |
| napridumȳval2 | 5.395 | 6.273 | 5.0 | 7.0 | 1.332 | 1.097 |
| nasobirala2 | 4.474 | 5.326 | 4.0 | 6.0 | 1.747 | 1.791 |
| navezli | 5.895 | 6.0 | 6.0 | 6.5 | 1.556 | 1.299 |
| nazakazȳvala | 3.837 | 3.789 | 3.0 | 4.0 | 2.094 | 2.195 |

One pair with very low ratings irrespective of presence of $D$.

## Experiment: summary

- no significant difference in acceptability between has_D and no_D conditions
- not predicted if cumulative na- c-selects a QP
- predicted by NP hypothesis


## Dilemma

What is responsible for the low acceptability of Pereltsvaig's sentences?
(19) * Dzheĭms Bond na-priglashal [ ètu dyuzhinu krasotok ] James Bond cml-invited this dozen babes ('James Bond invited these dozen babes.')
(20) * Dzheĭms Bond na-priglashal [ nas / menya ] James Bond CmL-invited us me ('James Bond invited \{us/me\} a lot.')
(21) * Dzheǐms Bond na-priglashal [ Ivanovȳkh / Ivanova ] James Bond cml-invited Ivanovs Ivanov ('James Bond invited \{the Ivanovs/Ivanov\} a lot.')

## A different view of cumulative na- verbs

- cumulative na- verbs require a measure
- that measure can be either explicit or contextually salient
- but it is not easily recoverable from the context in the unacceptable examples because there simply is no context available


## Other properties

## Inability to control PRO

Matushansky \& Ruys (2015)
(22) Džejms Bond napriglašal [ djužinu krasotok ] vypit' po James Bond Acm.invited dozen.Acc babes.gen drink.INF DIST.P martini.
Martini
$=$ James Bond ${ }_{j}$ invited [a whopping dozen babes $]_{k} \mathrm{PRO}_{\mathrm{k}+\mathrm{j}}$ to drink a martini apiece.
$\neq$ James Bond ${ }_{j}$ invited [a whopping dozen babes] ${ }_{k} \mathrm{PRO}_{\mathrm{k}}$ to drink a martini apiece.

Arguments of cumulative na- verbs can also apparently control PRO in depictive secondary predicates:
(23) On na-sobiral ètikh sliv [PRO eshchë zelënȳmi ] he смц-picked these plums still green
'He picked these plums still unripe.'

Though the constraints on depictive secondary predicates in Russian are still poorly understood.

## Inability to bind anaphors

Pereltsvaig (2006: 41a) gives the following judgement:
(24) * Bond na-priglashal krasotok na dni rozhdeniya drug druga Bond CmL-invited babes on days birth each other ('Bond invited (many) babes to each other's birthdays.')

## Ability to bind anaphors

I think context improves such sentences quite substantially:
(25) It's always like this for him...

Snachala na-podchinyaet vedomstv drug drugu, a nam first CML-subordinate government.bodies each other, and us potom razbirat'sya
later sort.out
'First, he subordinates a whole lot of government bodies to each other, and we're left to sort out the mess.'
(26) On obozhaet na-protivopostavlyat' neskol'ko tochek zreniya drug drugu, he loves cmL-oppose several points view each other
a potom ob'yavit' ikh polnost'yu sovmestimȳmi and then declare them fully compatible
'He just loves to first oppose several viewpoints to each other, only to declare them fully compatible afterwards.'

## Conclusions

- contra Pereltsvaig (2006), Russian small nominals are not c-selected by cumulative na-
- therefore, they cannot be used to support the DP/PossP/QP/.../NP hypothesis
- other selection-based arguments exist - e.g. Erschler (2019) — and need to be addressed


## Appendix

## (In)compatibility with 'certain' i

'Arguments of cumulative na- are incompatible with adjectives denoting specificity; the only possibility is to mark such adjectives with the genitive case, with the resulting interpretation being the kind interpretation'.

This is demonstrably wrong:
nasobirat' 'смL-pick' is compatible with accusative NPs containing opredelënny̌̌̆, as in

- nasobiral opredelënnȳe laifkhaki
- nasobiral opredelënnȳe sredstva
- nasobiral opredelënnȳı̆ opȳt/kapital

Pereltsvaig (2006) further claims that 'if a quantity expression is present, it cannot be modified by a specificity adjective', giving the following example:

## (In)compatibility with 'certain' if

(27) * Džejms Bond na-sobiral [ opredelënnuju oxapku cvetov ]. James Bond cml-picked particular armful of.flowers intended: 'James Bond picked a particular armful of flowers.'

Again, this observation does not appear to hold, since the above sentence is flawless if količestvo 'quantity/amount' is substituted for oxapka 'armful':
(28) Džejms Bond na-sobiral [ opredelënnoe količestvo cvetov ]. James Bond cml-picked particular amount of.flowers 'James Bond picked a particular amount of flowers.'

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[^0]:    ${ }^{1}$ I thank Daniyar Kasenov for coding the experiment.

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