

0. Are there null subjects in Modern Russian?

NO – (Müller 2006), references therein; **YES** – (Franks 1995) i.a.; **Discourse / pragmatically** driven – (Kibrik 2011) i.a.

Carlo Collodi, "The Adventures of Pinocchio" (ch.5)

The Italian original – no nominative 3rd p. pronouns for the main character:

...*(i) Quand'ecco gli parve di vedere nel monte della spazzatura qualche cosa di tondo e di bianco, che somigliava tutto a un uovo di gallina. (ii) Spiccare un salto e gettarvisi sopra, fu un punto solo. (iii) Era un uovo davvero.*

(iv) La gioia del burattino e impossibile descriverla: (v) bisogna sapersela figurare. (vi) Credendo quasi che fosse un sogno, (vii) si rigirava quest'uovo fra le mani, e lo toccava e lo baciava, e baciandolo diceva...

The Russian translation – four 3rd p.pronouns for the main character

(i)... Вдруг он заметил в куче мусора что-то такое кругленькое и беленькое, похожее на куриное яйцо. (ii) В мгновение ока он очутился там и схватил этот предмет. (iii) Действительно, то было яйцо.

(iv) Радость Деревянного Человечка невозможно описать. (v) Пиноккио казалось, что он грезит. (vii) Он вертел и крутил яйцо в руках, гладил, целовал его и приговаривал...

English – four 3rd p.pronouns for the main character

(i) ... Suddenly, he saw, among the sweepings in a corner, something round and white that looked very much like a hen's egg. (ii) In a jiffy he pounced upon it. (iii) It was an egg.

(iv) The Marionette's joy knew no bounds. (v) It is impossible to describe it, you must picture it to yourself. (vi) Certain that he was dreaming, (vii) he turned the egg over and over in his hands, fondled it, kissed it, and talked to it...

(see also Kibrik 2013 for the English-German-Polish-Russian comparison)

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In this talk:

1. **Topics in the study of *pro***
2. **Null thematic referential subject pronouns in Old Russian**
3. **Tense systems in Old and Modern Russian**
4. **Past tenses decay and its consequences for null subjects**
5. **Expletive null subjects in Modern Russian**
6. **Russian: lessons learned**
7. **Analysis**
8. **Conclusion and tasks for future research**

1. Topics in the study of *pro*

There is a long-term story about relations between complexity of the verbal paradigm and availability of null pronouns in a language. Languages that can not easily fit this hypothesis include but are not limited to Chinese (Huang 1989), German (Müller 2006), French (Roberts 2011). Another example of a problematic language, Russian, is being discussed in this paper.

1.1. Is there a *pro*?

(Holmberg 2003, 2005): The null subject is specified for interpretable ϕ -features, and values the uninterpretable features of Agr just like any other subject... nullness is a phonological matter. (Y)

(Rizzi 1986): *pro*-typology: a) referential *pro*: null pronouns bearing a full theta-role; b) quasi-argumental *pro*: null pronouns bearing a quasi-theta-role; c) expletive *pro*: null pronouns bearing no theta-role. (Y)

(Anagnostopoulou & Alexiadou 1998): Verb Movement is responsible for feature-checking, no *pro* is needed. (N)

(Biberauer 2009): In some languages with the expletive *pro* Spec, TP may remain empty, so no need for the *pro*_{Expl.}. (N)

1.2. Triggering / licensing / governing / identifying *pro*:

Taraldsen's Generalisation: "The intuitive idea is that where there is overt agreement, the subject can be dropped"(by (Roberts 2007))

(Huang 1989): *pro* must be governed by AGR in its Government Domain: a) Italian – is governed, b) English – AGR is not rich enough, hence no government & *pro* is unavailable, c) Chinese - no Government Domain due to no AGR.

(1) Chinese: no Agreement, but pro-drop:
(cf. Japanese, Korean)
(Huang 1989:187):

(ta) kanjian (ta) le.
he see he Perf
'He saw him'

(Rohrbacher 1999): “A language can have pro-drop if “in at least one number of one tense, the person features [1] and [2] are distinctively marked.” (cited by (Müller 2011))

(Rizzi 2002): “What rich agreement means: One syncretism is tolerable, two are not.” (cited by (Müller 2011))

(Müller 2006, 2007): Rich Agreement means no 'System-Defining' syncretism; S-D syncretism results from Impoverishment, which marks features as morphologically inaccessible; **pro Generalization**: “An argumental pro DP cannot undergo Agree with a functional head if has been subjected (perhaps vacuously) to ϕ -feature neutralizing impoverishment.”

(2)	Middle High German:	1.Pl.Prs \neq 3.Pl.Prs,	helfen vs. helfent	Past but not Present tense was syncretic
	Modern German:	1.Pl.Prs = 3.Pl.Prs,	helfen = helfen	Syncretism was generalized to Present

(Roberts 2011): *pro* in Old French was licensed not by agreement, but V-to-C and disappeared owing to the loss of V2 combined with the development of weak subject pronouns; in Brazilian Portuguese there was impoverishment of the overt pronoun and agreement inventory.

(Biberauer & Roberts 2009): it is not V-to-T movement, but tense that triggers *pro*.

1.3. Features of *pro*:

(Rizzi 1986): a) If no content is recovered, *pro* is restricted to non-argumental use; b) If only number is recovered *pro* is restricted to non-referential uses; c) If person and number are recovered *pro* has full range of uses.

(Holmberg 2003, 2005): a) consistent null subject languages have a D-feature in I; b) 1st and 2nd person null subjects are fully specified pronoun with D, which is deleted in the Phonology; c) expletive 3rd person *pro* (and 3rd person overt pronoun) in Finnish is a ϕ P that lacks D, it thus bears logophoric / generic meaning; d) in languages without unvalued ϕ -features in I (i.e. is without Agr) *pro* is a minimally specified nominal category, a bare, ϕ -less noun.

(Roberts 2011): following (Holmberg 2005): a) null subjects are always interpreted as definite in consistent null-subject languages; b) a (non-impooverished) T bears a D-feature; c) the meaning of the 1st and 2nd person inherently give rise to a definite interpretation (i.e. imply unique and existent referents); 3rd-person *pro* is indefinite, i.e. [-D] (if T is impoverishd).

1.4. *pro* in diachrony

- *pro* lost:

French: loss of agreement (12 c.) → loss of V2 (16 c.) → disappearance of *pro*, see (Roberts 2011)

Brazilian Portuguese: → weak pronoun appeared in place of Agr → disappearance of *pro*, (Kato 2000), (Roberts 2011)

German: loss of agreement (11 c.) → disappearance of *pro*, see (Axel 2007:298), (Müller 2011)

...

- *pro* developed

??? – please tell me if you know any example !!!

2. Null thematic referential subject pronouns in Old Russian

2.1. Null subjects in Old Russian

- 1st – 2nd person:

(Borkovskiy 1949:90-108): Predications in the 1st – 2nd person regularly lacked overt pronouns

- 3rd person:

(Borkovskiy & Kuznecov 1963:321-322): “In Old Russian there was no specific 3rd person pronoun”

(Gorshkova & Haburgaev 1981:262), “In OR much more often pronominal subjects is omitted than instantiated by *онъ* (3Sg – PG)”

(3) OR, 1Sg, (Borkovskiy 1949:95)

а теи земли все даю своему братию...
 a tei zemli vse daju svoemu bratiju...
 and those lands all give.1Sg self's brother
 ‘And I’m giving those lands to my brother’

(4) OR, 3Sg, (Borkovskiy&Kuznecov 1963)

а мѣнѣ не вѣдасть ничьто же
 a mѣne ne vѣdast ničto že
 and me not give nothing ZHE
 ‘And he gives me nothing’

2.2. Statistics on the null subject in Old and Middle Russian

- 1st – 2nd person:

(Borkovskiy 1949:94-103): number of overt pronominal subjects rose through 15-16 cc.

(5) Null and different types of overt pronominal subjects for 1st and 2nd person in Old Russian charters

period	1Sg					1Pl					2Sg					2Pl				
	pro	ls	cc	um	tot	pro	ls	cc	um	tot	pro	ls	cc	um	tot	pro	ls	cc	um	tot
<15c.	75,2	20,8	3,5	0,5	173	71,4	2,4	26,2	-	42	86,2	10,4	3,4	-	29	94,1	5,9	-	-	17
15-16	46	44	5	5	59	40,7	24,4	32,5	2,4	86	50	30	-	20	10	59,7	7	3,5	29,8	57

Legend: pro – *pro* subject, ls – non-null subject under the logical stress, cc – non-null subject in contrastive context, um – unmotivated non-null subject (all in percents), tot – total (number)

- 3rd person:

(Borkovskiy & Kuznecov 1963:321-2): “Number of examples with the subject *онъ* (3Sg) seriously increased at 15-16 cc.”

→ Russian totally lost null subjects near to the 16-17 cc. ()

3. Tense systems in Old and Modern Russian

3.1. Past Tenses in Old Russian: Aorist, Imperfect, Perfect, Pluperfect

- Aorist

1Sg: *несохъ*

2-3Sg: *несе*

1Du: *несоховѣ*

2-3Du: *несоста*

1Pl: *несохомъ*

2Pl: *несосте*

3Pl: *несоша*

- Perfect

1Sg: *есмь неслъ, -а, -о*

2Sg: *еси неслъ, -а, -о*

3Sg: *естъ неслъ, -а, -о*

1Du: *есвѣ несла, -ѣ, -ѣ*

2-3Du: *еста несла, -ѣ, -ѣ*

1Pl: *есмь несли, -ы, -а*

2Pl: *есте несли, -ы, -а*

3Pl: *суть несли, -ы, -а*

- Pluperfect

- Imperfect

1Sg: *несяхъ*

2-3Sg: *несяше(тъ)*

1Du: *несяховѣ*

2-3Du: *несяста*

1Pl: *несяхомъ*

2Pl: *несясте*

3Pl: *несху(тъ)*

1Sg: *бяхъ / бѣхъ неслъ, -а, -о*

2Sg: *бяше / бѣ неслъ, -а, -о*

3Sg: *бяше(тъ) / бѣ неслъ, -а, -о*

1Du: *бяховѣ / бѣховѣ несла, -ѣ, -ѣ*

2-3Du: *бяста / бѣста несла, -ѣ, -ѣ*

1Pl: *бяхомъ / бѣхомъ несли, -ы, -а*

2Pl: *бясте / бѣсте несли, -ы, -а*

3Pl: *бяху(тъ) несли, -ы, -а*

➔ The Old Russian past tenses included aorist, imperfect, perfect and pluperfect with elaborated person-number paradigm.

3.2. Tenses in Modern Russian: Gender instead Person marking in the past

- Present

1Sg: *несу*

2Sg: *несешь*

3Sg: *несет*

1Pl: *несем*

2Pl: *несете*

3Pl: *несут*

- Past

M.SG: *отн'ал*

F.Sg: *отн'ал*

N.Sg: *отн'ал*

Pl: *отн'ал*

- Future

Morphologically equivalent to the present and is the same for Perfective; for Imperfective is a complex form, BE_{finite} + Infinitive, where BE_{finite} has full range of person-number flections, i.e. also morphologically equivalent to the present tense.

→ Modern Russian preserved non-syncretic parading for the present tense but lacks personal agreement for the past.

(6) Old Russian (Borkovskij 1949:101)

A ту грамоту кнже отя-л-ъ еси
A tu gramotu knže otja-l-M esi
and those charter prince.Voc take-Part Aux.2Sg
'And those charter (you), prince, have taken back.'

(7) Modern Russian

A ту грамоту ты, князь, отнял
A tu gramotu ty, knjazj, otnja-l-Ø
and those charter you prince take-Pst-M
'And those charter you, prince, have taken back.'

→ Problem: how are person features checked in Modern Russian past tenses?

4. Past tenses decay and its consequences for null subjects

4.1. Chronology of the past tense decay

(Sobolevskij 1907:239-242), (Maslov 1954), (Zaliznjak 2008a:239-262; 2008b:94-114), (Ivanov 1990:327-330) i.a.

- Imperfect

Imperfect of the perfective aspect first disappeared in the colloquial style; the maximum number of Imperfectives – 6-12% were attested in the 11-12 cc.; the extinction of these forms started in the 12 c. and completed in 13 c. – it was replaced by the Imperfect of the imperfective aspect.

- Aorist

Aorist disappeared in the colloquial style about the 13 c.; in the literary texts it survived till 15-16 cc.

- Imperfect and Aorist

Aorist and Imperfect stopped to be semantically opposed yet from the 11 – 12 cc.; they were totally mixed from the 15 c.

- Perfect and Pluperfect

For complex forms number of 1st and 2nd person auxiliaries decreased from the 11 – 12 cc. and disappeared at the 16-17 cc., the same happened in the literary language at the 17 c.; 3rd person auxiliaries were absent from the very beginning of OR.

→ Elaborated system of past tenses totally disappeared to the 17 c., (Zalizjak 2008a), (Choo 2003)

4.2. Ideas on the relation between past tenses and null subjects in Russian linguistics

(Sobolevskij 1907:241) “... the use of personal pronouns led to the situation when past tense forms were losing the auxiliary ... and the absence of the auxiliary was supported by the personal pronouns...”

(Meschaninov 1945:36, 169): “A predicate expressed both a predicate and a subject and consequently is a finite sentence in itself”, “A subject and a predicate can be both present in a predicate ... *Beru* (give.1Sg – PG) expresses the action of the 1st person, i.e. includes the expression of the subject”, citations from (Borkovskij 1949:91).

(Ivanov 1990): “The role of personal pronouns as subjects increased that was due to the fact that *-l* participles were being fixed as the only form of past tense. This development was accompanied by the loss of auxiliary in the recent perfect that implied the use of personal pronouns to distinguish between persons and numbers.” (Ivanov 1990:373-374)

(Zaliznjak 2008a:222): auxiliary forms were replaced by overt pronouns, see also (Sobolevskij 1907:239-242)

(Zimmerling 2009a):² based on (Zaliznjak 1993), the data from Novgorod birch barks (short colloquial style messages): 1st and 2nd person overt pronouns were in the complimentary distribution with the copulas, what we observed around 12-13 cc. in the 3rd person was the so-called “aggressive pro-drop”: neither overt pronouns nor copulas were present.

➔ The idea is that *pro* lost due to the finite Aux erosion (and to a lesser extent – loss of simple tenses).

4.3. Other proposals

(Meyer 2011): “The emerging generalisation is that in 1st and 2nd person, subject realisation by weak pronouns increased considerably during the 16 century, correlating strongly with the development of verbal agreement morphology... The respective change in 3rd person, however, took place with a delay of about 150 years.”

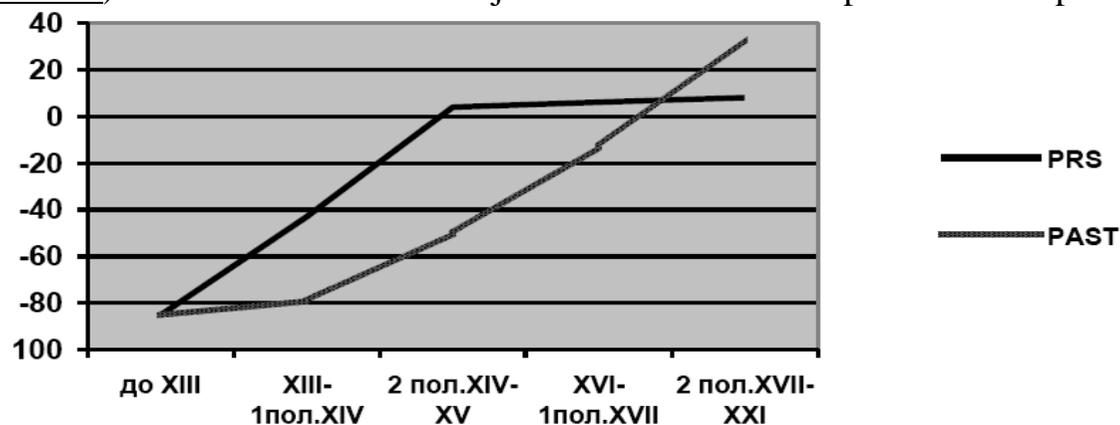
(Kibrik 2013): pro-drop is a typologically non-marked strategy, whereas overt pronominal subjects are (nearly) restricted to Germanic; Old Russian had a typologically “natural” way to express pronominal subject and changed it to the marked one – probably under the areal influence from the Germanic languages.

² I am very grateful to Anton Zimmerling, Andrej Kibrik and Eugenia Sidorova for sending me their papers and discussing the data from OR.

4.4. Statistics on null subjects with respect to tense forms

(Sidorova 2013): Study of 2000+ clauses from four periods: **1)** before 13 c., **2)** 13 – first half of 14 cc., **3)** sec. half of 14 – 15 cc. **4)** 16-17 cc.; Results: it seems that overt pronouns started to replace null subjects in the **present** tense, in particular: the period **1)** shows slight preferences for overt subjects in the past but the data seems not statistically reliable; during the periods **2)** and **3)** more overt subjects appeared in the present tense; the period **4)** shows preferences for overt subject in the past again but the overall situations with pronouns and tenses is very similar to Modern Russian.

(8) Results of (Sidorova 2013): relative ratio of null subjects in OR at different periods in the past and present tenses



→ Even if we do not accept these data as an evidence of the leading role of the present tense, (Sidorova 2013) casts serious doubts on the view that pro started to disappear in the past tenses. But it definitely started to disappear **with** the past tenses.

(Choo 2003): OR texts from 17th c.; it was proposed on the grounds of different grammatical properties of the texts to correct the chronology of these documents and to reorganize them by means of “grammatical chronology”, but we would adhere the traditional approach here; Results are summarised below:

(9) Results of (Choo 2003): percentage of pro and V forms (%) in OR in different texts from different periods (adopted)³

	IOV	IT	IA	TOM	SG	AV	FS	KS	BK	DK	EL	GZ
	1598-1605	1616-1619	1620s	mid. 17 th c.	1660s	1667-1682	1680-1720	late 17 th c.	mid. 17 th c.	1670s	mid. 17 th c.	18 th c.
<i>pro</i>	77,4	68,8	79,6	69,1	62,8	55,0	43,9	29,7	30,4	29,7	30,9	16,9
Imp	26,5	33,6	19,8	20,6	20,6	1,1	0,0	14,2	0,0	0,8	0,0	0,0
Aor	63,4	61,8	75,0	70,6	62,4	10,1	0,8	56,3	11,5	5,1	1,2	0,0
Perf	41,2	0,0	9,1	0,7	24,1	0,5	0,0	3,8	0,33	1,2	0,34	0,0
Cop	92,9	85,7	95,5	66,7	63,2	72,2	10,0	25,0	9,7	8,0	42,3	30,0
∅ _{Cop}	0,0	0,0	0,0	33,3	26,3	13,9	80,0	50,0	61,3	76,0	50,0	50,0

5. Expletive null subjects in Modern Russian

5.1. Types of pro in Modern Russian

In spite of the loss of referential thematic null subjects, some prominent semantic types of thematic pro are attested in Modern Russian, see (Franks 1995, Müller 2006, Zimmerling 2009b).

i) Non-referential 3rd Pl human subjects (Nr3 hereafter)

(10)

Валенки носят зимой.
 Valenki nos'-at zimoj.
 felt.boots wear-3Pl in.winter
 'Everybody wears felt boots in winter.'

(also носили / ставили = Past.Pl, no Person, Gender neutralized)

(11)

Фундамент став-ят из камня
 Fundament stav'-at iz kamnya
 Foundation build-3Pl from stone
 'A foundation is built from stones.'

³ Perfect row stands for the Aux-less forms.

ii) Generic 2nd Sg subjects (Gen2 hereafter)

(12)

Посмотр-ишь на него и грустно становится.
Posmotr-iš' na nego i grustno stanovitsa.
look-2Sg at him and sad become
'Everybody, who looks at him, got sad.'

(also посмотрел / приготовил = Past.Sg, no Person, Gender neutralized)

(13)

Приготов-ишь ужин, а есть не хочется...
prigotov-iš' užin a est' ne hočetsa
cook-2Sg dinner eatnot want
'You cook yourself a dinner but you do not want to eat.'

iii) Zero subjects of Nature

(14)

Деревн-ю смыл-о (водой)
Derevn'-u smyl-o (vodoj)
Village.Acc wash.away-N.Sg (by.water)
'A village was washed away (by the water)'

(15) (Lavine 1998)

Уши заложил-о
uši žaložil-o
ear.Pl.Acc wash.away-N.Sg
'Ears are clogged'

→ “subjects” of Nature may be analyzed via vP movement, (Lavine 1998), and won't concern us here

5.2. Subject properties of Nr3 and Gen2:

It could be argued that the semantic properties of Nr3 and Gen2 are due to the interpretation of verbs only, but the standard tests on reflexive binding, adjunct control and secondary predication show presence of nominative subjects.

- Reflexive binding

(16) Nr3

Валенки надевают для самих себя, а не для родителей.
 Valenki nadevaj-ut dl'a samix seb'a a ne dl'a roditelej.
 felt.boots put.on-3Pl for themselves but not for parents
 'People put on felt boots for themselves, not for their parents.'

(17) Nr3

Фундаментставят для самих себя а не ...
 Fundament stavyat dl'a samih seb'a a ne ...
 Foundation build.3Plfor himself but not ...
 '(People) put foundation for themselves' sake, not ...'

(18) Gen2

Послушаешь самого себя и грустно становится...
 Posluš-a-eš' samogo seb'a i grustno stanovitsa.
 listen-2Sg himself and sad become
 'Somebody listens to him/herself and it is getting sad.'

(19) Gen2

Ведь пишешь-то не только для самого себя...
 Ved' piš-eš'-to ne tol'ko dl'a samogo seb'a...
 'cause write-2Sg not only for himself
 'Cause everybody writes not only for oneself ...'

- Adjunct control

(20) Nr3

Валенки зимой носят чтобы не замерзнуть.
 Valenki zimoj nos'-at čtoby ne zamerznut'.
 felt.boots in.winterwear-3Plfor not freeze
 'People wear felt boots in winter for not freezing.'

(21) Nr3

Фундаментставят из к. (чтобы) экономить
 Fundament stavyat iz k. (čtoby) ekonomit'
 Foundation build.3Plfrom s. (for) make.economy
 'A foundation is built from stones to economize on'

(22) Gen2

Придешь пораньше чтобы приготовить ужин...
 prid-eš' poran'se (čtoby) prigotovit' užin...
 come-2Sg earlier (for) cook dinner...
 'You come earlier to cook dinner ...'

(23) Gen2

На работу ходишь (чтобы) деньги зарабатывать ...
 Narabotu hod-iš' (čtoby) den'gi zarabatyvat'...
 To work go-2Sg (for) money gain...
 'Everybody goes to work for gaining money...'

- Secondary predication

(24) Nr3

Вечером возвращаются усталые...

Večerom vozvraš'aj-ut-s'a ustal-ye

In.evening return-3.Pl-Refl tired-Nom.Pl

'In the evening people come back home,...'

(25) Nr3

В Москве гоняют как сумасшедшие.

V Moskve gon'aj-ut kak sumasėdš-ie

In Moscow drive-3.Pl as crazy-Nom.Pl

'People drive as crazy in Moscow'

(26) Gen2

В городе кажешься никому не нужным.

V gorode kaŷ-eš'-s'a nikomu ne nuŷnym...

In city look-2Sg-Refl nobody not needed...

'You look strange in the city.'

(27) Gen2

В Москве платишь за все как новый русский.

V Moskve plat-iš' za vse kak novyj russkij.

In Moscow look-2Sg for everything as new Russian-Sg

'In Moscow you pay for everything as a new Russian.'

➔ Nr3 and Gen2 are true subjects generated and operating in syntax

6. Russian: lessons learned

6.1. Crucial facts about Russian:

- Old Russian had null subjects
- Modern Russian does not have null subjects
- Null subjects were lost right after the past tenses with the elaborated agreement system failed
- The non-syncretic agreement is present in the present and future tenses of Modern Russian
- Modern Russian still has two types of non-referential pro subjects

6.2. Questions to answer

Q.1: How Nr3 and Gen2 are licensed in Modern Russian?

Q.2: Why the decay (only) of the past tenses rebuilt the Russian referential system?

Q.3: How Nr3 and Gen2 resulted from the pro-drop failure?

Q.4: What features checked in Modern Russian in the past (?person) and present (?number) tenses?

7. Analysis

7.1. List of hypotheses

- I. It was the tense or soon the aspect that licensed *pro* in Old Russian, see (Biberauer & Roberts 2009)
- II. D features on T responsible for the *pro* disappearance – not a case in Russian, at least in the present / future tense
- III. Pro lost due to (d)evolution of null pronouns

→ Option III. for Russian

- ✓ Evolution of null subjects can be viewed as feature evolution of *pro*, in line with (Rizzi 1986)
- ✓ *pro* in Old Russian had uninterpretable ϕ -features, in line with (Holmberg 2003)
- ✓ (Roberts 2011): “If a category α has D[def], then all α 's ϕ -features are specified.”
- ✓ Ways of change:

(i) initial state: null subjects bore uninterpretable ϕ -features that was checked by interpretable ϕ -features on T:

[$\text{pro}\{\phi_u\}$ T $\{\phi_i\}$...] → ok in Old Russian in all tenses

(Borkovskij 1949:106): non-referential 3rd plural *pro* was already present in Old Russian:⁴

(28) Nr3 in Old Russian, 13th c.

Как то место зовут где стоим?

Kak to mesto zov-ut, gde stoim?

how this place call-3Pl where stay.1Pl

‘What is the name of the place where we are staying?’

(29) Nr3 in Old Russian, 13th c.

от всякого вѣснаго товара что клад-уть на скалви

ot vs’akogo vesnago tovara čto klad-ut’ na skalvi

from various measurable article that put-3Pl on scales

‘... from every measurable article that is put onto the scales’

But! Generic constructions with verbs in 2Sg were not attested.

(ii) T lost ϕ -features (person agreement) in past tenses:

[pro{ ϕ_u } T{ ϕ_i } ...] → ok in Old / Middle Russian in the present

[pro{ ϕ_u } T{ } ...] → not ok in Old / Middle Russian in the past

In the state (ii) Old / Middle Russian still had null subjects but their uninterpretable ϕ -features were not checked in the past tense, that resulted in (iii) and (iv) simultaneously:

(iii) Overt pronouns replaced referential pro in Middle Russian in all tenses

[[overt pronoun] T_{past/present} ...] → for referential subjects

(iv) ϕ -features degenerated from *pro* that gave rise to the generic 2nd person subject

[pro_{Generic} T_{past/present} ...] → for non-referential subjects

Acquirement of non-referentiality, i.e. loss of ϕ -features on *pro* started presumably in the present tense clauses and was supported by the following facts:

1) semantics of 2Sg pronouns, which regularly have generic reading (cf. English: *you only live once* etc.),

2) the present tense might kept *pro* available longer than the past due to person agreement (but see (Sidorova 2013)),

⁴ counter (Holmberg 2003, 2005)

3) habitual interpretation was also available in the present tense, see (30), that helped to developed 2Sg generic *pro*

4) 2Sg value for Aorist in the verbal paradigm has been lost earlier than other forms, cf. (31) where Perfect used instead of Aorist, see (Zaliznjak 2008b:111).

(30) 13th c., (Gorshkova & Naburgaev 1981:286)

Поляне бо своих оць обычай им-оуть кротокъ и тихъ

Pol'ane bo svoix ot'sь obyčaj im-ouť krotokъ...

Polans BO their fathers' customs have-3Plgentle

As though Polans have gentle and quiet customs of their ancestors.

(31) 12th c., (Zaliznjak 2008b:111)

чемоу хотелъ юси сести Переяславлѣ

čemu hotelъ jesi sestĭ Perejaslavli

why want.PstPrt be.2Sg sit at.Perejaslavl'

Why did you want to sit at Perejaslavl'?

(v) non-referential 3rd plural *pro* has been kept since it did not force any interpretable ϕ -feature checking

➔ Answer to **Q.1**: no ϕ -feature checking involved with non-referential *pro*(s)

8. Conclusion and tasks for future research

8.1. Evolution of Russian *pro* system shows:

➔ Answer to **Q.2**: Referential *pro* has been lost due to the past tenses destruction and inability to check uninterpretable ϕ -features on *pro* in the past tenses

➔ Answer to **Q.3**: Non-referential *pro* arose as a result of the same very process: in the past tenses uninterpretable ϕ -features on *pro* was unable to be checked hence two *pro* elements lost them and acquired non-referential meaning

8.2. For future research:

➔ Answer to **Q.4**: What features checked in Modern Russian in the past (?person) and present (?number) tenses?

➔ Timing of the development of 2Sg generic *pro*

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