

# Predicate Doubling in Russian: One Process or Two?

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## 1 Outline

1. Review of the phenomenon and previous analyses
2. Predicate Doubling/Clefting in Russian
3. Analysis

## 2 Introduction

### 2.1 Basic Examples

*Predicate Doubling (AKA Predicate Clefting):*

- Predicate is fronted, usually occurs in CP-domain;
- Verb in the “cleft” is non-finite;
- Either only V is fronted or an entire VP is fronted (Landau generalization, Landau, 2006).

- (1) *Verb-doubling constructions (Verb-Doubling):* only verb is fronted:
- a. Čitat'-to Ivan knigu čitaet, no ničego ne ponimaet. (Russian, Abels 2001)  
read<sub>INF</sub>-TO Ivan book reads, but nothing not understands  
“Ivan does read the book, but he doesn't understand a thing”
  - b. Leer, Juan ha leído un libro. (Spanish, Vicente 2009)  
read<sub>INF</sub> Juan has read a book  
“As for reading, Juan has read a book”
  - c. Liknot, hi kanta et ha-praxim. (Hebrew, Landau 2006)  
buy<sub>INF</sub> she bought ACC the-flowers  
“As for buying, she bought the flowers”

- d. Essen est Maks fish. (Yiddish, Cable 2004)  
eat<sub>INF</sub> eats Max fish  
“As for eating, Max eats fish”
- (2) *Verb phrase-doubling constructions (VP-Doubling):* entire VP is fronted:
- a. čitat' knigu-to Ivan čitaet, no ničego ne ponimaet.  
read<sub>INF</sub> book-TO Ivan reads, but nothing not understands  
“Ivan does read it, but he doesn't understand a thing”
  - b. Leer el libro, Juan lo ha leído.  
read<sub>INF</sub> the book Juan CL has read  
“As for reading the book, Juan has indeed read it”
  - c. Liknot et ha-praxim, hi kanta.  
buy<sub>INF</sub> ACC the-flowers she bought  
“As for buying, she bought the flowers”
  - d. Essen fish est Maks.  
eat<sub>INF</sub> fish eats Max  
“As for eating, Max eats fish”

### 2.2 Previous Approaches

- Several analyses of predicate doubling (or clefting; PD below) were proposed in the recent literature for various languages:
  - Yiddish, Russian, Polish, Gungbe, and others, see Abels, 2001; Cable, 2004; Landau, 2006; Aboh and Dyakonova, 2009; Bondaruk, 2009, 2012 a.o.).
- Two major approaches:
  1. Movement analysis
  2. Base-generation analysis

- (3) Proposal of this paper: Russian uses different strategies for Verb-Doubling and VP-Doubling.

- **VP-Doubling:** *Base Generation*
- **Verb-Doubling:** *Movement*

### 3 Data Description

#### 3.1 Basic Properties of PD in Russian

- Bare V fronting (**Verb-Doubling**) (4-a)
- Entire V and its arguments fronting (**VP-Doubling**) (4-b)
- Argument of the verb cannot be repeated in both locations (4-c)
- The particle -TO marks the topic phrase and is optional

- (4) a. kupit'-to Ivan piva kupit, no pit' ne budet (Verb-D)  
 buy<sub>INF</sub>-TO I. beer buy<sub>FUT</sub> but drink<sub>INF</sub> not will  
 'As for buying beer, Ivan will buy beer, but won't drink it.'
- b. kupit' piva-to Ivan kupit, no pit' ne budet (VP-D)  
 buy<sub>INF</sub> beer-TO I. buy<sub>FUT</sub> but drink<sub>INF</sub> not will  
 'As for buying beer, Ivan will buy beer, but won't drink it.'
- c. kupit' piva-to Ivan (\*piva) kupit (\*piva), ...  
 buy<sub>INF</sub> beer-TO I. (beer) buy<sub>FUT</sub> (beer)

#### 3.2 Issues of Identity

- Usually it has been claimed that both instances of the verb must be identical, however:
    - This is indeed the case in case of Verb-D, (5-b), (6-b)
    - No strict identity requirement on verbs in case of VP-D, see contrast between (5-a), (6-a) and (5-b), (6-b)
- (5) a. ?s'ezdit' v Ameriku-to ja zavtra tuda poleču (VP-D)  
 go<sub>INF</sub> to America-TO I tomorrow there fly<sub>FUT</sub>  
 'As for going to the USA, I'm flying there tomorrow.'
- b. \*s'ezdit'-to ja zavtra v Ameriku leču (Verb-D)  
 go<sub>INF</sub>-TO I tomorrow in America fly  
 'As for going, I'm flying to the USA tomorrow.'
- (6) a. ?najti deneg-to on v dolg voz'mët. (VP-D)  
 find<sub>INF</sub> money-TO he borrow<sub>FUT</sub>.  
 'As for finding money, he will borrow some.'
- b. \*najti-to on deneg v dolg voz'mët. (Verb-D)  
 find<sub>INF</sub>-TO he money borrow<sub>FUT</sub>.  
 'As for finding, he will borrow some money.'

#### 3.3 Long-Distance Predicate Doubling

- (7) Long Distance effects are different for VP-D and Verb-PD:

	VP-Doubling	Verb-Doubling
<i>Indicative</i>	✓	✗
<i>Subjunctive</i>	✗	✗
<i>Control</i>	✗	✗

- (8) *Indicative complements*
- a. ?kupit' piva-to on думаet čto Boris kupit (VP-D)  
 buy<sub>INF</sub> beer-TO he thinks that B. buy<sub>FUT</sub>  
 'As for buying beer, he heard that Boris will buy it'
- b. \*kupit'-to on slyshal čto Boris piva kupit (Verb-D)  
 buy<sub>INF</sub>-TO he heard that B. beer buy<sub>FUT</sub>  
 'As for buying, he heard that Boris will buy beer'
- (9) *Subjunctive complements*
- a. \*kupit' piva-to Ivan xočet čtoby Boris kupil (VP-D)  
 buy<sub>INF</sub> beer-TO I. wants that<sub>SUBJ</sub> B. buy<sub>SUBJ</sub>  
 'As for buying beer, Ivan wants Boris to buy it.'
- b. \*kupit'-to Ivan xočet čtoby Boris piva kupil (Verb-D)  
 buy<sub>INF</sub>-TO I. wants that<sub>SUBJ</sub> B. beer buy<sub>SUBJ</sub>  
 'As for buying beer, Ivan wants Boris to buy it.'
- (10) *Control complements*
- a. \*kupit' piva-to Marina xočet kupit' (VP-D)  
 buy<sub>INF</sub> beer-TO M. wants buy<sub>INF</sub>  
 'As for buying beer, Marina wants to buy it'
- b. \*kupit'-to Marina xočet piva kupit' (Verb-D)  
 buy<sub>INF</sub>-TO M. wants beer buy<sub>INF</sub>  
 'As for buying beer, Marina wants to buy it'
- Puzzle: this behavior is unexpected compared to other long-distance effects:
    - Long-distance extraction is degraded out of indicative complements compared to subjunctive and control complements, (11)
    - Long-distance binding is possible into infinitival complements, (12)
    - Obviation effects into subjunctive complements (Avrutin and Babyonyshev, 1997)
- (11) *Long-distance extraction*

- (12) *Long-distance binding*
- a. ??Čto ty skazal čto Ivan vypil? (Indicative)  
 what you said that Ivan drank  
 “What did you say that Ivan had drunk?”
- b. Čto ty xočeš čtoby Ivan vypil? (Subjunctive)  
 what you want that<sub>SUBJ</sub> Ivan drank  
 “What do you want for Ivan to drink?”
- a. \*Ivan<sub>i</sub> skazal čto Maša l’ubit sebja<sub>i</sub>. (Indicative)  
 Ivan said that Maša loves self  
 “Ivan said that Maša loves him.”
- b. \*Ivan<sub>i</sub> skazal čtoby Maša narisovala sebja<sub>i</sub>. (Subjunctive)  
 Ivan said that<sub>SUBJ</sub> Maša draw self  
 “Ivan told Maša to draw him.”
- c. Ivan<sub>i</sub> skazal Maše narisovat’ sebja<sub>i</sub>. (Control)  
 Ivan said Maša<sub>DAT</sub> draw<sub>INF</sub> self  
 “Ivan told Maša to draw him.”

### 3.4 Island Effects

- Verb-Doubling: sensitive to islands/constraints
- VP-Doubling: not sensitive to islands/constraints

- (13) *wh-island*
- a. ?kupit’ piva-to ja ne znaju kogda on kupit (VP-D)  
 buy<sub>INF</sub> beer-TO I not now when he buy  
 “As for buying beer, I don’t know when he will do so.”
- b. \*kupit’-to ja ne znaju kogda on piva kupit (Verb-D)  
 buy<sub>INF</sub>-TO I not now when he beer buy  
 “As for buying, I don’t know when he will buy beer”
- (14) *Coordinate Structure Constraint*
- a. kupit’ piva-to on kupit i vodki vyp’et (VP-D)  
 buy<sub>INF</sub> beer-TO he buy and vodka drink  
 “As for buying beer, he will buy it and drink some vodka”
- b. \*kupit’-to on piva kupit i vodki vyp’et (Verb-D)  
 buy<sub>INF</sub>-TO he beer buy and vodka drink  
 “As for buying, he will buy beer and drink vodka”
- (15) *Complex NP Constraint*
- a. ?kupit’ piva-to ja znaju človeka, kotoryj kupit (VP-D)  
 buy<sub>INF</sub> beer-TO I know person which buy

- “As for buying beer, I know a person who will buy it.”
- b. \*kupit’-to ja znaju človeka, kotoryj kupit piva (Verb-D)  
 buy<sub>INF</sub>-TO I know person which beer buy  
 “As for buying, I know a person who will buy beer.”
- (16) *Adjunct Island Constraint*
- a. ?vypit’ piva-to on ušël tak kak Maša vypila. (VP-D)  
 drink<sub>INF</sub> beer-TO he left because Maša drank  
 “As for drinking beer, he left because Maša drank it.”
- b. \*vypit’-to on ušël tak kak Maša piva vypila. (Verb-D)  
 drink<sub>INF</sub>-TO he left because Maša beer drank  
 “As for drinking, he left because Maša drank beer.”

### 3.5 Summary of the Data

	VP-Doubling	Verb-Doubling
<b>LD-Doubling with:</b>		
<i>Indicatives</i>	✓	✗
<i>Subjunctives</i>	✗	✗
<i>Control</i>	✗	✗
<b>Constraints:</b>	✗	✓
<b>Identity Effects:</b>	✗	✓

## 4 Analysis

To analyze the data one needs to answer the following questions:

1. What triggers the PD process?
2. Is the upper instance of the doubled constituent base-generated or moved?
3. Why does doubled verb exhibit infinitival morphology?
4. Why is identity necessary in the case of Verb-Doubling and optional in the case of VP-Doubling?
5. Why is long-distance V-PD prohibited, while VP-PD is allowed out of indicatives?
6. How to account for the observed behavior of PD with respect to islands?

#### 4.1 Interpretation of PD-constructions and Structural Position

- Interpretation of PD-construction: contrastive topic (see Abels 2001), see for example the gloss of (4).
- Structural position of -TO: Head of the Top,P (precise nature of the position is not crucial for the analysis, as long as this position is in the CP-domain of the clause).
- Speaking in terms of features (I assume Pesetsky and Torrego, 2007 feature system):
  - $\langle i\text{Top} -val \rangle$  feature on the -TO
  - $\langle u\text{Top} +val \rangle$  feature on the head of the doubled constituent  $v$
  - Agree relation between Top-head and  $v$  drives the Merge (*internal* or *external*) of the topicalized element into the Top,P projection

#### 4.2 Movement or Base-Generation?

- Previous analysis of Russian (Abels 2001): movement analysis
- However, summary of the data points to two different analyses behind Verb-Doubling and VP-Doubling
- VP-Doubling: base-generation of the topicalized VP ( $vP$ ) in the Spec,TopP position
  - No islands effects
  - No identity requirement
  - Possibility with indicative complements
- Verb-Doubling: head-movement to the Top-head
  - Islands effects
  - Identity requirement
  - Impossible with embedded clauses

#### 4.3 Long-Distance Effects and Islands

- Movement vs. Base-generation analysis explains basic facts about Islands and Long-Distance effects:
  - Long-Distance head movement is not allowed out of finite clauses, therefore Long distance Verb-Doubling is ungrammatical
  - VP-Doubling involves base-generation, therefore no island effects
- How to explain the difference between indicative complements and subjunctive/control complements?

- Assume: Doubled  $vP$  is generated in the embedded Spec,CP.
- It further has to move to the matrix Spec,CP
- Embedded contrastive topics are ungrammatical for subjunctive (17-b) and control (17-c) complements, but grammatical for indicative complements (17-a):

(17) *Embedded Topic position only exists in indicative complements, but not in subjunctive or control complements:*

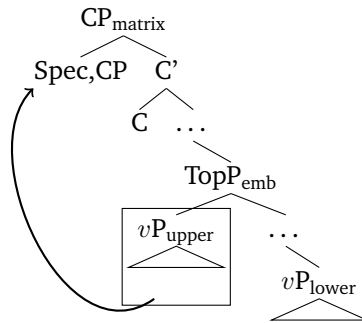
- Maša skazala čto Sergeja-to Ivan vstretil, a Petra net. (Ind)  
Maša said that Sergej-TO Ivan met but Peter not  
'Maša wants Ivan to meet Sergej, but not Peter.'
- \*Maša xočet čtoby Sergeja-to Ivan vstretil, a Petra net. (Subj)  
Maša wants that<sub>SUBJ</sub> Sergej-TO Ivan meet<sub>SUBJ</sub> but Peter not  
'Maša wants Ivan to meet Sergej but not Peter'
- \*Maša xočet piva-to kupit', a vodki net. (Control)  
Maša wants beer-TO buy<sub>INF</sub> but vodka not  
'Maša wants to buy beer, but not vodka'

- Since it is impossible to generate VP in the embedded CP-domain of subjunctive and control clauses (18-b)-(18-c), the VP-Doubling is impossible in such cases.
- Note that the upper instance of VP does not obligatory move to the matrix Spec,TopP, and can stay in the embedded Spec,TopP (18-a).

(18) *Embedded VP-Doubling in indicatives subjunctives, and control clauses:*

- Maša skazala čto [vstretit' Sergeja]-to Ivan vstretil, a Petra net.  
Maša said that [meet<sub>INF</sub> Sergej]-TO Ivan met but Peter not  
"Maša said that as for Sergej, Ivan met him, but didn't meet Peter."
- \*Maša xočet čtoby [vstretit' Sergeja]-to Ivan vstretil, a Petra net.  
Maša wants that<sub>SUBJ</sub> [meet<sub>INF</sub> Sergej]-TO Ivan met but Peter not  
not  
"Maša wants Ivan to meet Sergej, but not Peter."
- \*Maša xočet [vstretit' Sergeja]-to PRO vstretil', a Petra net.  
Maša wants [meet<sub>INF</sub> Sergej]-TO meet<sub>INF</sub> but Peter not  
"Maša wants to meet Sergej, but not Peter."

- (19) *Base-generation of  $vP$  in the embedded Spec,TopP and subsequent movement into the matrix clause:*



#### 4.4 Identity Effects

- VP-Doubling analysis involves base-generation, and therefore identity is not required.
- There are some constraints on the verbs in the upper and lower position:
  - It is not a syntactic requirement in case of VP-Doubling, but a semantic condition on Topic, cf. (20):
 

(20) a. As for fruits, I like apples.  
b. \*As for apples, I like fruits.
  - Similar identity conditions hold on verb arguments in the doubled predicate, see contrast in (21-a) and (21-b)
 

(21) a. ?najti deneg-to on 100 rublej najdet  
find<sub>INF</sub> money-TO he 100 rubles find<sub>FUT</sub>  
'As for finding money, he will find 100 rubles.'  
b. \*najti 100 rublej-to on deneg najdet  
find<sub>INF</sub> 100 rubles-TO he money find<sub>FUT</sub>  
'As for finding money, he will find 100 rubles.'
- Verb-Doubling analysis involves movement, therefore identity between lower and upper instances of the verb is required.

#### 4.5 Infinitival Morphology

- Finite form of the verb bears uninterpretable valued T-features  $\langle uT +val \rangle$  which need to be checked by T, which has interpretable unvalued T-features  $\langle iT -val \rangle$  (Pesetsky and Torrego 2007).
- Doubled VP is base generated in the CP-domain, higher than T.
- As a result, V in the doubled VP is never probed by T, and as a result cannot have finite morphology, and must be uninflected.

#### 4.6 Deletion of Arguments

- In the VP-Doubling the arguments of the verb cannot be repeated in the upper and lower copies
- Analysis: deletion under identity, similar to ellipsis
  - Ellipsis doesn't respect islands as well!
- Verb does not delete, because morphology is different: infinitival form in the upper instance, finite form in the lower instance.
  - In fact, it may not be just about morphological form, but about featural content of the verb, as in general verbs with difference morphology can be elided.

(22) Who has done it today and who will tomorrow?<sup>1</sup>

- Upper instance of the verb lacks T-feature, as nothing can check it, and is therefore spelled out as infinitive
- Lower instance of the verb has an instance of T-feature
- Difference in featural content of verbs prevents ellipsis; note that in the previous example both elided and not-elided instances of the verb *do* have a T-feature.

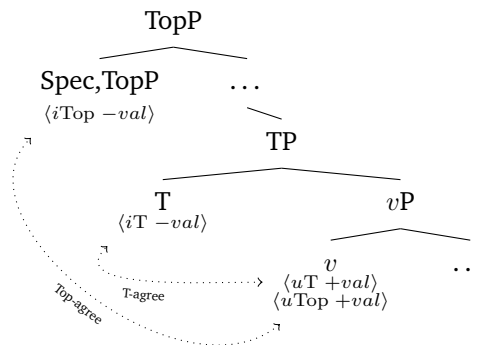
#### 4.7 Verb-Doubling as Head Movement

- Feature content of  $v$ : Topic feature  $\langle uTop +val \rangle$ ; T-feature  $\langle uT +val \rangle$
- Feature content of T: T-feature  $\langle iT -val \rangle$  – triggers T to probe  $v$ 
  - No EPP on T in Russian,  $v/V$  does not move to T, stays within the  $vP$
- Feature content of Top: Topic feature  $\langle iTop -val \rangle$  – triggers Top to probe  $v$ .
  - Strong Topic feature, triggers movement of  $v/V$  into the Top position

<sup>1</sup>Thanks to the anonymous reviewer for this example.

- Assume following Chomsky 2008, that T and C/Top probe simultaneously
- Two chains are created: C-*v*/V (Top-feature) and T-*v*/V (T-feature)
  - C-*v*/V chain: *v*/V is raised to C uninflected, since Top does not agree with its T-feature; upper copy will be pronounced (Top needs to be pronounced)
  - T-*v*/V chain: T (in Russian) is weak, the lower instance of *v*/V will be pronounced; the lower instance of V will have finite morphology

(23) Two chains: Top-*v* and T-*v*:



- Potentially this idea can be implemented in Arregi and Pietraszko, 2018 Generalized Head Movement framework, albeit we might need to propose some modifications to it.
  - The complex head is created in all positions related by the head movement;
  - The head is pronounced in the highest strong position, if there is any;
  - If there are no strong positions, the highest position is pronounced.
- This approach needs a revision where both strong positions should be able to be pronounced, however that might have a theoretical cost.
- But if so, under assumption that both TopP and *v* positions are strong, they are both pronounced, however differently.

## 5 Further Questions

This analysis raises a number of theoretical questions about the nature of several theoretical assumptions:

- Questions on the Copy Theory of Movement:
  - How is the upper copy of the *v*P created? Are the *v*P-internal elements doubled in the numeration?
  - If so, are they exactly the same, but occur in the numeration twice, or are they different in their feature content?
  - Can we deal with the proposed Base-Generation analysis within the copy theory of movement directly? Is it possible that the upper copy of the *v*P is internally merged, but is not subject to movement constraints from the lower position?
- Question on the Morphology and the structure of Infinitives:
  - What is the featural content of the infinitival form of the verb?
  - Is it possible that it lacks T-features at all, or they are unvalued and such verbs are spelled out as infinitives?
  - While ellipsis is not in general sensitive to morphology, there are certain restrictions (as in the proposed analysis). What is their nature?

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