

# P-DOUBLING IN SPLIT-SCRAMBLING: A RENAISSANCE ANALYSIS\*

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## 1. Introduction

This paper discusses split scrambling constructions in Russian, focussing on split NPs contained within a PP. Based on a new observation that P(reposition)-doubling is possible (or even obligatory) in some split PPs, whereas it is infelicitous in others, I propose that we need to reconsider the uniform treatment of split scrambling, which is usually assumed in the literature (Sekerina 1997; Bošković 2005; Franks 2007; Pereltsvaig 2008; among many others).

In this paper, I identify two classes of split constructions: contrastive split (c-split) and topicalization split (t-split) and argue that c-split and t-split have different syntactic structures, with the latter involving a more complex derivation. This difference stems from the fact that the parts of a constituent from which scrambling takes place are farther apart on the information scale in t-split than in c-split. This observation supports the idea that syntax is sensitive to the information structure of the utterance.

The analysis I propose for t-split is a revival of the old idea that (in some cases) sub-extraction is impossible unless a ‘readjustment’ takes place, breaking up a constituent from which we wish to extract (Chomsky 1977; Kayne 2005). For my analysis, I use Kayne’s (1998 and subsequent works) proposal that prepositions merge above VP, making it possible to split the complement of the verb via a number of remnant movements.

Finally, I discuss P-doubling in approximative inversion in Russian, a phenomenon which is apparently unrelated to split scrambling, and show that it also can be analyzed using Kayne’s (1998) proposal and that the spell-out rules that apply to split scrambling and approximative inversion are identical.

## 2. C-split vs. t-split

The goal of this section is to show that contrastive splits (c-splits) and topicalization splits (t-splits) differ from the information structure point of view. The following sections will argue that they also have distinct syntax.

(1) is an example of c-split, in which the adjective *otdel'nogo* ‘separate-N.SG.GEN’ is preposed and bears contrastive stress, i.e. is marked with a falling intonational contour, dubbed IK-2 in Russian traditional literature, e.g. Bryzgunova 1981.

- (1) *c-split example*  
(Čto net nikakogo trebuemogo izdanija?) (RRR 1973)  
(Is there any required edition?)

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\* I would like to thank Diane Massam, Elizabeth Cowper, Arsalan Kahnemuyipour and my Russian consultants for their help. All errors are my own.

$\backslash_2$   
Otdel' nogo net u nas izdanija.  
 separate-N.SG.GEN not at us edition-N.GEN  
 'It is the SEPARATE edition that we do not have.' (as opposed to other  
 required types of the edition)

A noun also can be contrastively preposed, as shown in (2):

(2)  $\backslash_2$   
Djadja staralsja moj ukrotit' ee. (RRR 1973)  
 uncle-NOM tried my-M.SG.NOM to.reason her  
 'It was my UNCLE who tried to reason with her.' (as opposed to other  
 family members)

(3) is an example of t-split, in which the topic noun *dobyča* 'booty-F.NOM' is fronted and marked with a rising intonation characteristic of topics in Russian and the adjective *xorošaja* 'good-F.SG.NOM' expresses new information and has a falling intonation IK-1, which is less intense and lower in tone than IK-2.

(3) *t-split example* (Slioussar 2007)  
 (S takim entuziazmom ljudi ispokon vekov i vkalyvajut [...] na svoju  
 sobstvennuju vygodu, konkretnuju dolju v dobyče [...])  
 (With such an enthusiasm people have worked hard for ages [...] for  
 their own profit, for a concrete share of the booty [...])  
 $\backslash_1$   
 $\backslash_1$   
Dobyča im dostalas' xorošaja  
 booty-F.NOM to.them passed good-F.SG.NOM  
 'They got a good booty.' (= As for the booty, they got a good one.)

It is difficult to construct a minimal pair for (3), in which an adjective would be a topic and a noun new information. (4) is a possible candidate:<sup>1</sup>

(4) (On a cold November morning, a communist parade is taking place.  
 There is a requirement that every participant must carry something red.  
 A news reporter: 'Here is coming the fourth group of people ...)  
 $\backslash_1$   
 $\backslash_1$   
 ? i krasnye oni nesut znamena.  
 and red-N.PL.ACC they carry flags-N.ACC  
 'and they are carrying red flags.'

The examples above show that c-split and t-split have distinct information structure marked by prosody. (5) summarizes criteria for distinguishing between c-split and t-split:

- (5) a. *criteria for c-split:*  
 -  $\backslash_2$  on the fronted part  
 - the fronted part bears contrastive interpretation

<sup>1</sup> I thank Ivona Kučerova for suggesting the example in (4). Also, compare (4) with contrastive topics in Pereltsvaig (2008).

- b. *criteria for t-split*: - / on the fronted part, \\_1 on the stranded part  
 - the fronted part is a topic; the stranded part presents new information

### 3. P-doubling in split scrambling

The new observation about the possibility of P-doubling in split constructions is that it is sensitive to information structure of the utterance. This section presents data that show that P-doubling is possible (and in some cases, even obligatory)<sup>2</sup> with t-splits, whereas it is ill-formed with c-splits.

- (6) *P-doubling in t-split*: ‘from’  
 a. \* Iz čaški ja pila krasnoj.  
 from cup-F.GEN I drank red-F.SG.GEN  
 ‘As for cups, I drank from a red one.’  
 b. Iz čaški ja pila iz krasnoj.  
 from cup-F.GEN I drank from red-F.SG.GEN  
 ‘As for cups, I drank from a red one.’
- (7) *P-doubling in c-split*: ‘from’  
 a. Iz čaški ja pila krasnoj.  
 from cup-F.GEN I drank red-F.SG.GEN  
 ‘It is from the red CUP that I drank.’ (not from a red glass)  
 b. \* Iz čaški ja pila iz krasnoj.  
 from cup-F.GEN I drank from red-F.SG.GEN  
 ‘It is from the red CUP that I drank.’ (not from a red glass)
- (8) *P-doubling in t-split*: ‘on’  
 a. ? Na tarelku položi jabloki bol’šuju.  
 on plate-F.ACC put apples big-F.SG.ACC  
 ‘As for plates, put the apples on a big one.’  
 b. Na tarelku položi jabloki na bol’šuju.  
 on plate-F.ACC put apples on big-F.SG.ACC  
 ‘As for plates, put the apples on a big one.’
- (9) *P-doubling in c-split*: ‘on’  
 a. Na bol’šuju položi jabloki tarelku.  
 on big-F.SG.ACC put apples plate-F.ACC  
 ‘Put the apples on a BIG plate.’ (not on a small one)  
 b. \* Na bol’šuju položi jabloki na tarelku.  
 on big-F.SG.ACC put apples on plate-F.ACC  
 ‘Put the apples on a BIG plate.’ (not on a small one)

The table below summarizes the data:

<sup>2</sup> The ‘possible’ vs. ‘obligatory’ optionality depends on the choice of preposition. In this section, I illustrate both patterns with the preposition *from* and *on*. For reasons of space, I will not discuss this optionality further, but see some remarks in section 6.

(10) *summary of the data*

	one P	P-doubling	construction
'from'	*P N ... A	P N ... P A	t-split
	P N ... A	*P N ... P A	c-split
'on'	?P N ... A	P N ... P A	t-split
	P A ... N	*P A ... P N	c-split

Two descriptive generalizations can be derived from the data above: i) P-doubling is possible with t-split, but is ill-formed with c-split; ii) in cases in which t-split is ungrammatical, P-doubling rescues the structure.

#### 4. Previous analyses

Split constructions show paradoxical properties of both movement and non-movement, see Sekerina 1997; Fanselow and Cavar 2002; Bošković 2005; Franks 2007; Pereltsvaig 2008; Ott 2011; among others. In (11), I list the properties of split constructions. (11a)-(11c) argue for a non-movement analysis, whereas (11d) and (11e) suggest that split constructions are derived by movement.

- (11) *properties of splits*
- extraction of non-constituents, remnant is non-constituent
  - extraction from PPs, inherently-marked NPs and weak islands
  - morphological 'regeneration'
  - impossibility of extraction from strong islands
  - morphological agreement

All studies of split scrambling in Russian and in other languages (that I am aware of) treat split NPs and split PPs uniformly and do not make distinction between c-split and t-split. (12) illustrates the most recent accounts of split constructions.

- (12) *accounts of splits (simplified)* (Sekerina 1997)
- Kofe on ljubit černyj.  
 coffee-M.ACC he likes black-M.ACC  
 'He likes black coffee.'
- base generation: e.g. Fanselow 1988*  
 [<sub>NP</sub> coffee] he likes [<sub>NP</sub> black e]
  - Left Branch Extraction account: e.g. Bošković 2005*  
 [<sub>AP</sub> black]<sub>i</sub> he likes [<sub>NP</sub> t<sub>i</sub> coffee]
  - remnant movement: e.g. Sekerina 1997; Androutsopoulou 1997*  
 [<sub>NP</sub> t<sub>i</sub> coffee]<sub>j</sub> he likes [<sub>FP</sub> [<sub>AP</sub> black]<sub>i</sub> F t<sub>j</sub>]
  - distributed deletion: e.g. Fanselow & Cavar 2002; Pereltsvaig 2008*  
 [<sub>NP</sub> ~~black~~ coffee<sub>Topic</sub>] he likes [<sub>NP</sub> black<sub>Focus</sub> ~~coffee~~]
  - symmetry-breaking movement: e.g. Ott 2011*  
 [<sub>NP</sub> coffee] he likes [<sub>?</sub> [<sub>NP</sub> black e] t<sub>NP</sub>]

None of these accounts can explain the observation about P-doubling (without additional stipulations).

## 5. Towards an explanation

### 5.1 Assumptions

Following Fanselow and Cavar (2002) (but cf. Pereltsvaig 2008), I assume that Topic (but not Contrastive Focus) is an uninterpretable feature that necessarily drives movement. I also assume that New Information Focus (NIF) is licensed (and must stay) in clause-final position, see Neeleman and Titov (2009) and Slioussar (2007). Evidence for these assumptions comes from the contrast between (13) and (14) below. (13) presents c-split in which the contrastive interpretation of the adjective is achieved via stress alone, see (13a), or stress plus movement to different positions, see (13b) and (13c).<sup>3</sup> The t-split in (14),<sup>4</sup> however, is acceptable only when the topic noun is fronted.

- (13) a.                    \<sub>2</sub>  
 On zadal složnyj \_\_\_\_\_ vopros.  
 he asked difficult-ACC question-ACC  
 ‘He asked a DIFFICULT question.’
- b.                    \<sub>2</sub>  
 On složnyj \_\_\_\_\_ zadal vopros.  
 he difficult-ACC asked question-ACC  
 ‘He asked a DIFFICULT question.’
- c.                    \<sub>2</sub>  
Složnyj \_\_\_\_\_ on zadal vopros.  
 difficult-ACC he asked question-ACC  
 ‘He asked a DIFFICULT question.’
- (14) a.                    \<sub>1</sub>                    /  
 \* Im dostalas’ xorošaja \_\_\_\_\_ dobyča.  
 to.them passed good-F.SG.NOM booty-F.NOM  
 ‘They got a good booty.’ (= As for the booty, they got a good one.)
- b.                    /                    \<sub>1</sub>  
 \* Im dobyča \_\_\_\_\_ dostalas’ xorošaja.  
 to.them booty-F.NOM passed good-F.SG.NOM  
 ‘They got a good booty.’ (= As for the booty, they got a good one.)
- c.                    /                    \<sub>1</sub>  
Dobyča \_\_\_\_\_ im dostalas’ xorošaja.  
 booty-F.NOM to.them passed good-F.SG.NOM  
 ‘They got a good booty.’ (= As for the booty, they got a good one.)

<sup>3</sup> The example in (13) is from Sekerina’s (1997: 215) discussion of the Zubatov and Junghanns’ (1995) Copy and Deletion analysis of split scrambling in Russian.

<sup>4</sup> (14) is based on the example from Slioussar (2007: 58) discussed earlier in (3).

## 5.2 Proposal

My main proposal is that the major difference between c-split and t-split is that c-split, as opposed to t-split, is not entirely split. I propose that c-splits have a simple derivation such as the remnant movement derivation proposed by Androutsopoulou (1997) for Greek split NPs and PPs. In case of PP splits, only one preposition is merged and the split is derived by a remnant movement of PP from which the adjective has been evacuated (see below). T-split, on the other hand, requires the merger of two prepositions because the two subparts of t-split bear different features of information structure (Topic - NIF) with the obligatory fronting of the Topic part. The proposal is stated in (15):

- (15) In t-split, the two subparts must be entirely split, whereas this is not the case for c-split.

‘Entirely’ is intended to indicate how ‘deep’ the split is. For the purpose of this paper, I take ‘entirely’ to be defined as in (16):

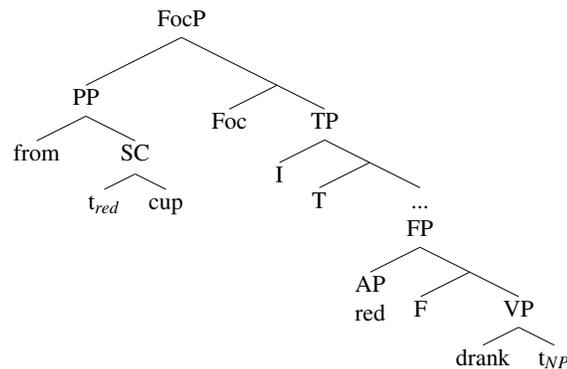
- (16) The two subparts of a constituent are entirely split if each of them has an independent Case and  $\theta$ -role assigner.

That is to say, in t-split, as opposed to c-split, the two subparts are completely disjoint, so that both subparts need an independent Case and  $\theta$ -role assigner and thus, c-split and t-split require different derivations.

### 5.2.1 C-split

As mentioned above, for c-splits, I propose a simple remnant movement derivation proposed by Androutsopoulou (1997) for Greek. This derivation is shown in (17):

- (17) *proposal for c-split*  
 a. Iz čaški ja pila krasnoj.  
     from cup-F.GEN I drank red-F.SG.GEN  
     ‘It is from the red CUP that I drank.’ (not from a red glass)  
 b.



In (17), the adjective *krasnoj* ‘red-F.SG.GEN’ first moves to Spec of a functional projection FP. This movement is followed by the remnant movement of PP to Spec-FocusP.

## 5.2.2 T-split

I propose that the derivation of t-split involves P merging above VP as proposed in Kayne (1998, 2002, 2003). More precisely, I propose that in t-split, there are two Ps merged above VP. The second at merge P is responsible for breaking the constituent from which topicalization takes place. I refer to this process as ‘readjustment’ (see below).

### 5.2.2.1 General assumptions

I adopt Kayne’s (1994) antisymmetry framework in which the antisymmetric configuration in (18) is respected at all stages of derivation, i.e. no adjuncts or multiple specifiers are allowed.

(18) [Spec [ H Compl ]]

Other important assumptions from Kayne (1994) and his later works are discussed below in (19)-(21). (19) is a property of the computational system which substitutes for an EPP feature.

(19) Functional heads must always attract something overtly to their Spec.

Kayne (2003, fn.99) proposes that ‘[p]ossibly, every functional head has an EPP feature - or, better, there is no such feature but, rather, a general need for functional heads to have filled Specs’. (19) does not imply that all movements are triggered by structural considerations. Some movements are feature-driven in Chomsky’s sense (Kayne, 2003/5: 332).

(20) The complement of a given head H can never move to the Spec of H.

Kayne (2003/5: 331) motivates this principle by the following: ‘(In feature checking terms, this could be achieved if upon Merge the maximal set of matching features has to be checked.)’

(21) Move to Spec,H the category closest to H (that is not excluded by [(20)])

(21) means that ‘what is moved where is entirely determined by what is merged (in a given derivation) and in what order’ (Kayne, 2003/5: 332). As I base my analysis of t-split on Kayne’s proposal that (some) Ps are merged above VP (see below), two other assumptions are crucial for the order of merge in this proposal. First, Ps can be taken as selecting Vs, i.e. a P can be associated with a list of verbs in the lexicon that it selects for. This postulate ensures that in P-doubling constructions the two Ps are identical. Second, as discussed in Kayne (2002/5: 165), ‘Case-licensing heads enter the derivation prior to the heads that license scrambling or focus’.

### 5.2.2.2 P above VP

Kayne (1998 and subsequent works) proposes that (some)<sup>5</sup> Ps merge above VP. A simple derivation where P is merged above VP is given in (22) from Kayne (2005: 329):

- (22) *P above VP*
- |   |                            |
|---|----------------------------|
| looking us  | → merger of K              |
| K looking us  | → movement of DP to Spec-K |
| us <sub>i</sub> K looking t <sub>i</sub>                                      | → merger of P              |
| at [us <sub>i</sub> K looking t <sub>i</sub> ]                                | → movement of VP to Spec-P |
| [looking t <sub>i</sub> ] <sub>j</sub> at [us <sub>i</sub> K t <sub>j</sub> ] |                            |

K is a Case element which is paired with P and is visible in some languages, e.g. German where it surfaces on D in *mit de+m Mann* ‘with the+DAT man’; in other languages, e.g. English and French, it is unpronounced.

### 5.2.2.3 The derivation of t-split

I propose that in t-split, the P-K complex is merged twice. The derivation proceeds in three steps: i) the merger of the first P-K complex and antisymmetry driven movements; ii) the merger of the second P-K complex and antisymmetry driven movements; iii) Topicalization - a feature driven movement. (24) is the first step to derive t-split in Russian using the example in (23).

- (23) *Na tarelku položi jabloki na bol'suju.*  
 on plate-F.ACC put apples on big-F.SG.ACC  
 ‘As for plates, put the apples on a big one.’

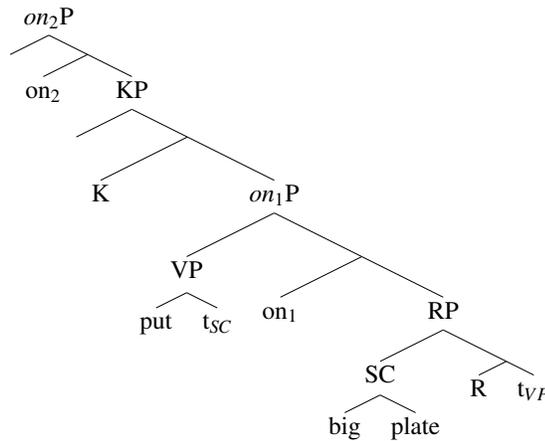
(ignoring Obj to simplify)

- (24) I.
- |  |                                  |
|--|----------------------------------|
| a. put [big plate]   | → merger of R (= K) <sup>6</sup> |
| R put [big plate]  | → movement to Spec-R             |
| [big plate] <sub>i</sub> R put t <sub>i</sub>                                    | → merger of onI                  |
| onI [big plate] <sub>i</sub> R put t <sub>i</sub>                                | → movement of VP to Spec-onI     |
| [put t <sub>i</sub> ] <sub>j</sub> onI [big plate] <sub>i</sub> R t <sub>j</sub> |                                  |

<sup>5</sup> In this paper, I use Kayne’s phrasing with ‘some’ in parentheses which suggests that whether all Ps merge outside VP is an open question. From the language acquisition point of view, to have all Ps merge above VP is a preferable option; however, this requires rethinking of many phenomena and some of our current assumptions about the grammar (see the discussion in Kayne 2002).

<sup>6</sup> In the derivation of P-doubling, I use R instead of K for the low Case head for expository purposes.

b.



Now, let me hypothesize that Russian has the following restriction on topicalization:

- (25) Topicalization is possible only if the fronted constituent is independently Case- and  $\theta$ -marked.

In t-split, we need to have an independent Case and  $\theta$ -role assigner for the noun. Let me propose that the grammar permits the merger of the same P-K complex a second time, but in this case only the noun *plate*, which needs an independent Case assigner,<sup>7</sup> is attracted to Spec-K (if the P-K complex fails to merge the second time, the derivation crashes).

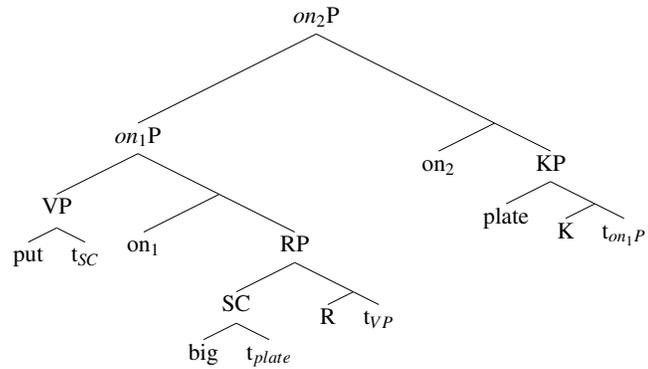
- (26) II.  
 a. [put  $t_i$ ]<sub>j</sub> on1 [big plate]<sub>i</sub> R  $t_j$  → merger of K  
     K [put  $t_i$ ]<sub>j</sub> on1 [big plate]<sub>i</sub> R  $t_j$  → move of N to Spec-K  
     plate<sub>k</sub> K [put  $t_i$ ]<sub>j</sub> on1 [big  $t_k$ ]<sub>i</sub> R  $t_j$  → merger of on2  
     on2 plate<sub>k</sub> K [put  $t_i$ ]<sub>j</sub> on1 [big  $t_k$ ]<sub>i</sub> R  $t_j$  → move to Spec-on2  
     [[put  $t_i$ ]<sub>j</sub> on1 [big  $t_k$ ]<sub>i</sub> R  $t_j$ ]<sub>1</sub> on2 plate<sub>k</sub> K  $t_1$

<sup>7</sup> Contrary to the standard view that Case marks the whole phrase in addition to its immediate subparts, which is '[f]rom a minimalist perspective, [...] a notable redundancy' (Kayne, 2005: 142), Kayne (2005) proposes the Case Filter in (i):

- (i) +N Case Filter: Every nominal (+N) element requires Case.

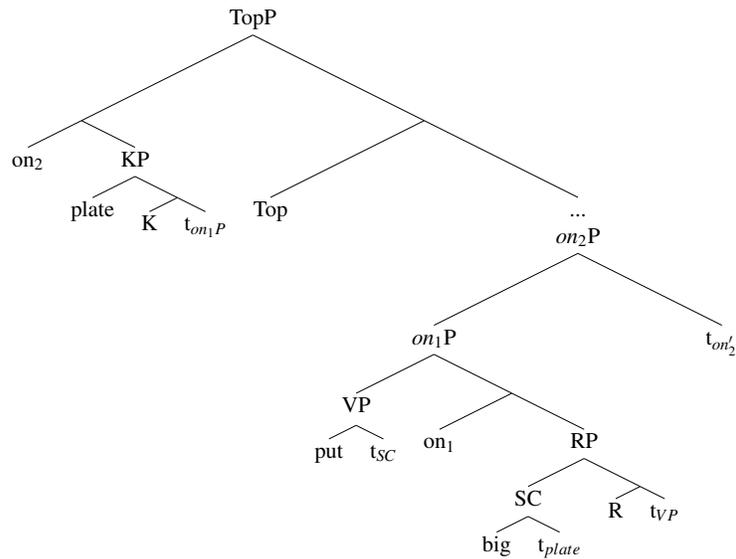
(i) assumes Case to be a feature of lexical items only valued under agreement with a probe (e.g.  $v$ ) or assigned independently (via P-K).

b.



The last step of the derivation is topicalization as in (27):<sup>8</sup>

- (27) III. topicalization  
 a.  $[on_2 plate_k K t_i ]_m \dots [[put t_i ]_j on_1 [big t_k ]_i R t_j ]_l t_m$   
 b.



<sup>8</sup> My proposal for Russian t-split is similar to Kayne's (2002, fn. 57) derivation for the French example in (i) acceptable for some speakers, in which both  $\acute{a}$  and  $de$  merge above VP.

- (i)  $\acute{A}$  combien a-t-elle souri t de garçons? 'at how-many has-she smiled of boys'

### 5.2.2.4 Renaissance

Another way of looking at the derivation of t-split is from the breaking-up the constituent point of view. The idea that *sub*-extraction does not exist, i.e. a constituent must be broken up before one of its parts can be extracted, is not novel. It goes back at least to Chomsky (1977) who proposes a ‘readjustment’ rule, see (28c), to explain why subjacency which is responsible for the ungrammaticality of sub-extraction out of subjects in English is not operative in sub-extraction out of objects, see the familiar distinction in (28a,b):

- (28) a. \*Whom did [your interest in t] seem to me rather strange?  
 b. Who did you see [a picture of t]?  
 c. [NP [PP ]] → [NP t ] [PP ]

Kayne (1998, 2002) revives this idea proposing that when P merges above VP, it breaks the constituent making extraction possible, see (29):<sup>9</sup>

- (29) admiring [who a picture]  
 K admiring [who a picture]  
 who K admiring [<sub>who</sub> a picture]  
 of who admiring [[<sub>who</sub> a picture]  
 [admiring [<sub>who</sub> a picture]] of who <sub>VP</sub>

A relevant fact that reinforces the link between P-doubling and ‘readjustment’ is that other languages, unrelated to Russian, also show P-doubling in movement cases:

- (30) ?? Ces garçons, à qui j’en ai à tous offert. (Kayne 1975)  
 ‘these boys to who I of.it have to all offered’
- (31) In Schlössern habe ich noch in keinen gewohnt.  
 in castles have I yet in no lived  
 ‘So far, I have not yet lived in any castle.’ (Fanselow&Cavar 2002)

## 6. Extension: P-doubling in Approximative Inversion

Approximative Inversion (AI) in Russian is a construction in which the noun appears before the numeral, resulting in an approximative interpretation of the numeral (Franks 1995; Pereltsvaig 2006; Billings and Yadroff 1996, Zaroukian 2010; among others), compare (32a) with (32b):

- (32) a. Ivan s’el pjat’ buterbrodov.  
 Ivan ate five sandwiches-GEN  
 ‘Ivan ate five sandwiches.’
- b. Ivan s’el buterbrodov pjat’.  
 Ivan ate sandwiches-GEN five  
 ‘Ivan ate approximately five sandwiches.’

<sup>9</sup> The ‘traditional’ extraction out of *a picture of who* is made impossible by the following rule: Preposition stranding is not allowed out of a constituent of the form ‘D N of XP’, which is not a primitive (Kayne, 2005: 316).

P-doubling in AI has been previously reported in the literature (e.g. Franks 1995; Yadroff 2000):

- (33) *P-doubling in AI*
- a. On prijdet k časam k pjati.  
 he will.come towards hours towards five  
 'He will come around 5 o'clock.'
- b. \* On prijdet k časam pjati.  
 he will.come towards hours five  
 'He will come around 5 o'clock.'
- c. On prijdet časam k pjati.  
 he will.come hours towards five  
 'He will come around 5 o'clock.'

The main observation about the data above is that P-doubling is possible in Russian AI and in cases in which P assigns inherent Case the low P is obligatorily present.

There are two types of analyses of Russian AI in the literature: a) head movement (e.g. Franks 1995; Pereltsvaig 2006; Billings and Yadroff 1996); b) XP movement (e.g. Zaroukian 2010; Franks 1995). Both types of analyses generate only one PP and delegate the choice of spelling one or two prepositions to PF. I would like to propose to analyze AI in Russian using Kayne's (1998; 2002; 2003) proposal that P merges VP-externally, as shown in (34). What is important for this paper is that (33) generates two P positions parallel to the derivation of t-split presented in section 5.2.2.3.<sup>10</sup>

- (34) *P-above-VP derivation of AI*
- a. Ja vernus' k časam k dvum.  
 I will.return by hours by two  
 'I will return towards approximately 2 o'clock.'

<sup>10</sup> There is a slight difference between the second steps in the derivation of t-split in (26) and AI in (34). The difference is that what is attracted to Spec-by2 in (34) is not the complement of the next head down, i.e. by1P, but its Spec, i.e. the VP. I assume this movement in AI to be construction-specific. The ungrammaticality of sub-extraction of 'by2 N' (parallel to a well-formed sub-extraction in t-split) suggests that this is indeed so:

- (i) \* (K) časam ja vernus' k dvum. 'by hours I will.return by two' [= around 2 o'clock]

Interestingly, 'P numeral' can be fronted, as shown below:

- (ii) K dvum ja vernus' (\*k) časam. 'by two I will.return hours' [= at 2 o'clock (sharp)]

In this case, however, the sentence loses its approximative reading. (ii) is parallel to c-split, which has been argued to involve a simple derivation without the 'readjustment'. The loss of the approximative reading in (ii) is expected under the assumption that inversion is a source of the approximative interpretation (e.g. the discussion in Franks 1995 and Pereltsvaig 2006). This again suggests that the movement of by1P in (34) is prohibited by a construction-specific constraint in order to keep the inversion.

- b.
- I.
- |   |                      |
|---|----------------------|
| return [two hours]  | → merger of R (= K)  |
| R return [two hours]  | → movement to Spec-R |
| [two hours] <sub>i</sub> R return t <sub>i</sub>                                    | → merger of by1      |
| by1 [two hours] <sub>i</sub> R return t <sub>i</sub>                                | → move to Spec-by1   |
| [return t <sub>i</sub> ] <sub>j</sub> by1 [two hours] <sub>i</sub> R t <sub>j</sub> |                      |
- II.
- |   |                        |
|---|------------------------|
| [return t <sub>i</sub> ] <sub>j</sub> by1 [two hours] <sub>i</sub> R t <sub>j</sub>   | → AI: merger of K      |
| K [return t <sub>i</sub> ] <sub>j</sub> by1 [two hours] <sub>i</sub> R t <sub>j</sub>   | → move to Spec-K       |
| hours <sub>k</sub> K [return t <sub>i</sub> ] <sub>j</sub> by1 [two t <sub>k</sub> ] <sub>i</sub> R t <sub>j</sub>                    | → merger of by2        |
| by2 hours <sub>k</sub> K [return t <sub>i</sub> ] <sub>j</sub> by1 [two t <sub>k</sub> ] <sub>i</sub> R t <sub>j</sub>                | → movement to Spec.by2 |
| [return t <sub>i</sub> ] <sub>j</sub> by2 hours <sub>k</sub> K t <sub>j</sub> by1 [two t <sub>k</sub> ] <sub>i</sub> R t <sub>j</sub> |                        |

In (35), I propose descriptive PF rules for spell-out of Ps in P-doubling t-split and AI constructions which are amenable to more general principles of the grammar and inter/intra-language(s) parametrization.

- (35) *descriptive PF rules for P-doubling*
- signal semantics of P by spelling out at least one P
  - signal (inherent) Case-/ $\theta$ -role-marking by spelling out the lower P
  - 'addressing': independently mark the sub-extracted material

(35a) is trivial. The 'at least one' part allows for the possibility to spell-out as many P-heads as there are in the structure. The optionality of spelling out one or both Ps is identical to the possibility of spelling out one or more *et* in French:<sup>11</sup>

- (36) Jean connaît et Paul et Michel. 'J. knows and P. and M.'

The configuration in (35b) is parallel to the deviance of (37a) compared to (37b):

- (37) a. \* John and Bill, Sam  
b. John, Bill and Sam

The principle in (35c) captures the intuition that the 'sub'-extracted part must independently contain all the necessary information, including Case. This 'addressing' phenomenon is wide spread across languages, as shown in (38) for Serbo-Croatian, (39) for Warlpiri and (40) for German:<sup>12,13</sup>

<sup>11</sup> The observations in (36) and (37) are from Kayne (1994, ch. 6).

<sup>12</sup> (38) is from Bošković (2005). Examples parallel to (38) can be constructed in Russian and in some other Slavic languages. (39) and (40) are from Franks (2007). See also Fanselow and Féry (2006) for an extensive cross-linguistic study of discontinuous NPs.

<sup>13</sup> In the German example in (40b), the strong form of the inflected adjective *deutsche* which is used in independent DPs reappears.

- (38) a. On je srušio čiča /\*čičinu Tominu kolibu.  
 he is torn.down uncle's-NOM/uncle's-ACC Tom's-ACC cabin-ACC  
 'He tore down uncle Tom's cabin.'
- b. Čičinu/\*Čiča je on Tominu kolibu srušio.  
 uncle's-ACC/uncle's-NOM is he Tom's-ACC cabin-ACC torn-down  
 (Serbo-Croatian)
- (39) a. Tjantu wiri -ŋki = tji yalku -nu. (Warlpiri)  
 dog big ERG 1.SG.OBJ bite PAST  
 'The big dog bit me.'
- b. Tjantu -ŋku = tju yalku -nu wiri -ŋki.  
 dog ERG 1.SG.OBJ bite PAST big ERG
- (40) a. Er hat keine deutschen Bücher gelesen. (German)  
 'He has read no German books.'
- b. Deutsche Bücher hat er keine gelesen.  
 'As for German books, he hasn't read any.'

## 7. Conclusion

The abundance of approaches to the split scrambling is due to lack of a precise and accurate description of the data, more exactly, to the fact that information structure of split constructions is not taken into consideration. I argued that discontinuous NPs and PPs do not form a uniform class. At least two different phenomena - c(ontrastive)-split and t(opicalization)-split - must be distinguished each of which has a distinct prosody, interpretation and (as I proposed) syntactic structure. I presented new data showing that these constructions pattern differently with respect to the possibility of preposition doubling in Russian. The observation that in discontinuous PPs, t-split (as opposed to c-split) requires a preposition on each of the sub-parts led me to propose that the derivation of t-split (as opposed to c-split) involves breaking-up of the phrase into two constituents each of which needs an independent Case and  $\theta$ -role assigner. None of the current (minimalist) accounts (see Bošković 2005; Franks 2007; Pereltsvaig 2008, for overviews) can explain the different behaviour of t-split and c-split with respect to preposition doubling.

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