

Results, Repetitives and Datives: towards an account of the crosslinguistic variation¹

Tanya Bondarenko - tbond@mit.edu

1 Introduction

- In this talk I will discuss interpretations of repetitive adverbs (like ‘*again*’) in sentences with dative (=indirect) arguments.
- If we look at a ditransitive sentence in English that contains AGAIN, we see that this sentence has (at least) two readings.

(1) Thilo gave Satoshi the map again.

- a. *REP(etitive)*: ‘Thilo gave Satoshi the map, and that had happened before.’
- b. *RES(titutive)*: ‘Thilo gave Satoshi the map, and Satoshi had had the map before.’

(Beck & Johnson 2004: 113)

- I will be interested in the **restitutive reading**, under which it is the result state of the predicate that is being repeated.
- Some languages differ from English in that they lack the restitutive reading in ditransitive sentences:

(2) **Russian**

Masha opjat’ ot dala Vase knigu.
Masha.NOM again gave Vasja.DAT book.ACC

- a. *REP*: ‘Masha gave Vasja the book, and that had happened before.’
- b. *RES*: *‘Masha gave Vasja the book, and Vasja had had the book before.’

- **Questions about ditransitives:**

- How does the restitutive reading arise in ditransitive sentences (1b)?
- How and why do languages differ in the availability of the restitutive reading in ditransitives (English, (1b) -vs- Russian, (2b))?
- Is the observed variation syntactic in nature? In other words, does the (un)availability of the RES reading correlate with a difference in the syntactic structure?
- Are result states of predicates with dative arguments represented in syntax? (= Is there a constituent that denotes the result state?)

¹Thanks to Sergei Tatevosov, Roger Schwarzschild, Mitya Privoznov, Hagen Blix, Verena Hehl, Colin Davis, my Georgian informants and my MIT classmates: Boer, Cater, Chris, Daniel, Dóra, Filipe, Sherry, Stan, Vincent.

2 Assumptions about the semantics of repetitives: the structural ambiguity approach to the REP/RES ambiguity

- Two lines of approaches to the ambiguity of repetitives:
 1. **The lexical ambiguity (“semantic”) approach** (Fabricius-Hansen 2001, Jäger, G. & R. Blutner 2000, Pedersen 2015, among others): different readings of AGAIN emerge due to the lexical ambiguity of repetitive morphemes.
 2. **The structural ambiguity (“syntactic”) approach** (Stechow 1996, Beck & Johnson 2004, Beck 2005, Alexiadou et al. 2014, Lechner et al. 2015, among others): different readings of AGAIN are attributed to different attachments of AGAIN in the syntactic representation.
 - The semantics of AGAIN is taken to be always the same and involve repetition of some event.
 - Different readings of AGAIN reflect its modification of different subevents in the syntactically represented lexical decomposition: the subevent that is modified by AGAIN is understood as being repeated.
- The semantics of AGAIN under the structural ambiguity approach (Stechow 1996, Beck & Johnson 2004, Beck 2005):

$$(3) \quad \llbracket \text{AGAIN} \rrbracket = \lambda P \in D_{st}. \lambda e \in D_s : \exists e' [e' <_T e \ \& \ P(e')]. P(e).$$

- AGAIN takes a property of events and an event as its arguments and returns 1 iff the property is true of the event and 0 iff the property is not true of the event.
- **Presuppositional component of AGAIN:** There is another event that temporally precedes the event under consideration of which the property is true.
- **Illustration:** the two readings of the sentence in (4) are a result of two adjunction sites of AGAIN: the REP reading results from adjunction of AGAIN to the VoiceP (5)-(6); the RES reading results from adjunction of AGAIN to the SC (9)-(10).

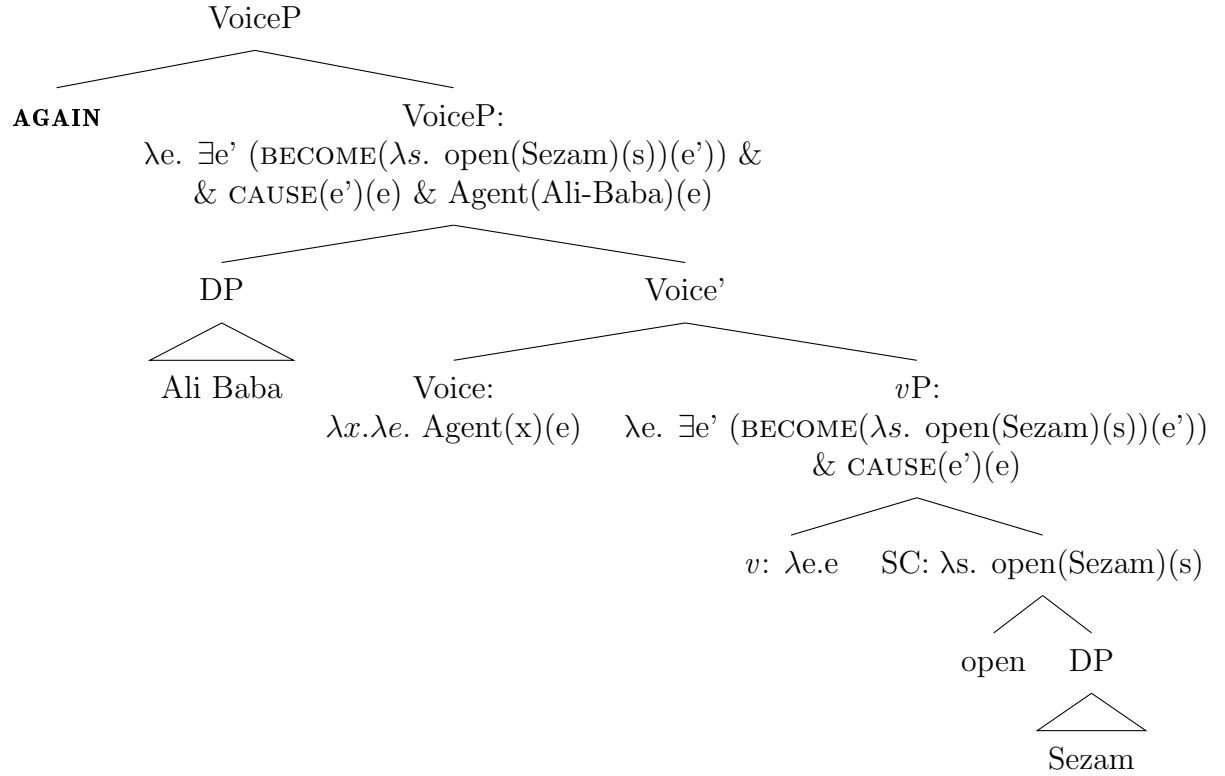
(4) Ali Baba opened Sezam again.

- a. *REP*: ‘Ali Baba opened Sezam, and that had happened before.’
- b. *RES*: ‘Ali Baba opened Sezam, and Sezam had been open before.’

(5) **[[VoiceP] under the REP reading:** for any event e

- a. **Presupposition (is defined when...):**
 $\exists e'' (e'' <_T e \ \& \ \exists e''' (\text{BECOME}(\lambda s.\text{open}(\text{Sezam})(s))(e''')) \ \& \ \text{CAUSE}(e''')(e'')) \ \& \ \text{Agent}(\text{Ali-Baba})(e'')$
- b. **Assertion (gives true if...):** $\exists e' (\text{BECOME}(\lambda s.\text{open}(\text{Sezam})(s))(e')) \ \& \ \text{CAUSE}(e')(e) \ \& \ \text{Agent}(\text{Ali-Baba})(e)$

(6) **The REP reading**



- The principle that is required for the combination of the verb and the small clause:

(7) **Principle R**

If $\alpha = [V \ \gamma \ \text{SC} \ \beta]$ and $\llbracket \beta \rrbracket$ is of type $\langle s, t \rangle$ and $\llbracket \gamma \rrbracket$ is of type $\langle e, \dots \langle e, \langle s, t \rangle \rangle \rangle$ (an n-place predicate), then $\llbracket \alpha \rrbracket = \lambda x_1 \dots \lambda x_n \lambda e. \llbracket \gamma \rrbracket(x_1) \dots (x_n)(e) \& \exists e' [\text{BECOME}(\llbracket \beta \rrbracket)](e') \& \text{CAUSE}(e')(e)$.

adapted from (Beck 2005: 7)

- I take BECOME to be defined as follows (Beck 2005: 7):

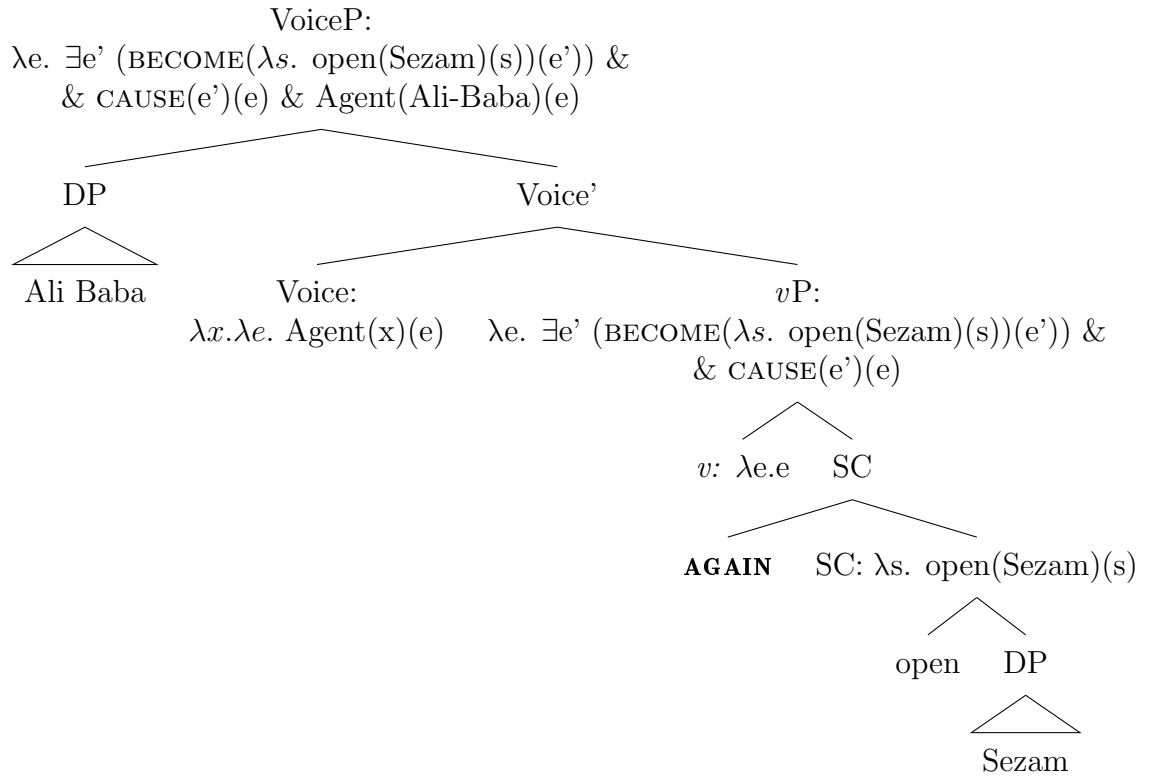
(8) $\llbracket \text{BECOME} \rrbracket (\text{P})(e) = 1$ iff e is the smallest event such that P is not true of the prestate of e but is true of the result state of e .

(9) $\llbracket \text{SC} \rrbracket$ under the RES reading:² for any state s

- a. **Presupposition (is defined when...):** $\exists s': s' <_T s \& \text{open}(\text{Sezam})(s')$
- b. **Assertion (is true if...):** $\text{open}(\text{Sezam})(s)$

²I do not provide the meaning of the VoiceP in order not to address the question of presupposition projection and its interaction with the application of the Principle R. But I will assume that is somehow projects to the top of the tree, giving the desired interpretation.

(10) **The RES reading**



- A consequence of the structural ambiguity approach to the REP/RES ambiguity: whenever the RES reading is available, there is some constituent in the syntactic structure that corresponds to the result state of the predicate.

3 Back to the RES reading in ditransitives

- Under the structural ambiguity approach, the presence of the RES reading in a ditransitive sentence entails that there is some constituent in the syntactic structure that denotes the result state of the ditransitive predicate.

(11) **Result state of a ditransitive:** $\lambda s. \text{have}(\text{IO})(\text{DO})(s)$

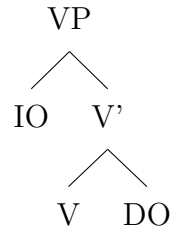
- What syntactic constituent in the structure of ditransitives might correspond to this denotation in (11)?
 - a small clause (Beck & Johnson 2004);
 - an ApplP (Bruening 2010);
 - **a prepositional phrase (PP):**
 Weak hypothesis: PP \rightarrow the RES reading
 Strong hypothesis: PP \iff the RES reading

- Different approaches to ditransitives and their predictions about the availability of the RES reading:

1. **Indirect object as an argument of the verb:**

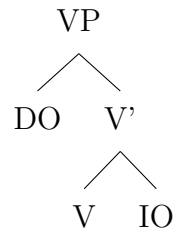
no constituent straightforwardly corresponds to the result state $(\lambda s.\text{have}(\text{IO})(\text{DO})(s))$.

(12) Indirect object in Spec, VP



Ex., (Franks 1995, Junghanns & Zybatov 1997, Dyakonova 2005, 2007)

(13) Indirect object as a complement of a VP

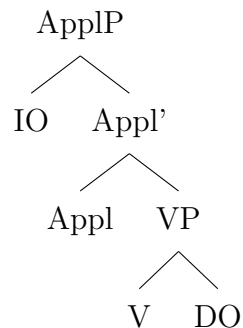


Ex., (Larson 1988, Bailyn 1995, 2010)

2. **Indirect object as an applicative argument:**

no constituent straightforwardly corresponds to the result state $(\lambda s.\text{have}(\text{DO})(\text{IO})(s))$.³

(14) Indirect object in Spec, ApplP



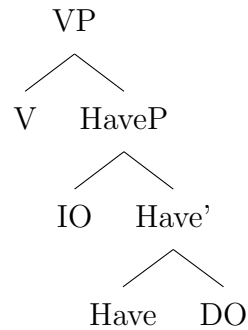
Ex., (Marantz 1993, Pylkkänen 2008, Cuervo 2003, McIntyre 2006, Bruening 2010)

³It is not impossible to derive the restitutive reading from such a structure, but it requires a lot of special assumptions; for example, noun phrases have to be able to be interpreted twice (see (Bruening 2010) for the details).

3. **Indirect object as an argument of a small clause:**

straightforwardly accounts for the RES reading (Beck & Johnson 2004).

(15) Indirect object in Spec, HaveP

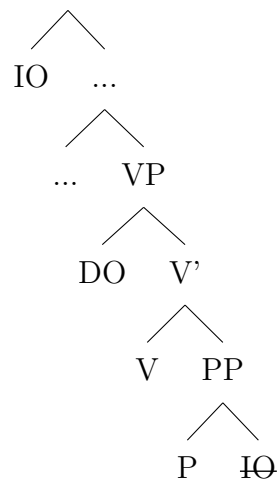


Ex., (Kayne 1984, Pesetsky 1995, Harley 1996, 2002, Beck & Johnson 2004)

4. **Indirect object as a PP underlyingly:**

PP as the constituent that denotes the result state.

(16) Indirect object as a complement of a P



Ex., (Baker 1996, McIntyre 2011)

Indirect object originates as an argument of a null P that undergoes incorporation into V; DO is an argument of the verb.

- The hypothesis that the RES reading arises in ditransitives iff there is a PP in the syntactic structure predicts the following typology:

(17) **Typology of the RES in ditransitives:**

- ^{OK}RES: languages that have true PPs
- *RES: languages that have true datives
- ^{OK}RES: languages that have datives that originate as complements of Ps

4 Crosslinguistic variation (RES/*RES) as variation in syntax

In order to argue that the absence of the RES reading is due to a difference in the syntactic structure, we first need to exclude other possible reasons for the absence of the ambiguity.

4.1 Properties of AGAIN across languages

- Crosslinguistically, not all repetitive adverbs can look inside a decomposition structure.

(18) The Visibility Parameter

D(ecomposition)-adverbs differ with respect to what kind of constituents they can attach to.

- a. D-adverbs that can attach only to independent syntactic phrases.
VPs: [John open the door]
- b. D-adverbs that can attach to any phrase with an overt head.
resultatives: hammer [the metal flat]
- c. D-adverbs that can attach to any phrase.
result states of lexical accomplishments: [door open]

(proposed by Rapp&Stechow(1999), modified version by Beck(2005))

- For example, German *erneut*, unlike English *again* and German *wieder*, cannot attach to a small clause in the decomposition structure of a verb like ‘open’:

(19) German *erneut*

Maria hat die Tür erneut geöffnet.
Maria has the door again opened

- a. *REP*: ‘Maria opened the door again, and that had happened before.’
- b. *RES*: *‘Maria opened the door, and it had been open before.’

- Could the variation across languages with respect to the availability of the RES reading in ditransitives be reduced down to the properties of repetitive adverbs in these languages?
- It seems that it cannot: in each language that I have found to lack the RES in ditransitives (ex., Russian, Georgian, Hungarian), repetitives can look inside decomposition structures of lexical accomplishments.

(20) Russian

Petja **opjat’** opustošil butylku.
Petja **again** emptied bottle

- a. *REP*: ‘Petja emptied the bottle, and that had happened before.’
- b. *RES*: ‘Petja emptied the bottle, and the bottle had been empty before.’

(21) **Georgian**

šota-m k’ari **isev** ga-a-y-o.
 Shota-ERG door.NOM **again** PVB-pv-open-AOR.3SG

- a. *REP*: ‘Shota opened the door, and that had happened before.’
- b. *RES*: ‘Shota opened the door, and the door had been open before.’

(22) **Hungarian**

Péter **megint** kinyitotta az ablakot.
 Peter **again** opened the window.acc

- a. *REP*: ‘Peter opened the window, and that had happened before.’
- b. *RES*: ‘Peter opened the window, and the window had been open before.’

- This suggests that these languages are among those where AGAIN can attach to any type of constituent (C-type languages according to the Visibility Parameter).
- This means that the properties of adverbs cannot be the source of the lack of the RES reading in ditransitives.⁴

4.2 Principle R (or its equivalent) across languages

- It has been previously argued ((Snyder 2001), (Beck & Snyder 2001), (Beck 2005)) that it is a parameter of crosslinguistic variation whether a language has Principle R or not.
- Could it be that languages that lack the RES reading in ditransitives are the ones that lack the Principle R?
- Probably not:
 - We would need another story about lexical accomplishments like ‘open’ (if they do not involve a verb + a SC, how do they get the RES?).
 - There is independent evidence that languages like Russian can have combinations of verbs and small clauses.

⁴One might note that in the examples (20)-(22) AGAIN occurs preverbally, unlike in English (1). This turns out to be irrelevant for the present discussion, but I briefly discuss this issue in appendix B.

• **Case 1: Russian and Georgian preverbs as heads of small clauses**

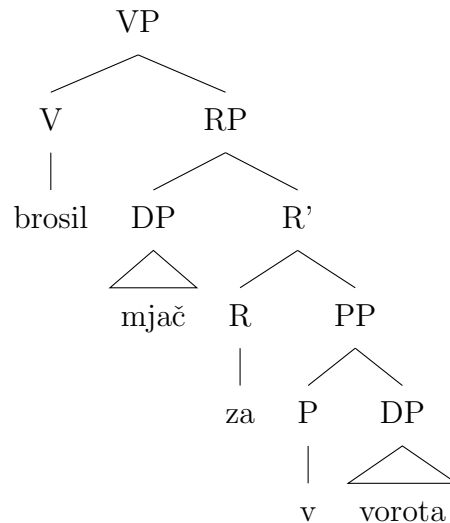
- (Svenonius 2004), for Russian: lexical prefixes enter derivation as heads of small clauses that take PPs as their complements and DOs as their subjects.

(23) Russian lexical prefixes as heads of SCs

Vasja **za**-brosil mjač v vorota.
 Vasja.NOM **PVB**-throw ball.ACC in goal

‘Vasja threw the ball into the goal.’

(24) Structure for (23)



- An argument for such an analysis: the RES reading is available in such a structure.

(25) **Russian lexical prefixes + again**

Vasja **opjat'** **za**-brosil mjač v vorota.
 Vasja.NOM **again** **PVB**-throw ball.ACC in goal

- REP*: ‘Vasja threw the ball into the goal, and that happened before.’
- RES*: ‘Vasja threw the ball into the goal, and the goal had been in the goal before.’

(26) **Georgian lexical prefixes + again**

Context: *Shota had never been to this mountain before. One day he was flying in an air balloon and landed on the top of it. Then he went down the mountain. After that ...*

šota **isev** **a**-vid-a mta-ze.
 Shota.NOM **again** **PVB**-go-AOR.3SG mountain-on

‘Shota climbed up the mountain, and he had been on the mountain before.’

- If this analysis of lexical preverbs is on the right track, then Principle R or its equivalent is independently required for Russian and Georgian.

• **Case 2: Russian resultatives**

- Instead of resultative constructions of the English type (*wipe the table clean*, *hammer the metal flat*) Russian uses adverbs that look like a combination of a preposition and short adjective (*do-čista* to-clean, *do-suxa* to-dry, *do-bela* (to-white)).
- Hypothesis: these items are actually not adverbs, but PPs (with *do* as a preposition) that can occur as complements of SCs.
- This hypothesis makes a prediction that is born out: the RES reading is possible in sentences with these adverbs.

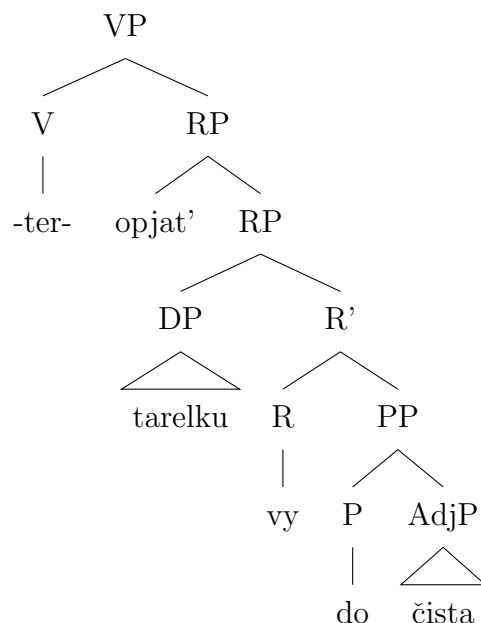
(27) Example from a novel:

Odnako Saša s’el svoju ogromnuju porciju pelmenej s
 but Sasha ate his giant portion of pelmeni with
 udovol’stvie i **opjat’ do-čista** vyter tarelku xlebnoj
 pleasure and **again to-clean** wiped plate bread.INSTR
 koročkoj.
 crust.INSTR

‘But Sasha ate his giant portion of pelmeni with pleasure, and, with the help of a bread crust, he wiped the plate clean again.’

(<http://e-libra.ru/read/81419-legkie-shagi-bezumiya.html>)

(28) Structure for the relevant part of (28)



5 Evidence for the PP hypothesis

5.1 A crosslinguistic generalization

- If a language has a complement PPs in ditransitive constructions, it has the RES reading.

(29) Italian

Gianni ha dato **di nuovo** il libro a Maria.
John has gave **again** the book to Mary

- a. *REP*: ‘John gave Mary the book, and that had happened before.’
- b. *RES*: ‘John gave Mary the book, and Mary had had the book before.’

(30) French

Jean a **de nouveau** donn le livre à Marie.
John has **again** given the book to Mary

- a. *REP*: ‘John gave Mary the book, and that had happened before.’
- b. *RES*: ? ‘John gave Mary the book, and Mary had had the book before.’

(31) Brazilian Portuguese

O João deu o livro **de novo** pra Maria
the Joo give-3sg/pst the book **again** to.the Maria

- a. *REP*: ‘John gave Mary the book, and that had happened before.’
- b. *RES*: ‘John gave Mary the book, and Mary had had the book before.’

- If a language has a dative argument, it might both have (English, German, Chinese) and not have (Russian, Georgian, Hungarian) the RES reading:

[+RES] Languages with dative arguments

(32) German

...dass Hans dem Mädchen ein Buch **wieder** gab.
...that Hans DEF.n.DAT girl INDEF.n.ACC book **again** gave

- a. *REP*: ‘...that Hans gave the girl the book, and that had happened before.’
- b. *RES*: ‘...that Hans gave the girl the book, and the girl had had the book before.’

(33) **Mandarin**

Yuehan **you** gei le mali zhe-ben shu.
John **again** give PERF Mary this-CL book

- a. *REP*: (accent on “again”) ‘John gave Mary the book, and that had happened before.’
b. *RES*: (accent on “give”) ‘John gave Mary the book, and Mary had had the book before.’

[-RES] Languages with dative arguments

(34) **Georgian**

dyes Levan-ma šota-s c’igni **isev** misca.
today Levan-ERG Shota-DAT book.NOM **again** gave

- a. *REP*: ‘Levan gave Shota the book, and that had happened before.’
b. *RES*: * ‘Levan gave Shota the book, and Shota had had the book before.’

(35) **Hungarian**

Péter **megint** odaadta a knyvet Marcsinak.
Peter **again** gave the book.acc Mary.dat

- a. *REP*: ‘Peter gave Mary the book, and that had happened before.’
b. *RES*: */?? ‘Peter gave Mary the book, and Mary had had the book before.’

- A potential counterexample would be: a language that has complement PPs in ditransitives, but does not have the RES reading.
- If the generalization is correct, then three groups of languages could correspond to the typology outlined in (17) in the following way:
 - languages with PPs - (29)-(31);
 - languages with datives - (34)-(35);
 - languages with datives that are underlyingly complements of Ps - (32)-(33).
- Potential explanations under the small clause approach: PPs are types of small clauses, that’s why their presence goes hand in hand with the RES reading.
- Any approach needs to account for:
 - Constructions with dative arguments differ across languages with respect to whether they allow the RES reading.
 - Constructions with PPs seem to always allow the RES reading.

5.2 Russian Dat -vs- PP contrast

- Russian allows to see the contrast between the complement PPs and datives within one language:

(36) Russian: ditransitives with a dative

Maša **opjat** otpravila knigu **Kate**.
Masha **again** sent book **Katja.DAT**

- a. *REP*: ‘Masha sent Katja the book, and that had happened before.’
- b. *RES*: *‘Masha sent Katja the book, and Katja had had the book before.’

(37) Russian: ditransitives with a PP

Maša **opjat** otpravila knigu **k Kate**.
Masha **again** sent book **to Katja.DAT**

- a. *REP*: ‘Masha sent Katja the book, and that had happened before.’
- b. *RES*: ‘Masha sent Katja the book, and Katja had had the book before.’

- This is expected if the source of the RES reading is the presence of the PP in the structure.
- Russian datives are “true” datives (either arguments of the verb or of an Appl head, but crucially not of a small clause or a PP), so there is no syntactic constituent that would correspond to the result state of the predicate in (36). So *opjat*’ has nothing to attach to to make the RES available.
- When the verb takes a PP as its complement instead of a dative (37), there emerges a constituent in syntax that corresponds to the result state of a predicate, and the RES reading becomes available.

5.3 Detecting PPs with null Ps

Under the current approach, indirect objects in languages like English, German and Chinese are underlyingly complements of prepositions. The presence of a PP with a null P is what allows the RES reading in ditransitives of such languages. Here are two arguments for such an analysis of English.

5.3.1 Restriction on complement PP insertion

- There is an observation (McIntyre 2011) that the double object construction in English cannot co-occur with complement PPs:

(38) Incompatibility of English DOCs with PPs (McIntyre 2011: 3)

- a. *I passed the patient a tray to his bed.

- b. *I threw Fred a ball into his hands.
- c. *They sent her a doctor into the building.

- But in Russian, dative arguments can co-occur with complement PPs:

(39) **Russian datives + complement PPs**

- a. Ja peredal pacientu podnos v palatu
I.NOM passed patient.DAT tray.ACC in ward
Lit.: ‘I passed the patient a tray into (his) ward.’
- b. Ja brosil Vase mjač v ruki.
I.NOM threw Vasja.DAT ball.ACC in hands
Lit.: ‘I threw Vasja the ball into (his) hands.’
- c. Oni otpravili ej doktora v školu / na dom
they.NOM sent she.DAT doctor.ACC in school / to home
Lit.: ‘They sent her a doctor to school / home.’

- In English DOC the indirect object is underlyingly a PP, that is why another complement PP is impossible in DOC.
- In Russian ditransitives the dative argument is not a PP at any level, that is why a ditransitive verb can have both a dative argument and a PP.

5.3.2 PP-modifiers in sentences with no overt PPs

- Russian has another repetitive adverb *obratno* (‘back’), which can have restitutive readings only (see (Tatevosov 2016) for the analysis of its semantics).
- Surprisingly, *obratno* is possible in ditransitive sentences with two objects:

(40) **Russian *obratno***

Masha otdala / otpravila / vernula Vase knigu **obratno**.
Masha.NOM gave / sent / returned Vasja.DAT book.ACC **OBRATNO**

- a. *REP*: *‘Masha gave / sent / returned Vasja the book, and that had happened before.’
- b. *RES*: ‘Masha gave /sent / returned Vasja the book, and Vasja had had the book before.’

- A similar English adverb - *back* - is also possible in the DOC (McIntyre 2011: 3).

(41) **English *back* in the DOC**

- a. She gave the people their books **back**.
- b. She sent / handed / sold / passed the people their stuff **back**.

- **Hypothesis:** *obratno* and *back* are PP-modifiers (has been argued for English in (McIntyre 2011)).

- It explains why *obratno* cannot have repetitive readings.
- It explains why *obratno* occurs not preverbally in Russian, but sentence-finally.
- It explains why *obratno* cannot scope above indefinites (Tatevosov 2016).

(42) **Narrow scope with respect to indefinites**

Petja položil knigu obratno.
 Petja.NOM put book.ACC OBRATNO

‘Petja put a book back (somewhere), and this book /*a book had been there before.’

- It explains why *obratno* can form a constituent with overt PPs.

(43) **OBRATNO + PP**

Vasja priexal [obratno v Moskvu].
 Vasja.NOM came OBRATNO to Moscow

‘Vasja came to Moscow, and he had been in Moscow before.’

(44) **OBRATNO + PP: scrambling**

[Obratno v Moskvu] Vasja rešil priexat’.
 OBRATNO to Moscow Vasja decided to come

Lit.: ‘Back to Moscow Vasja decided to come.’

(45) **OBRATNO + PP: pied-piping**

[Obratno v kakoj gorod] oni otpravilis’?
 OBRATNO to which city they.NOM set.off

Lit.: ‘Back to which city did they set off?’

(46) **OBRATNO + PP: fragment answer**

a. Kuda Petja poš’ol?
 where Petja.NOM went
 ‘Where did Petja go?’

b. [Obratno v školu].
 back to school

Lit.: ‘Back to school.’

- English (unlike Russian): cannot drop PPs (McIntyre 2011: 4): ‘*Basil found the arms of Venus and glued them back *(onto the statue)*’.
- We see PP-modifiers in ditransitives → there must be a silent PP in the structure.

- Some languages lack a PP in the syntactic structure.⁵
- **Why is the difference between languages a difference in syntax?**
Because other potential sources cannot account for the variation:
 - The difference is not in the properties of repetitive adverbs.
 - The difference is not in the rules of semantic composition.
 - → The difference is in whether the predicate is decomposed in syntax.
- **Why does the difference have to do with presence / absence of a PP?**
Because it allows us to straightforwardly explain why:
 - All languages with PPs in ditransitives have the RES reading.
 - In Russian the RES reading is possible with ditransitive verbs only if they take a PP, but not if they take a dative argument.
 - Some languages with datives cannot take an additional complement PP (English), while others can (Russian).
 - We see PP-modifiers in ditransitives.
- Many open issues, the following of which are briefly addressed in the appendices:
 - **Appendix A:** Is there a connection between the word order and the RES reading in ditransitives? Can we replicate Stechow(1996)’s argument for the structural ambiguity approach here?
 - **Appendix B:** Why do some languages always have AGAIN in the preverbal position? How does the RES reading arise in these languages?
 - **Appendix C:** What predictions does the structural approach make with respect to other constructions involving dative arguments?

8 References

Alexiadou et al. 2014 – Alexiadou A., Anagnostopoulou, E., Lechner W. 2014. Variation In Repetitive Morphemes: Some Implications For The Clausal Architecture. Workshop on the State of the Art in Comparative Syntax, University of York, September 25, 2014.

Bailyn 1995 – Bailyn, J. F. A Configurational Approach to Russian Free Word Order. PhD diss., Cornell University. 1995.

Bailyn 2010 – Bailyn, J. F. Whats inside VP? New (and old) Evidence from Russian. In *Formal Approaches to Slavic Linguistics18*. Ann Arbor, MI: Michigan Slavic Publications.

Baker 1996 – Baker, M. Thematic Roles and Syntactic Structure. In L. Haegeman (ed.), *Elements of Grammar*. Dordrecht: Kluwer. 73137.

⁵Languages without the RES readings are compatible with several analyses of ditransitives (indirect object as an argument of the verb; indirect object as an applicative argument). The lack of the RES reading cannot help us distinguish between these analyses.

- Beck & Snyder 2001** – Beck, S. and W. Snyder. The resultative parameter and restitutive again. In *Auditur vox sapientiae: A festschrift for Arnim von Stechow*, ed. by C. Fery and W. Sternefeld, 48-69. Berlin: Akademie Verlag. 2001.
- Beck & Johnson 2004** – Beck, S. & K. Johnson. Double Objects Again. In *Linguistic Inquiry* 35/1: 97-124. 2004.
- Beck 2005** – Beck, S. There and back again: A semantic analysis. In *Journal of Semantics* 22: 3-51. 2005.
- Bruening 2010** – Bruening, B. Ditransitive asymmetries and a theory of idiom formation. In *Linguistic Inquiry* 41:519-562. 2010.
- Cresti 1995** – Cresti, D. Extraction and Reconstruction. In *Natural Language Semantics* 3, 79-122. 1995.
- Cuervo 2003** – Cuervo, M. Datives at Large. Ph.D. Dissertation. MIT. 2003.
- Dyakonova 2005** – Dyakonova, M. Russian Double Object Constructions. In *ACLCLC Working Papers* 2/1: 3-30. 2005.
- Dyakonova 2007** – Dyakonova, M. Russian double object constructions. In M. van Staden & H. Zeijlstra (eds.), *Amsterdam Center for Language and Communication (ACLCLC) Working Papers* Vol. 2 Issue 1. 330. 2007.
- Ernst 2002** – Ernst, T. The Syntax of Adjuncts. Cambridge University Press, Cambridge. 2002.
- Fabricius-Hansen 2001** – Fabricius-Hansen, C. Wi(e)der and again(st). In C. Fery and W. Sternefeld (eds.): *Auditur Vox Sapientiae: a festschrift for Arnim von Stechow*. Berlin: Akademie, 101-130. 2001.
- Franks 1995** – Franks, S. Parameters of Slavic Morphosyntax. Oxford. 1995.
- Harley 1996** – Harley, H. If You Have, You Can Give, In *Proceedings of WCCFL XV*, B. Agbayani and S. Tang, eds, CSLI, Stanford, CA, pp. 193-207. 1996.
- Harley 2002** – Harley, H. Possession and the Double Object Construction. In *Yearbook of Linguistic Variation* 2: 296-8. 2002.
- Jäger & Blutner 2000** – Jäger, G. and Blutner, R. Against lexical decomposition in syntax. In A. Z. Wyner (Ed.), *Proceedings of the Fifteenth Annual Conference, IATL 7*, 113-137. Haifa: University of Haifa. 2000.
- Junghanns & Zybatow 1997** – Junghanns, U. & G. Zybatow. Syntax and Information Structure of Russian Clauses. In *Proceedings of FASL* 6: 289-319. 1997.
- Kayne 1984** – Kayne, R. S. 1984. Unambiguous paths. In *Connectedness and binary branching*, 129-164. Dordrecht: Foris. 1984.
- Ko 2011** – Ko, Heejeong. Predication and edge effects. In *Natural Language and Linguistic Theory* 29: 725-778. 2011.
- Larson 1988** – Larson, R. On the Double Object Construction. In *Linguistic Inquiry* 19: 33-91. 1988.
- Lechner 1998** – Lechner, W. Two kinds of reconstruction. In *Studia Linguistica* 52.3: 276-310. 1998.
- Lechner et al. 2015** – Lechner W., Spathas G., Alexiadou A., Anagnostopoulou E. On Deriving The Typology Of Repetition And Restitution. Paper presented at *GLOW 2015*, Paris. April 15-17. 2015.
- Marantz 1993** – Marantz, A. Implications of asymmetries in double object constructions. In S. A. Mchmbo (ed.), *Theoretical Aspects of Bantu Grammar*, Vol. 1. Stanford: CSLI Publications. 113-150. 1993.
- McIntyre 2006** – McIntyre, A. The interpretation of German datives and English have. In D.

Hole, A. Meinunger and W. Abraham (ed.): *Datives and Other Cases*. Amsterdam: Benjamins., 185-211. 2006.

McIntyre 2011 – McIntyre, A. Silent possessive PPs in English double object (+particle) constructions. Handout online. 2011.

Pedersen 2015 – Pedersen, W. A scalar analysis of again-ambiguities. In *Journal of Semantics* 32: 373424. 2015.

Pesetsky 1995 – Pesetsky, D. *Zero Syntax: Experiencers and Cascades*. Cambridge, MA: The MIT Press. 1995.

Pylkkänen 2008 – Pylkkänen, L. *Introducing Arguments*. Cambridge, MA: MIT Press. 2008.

Rapp & von Stechow 1999 – Rapp, I. & Stechow, A. von. Fast “almost and the visibility parameter for functional adverbs. In *Journal of Semantics* 16: 149204. 1999.

Rizzi 1990 – Rizzi, L. *Relativized Minimality*. Cambridge: MIT Press. 1990.

Sharvit 1999 – Sharvit, Y. Connectivity in specificational sentences. In *Natural Language Semantics*: 299339. 1999.

Snyder 2001 – Snyder, W. On the nature of syntactic variation: Evidence from complex predicates and complex word formation. In *Language* 77: 324342. 2001.

Stechow 1996 – Stechow, von A. The different readings of wieder again: A structural account. In *Journal of Semantics* 13: 87-138. 1996.

Svenonius 2004 – Svenonius, P. Slavic prefixes inside and outside VP, ms. University of Tromsø; to appear in *Nordlyd* at www.ub.uit.no/munin/nordlyd/. 2004.

Tatevosov 2016 – Tatevosov, S. Re-entering a state: case for obratno. *FASL25*.

Xu 2016 – Xu, T. *Almost Again: On the Semantics and Acquisition of Decomposition Adverbs*. PhD diss., UConn. 2016.

9 Appendix A: on the word order effects

- Word order is one of the factors that plays a role in the availability of the RES reading in ditransitives.
- For example, Brazilian Portuguese: compare (57) with (58).

(57) Brazilian Portuguese: AGAIN before PP

O João deu o livro **de novo** pra Maria
the João give-3sg/pst the book **again** to.the Maria

- a. *REP*: ‘John gave Mary the book, and that had happened before.’
- b. *RES*: ‘John gave Mary the book, and Mary had had the book before.’

(58) Brazilian Portuguese: sentence-final AGAIN

O João deu o livro pra Maria **de-novo**.
the João give-3sg/pst the book to.the Maria **again**

- a. *REP*: ‘John gave Mary the book, and that had happened before.’
- b. *RES*: * ‘John gave Mary the book, and Mary had had the book before.’

- For Brazilian Portuguese, it seems to be the case that sentence-final AGAIN makes the RES reading unavailable, while AGAIN that precedes the indirect object is compatible with the RES reading.

- English and German provide evidence that word order effects that we see in ditransitive clauses are a manifestation of a more general word order-sensitivity of repetitives.
- Compare (59)-(60) to (61)-(62):

(59) Thilo gave Satoshi the map **again**.

- REP*: ‘Thilo gave Satoshi the map, and that had happened before.’
- RES*: ‘Thilo gave Satoshi the map, and Satoshi had had the map before.’

(Beck & Johnson 2004: 113)

(60) Thilo **again** gave Satoshi the map.

- REP*: ‘Thilo gave Satoshi the map, and that had happened before.’
- RES*: *‘Thilo gave Satoshi the map, and Satoshi had had the map before.’

(61) Thilo opened the door **again**.

- REP*: ‘Thilo opened the door, and that had happened before.’
- RES*: ‘Thilo opened the door, and the door had been open before.’

(Beck & Johnson 2004: 112)

(62) Thilo **again** opened the door.

- REP*: ‘Thilo opened the door, and that had happened before.’
- RES*: *‘Thilo opened the door, and the door had been open before.’

(Beck & Johnson 2004: 112)

- As we can see, in English the availability of the RES reading depends on the word order in ditransitives and in sentences with lexical accomplishments like ‘open’ exactly in the same way: preverbal AGAIN does not allow the RES reading, while the sentence-final AGAIN allows for the RES.
- In German the generalization about the RES reading and the word order can be also stated independently of the construction under consideration: the RES reading is possible when AGAIN immediately precedes the verb and is not possible when AGAIN is separated from the verb by one or more objects.

(63) ...dass Hans dem Mädchen ein Buch **wieder** gab.

...that Hans DEF.n.DAT girl INDEF.n.ACC book **again** gave

- REP*: ‘...that Hans gave the girl the book, and that had happened before.’
- RES*: ‘...that Hans gave the girl the book, and the girl had had the book before.’

(64) ...dass Hans dem Mädchen **wieder** ein Buch gab.

...that Hans DEF.n.DAT girl **again** INDEF.n.ACC book gave

- REP*: ‘...that Hans gave the girl the book, and that had happened before.’
- RES*: *‘...that Hans gave the girl the book, and the girl had had the book before.’

(65) Ali-Baba Sezam **wieder** öffnete.
Ali-Baba Sezam **again** opened

- a. *REP*: ‘Ali Baba opened Sezam, and that had happened before.’
b. *RES*: ‘Ali Baba opened Sezam, and Sezam had been open before.’

(adapted from (Stechow 1996: 88))

(66) Ali-Baba **wieder** Sezam öffnete.
Ali-Baba **again** Sezam opened

- a. *REP*: ‘Ali Baba opened Sezam, and that had happened before.’
b. *RES*: *‘Ali Baba opened Sezam, and Sezam had been open before.’

(adapted from (Stechow 1996: 88))

- Word order in languages like English and German reflects the attachment site of AGAIN:
 - **English**: rightward adjunction of AGAIN to VP/SC and leftward adjunction to the small clause all result in the sentence-final AGAIN. This word order is ambiguous between the REP reading (rightward attachment to VP level) and the RES reading (attachment to the SC).
 - **German**: the direct object undergoes movement (presumably, to some position higher than VP), so if we see an adverb to the left of the object, it has been attached higher than the VP.
- The lack of the RES reading in ditransitives in languages that lack it cannot be attributed to word order (at least in Russian - no word order makes the RES reading acceptable).
- But (might be coincidental, might be not): all languages that lack the RES reading have preverbal AGAIN (see Appendix B).

10 Appendix B: on the preverbal AGAIN

- Some languages (Russian, Georgian, Chinese (Xu 2016)) strongly prefer AGAIN to be in the directly preverbal position.
- Despite this, they still show the REP/RES ambiguity (cf. (67) and (68)).

(67) **Russian**

Vasja **opjat**’ otkryl okno.
Vasja.NOM **AGAIN** opened window.ACC

- a. *REP*: ‘Vasja opened the window, and that had happened before.’
b. *RES*: ‘Vasja opened the window, and the window had been open before.’

(68) **English**

Thilo **again** opened the door.

- a. *REP*: ‘Thilo opened the door, and that had happened before.’
b. *RES*: *‘Thilo opened the door, and the door had been open before.’

- Possible explanations of how one can get the RES reading for Russian and other languages with preverbal AGAIN (see (Xu 2016) for discussion):
 1. overt movement (a PF-requirement) + LF reconstruction;
 2. overt movement (a PF-requirement) + semantic reconstruction ((Cresti 1995, Lechner 1998, Sharvit 1999), among others);
 3. lowering in semantics (Ernst 2002).
- An argument in favor of overt movement (Xu 2016):
 - it follows from the Relativized Minimality (Rizzi 1990) that one adjunct cannot move over another adjunct;
 - this explains why the scope AGAIN >adverb is impossible in (70);
 - it is not clear how a theory that does not assume movement (but has only lowering in semantics) can explain the ungrammaticality of (70).

(69) **AGAIN >ADV**

Včera Vasja naročno otkryl dver', i segodnja Vasja **opjat' naročno**
yesterday Vasja on purpose opened door, and today Vasja **again on purpose**
otkryl dver'.
opened door

'Yesterday Vasja opened the door on purpose, and today Vasja opened the door on purpose again.'

(70) ***ADV >AGAIN**

Včera Vasja slučajno otkryl dver', i segodnja Vasja **opjat' naročno**
yesterday Vasja accidentally opened door, and today Vasja **again on purpose**
otkryl dver'.
opened door

Expected: 'Yesterday Vasja opened the door accidentally, and today Vasja opened the door on purpose again.'

(71) **ADV >AGAIN**

Včera Vasja slučajno otkryl dver', i segodnja Vasja **naročno opjat'**
yesterday Vasja accidentally opened door, and today Vasja **on purpose again**
otkryl dver'.
opened door

'Yesterday Vasja opened the door accidentally, and today Vasja opened the door on purpose again.'

- What PF-requirement might require AGAIN rise into the preverbal position?
- One potential answer: linearization (Ko 2011).

11 Appendix C: on other datives

- Not all datives are alike: the availability and the content of the RES interpretation depends on the event structure of the predicate under consideration.
- Georgian: no RES readings in ditransitives (72), but can have RES readings with benefactive datives (73) and with locative datives (74-75).

(72) dyes Levan-ma šota-s c'igni **isev** misca.
 today Levan-ERG Shota-DAT book.NOM **again** gave

- a. *REP*: ‘Levan gave Shota the book, and that had happened before.’
 b. *RES*: * ‘Levan gave Shota the book, and Shota had had the book before.’

(73) šota-m **deda-s** k'ari **isev** ga-u--o
 Shota-ERG **mother-DAT** door.NOM **again** opened

- a. *REP*: ‘Shota opened the door for the mother, and that had happened before.’
 b. *RES*: ‘Shota opened the door for the mother, and the door had been open before.’

(74) šota-m es c'igni **im c'ign-ze** **isev** dado
 Shota-ERG this book.NOM **that book-on** **again** put

- a. *REP*: ‘Shota put this book onto that book, and that had happened before.’
 b. *RES*: ‘Shota put this book onto that book, and this book had been on that book before.’

(75) šota-m es c'igni **im c'ign-s** **isev** daado
 Shota-ERG this book.NOM **that book-DAT** **again** put

- a. *REP*: ‘Shota put this book onto that book, and that had happened before.’
 b. *RES*: ‘Shota put this book onto that book, and this book had been on that book before.’

- The benefactive dative (20): denotes an individual that is not a participant of the result state of the predicate. AGAIN takes scope only over the result state under the RES reading → the dative argument is not in its scope.
- The locative dative (22): denotes a location that is involved in the result state of the predicate; is inside the scope of AGAIN.