

## On embedded gapping\*

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I show that in a number of languages gapping can occur in embedded clauses and argue that the ability or inability of gapping to be embedded in a given language depends on the height of the ellipsis licensing feature in this language.

### 1. Gapping

- An ellipsis-like construction where the verb is omitted:

(1) a. *Some will eat beans, and others ~~will eat~~ rice.*

b. Russian

*Vasja p'jot vodku a Oleg p'jot samogon*  
Vasya drinks vodka.ACC<sup>1</sup> CTR Oleg drinks moonshine.ACC  
'Vasya drinks vodka and Oleg moonshine.'

c. Dutch

*Karel schrijft met een potlood en*  
K. writes with a pencil and  
*John schrijft met een pen*  
J. writes with a pen  
'Karel writes with a pencil and John with a pen.' Neijt (1979: 19)

- Discovered by Ross (1970), a vast amount of literature has appeared since then.
- This type of ellipsis is fairly common cross-linguistically.

### 2. Embedded Gapping

- Famously, English and a number of other well-studied languages disallow gapping in embedded clauses, Hankamer (1979) and the subsequent literature:

(2) a. *\*Some ate mussels, and she claims that others ~~ate~~ shrimp.* Johnson (2009)

b. *\*Peter houdt van bananen, en ik denk*  
Peter likes of bananas and I think

*dat Jessicavan peren.* Aelbrecht (2007)

COMP J. of pears

\*'Peter likes bananas and I think that Jessica pears.'

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<sup>1</sup> Glosses: ACC accusative; ALL allative; COMP complementizer; CTR contrastive topic/conjunction; DAT dative; ERG ergative; EZF ezafe; INS instrumental; SUBJ subjunctive

- However, the ban on embedding is not universal!
- Languages where embedded gapping has been found so far: PERSIAN, Farudi (2013), who is the first to notice the phenomenon; RUSSIAN, DIGOR and IRON OSSETIC; GEORGIAN; SVAN; HEBREW; FINNISH<sup>2</sup>; HUNGARIAN<sup>3</sup>; ALBANIAN<sup>4</sup>; ROMANIAN<sup>5</sup>; and MOROCCAN ARABIC (my data); SPANISH and POLISH, Fernández-Sánchez (2016)
- Some speakers of HINDI-URDU accept it as well, Farudi (2013); Kush (2016).
- Illustrated in (3).
- In all the sentences in (3), a complementizer is present in the clause that hosts gapping, which shows that it's indeed an embedded clause rather than a direct quotation.

- (3) a. *ia svams čais da vpikrob [rom uča svams ywinos]*  
 Ia drinks tea and I.think COMP Ucha drinks wine  
 'Ia drinks tea and I think that Ucha (drinks) wine.' Georgian
- b. *žawər basəmdta saj emə=məm aftə kəšə*  
 Zaur drank tea and=I.ALL so looks  
*[səma čermen=ta basəmdta k'oʃi]*  
 COMP Chermen=CTR drank coffee  
 'Zaur drank tea and I think that Chermen (drank) coffee.' Iron Ossetic
- c. Persian, Farudi (2013: 76)  
*Mahsā in ketāb-ro dust dār-e va*  
 Mahsa this book-ACC like have-3SG and  
*Minu mi-dun-e [ke māmān-eš un ketāb-ro]*  
 Minu IPF-know-3SG COMP mother-3SG that book-ACC  
 'Mahsa likes this book and Minu knows that her mother (likes) that book.'
- d. Russian  
*Vasja p'jot samogon i mne kažetsja*  
 Vasya drinks moonshine.ACC and I.DAT seems  
*[što Oleg p'jət vodku]*  
 COMP Oleg drins vodka.ACC  
 'Vasya drinks moonshine and it seems to me that Oleg (drinks) vodka.'
- e. Spanish, Fernández-Sánchez (2016)  
*Alfonso robó las esmeraldas y creo [que Mugsy*  
 Alfonso stole the emeralds and I.think COMP M.  
~~robó~~ *las perlas]*  
 stole the pearls  
 'Alfonso stole the emeralds and I think that Mugsy (stole) the pearls.'

- At least in some of the languages in the sample, this can happen for a variety of matrix predicates (verbs of saying, thinking, attitude verbs...)

<sup>2</sup> Seppo Kittilä, p.c.

<sup>3</sup> András Bárány, p.c.

<sup>4</sup> Dalina Kallulli, p.c.

<sup>5</sup> Rodica Ivan, p.c.

- GOAL: Find a uniform analysis that will derive this variation.
- GENERAL IDEA: If we adopt the feature-based licensing of ellipsis AND allow the location of the licensing feature to vary across languages, and in particular, to be situated sufficiently low, we can capture the embedding facts.

### 3. (Some) Accounts of Gapping

#### 3.1 Johnson (2009)

- An influential account of gapping in English, Johnson (2009), analyzes it as a result of vP coordination and across the board movement of the two vPs.
  - The sentence in (1a) is thus parsed as
- (4) a. *Some will eat beans, and others rice*  
 b. [TP some [TP will [XP eat [vP[vP [vP beans [v [VP tVP]] & [vP others [vP rice [v [VP tVP]]]]]]]]
- 

- This automatically rules out embedded gapping (assuming that a TP from a matrix clause may not dominate a vP from an embedded one).
- Accordingly, such an analysis is unable to account for the embedding data in (3).
- It has been shown to be inapplicable to Russian by Kazenin (2010) based on independent evidence.
- Additionally, it rules out backwards gapping (assuming that movement proceeds leftwards), as we will see later, this is undesirable as well.

#### 3.2 Clause-bound movement and deletion of the remnant

- A number of accounts, starting from Jayaseelan (1990), assume that the material that survives gapping moves out of the constituent to be deleted, and then ellipsis proceeds, as shown in (5).
- (5) *Some will eat beans and [others rice [~~XP will [vP [VP eat rice]]~~]]*
- 

- Some of them, e.g. Aelbrecht (2007), Gengel (2013), and Farudi (2013), use the feature-based approach to ellipsis licensing initially developed by Lobeck (1995) and Merchant (2001).

### 4. Deletion licensing

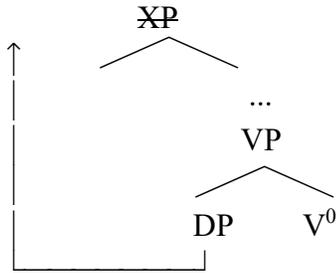
- Ingredients: Feature-licensed deletion, Lobeck (1995); Merchant (2001)
- That can be mediated by agreement, Aelbrecht (2010): the feature creates an Agree relationship between some higher head and the head whose complement deletes.
- I modify Aelbrecht's proposal, so the licensing feature is situated on the licensing head and searches for something to delete downstairs; nothing crucially depends on this.

#### 4.1 Creating the remnant

- This part of the proposal fairly uncontroversial: Boone (2014), Fernández-Sánchez (2016), a.o.
- It essentially goes back to Merchant's (2004) analysis of fragments.
- The material that survives gapping moves out of the constituent to be deleted.

- For the time being, I stay agnostic as to the precise size of that constituent, but assume that it is at least a VP. I use XP to denote it in (6).
- It is plausible that languages vary with respect to the size of the XP: for English, the consensus is that it is a vP, Coppock (2001), Lin (2001), Johnson (2009), Toosarvandani (2016), a.o. On the other hand, in Hindi-Urdu and Persian, the deleted constituent is clearly at least a TP, Farudi (2013); Kush (2016).
- The remnant XP undergoes deletion.

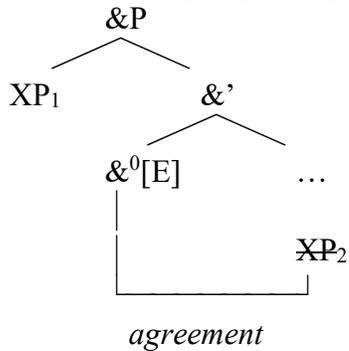
(6)



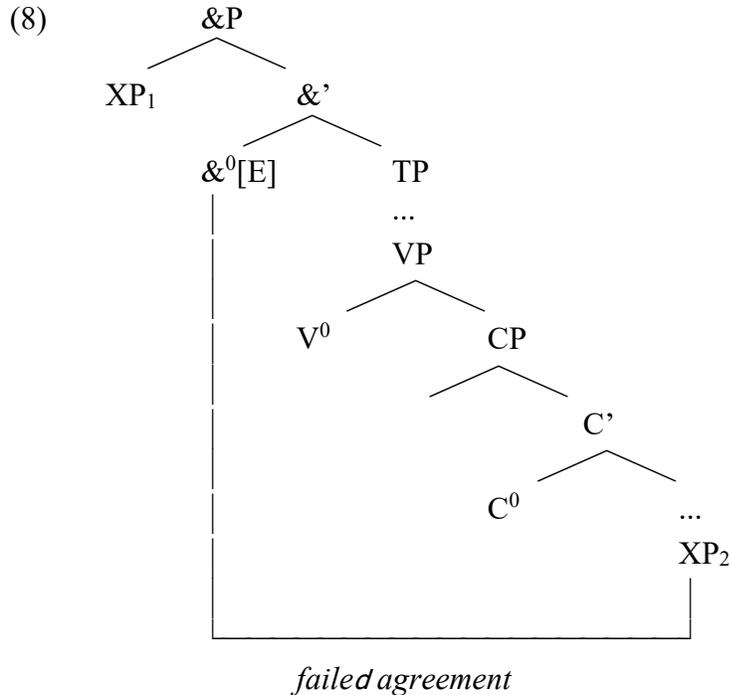
#### 4.2 Licensing deletion

- High licensing of gapping: English, Dutch ...: the E-feature is hosted by &<sup>0</sup>.

(7)



- If the gapping site is *embedded* in a finite clause and the E-feature is hosted on &<sup>0</sup>, agreement fails to occur for locality reasons.



- Consequently, gapping in such languages is ungrammatical.
- Unless the constituent to be deleted may move out of the CP and *then* be targeted by whatever process that causes gapping (which is essentially what Farudi (2013) proposed to explain embeddable gapping in Persian).

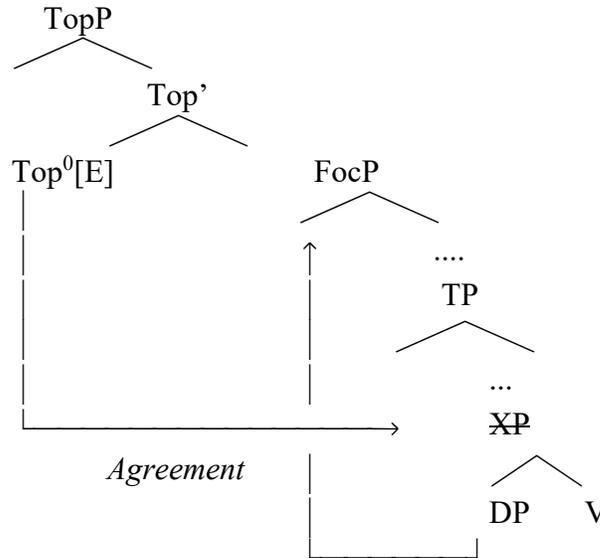
PREDICTION: In such languages, i.e. ones with high location of E-feature and movement of extended VPs out of CPs, gaps cannot be embedded in islands.

- This is reported to be borne out for Persian.
- However, this analysis will not work for languages that (a) exhibit embedded gapping, but either (b) do not allow movement out of finite clauses or (c) allow to embed gaps in standard islands.
- Such languages do indeed exist!
- For example, neither Ossetic, nor Georgian, nor Svan allow movement out of finite clauses, Harris (1981); Erschler (2012, 2014, 2015).
- However, if we allow the licensing feature to be hosted *lower* than on  $\&^0$  we will be able to derive the facts.

### 5. Proposal

- Things that are preserved under gapping evacuate from the XP that deletes.
- The feature that licenses deletion is hosted by  $\text{Top}^0$

(9)



- We immediately rule in embedded gapping.
- There is nothing unnatural in positing the movement out of the VP or TP: except in some special cases, the languages where embedded gapping has been found so far have very free word order.
- Why put the feature in Top?
- Contrast is obligatory for gapping to occur.
- REMARK. If the left periphery in embedded clauses in a given language is not rich enough, movement out of the VP will fail and embedded gapping will not be observable, as has been argued for Turkish by Ince (2009).
- In such languages, it is impossible to empirically determine how high the licensing feature is hosted.

## 6. Predictions

- This analysis makes a number of correct predictions for languages with low placement of gapping-licensing feature.
- First, **backward gapping** is predicted to be grammatical: gapping in such languages should behave fairly similarly to sluicing, (10).

- (10)
- |              |   |                |                  |                 |                |                 |          |
|--------------|---|----------------|------------------|-----------------|----------------|-----------------|----------|
| a.           | <i>me</i>   | <i>viq'idi</i> | <i>xils</i>      | <i>šen=k'i</i>  | <i>iq'idi</i>  | <i>ywinos</i>   |          |
|              | I   | I.will.buy     | fruit            | you.SG=CTR      | you.will.buy   | wine            |          |
|              | 'I (will buy) fruit and you will buy wine.'       |                |                  |                 |                |                 | Georgian |
| b.           | <i>mi</i>   | <i>xwiq'di</i> | <i>xils</i>      | <i>si</i>       | <i>xiq'di</i>  | <i>kwinaels</i> |          |
|              | I   | I.will.buy     | fruit            | you.SG          | you.will.buy   | wine            |          |
|              | 'I (will buy) fruit and you will buy wine.'       |                |                  |                 |                |                 | Svan     |
| Iron Ossetic |   |                |                  |                 |                |                 |          |
| c.           | <i>vž</i>   | <i>fáččän</i>  | <i>baχordtən</i> | <i>maχar=ta</i> | <i>wəlibəχ</i> | <i>baχordta</i> |          |
|              | I   | meat.pie       | eat.PST.1SG      | Maxar=CTR       | cheese.pie     | eat.PST.3SG     |          |
|              | 'I (ate) a meat pie, and Maxar ate a cheese pie.' |                |                  |                 |                |                 |          |

- d. *də nɐ=mad-ə fɛn-ɛj ɛʒ=ta nɐ=fəd-ə*  
 you our=mother-ACC see-SUBJ.FUT.2SG I=CTR our=father-ACC  
*fɛn-on*  
 see-SUBJ.FUT.1SG  
 ‘You (are to see) our mother, and I am to see our father.’
- e. Moroccan Arabic  
*ana rruz u=fatima ka takul llubya*  
 I the.rice and=Fatima ate the.beans  
 ‘I (ate) the rice, and Fatima ate the beans.’ Moroccan Arabic

- **REMARK** Variants of sentences in (10) with forward gapping are all grammatical as well.
- Additionally, (10) demonstrates that backward gapping in these languages is not an instance of RNR.
- Namely, the gapped verb and the antecedent may mismatch in phonological form; nor does the verb have to be the rightmost in the conjuncts, contrary to what’s expected from RNR, Hartmann (2000)<sup>6</sup>.
- In this respect these languages differ from Persian, where there are reasons to assume that what looks like backward gapping is actually RNR (as Farudi (2013) claims,  $\phi$ -feature mismatches are dispreferred under the backward gapping).
- However, backward gapping is impossible in Russian (probably for some independent reasons).
- Second, the antecedent and the gap are predicted to be **embeddable in separate matrix clauses**:

- (11) a. *me darc'mnebuli var [rom rezom sp'ilo abanava]*  
 I sure am COMP Rezo elephant bathed  
*čemi coli=k'i amt'k'icebs [rom guramma behemot'i]*  
 my wife=CTR claims COMP Guram hippo  
 ‘I am sure that Rezo washed an elephant and my wife claims that Guram (washed) a hippo.’ Georgian
- b. *ja uveren [što vasja pomyl slona]*  
 I sure COMP Vasya washed elephant.ACC  
*a moja žena utverždajet [što petja begemota]*  
 CTR my wife claims COMP Petya hippo.ACC Russian

- Furthermore, gapping is predicted to be **embeddable in islands**:

- (12) Complex NP
- a. *učas nino uq'vars da momivida xmebi*  
 Ucha.DAT Nino loves and came.to.me rumors  
*[rom zuras rusudani uq'vars]*  
 COMP Zura.DAT Rusudan loves  
 ‘Ucha loves Nino, and rumors reached me that Zura (loves) Rusudan.’ Georgian

<sup>6</sup> Pace Ha (2008), who analyzes any variety of backward ellipsis as RNR and strives to provide a uniform account for them.

- b. *učas nino xalæt' i amqæd helær [ere:*  
 Ucha.DAT Nino loves and came.to.me rumors COMP  
*zuras ek'a xalæt]*  
 Zura.DAT Eka loves  
 'Ucha loves Ia, and rumors reached me that Zura (loves) Eka.' Svan
- c. Subject Island (Russian)  
 ?[što jožiki nenavidjat belok] ogorčæet menja  
 COMP hedgehogs hate squirrels.ACC upsets I.ACC  
 a [što dikobrazy ~~nenavidjat~~ burundukov]  
 CTR COMP porcupines hate chipmunks.ACC  
 šokiruet moevo druga  
 my.ACC friend.ACC shocks  
 'That hedgehogs hate squirrels upsets me, and that porcupines (hate) chipmunks shocks my friend.'

- Finally, if the licensing feature is not tied to &<sup>0</sup>, we predict gapping to be able to occur in the absence of coordination. This again is borne out:

- (13) a. *vasja pokrasil steny [posle togo kak petya pokrasil*  
 Vasya painted walls after that as Petya painted  
*potolok]*  
 ceiling  
 'Vasya painted the walls after that Petya (painted) the ceiling.' Russian
- b. *fatima ka t'ayyæb rruz [hit*  
 Fatima cooked the.rice because  
*xadija ka—t'ayyæb llubya]*  
 Khadija the.beans  
 'Fatima cooks rice, because Khadija (cooks) beans.' Moroccan Arabic
- c. *mædinæ šošlan-imæ zuræ [zeraššæ alan-imæ saš*  
 Madina Soslan-COM speaks Dzerassa Alan-com how.much  
*æwæ] wæmæj araχdær*  
 speaks it.ABL more.frequently  
 'Madina speaks with Soslan more frequently than Dzerassa speaks with Alan.'  
 Iron Ossetic

## 7. Parameters of cross-linguistic variation

- ✓ The height of the licensing feature
- ✓ The size of the left periphery of embedded clauses
- ✓ The size of the deleted constituent (VP, vP, TP, ...)

### 7.1 Size of the left periphery

- In principle, different matrix verbs in one language may allow for complements of different sizes, and, accordingly, vary in their ability to host gapping.
- As has been argued by Fernández-Sánchez (2016), in Spanish and Polish, only factive verbs allow embedded gaps, which he explains by a larger size of the left periphery in the complements in such verbs.

## 7.2 Size of conjuncts and deleted constituents under gapping

- In languages that allow embedded gapping, the targeted constituent needs to be at least a TP. Otherwise, gapping will strand the T – I will discuss this possibility in the next section.
- Independent arguments for the large size of the gapped conjuncts were advanced for Persian by Farudi (2013); and for Hindi-Urdu, by Kush (2016).
- In the languages of my sample, it is fairly clear that the conjuncts can be at least TPs<sup>7</sup>.
- They can host temporal adverbials, which cannot attach lower than to a TP. This may occur both under forward and backward gapping. (14).
- *A priori*, it is rather hard to determine whether or not T<sup>0</sup> gets deleted under gapping: temporal adverbials may undergo movement, as any other XPs, and thus escape deletion.
- See a comparison with the English pseudo-gapping in the next section,

(14) Temporal adverbials

- a. *mədinə*      **žnon**      *šfəχta*      *fəččən*  
 Madina      yesterday      cooked      meat.pie  
*zalinə=ta*      **abon**  
 Zalina=CTR      today  
 ‘Madina cooked a meat pie yesterday, and Zalina today.’      Iron Ossetic
- b. *mədinə*      **žnon**      *zalinə=ta*      **abon**      *fəččən*      *šfəχta*  
 Madina      yesterday      Zalina=CTR      today      meat.pie      cooked  
 ‘Madina cooked a meat pie yesterday, and Zalina today.’
- c. *mədinə*      **žnon**      *fəččən*      *šfəχta*  
 Madina      yesterday      meat.pie      cooked  
*zalinə=ta*      **abon**      *k’abuškadzən*  
 Zalina=CTR      today      cabbage.pie  
 ‘Madina yesterday cooked a meat pie, and Zalina today a cabbage pie.’

Georgian

- d. *manana-m*      **dyes**      *gamoacxo*      *xač’ap’ur-i*  
 Manana-ERG      today      baked      khachapuri-NOM  
*nino-m=k’i*      **gušin**      *lobian-i*  
 Nino-ERG=CTR      yesterday      lobiani-NOM  
 ‘Manana baked a khachapuri today and Nino (baked) a lobiani yesterday.’
- e. *manana*      **xširad**      *uk’ravsp’anino=ze*  
 Manana.NOM      often      plays      piano=on  
*nino=k’i*      **išviatad**      *pleit’a=ze*  
 Nino.NOM=CTR      rarely      flute=on  
 ‘Manana often plays piano, and Nino rarely flute.’

- Moreover, sentential adverbials can be present in gapping constructions as well.

(15) Iron Ossetic

- a. *šošlan zul*      *ərbaxašta*      *tamu=ta*      **qəgagen**      *araq*  
 Soslan bread      brought      Tamu=ctr      unfortunately      arak  
 ‘Soslan brought bread, and Tamu unfortunately arak.’

<sup>7</sup> It was argued by Agafonova (2011) that gapping in Russian involves small conjuncts. See the appendix for arguments against her conclusion.

- b. *šošlan zul tamu=ta qəgagen araq erbaxašta*  
 Soslan bread Tamu=CTR unfortunately arak brought  
 ‘Soslan brought bread, and Tamu unfortunately arak.’
- c. *šošlan amonden zul erbaxašta tamu=ta qəgagen araq*  
 Soslan fortunately bread brought Tamu=CTR unfortunately arak  
 ‘Soslan fortunately brought bread, and Tamu unfortunately arak.’  
 Georgian
- d. *gia-m sabednierod yvino moit’ana*  
 Gia-NOM fortunately wine.NOM s/he.brought  
*rezo-m=k’i saubedurod č’ač’a*  
 Rezo-ERG=CTR unfortunately chacha.NOM  
 ‘Fortunately, Gia brought wine, and Rezo, unfortunately, (brought) chacha.’
- b. *rezo-m saubedurod č’ač’a*  
 Rezo-ERG unfortunately chacha.NOM  
*gia-m=k’i sabednierod yvino moit’ana*  
 Gia-NOM = CTR fortunately wine.NOM s/he.brought  
 ‘Rezo, unfortunately, (brought) chacha, and Gia, fortunately, brought wine.’

### 8. Can T<sup>0</sup> be stranded by embedded gapping, or Gapping or pseudogapping?

- In English, pseudogapping deletes the lexical verb while stranding an auxiliary  
 (16) *That may not bother you, but it does me.* Hoeksema (2006)
- In this narrow sense, pseudogapping is extremely rare cross-linguistically, but, in principle, this notion can be generalized in the following manner:  
 Pseudogapping is a type of ellipsis that deletes the lexical verb but keeps T<sup>0</sup>.
- Perhaps what we have seen above are instances of pseudogapping with a null T<sup>0</sup>?
- If gapping in English is derived by a process similar to (9) (as argued by Gengel (2013)), this becomes a terminological question.
- English pseudogapping allows tense mismatches (Kyle Johnson, p.c.):  
 (17) *Tom ate tomatoes and he will onions too.*
- However, this is not what is observed in our cases:  
 (18) a. *\*vasja sjel pomidory sevodnja*  
           Vasya ate tomatoes today  
           *a petja sjest ogurcy zavtra*  
           CTR Petya will.eat cucumbers tomorrow  
           ‘Vasya ate the tomatoes today and Petya (will eat) the cucumbers tomorrow.’ Russian
- b. *\*iam dyes xač’ap’uri gamoacxo nino=k’i*  
           Ia.ERG today khachapuri.NOM baked Nino.NOM=CTR  
           *xval mč’ads gamoacxobs*  
           tomorrow mchadi.DAT will.bake  
           ‘Ia baked a khachapuri today, and Nino (will bake) a mchadi tomorrow.’ Georgian

- Furthermore, a number of properties of pseudogapping in English, observed by Levin (1980) when comparing pseudogapping to VPE, do not generalize to our cases.
- English pseudogapping

cannot be deeply embedded, (19a).  
 shows preference for same subjects, (19b)  
 cannot happen in infinitival clauses, (19c)  
 cannot go backwards, (19d).

- (19) a. \**Since tornadoes petrify Harold, I can't for the life of me figure out why he's so surprised about the fact that they do me, too.*  
 b. A: That thunderstorm bothered Millicent last night.  
 B: ??Well, your stereo did me.  
 B: *I'm afraid my stereo did, too.*  
 c. \**I wrote his papers, but I did not want to his dissertation.*

- REMARK. Levin (1980) observes a number of other properties as well, but they are very English-specific.
- This is not what occurs in the languages under consideration! (Except for directionality in Russian, but, as we will see, directionality is problematic anyway.)

(20) Deeply embedded gaps

- a. *?vasja ljubit vodu a jeho drug utverđdajet [što vasja  
 Vasya likes vodka CTR his friend claims COMP Vasya  
 jemu govoril [što vasina žena ljubit vino]]  
 he.DAT told COMP Vasya's wife likes wine  
 'Vasya likes vodka, and his friend claims that Vasya told him that Vasya's wife  
 (likes) wine.'*

Non-matching subjects

- b. A: *vasja ljubit vodu*  
 Vasya likes vodka  
 'Vasya likes vodka.'  
 B: *a ja samogon*  
 CTR I moonshine  
 'And I moonshine.' Russian
- c. A: *rezos adžavrebs sulguni*  
 Rezo.DAT hates sulguni.NOM  
 'Rezo hates sulguni.'  
 B: *ninos=k'i t'q'emali*  
 Nino.DAT=CTR tkemali.NOM  
 'And Nino tkemali.' Georgian

Infinitival clauses

- d. *ja napisalvasje dissertaciju a [napisať pete  
 I wrote Vasya.DAT thesis.ACC CTR write.INF Petya.DAT  
 stat'ju] (ja) nje xoču/otkazalsja  
 article.ACC I NEG I.want/refused  
 'I wrote a thesis for Vasya, and I don't want/refused to (write) an article  
 for Petya.'* Russian

- Accordingly, empirically these phenomena are rather different from the English pseudogapping.

### 9. A Standing Challenge: Directionality of Gapping

- Ross (1970) advanced a conjecture that the directionality of gapping in a given language correlates with SVO vs. SOV word order.
- This holds true for Japanese and Korean. First problematic Quechua data in Pulte (1971; 1973).
- Ross' conjecture is not borne out by a larger language sample.
- Hungarian allows both SOV and SVO, gapping in both directions is preferable with the SOV order.

(21) Hungarian, András Bárány, p.c.

a. forward gapping, SOV

Mari téa-t iszik és Zsuzsa kávét  
 M. tea-ACC drinks and Zs. coffee-ACC  
 'Mari drinks tea and Zsuzsa coffee.'

b. backward gapping, SOV

Mari téa-t és Zsuzsa kavé-t iszik.  
 M. tea-ACC and Zs. coffee-ACC drinks  
 'Mary drinks tea and I believe that Zsuzsa drinks coffee.'

c. embedded forward gapping, SOV

Mari téat iszik és azt hiszem hogy Zsuzsa kávét  
 M. tea drinks and that.acc I.believe COMP Zs. coffee  
 'Mary drinks tea and I believe that Zsuzsa drinks coffee.'

- Further counter-evidence: Dargwa (Northeast Caucasian), Abaza (Northwest Caucasian): strictly SOV, only forward gapping (my fieldwork data).
- Rutul (Northeast Caucasian): SVO highly marked, only forward gapping.
- Russian and Romanian: SOV possible, only forward gapping (*pace* Ross' (1970) claim about Russian).
- The current account predicts, however, that, if a language allows embedded gapping, it will allow gapping in both directions.
- This prediction is not borne out for Russian and Romanian.
- I hypothesize that a separate mechanism is implicated in determining the directionality of gapping in a given language.

### 10. Conclusion

- Embeddable gapping, the construction discussed here, differs significantly from gapping observed in better studied languages.
- It is not impossible that, in different languages, different syntactic mechanisms are implicated in embeddable gapping.
- However, agreement-mediated deletion approach is able to derive much of this differences by positing two different loci of the licensing feature: a high one and a low one. This shows that this theoretical approach is a promising way of treating typological variation.

- A wider implication of the findings: What is the theoretical status of gapping (or pseudo-gapping)? If my proposal is on the right track, the nature of the ellipsis is determined by the location of the licensing feature and the size of the constituent that is deleted.
- Descriptively, however, gapping under this view becomes a mirror image of verb stranding VP ellipsis, Goldberg (2005): instead of evacuating the verb out of a VP and then deleting the remnant constituent, it is DPs that raise out of the (possibly extended) VP, which then undergoes deletion.

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### Appendix: On the size of conjuncts in Russian gapping

The argument of Agafonova (2011) in favor of the small conjunct analysis in Russian is based on the following two observations. First, while binding from the first conjunct into the second is impossible without gapping, it becomes at least marginally available when the auxiliary is gapped in the analytic future form<sup>8</sup>:

- (22) a. \**ne každyj mal'čik vyšivaet krestikom*  
 NEG every boy embroiders cross.INS  
*a jevo sestra vypilivaet lobzikom*  
 CTR his sister cuts fretsaw.INS  
 ‘Not every boy<sub>i</sub> embroiders in cross-stitches and his<sub>i</sub> sister cuts with a fretsaw.’
- b. ?*ne každyj mal'čik budet vyšivať krestikom*  
 NEG every boy be.FUT.3SG embroider.INF cross.INS  
*a jevo sestra budet vypilivať lobzikom*  
 CTR his sister be.FUT.3SG cut.INF fretsaw.INS  
 ‘Not every boy<sub>i</sub> would embroider in cross-stitches and his<sub>i</sub> sister would cut with a fretsaw.’

This argument faces two issues: first, the sentence in (22b) does not provide a standard example of gapping, given that the lexical verb is retained<sup>9</sup>. Second, the binding pattern in (22b) is still quite unusual. Russian distinguishes reflexive and non-reflexive possessive pronouns, and only the non-reflexive one is possible in (22b):

- (23) ?*ne každyj mal'čik budet vyšivať krestikom*  
 NEG every boy be.FUT.3SG embroider.INF cross.INS  
*a jevo/\*svoja sestra budet vypilivať lobzikom*  
 CTR his/self's sister be.FUT.3SG cut.INF fretsaw.INS  
 ‘Not every boy<sub>i</sub> would embroider in cross-stitches and his<sub>i</sub> sister would cut with a fretsaw.’

In a regular binding configuration, only the reflexive possessive would have been possible:

- (24) *ne každyj mal'čik ljubit svoju/\*jevo sestru*  
 NEG every boy loves self's/his sister.ACC  
 ‘Not every boy<sub>i</sub> loves his<sub>i</sub> sister.’

<sup>8</sup> The morphological future is formed for imperfective verbs by combining the future of the verb ‘to be’ with the infinitive of the lexical verb. The verb ‘to be’ is the only verb in Russian that has a non-analytic future form.

<sup>9</sup> It seems that sentences of this type with real gapping are marginally possible as well, although the sentence in (i) seems to be worse than that in (22b):

- (i) ?*ne každyj mal'čik pišet sonety a jevo/\*svoja sestra simfonii*  
 NEG every boy writes sonnets CTR his/self's sister symphonies  
 ‘Not every boy<sub>i</sub> writes sonnets and his<sub>i</sub> sister symphonies.’

However, the ban on the reflexive possessive holds here as well.

If what we have in (22b) is a regular syntactic binding configuration, with a DP in, say, Spec TP binding DP in a vP, the ban on reflexive possessive appears puzzling.

The second argument of Agafonova's (2011) is based on the scope of modals:

- (25)            *peťa možet jest' ikru            a        van'a jest' boby*  
                 Petya can    eat.INF caviar.ACC    CTR    Vanya eat.INF beans.ACC
- a.            'Petya can eat caviar and Vanya eat beans.'
  - b.            'It is possible that Petya eats caviar and Vanya eats beans.'

Here, however, the wide reading seems to be actually a subcase of the narrow reading: if Petya and Vasya eat their meals independently, it might so happen that they do so simultaneously. Moreover, here we again deal with incomplete gapping: only the modal is deleted in the second conjunct of (25).

Accordingly, the argument of Agafonova's (2011) in favor of small conjuncts in Russian is inconclusive at best.