Title: The Third Reading of *the most expensive photo of Abby*
Intro: This paper discusses the distribution of a recently discovered reading of superlative expressions, namely the relative reading with NP internal focus (RIN hereinafter), in English and German. The limited works on RIN almost have only been focusing on the cross-linguistic variation between English and Slavic languages. This paper looks into the reading in English and German in detail. After a survey of data that have not been discussed before, I provide a generalization of the distribution of the RIN in English and German and offer a syntactic account which covers all the data presented here while accounting for the cross-linguistic variation.
Readings: It has been noticed by Pancheva and Tomaszewicz (2013) (hereinafter P&T) that sentences in (1) can have three readings as shown in table 1. Note that (1a) shows that English only allows the absolute reading and the relative reading with NP external focus but not the RIN, which is at issue here. Meanwhile Polish (1b) allows all three readings.

Following Heim 1999 and P&T, the semantics of *-est* is as follows:
EST: <<e,t>,<<<d, <e,t>>,<e,t>>>
$[\![\text{EST}]\!] = \lambda C_{<e,t>}.\lambda D_{<d,\,<e,t>>}.\lambda x_{<e>}.\exists d.[D(d)(x)=1 \;\&\; \forall y.\, [y \in C \rightarrow D(d)(y)=1 \text{ iff } x=y]]$.
-EST(C)(D)(x) is definied iff (i) $x \in C$, and (ii) $\forall y\, [y \in C \rightarrow \exists d[D(d)(y)]]$

Pancheva and Tomaszewicz (2013) argues for a LF in (2) for the RIN, where both the focus *U2* and the DegP are required to move out of the NP to the sentential domain. This requirement comes from the restrictions of the contextual variable C which is the argument of the superlative morpheme *-est.* The semantics of *-est* presupposes the C to be a subset of the comparison class, i.e. the NP that the superlative AP modifies. Such a requirement makes sure that in sentence like *John is the tallest student*, *John* is the tallest individual in the set of *students*. P&T argues for another restriction on the C for RIN: focus association. The C must be the union of the set of alternatives that are generated by the focus operator ~. The two restrictions of C needs to converge, i.e. be compatible with each other, which is shown to be possible only when both the focus and the DegP move. (3) shows the mismatch between two Cs under two restrictions when neither DegP nor focus is moved. Similarly, LFs involving only DegP or only focus movement creates mismatch of C.

Observation: Here I present the data that have not been noticed before. (4-7) shows that the sentences involving wh-movement, *it*-cleft, pseudo-cleft, and relative clause have the RIN while sentences (8-10) involving alternative question (covert wh-movement), QR and ACD do not have the RIN. The data can be generalized as follows:

(11) **Generalization regarding RIN in English-type languages**: RIN is only possible when the NP internal focus is overtly moved to a position c-commanding the degree phrase (DegP).

Account: Here I offer an syntactic account for the generalization. I will 1) follow P&T's conclusion that RIN requires the movement of focus and DegP; 2) assume overt movements occur before covert movements, 3) derive the (un)availability of RIN with order preservation, i.e. the order of the base-generated positions of two elements needs to be preserved after the movements. (Müller 2001 a.o.) The order of the landing sites need to maintain the order of the generated positions. This order preservation requirement only applies to the movements on the same level, when both elements are going through overt or covert movements.

In the cases of overt movement of the focus element (6-10), the focus moves overtly to its landing site under which the DegP will tuck in. I follow Heim 1999 among others regarding the tucking-in movement of DegP. Since the movement of Focus and that of the DegP are not on the same level, order preservation constraint doesn't hold. The LF for RIN is thus available, allowing the RIN.

In the cases of covert movement of the focus element, both the focus and the DegP moves covertly, i.e. in LF. Since the DegP is based-generated as part of AP which is an adjunct of NP, it is higher than the focus element, a complement of N as in (12).

(12) $[_{DP}$ D $[_{NP}\, [_{AP}\, [_{DegP}$ EST-C] expensive] $[_{NP}\, [_{N}$ photo of $[_{DP}$ Abby$_{=FOCUS}]]]]]$

The DegP will move first to the sentential level. Since the movements of DegP and the focus are covert, order preservation constraint requires the focus to tuck in under the landing site of the DegP, yielding one of the LFs in (13), both of which create a mismatch of C. Note that I observe a more specific requirement of RIN: not only must both Focus and the DegP move out, Focus needs to c-command DegP, deriving the c-commanding part of the generalization in (11).

(13) a. $[\sim S\, [[_{DegP}\, \text{EST C}]\, [[\text{Abby}_{FOC}]\, [\text{John has } t_{DegP}\, \text{d-expensive photo of } t_{FOC}]]]]$
b. $[[_{DegP}\, \text{EST C}]\, [[\text{Abby}_{FOC}]\, \sim S\, [\text{John has } t_{DegP}\, \text{d-expensive photo of } t_{FOC}]]]$

The account spelled out above derive the new data while maintain the coverage of the cross-linguistic variation. Shen (to appear) note that in Polish, RIN is available only when the Focus is an adjunct to the NP but not when it is the complement of the N. Since both the focus and the AP are adjuncts to NP, order preservation doesn't hold. The movement of adjunct in English is independently ruled out.
(14) $[_{NP}\, [_{AP}\, [_{DegP}$ EST-C] expensive] $[_{NP}\, [_{NP}$ students] $[_{PP}$ from the Linguistic department]]]]] (Polish)

(1) a. John bought the best albums by U2.
b. Iwan ma naj−lepsze albumy U2. (Polish)
Ivan has naj−better-ACC albums-ACC U2.GEN.

Table 1

Cross-linguistic availability of readings of superlative expressions	English-type (1a)	Polish-type (1b)
Absolute Reading **"**The U2 albums that John has are better than other U2 albums."	√	√
Relative Reading with NP-External Focus (REX) "**John** has better U2 albums than others do."(Focus: "***John****"*)	√	√
Relative Reading with NP-Internal Focus (RIN) "The albums **by U2** that John has are better than the albums by others that John has."(Focus: "***by U2***" or ***U2-GEN***)	#	√

(2) a. Both DegP and Focus movement: $U2_F$ [[$_{DegP}$ EST-C] [~S [Ivan has t_{DegP} expensive albums t_F]]]
b. C = ∪S = {x: ∃d.[Ivan has d-expensive albums of x.} (required by focus association)
c. C = {x: ∃d.[Ivan has d-expensive albums of x.} (required the presupposition of *-est*)

(3) a. NO movement: [~S [Ivan has [$_{DegP}$ EST-C] expensive albums of $U2_F$]]]
b. C = ∪S = {x: Ivan has the most expensive albums of x} (required by focus association)
c. C = {x: ∃d [x are d-expensive albums by U2]} (required by the presupposition of *-est*)

Table 2 Scenario: Note the photo of Abby that John has is the most expensive one among John's purchases but not THE most expensive one sold: Mary has one at $900.

John	Abby: $800	Bill	Ben: $600	Mary	Abby: $900
	Ben: $500		Abby: $500		Cara: $300
	Cara: $200		Cara: $200		Ben: $200

(4) Wh-movement (The answer indicates the RIN is available in the question.)
a. - Who did John buy the most expensive photo of?
b. - Von wem hat John das teuerste Photo gekauft? (German)
Of who has John the most.expensive photo bought?
c. √ - Abby.

(5) *It*-cleft
a. √ It was Abby that John bought the most expensive photo of.
b. √ Es war Abby, von dem John das teuerste Photo gekauft hat. (German)
It was Abby of who.dat John the most.expensive photo bought has.

(6) Pseudo-cleft
√ Who John bought the most expensive photo of was Abby.

(7) Relative Clause
a. √ Abby was the model of whom John bought the most expensive photo.
b. √ Abby ist das Modell von dem John das teuerste Photo gekauft hat. (German)
Abby is the model of who.dat John the most.expensive photo bought has.

(8) Alternative Question
a. - Did John buy the most expensive photo of Abby or Cara?
b. #- Abby.

(9) QR # A different collector bought the most expensive photo of every model.

(10) ACD # School A admitted the oldest child of the same family as School B did.

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