

Inverse Scope in German revisited: No, 3/4, or Yes? An experimental study.

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- Aims of the talk:
 - i. Revisit claims in the formal syntactic literature that in German, inverse scope is restricted to a narrow set of syntactic contexts (Frey 1993, Bobaljik and Wurmbrand 2012) ...
 - ii. ... by means of an experimental *pilot study* on the interpretation of doubly quantified sentences with inverse scope potential:
 - (1) ... und ADV V_{FIN} Q_{SUBJ} Q_{OBJ} (middlefield de-accented)

- Experimental Findings:

(1) ... und ADV V_{FIN} Q_{SUBJ} Q_{OBJ} (middlefield de-accented)

⇒ Inverse scope in configuration (1) is indeed possible:
Inverse scope potential in German higher than assumed
in Frey (1993)

Findings possibly compatible with the syntax-based
account of scope possibilities in terms of local rigidity
(Bobaljik & Wurmbrand 2012)

1. Introduction – 2. Inverse Scope (in German) – 3. The Experiment



- Structure of the talk:

- i. Inverse Scope: Observations and theoretical accounts

- Inverse Scope in English
 - Inverse Scope in German

- Clauses involving scrambling (Frey 1993)

- Clauses involving hat contours (Krifka 1998)

- Pairs of quantifiers with fixed linear order

- (Bobaljik & Wurmbrand 2012)

- Constraints on Scrambling

- ii. What are the data? The experiment

- Set-up & Predictions
 - Results
 - Discussion

- Inverse Scope: The phenomenon

Inverse scope in English extensively discussed in May (1977, 1985) and Fox (2000):

(2)a. **Some man** loves **every woman**.

b. **A boy** loves **every girl**.

[Fox 2000:3; (2a)]

(3) **Whom** does **everyone** love?

[May 1977, 1985]

- Inverse Scope: The phenomenon

Inverse scope in English extensively discussed in May (1977, 1985) and Fox (2000):

Given a sentence with two (or more) quantified expressions QP1 and QP2 , where QP1 is in a higher structural position (preceding) QP2, QP2 takes semantic scope over QP1.

- (4) Surface Syntax: [QP1 ... [... QP2 ...]]
Interpretation: QP2 >> QP1

- Inverse Scope: The phenomenon

Inverse scope in English extensively discussed in May (1977, 1985) and Fox (2000):

(2)b. **A boy** loves **every girl**. [Fox 2000:3; (2a)]

Surface: There is some boy that loves every girl (one boy)

Inverse: For every girl y there is some (different) boy x such that x likes y (= more than one boy)

G1 ←———— B1

G2 ←———— B3

G3 ←———— B5

- Inverse Scope: The phenomenon

Inverse scope in English extensively discussed in May (1977, 1985) and Fox (2000):

(3) **Whom** does **everyone** love? [May 1977, 1985]

Surface: Who is the one that everyone loves? (one likee)

Inverse: For everybody: who does he like? (= more than one likee); see also Krifka (2001)

- Inverse Scope in English: Complications
 - i. Spurious instances of inverse scope (Reinhart 2006):
 - (5) Every boy loves some girl.
 - ⇒ apparent inverse scope reading (there is one girl such that ...) is just a special instantiation of the surface reading on which every boy loves a (here: the same) girl
 - ⇒ apparent inverse scope reading entails surface reading
 - ⇒ **Genuine inverse scope readings must not entail surface reading**

- Inverse Scope in English: Complications
 - i. Spurious instances of inverse scope (Reinhart 2006):
 - ii. Inverse scope readings not always available in English; but depend on a number of factors (Carden 1974, Ioup 1975, Liu 1991, Beghelli 1995, Stowell & Beghelli 1997)
 - information structure: e.g. focus or topic
 - prosody: accenting
 - lexical properties of QPs and Vs involved

- Inverse Scope in English: Complications
 - i. Spurious instances of inverse scope (Reinhart 2006):
 - ii. Inverse scope readings not always available in English; but depend on a number of factors (Carden 1974, Ioup 1975, Liu 1991, Beghelli 1995, Stowell & Beghelli 1997)
 - (2)c. A boy loves **each/every** girl.
 - ⇒ Inverse readings with Distributive QPs
 - d. A boy loves **no** girl.
 - ⇒ No inverse readings with Negative QPs
- see Liu (1991), Stowell & Beghelli (1997): feature checking in DistP

- Inverse Scope in English: Complications
 - i. Spurious instances of inverse scope (Reinhart 2006):
 - ii. Inverse scope readings not always available in English; but depend on a number of factors (Carden 1974, Ioup 1975, Liu 1991, Beghelli 1995, Stowell & Beghelli 1997)
 - iii. Inverse readings are costly and hence dispreferred (Reinhart 2006) and incur greater processing efforts (Kurtzman and MacDonald 1993, Tunstall 1998, Anderson 2004, Pylkkänen and McElree 2006, Hackl et al. 2012).
- ⇒ Inverse readings require strong contextual licensing

- Inverse Scope in English: Complications

iv. Inverse readings more easily available with sentences expressing (stative) spatial configurations with PPs (Hirschbühler 1982, Reinhart 2006:111)

(6) *An American flag was hanging* [_{PP} in front of *every building*].

⇒ In front of every building, there was a flag hanging
(= more than one flag)

- Inverse Scope in English: Complications

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⇒ In front of every building, there was a flag hanging
(= more than one flag)

viz. *Mert minden sarkon áll egy Puskás öcsi*

(as seen outside Terror Haza, Andrásy ut.)

- Inverse Scope in German: Standard Picture

Similar to what seems to hold in other free constituent order languages, scope inversion appears to be rarer in German than in English.

The scope potential of a quantifier is influenced by its syntactic status and its prosodic properties.

⇒ Surface scope seems always licensed.

- Inverse Scope in German: Standard Picture

Frey (1993)

- i. **No inverse scope in canonical SUBJ>>OBJ-sentences** if potentially confounding prosodic and information-structural factors are neutralized: **verum focus**
- (7) DASS **mindestens ein Student fast jeden Roman** gelesen hat.
that at least one student almost every novel read has
,... THAT at least one student read almost every novel'
OK: There is at least one student such that this student read almost every novel = at least one student read a lot

- Inverse Scope in German: Standard Picture

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that at least one student almost every novel read has
,... THAT at least one student read almost every novel‘

NOT: For almost every novel there is at least one student that read this novel = novels were evenly read by some student(s)

- Inverse Scope in German: Standard Picture

Frey (1993)

- i. **No inverse scope in canonical SUBJ>>OBJ-sentences** if potentially confounding prosodic and information-structural factors are neutralized: *verum focus*

NB: Frey (1993) uses modified numerals (*at least one*) and modified universal quantifiers (*almost every*) in order to rule out the confounding possibilities of specific or collective readings

≠ present experimental study

- Inverse Scope in German: Standard Picture

⇒ Frey's assessment of scope options in (7) is taken for granted in the literature on German scope nowadays.

BUT: The restriction of the claim to verum focus contexts in which everything but COMP is deaccented is often dropped in the literature. E.g., wide focus contexts are also often assumed to allow only surface scope with NOM > ACC order.

(8) *Why is everyone so upset?*

Nun, ich denke, weil **mindestens ein Kind** **jedes Fahrrad** benutzt

‚Well, I think because at least one child is using every bike.‘

- Inverse Scope in German: Standard Picture

Inverse scope is, however, possible, when the surface order does not correspond to the argumental hierarchy.

(9) **Was_{ACC} hat jeder_{NOM} zur Party mitgebracht?** (ACC > NOM)

What has everyone to-the party brought

For which x: every person y brought x to the party (surface)

For every person y: which y did y bring to the party (inverse)

(10) **Wer_{NOM} hat jedes Buch_{ACC} zur Party mitgebracht?**

Who has every book to the party brought

For which person y: y brought every book to the party (surface)

*For every x, x a book: which person y brought x to the party (inv.)

⇒ This is quite similar to English

- Inverse Scope in German: Standard Picture

The same holds for V2 declaratives:

(11) **Mindestens ein Buch**_{ACC} hat **jeder**_{NOM} zur Party mitgebracht.

(ACC > NOM)

At least one book has everyone to-the party brought

⇒ **AMBIGUOUS**

(12) **Mindestens ein Gast**_{NOM} hat **jedes Buch**_{ACC} gelesen.

At least one visitor has every book read (NOM > ACC)

⇒ **NOT AMBIGUOUS**

- Inverse Scope in German: Standard Picture

Frey (1993): Inverse scope also possible with scrambling
OBJ >> SUBJ

- (13) THAT **fast jeden Roman₁ mindestens ein Student t₁** gelesen hat.
that almost every novel at least one student read has
,...that almost every novel, at least one student read ‘

OK: For almost every novel there is at least one student that
read this novel = novels were evenly read by some student(s)

⇒ **surface scope**

- Inverse Scope in German: Standard Picture

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OK: There is at least one student such that this student read
almost every novel = at least one student read a lot

⇒ **inverse scope**

- Inverse Scope in German: Standard Picture

Scope Generalization: A can take scope over B

if A c-commands B in the syntax; OR

if A is higher than B in the argument hierarchy

⇒ **When the two hierarchies coincide, there is no scope ambiguity!** It does NOT matter whether an XP occupies a derived position or not

(14) Dass **mindestens einem Kind** **jeden Fehler** nur Fritz verzieh
That at least one-dat child every-acc mistake only Fritz
forgave

UNAMBIGUOUS (Sauerland 1998, Fanselow 2001)

- Inverse Scope in German: Refinements I

Krifka (1998): Inverse scope is possible under the RISE/-
FALL-contour in Contrastive Topic-Focus configurations

(15) dass **mindestens EIN/ Student** **fast JEDEN\ Roman** gelesen hat.
that at least one student almost every novel read has
,... that at least ONE student read almost EVERY novel‘

⇒ Analysis: CT-subject has focus feature assigned under V-
adjacency at intermediate step of derivation:

(15‘) ... **OBJ-QP₁** **SUBJ-QP** **t₁** V

- Inverse Scope in German: Refinements II

With PPs, scope facts seem to work the other way round
(von Stechow 1993:62)

- (16)a. Dass **ein Polizist** **vor jeder Bank** steht
That a policeman in front of each bank stands
⇒ AMBIGUOUS
- b. Dass **vor einer Bank** **jeder Polizist** steht
that in front of a bank every policeman stands
⇒ UNAMBIGUOUS (one bank)

- Inverse Scope in German: Refinements II

With PPs, scope facts seem to work the other way round

(16)c. Dass er **eine Münze** **in jeden Schlitz** warf

That he a coin in each slot threw

⇒ AMBIGUOUS

d. Dass er **mit einem geeigneten Instrument** **jeden Tresor**

knacken kann

That he with a suitable instrument each safe crack can

⇒ AMBIGUOUS

- Inverse Scope in German: Refinements II

With PPs, scope facts seem to work the other way round

- (16)d. Dass **ein Kommunist**_{NOM} **in jedem Wahlkreis** kandidiert
That a communist in each constituency runs
AMBIGUOUS
- e. dass **ein Pfarrer**_{NOM} **an jedem Sonntag** in unsere Kirche kommt
That a priest on each Sunday to our churchs comes
AMBIGUOUS
- f. Dass **wegen eines Sexskandals** **jeder Politiker**_{NOM} zurücktrat
that because of a sex scandal each politician resigned
UNAMBIGUOUS (one scandal)

- Inverse Scope in German: Refinements II

With PPs, scope facts seem to work the other way round:

When DP <> PP corresponds to the normal order, inverse scope is acceptable

When DP <> PP does not correspond to the normal order, inverse scope is unacceptable (16b, 16f)

- Inverse Scope in German: Refinements II

With psychological and other unaccusative predicates, **both** orders seem ambiguous (Frey 1993)

(17)a. Dass bei der Korrektur **mindestens einem Professor**_{DAT} **jeder Fehler**_{NOM} aufgefallen ist

That at the grading at least one professor every mistake struck has

b. Dass bei der Korrektur **mindestens ein Fehler**_{NOM} **jedem Professor**_{DAT} aufgefallen ist

That at the grading at least one mistake each professor struck has

- Inverse Scope in German: Refinements III

Bobaljik & Wurmbrand (2012)

(Un)availability of inverse wide scope for QP_2 in the configuration $[QP_1 \dots [\dots QP_2 \dots]]$ inversely correlated to (im)possibility of overt movement of QP_2 across QP_1 :

- i. Movement possible: No inverse scope
- ii. Movement impossible: Inverse scope
Local scope rigidity!

⇒ **Prediction:** Inverse scope in German should be possible in configurations that block overt movement of QP_2

- Inverse Scope in German: Refinements III

Bobaljik & Wurmbrand (2012):

- (18) *Context*: Two friends are talking about last night, when one of them visited Peter, who is crazy about jazz. On that occasion, Peter played a record by Miles Davis, a record by John Coltrane, and a record by Fred Frith.
- a. Peter hat [eine Platte [jedes Musikers_{GEN}]] aufgelegt.
($\forall \exists, \forall \exists$)
- b. #Peter hat [eine Platte [von jedem Musiker]] aufgelegt.
($\forall \exists^*, \forall \exists$)

Peter has a record every_{GEN} /of every musician played
'Peter played a record by every musician.'

- Inverse Scope in German: Refinements III

Bobaljik & Wurmbrand (2012):

(19)a. *Peter hat jedes Musikers₁ eine Platte t₁ aufgelegt

⇒ no movement; (18a) ambiguous

b. Peter hat von jedem Musiker₁ eine Platte t₁ aufgelegt.

⇒ movement possible; (18b) unambiguous

Inverse Scope in German: PREDICTIONS

⇒ Inverse scope available when movement is impossible

Q: What constrains (scrambling) movement?

Several conditioning factors for movement scrambling (Lenerz 1977, Müller 1999, among others):

- i. definiteness/givenness:
given > new, definite > indefinite
- ii. animacy:
animate > inanimate
- iii. scope taking/binding

Inverse Scope in German: PREDICTIONS

Müller 1999:

- The constraints on linear order may contradict each other
- They form a subhierarchy in grammar that is, initially, unordered.
- Sentences have to be evaluated relative to each of the possible arrangements of the principles in a strict hierarchy.

Inverse Scope in German: PREDICTIONS

A GIVENNESS Constraint favors the linearization given > new, **and disfavors scrambling in the absence of a givenness difference**

A CORRESPONDENCE Constraint favors the linearization corresponding to surface scope.

Inverse Scope in German: PREDICTIONS

- i. CORRESPONDENCE PRINCIPLE ranked above GIVENNESS PRINCIPLE in the evaluation:
ceteris paribus, movement/scrambling is possible
⇒ No inverse scope

- ii. GIVENNESS ranked above CORRESPONDENCE
when the two XPs do not differ in givenness, or when the left XP is given, scrambling impossible
⇒ **Inverse scope should be okay!**

Inverse Scope in German: Probing Intuitions

Inverse scope in **ALL-GIVEN** (verum) contexts:

(20) Die Polizei hat immer vor den Gefahren für *Schwimmer*
durch *Haie* gewarnt und

The police have always warned of the dangers for
swimmers because of sharks

tatsächlich **ATTACKIERT ein Hai_{NOM} jeden Schwimmer_{ACC}**
and in fact attacks a shark every swimmer

Tatsächlich attackiert ein Hai jeden Piraten

NSF *Scope Fieldwork project*, PI: Bruening, <http://udel.edu/~bruening/scopeproject/scopeproject.html>



Tatsächlich attackiert ein Hai jeden Piraten

31 YES, 47 NO (informal study, native speaking linguists)

INVERSE SCOPE



A proper (pilot) experiment:

- 6 conditions
- 8 experimental items per condition (48 sentences)
- **Method:** Stimuli plus forced choice question (Renans et al. 2011, Renans 2015)
 - ⇒ Aim: Tap into implicit knowledge regarding scope interpretations by probing intuitions as to the cardinality of the existential QP

A proper (pilot) experiment: Method

Context: We expected the men at work to be romantically attracted by their women colleagues, ...

Target: ... and in fact **some man** (\exists) has now developed a crush **on every woman** (\forall)

Question: How many men are referred to?

Answers:

- i. **one** \Rightarrow wide scope \exists (surface)
- ii. **more than one** \Rightarrow wide scope \forall (inverse)

A proper (pilot) experiment:

- 6 conditions:

I: Crucial Case: \exists -QP_{SUBJ} > \forall -QP_{OBJ}, both given

vs 5 Controls:

II: Wide surface scope for \forall -QP_{SUBJ}, both given

III: Inverse scope with \forall -Q-PPs \Rightarrow ,more than one'-answers

IV: Surface scope with \forall -Q-PPs (=wide scope for \exists -QP)

V: Syntactically forced wide surface scope for \exists -QP

VI: Contextually forced wide surface scope for \exists -QP

\Rightarrow ,one'-answers

Condition I: The crucial case

- **Stative/spatially situating predicates:** *block, cover, surround, plug up, revolve around ...*
- Destressed *a* precedes *every*
- Checking for wide scope in verum context **with both XPs given.**

(21) Die Polizei warnte vor dem Sturm davor, dass die *Zufahrten* in die Innenstadt durch *umstürzende Bäume* blockiert werden könnten, *und tatsächlich BLOCKIERT `n umgestürzter Baum_{NOM} jede Zufahrt_{ACC}.*

The police warned ahead of the storm that the roads towards downtown might be blocked by falling trees, and **a fallen tree DOES in fact block each road.**

Condition I: The crucial case

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Q: Von wie vielen **Bäumen** ist hier die Rede?

A: einer \Rightarrow surface scope: $\exists > \forall$

B: mehr als einer \Rightarrow **inverse scope (predicted)**

Condition II: 8 Controls

- Surface wide scope for \forall -DP
- Active predicates: *attack, fish, feed, ride, lick, ...*
- Same givenness facts

(22) Die Küstenschutzbehörde hatte Angst, dass arglose Schwimmer von den Haien attackiert würden *und tatsächlich* **ATTACKIERT** nun *jeder Hai* 'nen Schwimmer_{ACC}.

The coastal agency was afraid that unsuspecting swimmers would be attacked by the sharks,
and indeed every shark IS now attacking a swimmer

Condition II: 8 Controls

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- Active predicates: *attack, fish, feed, ride, lick, ...*
- Same givenness facts

(22) Die Küstenschutzbehörde hatte Angst, dass arglose Schwimmer von den Haien attackiert würden *und tatsächlich* **ATTACKIERT** nun *jeder Hai* 'nen Schwimmer_{ACC}.

Q: Von wie vielen Schwimmern ist hier die Rede?

A: einer

B: mehr als einer (expected answer)

Condition III: 8 Controls

- Inverse wide scope with \forall -PPs
- Contexts without givenness for subject

(23) Die Terroristen drohten, dass die Gebäude gesprengt würden, *und tatsächlich lag dann* *ne Bombe vor jedem Gebäude*

The terrorists threatened to blow up the buildings, and indeed *there was a bomb lying in front of every building*
(= Hirschbühler/Reinhart-sentences)

Condition III: 8 Controls

- Inverse wide scope with \forall -PPs
- Contexts without givenness for subject

(23) Die Terroristen drohten, dass die Gebäude gesprengt würden, *und tatsächlich lag dann `ne Bombe vor jedem Gebäude*

Q: Von wie vielen **Bomben** ist hier die Rede?

A: eine (surface: implausible)

B: mehr als eine (**inverse: expected**)

Condition IV: 8 Controls

- Surface narrow scope with \forall -PPs
- Neither subject nor PP given

(24) Der Direktor hat kritisiert, dass die Toleranz der Lehrer/innen gegenüber so manchem „Fehlverhalten“ der Schüler abgenommen hat, *und tatsächlich zetert auch `ne Lehrerin aus jedem Anlass.*

The director criticized that the teachers' tolerance against problematic student behavior has decreased, **and indeed some teacher is bickering for whatever reason.**

Condition IV: 8 Controls

- Surface narrow scope with \forall -PPs
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Q: Von wie vielen **Lehrerinnen** ist hier die Rede?

A: eine (surface: expected)

B: mehr als eine (inverse)

Condition V: 8 Controls

- Syntactically forced surface wide scope for \exists -DP
- \forall embedded in REL-clause

(25) Die Musiker drängen stets, dass die illegalen Downloads verfolgt werden, *und tatsächlich gibt's nun **`nen Beamten**, [der **jeden illegalen Download** verfolgt]*.

The musicians insist all the time that illegal downloading should be prosecuted, **and in fact there is now an official that prosecutes every illegal download.**

Condition V: 8 Controls

- Syntactically forced surface wide scope for \exists -DP
- \forall embedded in REL-clause

(25) Die Musiker drängen stets, dass die illegalen Downloads verfolgt werden, *und tatsächlich gibt's nun **nen Beamten**, [der **jeden illegalen Download** verfolgt].*

Q: Von wie vielen **Beamten** ist hier die Rede?

A: einer (surface: expected)

B: mehr als einer (inverse)

Condition VI: 8 Controls

- Contextually forced surface wide scope for \exists -DP
- Reference to SG individual in subsequent clause

(26) Die Touristen verlangten, dass die Folkloregesänge erklärt werden, *und tatsächlich ERKLÄRT nun `n Übersetzer_{NOM} jeden Gesang_{ACC}*. Ich weiß aber nicht, wie *er* heißt.

The tourists demanded that the traditional songs be explained, *and indeed, now a translator does explain every song*. But I don't know his or her name!

Condition VI: 8 Controls

- Contextually forced surface wide scope for \exists -DP
- Reference to SG individual in subsequent clause

(26) Die Touristen verlangten, dass die Folkloregesänge erklärt werden, *und tatsächlich ERKLÄRT nun* *n Übersetzer*_{NOM} *jeden* *Gesang*_{ACC}. Ich weiß aber nicht, wie er heißt.

Q: Von wie vielen **Übersetzern** ist hier die Rede?

A: einer (surface: expected)

B: mehr als einer (inverse)

Experimental Results (% predicted reading)

- Condition I – Inverse scope \exists -SUBJ $>$ \forall -OBJ 71,6%
- Condition II – Surface scope \forall -SUBJ $>$ \exists -OBJ 89,9%
- Condition III – Inverse scope with \forall -PP: $\forall > \exists$ 96,6%
- Condition IV – Surface scope with \forall -PP: $\exists > \forall$ 86,4%
- Condition V – Surface scope ($\exists > \forall$) forced by embedding 95,5%
- Condition VI – Surface scope ($\exists > \forall$) forced by SG 85,2%

Experimental Results (% predicted reading)

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Discussion

- Inverse scope possible when scrambling is not pragmatically triggered: **Above chance performance in C.I**
- Compatible with Bobaljik & Wurmbrand 2012, incompatible with Frey 1993
- Influence of grammatical structure:
 - Contrast with DP- \forall PP pairs shows that
 - a. Judgments are not simply based on plausibility
 - b. Computation of inverse scope more difficult when two DPs interact

Discussion

- ⇒ In our design, the inverse scope corresponds to the **pragmatically sensible interpretation**: a single tree could hardly block all roads, a single bomb could hardly be found in front of every building, ...
- High percentage (30%) of answers favoring the implausible reading shows that some speakers have difficulty in interpreting sentences with \exists -SUBJ $>$ \forall -OBJ order with inverse scope.
- ⇒ Methodological improvement after successful pilot study:
What explains the variation in answer patterns?

Discussion

- Possible grammatical factors involved: Grammatical operation involved in computing inverse scope

DP-DP: Quantifying In, QR (Montague 1973, May 1977)
Re-Merge = costly extra step in computation
(Reinhart 1995/2006)?

DP-PP: High or Low Adjunction to vP/VP: Simple Merge?
or base generated order: ___ PP > DP V

Q: Significance of inverse scope facts for analysis of adverbials?

Open questions

- Does the stativity of the main predicate affect readings?
- What are the limits of the pragmatic licensing of inverse scope?
- Would other factors disfavoring scrambling have similar effects on scope? E.g., global ambiguity with respect to grammatical functions (syncretism)?

(27) In seinem Roman lässt Haider **eine Studentin** **jede Lehrerin** beleidigen

‘In his novel has Haider some student every teacher insult’

- Would other factors disfavoring topicalization to the prefield have similar effects on scope? E.g. No pitch accenting/De-accenting, viz. Fanselow & Lenertová 2011?

Open questions

⇒ This might provide a (partial) answer to the often observed fact (e.g. Pafel 2005, Ioup 1975) that focus accenting on the more deeply embedded QP disfavors inverse scope:

(28) Es blockiert ´n umgestürzter Baum JEDE\ Zufahrt.
it blocks a fallen tree EVERY access
,There´s some tree blocking EVERY access.´

Summary:

- Experimental results of a pilot experiment on scope taking in all-given (verum) contexts suggest that inverse scope in $DP_{SUBJ} > DP_{OBJ}$ configurations may be possible after all, even in the absence of a hat-intonation: pace Frey (1993)
- The findings are compatible with the local scope rigidity-analysis of Bobaljik & Wurmbrand (2012), on the assumption that given material must not scramble across other given material.
- Subtle interaction of the availability of scope and constraints on overt movement that go beyond the coarse typological distinction into rigid scope vs flexible scope languages

Summary:

- Experimental results of a pilot experiment on scope taking in all-given (verum) contexts suggest that inverse scope in $DP_{SUBJ} > DP_{OBJ}$ configurations may be possible after all, even in the absence of a hat-intonation: pace Frey (1993)
- The findings are compatible with the local scope rigidity-analysis of Bobaljik & Wurmbrand (2012), on the assumption that given material must not scramble across other given material.
- Subtle interaction of the availability of scope and constraints on overt movement that go beyond the coarse typological distinction into rigid scope vs flexible scope languages

More research required!

THANK YOU!!!

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1. Introduction – 2. Inverse Scope (in German) – 3. The Experiment



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