Scrambling and the lack thereof in Uralic OV

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von der Gabelentz, *Die Sprachwissenschaft*, 1901

H. Georg Conon v. d. Gabelentz.
† in der Nacht zum 11. December 1893.

"It would be a great asset if a single property of a language could tell us which other properties that language has!"

"Aber welcher Gewinn wäre es auch, wenn wir einer Sprache auf den Kopf zusagen dürften: Du hast das und das Einzelmerkmal, folglich hast du die und die weiteren Eigenschaften [. . .]"

Implicational Universal

verb-finality $\rightarrow$ word order variability (scrambling)

(Corver & van Riemsdijk 1997, Fukui 1993, Fukui & Takano 1998, Haider 2010, Haider & Rosengren 2003, Koster 1999, Neeleman 1994, Neeleman & Weerman 1999, Reuland & Kosemeijer 1993, Saito & Fukui 1998)

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Induction based on mainly German, Dutch, and Japanese
↓
First falsification based on mainly Uralic

Research question and answer

Central Question

Are verb-final languages homogeneous
concerning word order variability?

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concerning word order variability?

Answer

No.
New proposal:
obligatory subject movement (EPP) determines word order variability

Additional prerequisite research

Auxiliary question

What is the structure of the non-scrambling verb-final language South Sámi?

Answer: A verb-final language with EPP and auxiliary raising.

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Auxiliary question

What is the structure of the non-scrambling verb-final language South Sámi?

Answer: A verb-final language with EPP and auxiliary raising.

Auxiliary question

Is a verb-final language still verb-final when it features verb-medial orders?

Answer: Yes, via underlying verb finality.
The first descriptive and structural typology of postverbal elements in verb-final languages.

Roadmap

1. Research question
2. Core notions
3. Scrambling in OV languages
4. Non-scrambling in OV languages
5. The structure of South Sámi
6. Conclusion

Core notions

Salient property: verb position

Not verb-final, VO
The fluffy cat gently **nudged** *the yarn ball* under the sofa yesterday.
S X **V** *O* X X

Not verb-final, VO
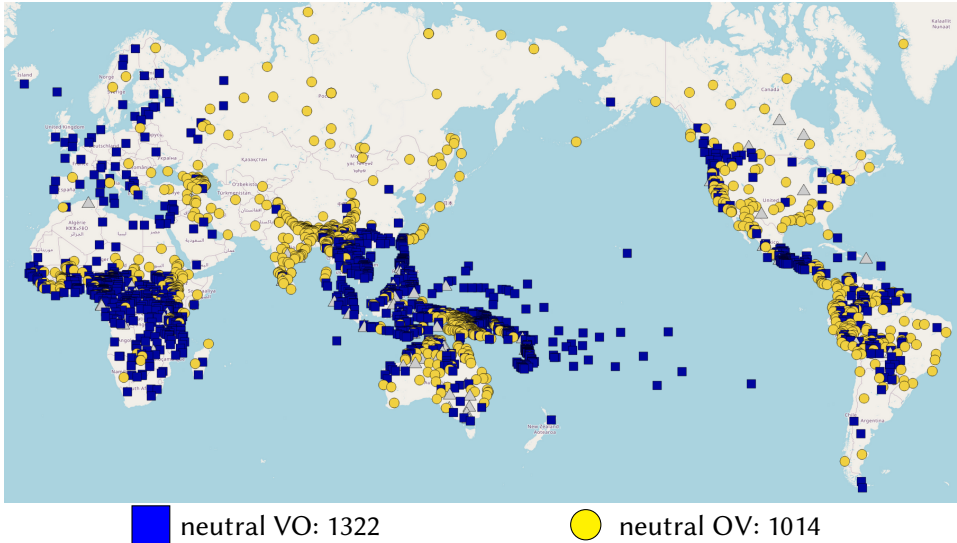The fluffy cat gently **nudged** *the yarn ball* under the sofa yesterday.
S X **V** *O* X X

Verb-final, OV
Yesterday the fluffy cat *the yarn ball* under the sofa gently **nudged**.
X S *O* X X **V**

Distribution of verb positions

neutral VO: 1322   neutral OV: 1014

What is word order variability?

1 Which surface word orders?

2 What is the function and
underlying structure?

(1) a. I change (the word order) with ease.
S V   O   X

b. (The word order) I change with ease.
O   S V   X

c. I change with ease (the word order).
S V   X   O

d. *(The word order) with ease I change.
O   X   S V

Method

- theory-driven item construction
- elicitation of judgements and comments in interviews
⇒ original data

- core set: Uralic OV languages

Target languages: Uralic OV languages
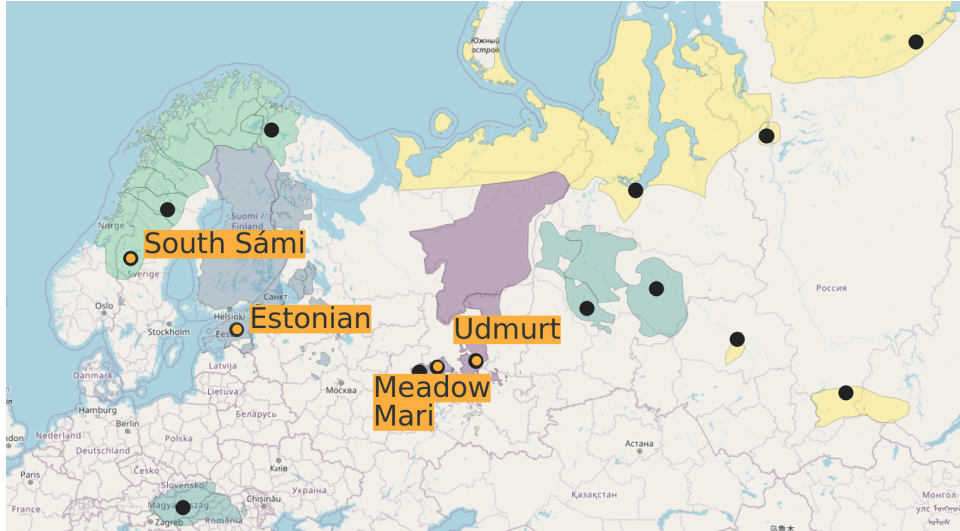
Scrambling in OV languages

Scrambling in OV languages: Claims

Claim 1

A-Scrambling (altruistic movement to the left) is a typologically valid concept.

Claim 2

There are OV languages without A-scrambling.

Claim 3

A high structural subject position in a functional projection constrains A-scrambling.

verb-finality $\rightarrow$ word order variability (scrambling)

(Corver & van Riemsdijk 1997, Fukui 1993, Fukui & Takano 1998, Haider 2010, Haider & Rosengren 2003, Koster 1999, Neeleman 1994, Neeleman & Weerman 1999, Reuland & Kosemeijer 1993, Saito & Fukui 1998)

$\Downarrow$
What is scrambling?

What is scrambling

Claim 1

A-Scrambling (altruistic movement to the left) is a typologically valid concept.

- **comparative concept** *A-scrambling* with previous OV languages as template
- many definitions of "scrambling" (Dutch vs. Japanese literature)
- "scrambling" as any reordering
  ⇒ *every* language has scrambling

(2) Differentiating A-scrambling from other kinds of word order variability

    a. **altruism: no IS-marking of the fronted element**
       ⇒ excludes topicalisation, contrastive fronting etc.

    b. OS order is possible
       ⇒ excludes mere adverbial intervention

    c. multiple scrambling
       ⇒ no dedicated, singular functional projection

(3) Surface A-scrambling pattern
$X_{unspecified} - Y_{unspecified} - O_{unspecified} - \boxed{S_{focus}}$

Traditional concept: A vs. Ā (van Urk, 2015; Lohninger, p.c.)

A properties	Ā properties
no IS effects	IS effects
Local	Long-distance
Restricted to nominals	Not restricted to nominals
No reconstruction for Principle C	Reconstruction for Principle C
No Weak Crossover	Weak Crossover
New antecedents for anaphors	No new antecedents for anaphors
No parasitic gap licensing	Parasitic gap licensing

TABLE: Properties of A vs. Ā-movement

Converging evidence: Extension of binding domain

(4) Estonian anti-reflexive possessive pronoun *tema*

a. Kindlasti on **tema poeg** iga isa armastanud.
surely AUX.PRS.3SG 3SG.POSS son[:NOM] every.PART father.PART love.PTCP
'Surely his$_x$ (specific, unnamed person's) son loved every$_i$ father.'
int. but not available: 'Surely his$_i$ son loved every$_i$ father.'

b. Kindlasti on iga isa **tema poeg** armastanud.
surely AUX.PRS.3SG every.PART father.PART 3SG.POSS son[:NOM] love.PTCP
'Surely his$_i$ son loved every$_i$ father.'
(spuriously available:'Surely his$_x$ (specific, unnamed person's) son loved every$_i$
father.'

PROBLEM: CROSSLINGUISTIC INAPPLICABILITY

(5) Udmurt possessive suffixes, no quantifiers

    a. Пинал-**ыз** атай-**з-э** яратэ.
       child-3sg.nom father-3sg-acc love:prs.3sg
       'His child$_i$ loves every father$_i$.'

    b. Атай-**з-э** пинал-**ыз** яратэ.
       father-3sg-acc child-3sg.nom love:prs.3sg
       'His child$_i$ loves every father$_i$.'

Problem: Crosslinguistic inapplicability

(6) Udmurt – Why not use quantifiers? Object–Non-object asymmetry with distributive quantifier *kot'kud*

    a. kot'kud vorgoron
       Q   man
       '**every** man'

    b. kot'kud nunokezly
       Q   child.ABL
       'to **every** grandchild'

    c. kot'kud knigajez
       Q   book.ACC
       '**whichever** book'

A-scrambling in Uralic OV

- A-scrambling pattern:
    - Estonian
    - Udmurt
    - Meadow Mari

(7) Estonian

Varem on lapsele kingitusi (MÜÜJA) **kinkinud**.
earlier AUX.3SG child:ALL present:PL.PART clerk[:NOM] give:PTCP

'Earlier, A CLERK gave presents to the child.'

A-scrambling in Uralic OV: Meadow Mari

(8) a. [C: Who told stories to the children recently?]

Ikeche   yalizhte   yochalan   yomak-vlakym (KOVA)   oylysh.
recently village.IN child.DAT tale-PL.ACC   grandma tell.PST1.3SG
'GRANDMA recently told stories to the children in the village.'

   b. ?? Yomak-vlakym   ikeche   (KOVA)   yalizhte   yochalan   oylysh.
      tale-PL.ACC   recently grandma village.IN child.DAT tell.PST1.3SG

   c. ?? Yomak-vlakym   yochalan   ikeche   (KOVA)   yalishte   oylysh.
      tale-PL.ACC   child.DAT recently grandma village.IN tell.PST1.3SG

Prefocal loosening

- A-scrambling OS order without S-focus, but V-focus

(9) Zhukaze Ishkaryn perepechse kotkud nunokezly
yesterday Izhevsk.in perepech.Px.3sg.acc every grandchild.Px.3sg.dat

(pesjanaj) **vajyny** BYGATE.
grandmother bring.inf could

'Grandmother COULD bring the perepech to every grandchild in Izhevsk yesterday.'

A-scrambling beyond Uralic: Standard Dargwa

(10) Standard Dargwa (Nakh-Daghestanian, Caucasus; Dzhuma Abakarova, p.c.)
Muruys dax sawɣat (xunuyin) **bitxib**.
man.OBL yesterday present.ABS woman.ERG gave
'Yesterday A WOMAN gave the man the present.'

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⇒ same pattern across Eurasian OV

A-scrambling and preverbal focus across OV languages

- directly preverbal focus in OV: my prediction: always A-scrambling

(11) Focus Constraint (Nikolaeva 1999: 60)
Non-focus elements must precede the focus elements in the linear representation of the clause.

(12) Preverbal information focus in OV languages
$Y^* X_{Foc} V$

    a. focus in preverbal position

    b. everything else in front of the focus
       $\Rightarrow$ altruistic pattern
       $\Rightarrow$ preverbal focus $\rightarrow$ A-scrambling

Preverbal focus across OV languages

- statistical universal: OV → preverbal focus (Czypionka 2007, Desző 1978, Herring 1990, Herring & Paolillo 1995, Kim 1988)
- stronger absolute universals leading to OV ⇒ scrambling
  1. preverbal focus → OV
     not absolute (cf. Gibson et al. 2017)
  2. OV → preverbal focus
     not absolute; statistical only for Eurasia (cf. Czypionka 2007)
- ⇒ directly preverbal focus is not universally present in OV
  - ⇒ universal scrambling in OV cannot follow from universal preverbal focus in OV

Overview: OV languages with preverbal focus

- most or all Nakh-Daghestanian and Kartvelian languages (Forker 2020)
- IE-languages in Caucasus and Western Asia:
    - Eastern Armenian
    - (Iron) Ossetic (Borise & Erschler 2023)
    - Hittite (Lyutikova & Sideltsev 2021: only contrastive focus)
- Turkic languages
- OV languages of South Asia:
    - Malayalam and Kannada (Dravidian, Jayaseelan & Amritavalli 2005)
    - Hindi-Urdu (IE Manetta 2011: §4.3)
- Japanese (Miyagawa 2006: 617)
- Basque (Arregi 2002)
- Tibeto-Burman OV languages (according to Czypionka 2007, confirmed by Hilary Chappell, p.c.)
- Papuan OV languages (according to Czypionka 2007)
- Uralic OV languages (my thesis)

Interim conclusion: A-scrambling as a comparative concept

Claim 1

A-Scrambling (altruistic movement to the left) is a typologically valid concept.

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but:

Some OV languages lack A-scrambling.

Non-scrambling in OV languages

Non-scrambling OV languages

Claim 2

There are OV languages without A-scrambling.

Absence of the A-scrambling pattern:

- South Sámi (Uralic)
- Dutch, Afrikaans (Germanic)
- Amharic (Semitic)
- Korean, Jejueo (Koreanic)
- Nepali (Indo-Aryan)
- South-Bolivian Quechua

WO variability, but:

- ¬ altruistic OS order
- ¬ multiple scrambling

(13) [C: What woke the child up on Friday?]

    a.   (Gaahtoe) bearjadahken maanam **gåaskoeji**.
           cat.nom   Friday.gen   child.acc wake.pst.3sg
           'A cat woke the child up on Friday.'

    b. *Bearjadahken maanam (gaahtoe) **gåaskoeji**.
           Friday.gen   child.acc cat.nom wake.pst.3sg
           int. 'A cat woke a child up on Friday.'

- ¬ altruistic OS order
- ¬ multiple scrambling

Instead, only singular non-altruistic fronting (contrastive topic + focus):

(14) Maanam (gaahtoe) bearjadahken **gåaskoeji**.
      child.acc cat.nom   Friday.gen   wake.pst.3sg

      '(On Monday, the cat woke the mother, on Wednesday the father, and)
      on Friday, the cat woke the child.'

Non-scrambling OV languages: Nepali

(15) Nepali, Subject focus context (Dubinanda Dakal, p.c.)

    a.   Focus subject

      #nəjã ghər (mero bhai-le) kin-jo.
      new house my brother-ERG buy-PST.3SG.M.NH
      'My brother bought a new house.'

    b.   Contrastive topic object

      kukur (Meri-le) kin-i.
      dog   Mary-ERG buy-PST.3SG.F.NH
      'A dog, Mary bought.'

(16) a. Focus subject

  ^{OK} (Tata-y)   ranti-rqa   musuq auto-ta-qa.
     father-1sg buy-pret.tes new   car-acc-top

  'My father bought a new car.'

b. Focus subject

  # Musuq auto-ta-qa (tatay)   ranti-rqa.
  new   car-acc-top father-1sg buy-pret.tes

  'My father bought a new car.'

c. Contrastive object

  ^{OK} Musuq auto-ta-qa (tatay)   ranti-rqa.
  new   car-acc-top father-1sg buy-pret.tes

  'My father bought a new car.'

The EPP prevents A-scrambling

Claim 3

A high structural subject position in a functional projection constrains A-scrambling.

$\Downarrow$

EPP $\rightarrow \neg$ A-scrambling
(with Gisbert Fanselow)

How the EPP constrains A-scrambling

(17) Premises for EPP $\rightarrow$ ¬A-scrambling

    a. A-scrambling is VP/*v*P **in**ternal (prevailing analysis)

    b. subjects moved via EPP are VP/*v*P **ex**ternal

How the EPP constrains A-scrambling

(17)   Premises for EPP → ¬A-scrambling

    a.   A-scrambling is VP/*v*P **in**ternal (prevailing analysis)

    b.   subjects moved via EPP are VP/*v*P **ex**ternal

(18)   OS order with a VP-external S can only involve a VP-external O
    [FP O [FP S [... [VP <S> [VP <O> V]]]]]

How the EPP constrains A-scrambling

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$[_{FP}$ O $[_{FP}$ S [... $[_{VP}$ <S> $[_{VP}$ <O> V]]]]]

(19) OS order with a VP-internal S can involve a VP-internal O
$[_{FP}$ ∅ [... $[_{VP}$ O $[_{VP}$ S $[_{VP}$ <O> V]]]]]

New implicational universal on the EPP

New testable scrambling prediction

Every non-scrambling language should exhibit EPP effects that a scrambling language lacks, i.e., enhanced subject–object asymmetries.

$\neg$A-scrambling $\rightarrow$ EPP effects

The structure of South Sámi

Independent EPP effects in South Sámi

1. Superiority effects

2. General clause-structure

(20) Superiority effects in South Sámi vs. Estonian

    a. *Gïem   (gie)   jååktan   heevehtimmesne tjuvliesti?
      who.SG.ACC who.SG.NOM yesterday celebration.IN   kiss.PST.3SG
      int. 'Who kissed who at the celebration yesterday?'

    b. ?Keda   tervitas   (kes)   peol?
      who.PART greet.PST.3SG who.NOM party.ADE
      lit. 'Who did who greet at the party?'

A puzzle: SAuxOV#–SOV# alternation

91% of OV	Macro-Sudan	South Sámi
S O V **Aux**	S **Aux** O V	S **Aux** O V
S O V	S V O	S O V

A puzzle: SAuxOV#–SOV# alternation

	91% of OV	Macro-Sudan	South Sámi
	S O V **Aux**	S **Aux** O V	S **Aux** O V
	S O V	S V O	S O V

(21) a.

Piere	aahtjan	bovtsem	(duaka).	(South Sámi)
Per.[NOM]	father.ILL	reindeer.ACC	sell.PRS.3SG	
S	X	O	(V)	

'Per sells the reindeer to the father.'

b.

Piere	(edtja)	aahtjan	bovtsem	(doekedh).
Per.[NOM]	shall.PRS.3SG	father.ILL	reindeer.ACC	sell.INF
S	(Aux)	X	O	(V)

'Per will sell the reindeer to the father.'

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91% of OV	Macro-Sudan	South Sámi
S O V	S V O	S O V
S O V **Aux**	S **Aux** O V	S **Aux** O V

Solution: South Sámi has obligatory Aux-, but not V-raising.

Aux- vs. V-raising in OV languages

Claim 4

The hitherto unique SOV#–SAuxOV# alternation in South Sámi results from verb movement restricted to auxiliaries. Aux-raising in an OV language fills a predicted gap in the typology of verb raising.

Aux- vs. V-raising in OV languages

Claim 4

The hitherto unique SOV#–SAuxOV# alternation in South Sámi results from verb movement restricted to auxiliaries. Aux-raising in an OV language fills a predicted gap in the typology of verb raising.

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(22) **Proposal regarding V- and Aux-raising OV languages**

    a. V-raising language (Guébie): **SAuxOV–SVO alternation**
        SAuxOV#:   [S [Aux [<S> [X [[O V] <Aux>]]]]]
        SVO: [S [V   [<S> [X [O <V>]]]]]

    b. Aux-raising language (South Sámi): **SAuxOV–SOV alternation**
        SAuxOV#:   [S [Aux [<S> [X [[O V] <Aux>]]]]]
        SOV#:   [S [∅   [<S> [X [O V]]]]]

Consequence: EPP required

(23) a. *[CP …   [T' **Aux** [AuxP[VP   **S**   [VP X [VP O V]]] <Aux>]]]
     b. [CP … [TP **S** [T' **Aux** [AuxP[VP <S> [VP X [VP O V]]] <Aux>]]]]

Overall conclusions

Word order variability in OV

A-scrambling is common in OV

SOV can be rigid
↓
OV cannot predict WO variability
↓
EPP as predictor

OVERALL CONCLUSIONS

Word order variability in OV

A-scrambling is common
in OV

SOV can be rigid
↓
OV cannot predict WO
variability
↓
EPP as predictor

SUMMARY: THESES

Claim 1

A-Scrambling (altruistic movement to the left) is a typologically valid concept.

Claim 2

There are OV languages without A-scrambling.

Claim 3

A high structural subject position in a functional projection constrains A-scrambling.

Claim 4

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Other definitions of A-scrambling I

The Dutch definition: A-scrambling = adverbial intervention

- formulated as: A-scrambling → OV
- ⇒ requires investigation of VO
- already large-scale typological data (Hawkins 2014, Neeleman 2015)
- ⇒ better chances at absolute universal, but there is surface V–Manner–O (Dryer, p.c.)
- for surface V**Adv**O: requires in-depth study, potentially paper-length for one language (e.g. French)
- South Sámi woud still not fit (slide)

Other definitions of A-scrambling II

Haider's inclusion of IO–DO/T–R inversion

- ensures that Dutch has German-type A-scrambling
- problem: only works with *oblique objects* (= PP) in Dutch
- same phenomenon in Amharic:
    - rigid R–T/IO–DO order with neutral alignment (two accusatives)
    - variable order with indirective alignment (dative R)
- ⇒ obliques pattern with adverbials, not core arguments
- suggestion by Doreen Georgi (p.c.):
    - oblique DPs are PPs
    - merger hierarchies are built upon categories
    - ⇒ S and DO are often the only DPs
- ⇒ full compatibility with Uralic (semantic cases are regarded as PPs)
- ⇒ same in Korean and Amharic

Non-scrambling OV languages: South Sámi

Not even A-scrambling for ditransitives (Ellen Holm Bull, p.c.):

(24) a. Aahka   gærjam   maanese vedti.
       grandmother.NOM book.ACC child.ILL give.PST.3SG
       'Grandmother gave a book to the child.'

    b. Aahka   MAANESE gærjam   vedti.
       grandmother.NOM child.ILL book.ACC give.PST.3SG
       'Grandmother gave a book TO THE CHILD.'

South Sámi rigidity I

(25) [C: Mij deahpadi? / What happened?]

   a. preferred order group A

      Gaahtoe maanam bearjadahken gåaskoeji.
      cat.NOM child.ACC friday.GEN   wake.PST.3SG
      'A cat woke a child up on friday.'

   b. marked order group A

      Gaahtoe BEARJADAHKEN maanam   gåaskoeji.
      cat.NOM child.ACC   friday.GEN wake.PST.3SG
      'A cat woke a child up ON FRIDAY.' (emphasis, unclear whether topical or focal)

South Sámi rigidity II

(26) [C: Mij deahpadi? / What happened?]

    a. preferred order group B
       Gaahtoe bearjadahken maanam gåaskoeji.
       cat.NOM child.ACC friday.GEN wake.PST.3SG
       'A cat woke a child up on friday.'

    b. marked order group B
       Gaahtoe MAANAM bearjadahken gåaskoeji.
       cat.NOM child.ACC friday.GEN wake.PST.3SG
       'A cat woke A CHILD up on friday.' (emphasis, unclear topical or focal)

Estonian as OV

- previously: preverbal focus mistaken for clause-final focus despite verb particles (27)

(27) a. Sinu   kasvatasin   ju   MINA   üles.
     2SG.ACC   raise.PST.1SG   DISC.PRT   1SG.NOM   PRT

     'I was me who raised you, wasn't it?'

                         (Erelt et al. 1993: 14 and 195, gloss and translation AP)

   b. sinu   kasvatasin   ju   <sinu>   MINA   üles-<kasvatasin>
      2SG.ACC   raise.PST.1SG   DISC.PRT   2SG.ACC   1SG.NOM   PRT-raise.PST.1SG

Altruism vs. non-altruism I

(28) Klar ist, dass niemanden der Bürgermeister abholt.
clear is that nobody.acc the mayor picks.up
'It is clear that the mayor does not pick up anybody.' (Fanselow 2003: 211)

Altruism vs. non-altruism II

(29) a. THAT CAKE I won't eat.

    b. KNIGU   Sasha chital.   (Russian)
        book.ACC Sasha read
        'It was the book that Sasha read.'

    c. KUULTA Samppa Lajunen   voitti.   (Finnish)
        gold.PAR Samppa Lajunen.NOM won
        'It was gold that S.L. won (not silver).'   (Kaiser 2006: 316)

    d. ʔeħmad ħabbat   -u   suʕād   (Palestinian Arabic)
        Ahmed loved.3SG.F -OM.3SG.M Suad
        'Ahmed, Suad loved him.'

Further non-scrambling OV languages

- Kru languages e.g. Guébie (Sande 2017)
- Tuparí (Tupian, Brazil, Adam Singerman p.c.)
- other varieties of Quechuan (Raúl Bendezú-Araujo, p.c.)
- Chibchan OV languages (Jana Bajorat, p.c.)

The problem of cartography

- what adverbial placement variability means for cartography
    - movement explanation: arbitrary number of pre-determined landing sites between heads ⇒ parsimony
    - base-generation explanation: each head has multiple possible positions, iterations ⇒ self-abolishment

(30) **Udmurt**

    a. **Mazha** *arnjapumyn Izhkaryn jaratysa* kyrdzha.
       Masha weekend.ɪɴ Ishkar.ɪɴ love.cᴠʙ sing.ᴘʀs.3sɢ

       'Masha sings with love in Izhevsk on the weekend.'

    b. *Arnjapumyn* **Mazha** *Izhkaryn jaratysa* kyrdzha.
       weekend.ɪɴ Masha Ishkar.ɪɴ love.cᴠʙ sing.ᴘʀs.3sɢ

    c. *Arnjapumyn Izhkaryn* **Mazha** *jaratysa* kyrdzha.
       weekend.ɪɴ Ishkar.ɪɴ Masha love.cᴠʙ sing.ᴘʀs.3sɢ

Free merger vs. UTAH

Neeleman's (= this work's) framework:

- merger is free
- *featural* theta-role assignment, not positional
  ⇒ **anything can be the complement of V**

more commonly, Baker's Uniformity of Theta Assignment Hypothesis (UTAH):

- generative semantics's deep structure
- positional theta-role assignment
  ⇒ **only P macrorole is complement of V**

Ad Neeleman's Flexible Syntax

- Merge is blind and therefore free (a priori)
  $\Rightarrow$ word order variability is the norm
  $\Rightarrow$ word order rigidity needs to be explained

Ad Neeleman's Flexible Syntax

(A) Axioms for information-structurally neutral word orders Abels (2016), Abels & Neeleman (2012), Neeleman (2015, 2017)

  I. There are independent merger hierarchies. The order of merge is only restrained within each merger hierarchy.

  II. Merge is symmetric. Structure building can take place to the left and to the right.

  III. Neutral orders are base-generated or derived by X^+-movement.

  IV. X^+-movement is asymmetric: it must be leftward.

Base-generation analysis of A-scrambling via preverbal focus

(31)   Description of A-scrambling

    a.   Merger hierarchy: S1 > S2

    b.   Actualised merge order: S2 > S1

    c.   structural result: [S1 [S2 H]]

(32)   Focus as the complement of V
    $[_{V^*}\ Y^*\ [_{V'}\ X\ V\ ]] \mapsto$ focus: X, background: Y^*

Typology of SAuxOV languages

- V and **Aux**: strong correlation pair: only 8% of OVs have **Aux**V order (Dryer 1992, 2013)
- SAuxOV: globally rare (Gensler & Güldemann 2003, Julien 2003)

(33) **SAuxOVX languages**: 1 – real SAuxOVX: Mande, Songhay, ... (Creissels 2005)
   SAuxOV# languages: 2A – V-raising OV: Kru languages (Sande et al. 2019)
   2B – Aux-raising OV: South Sámi (Khoekhoe? Canelo-Krahó?)

South Sámi: Aux originates behind V

- (34) in line with data by Kroik (2016)
- analysis: Aux-movement supression

(34) a. Piere **(lij)** aahtjan bovtsem doekeme.
 Piere COP.PRS.3SG father.ILL reindeer.ACC sell.PTCP
 'Piere has sold the reindeer to the father.'

 b. Piere aahtjan BOVTSEM doekeme **lij**.
 Piere father.ILL reindeer.ACC sell.PTCP COP.PRS.3SG
 'Piere has sold THE REINDEER to the father.'

 c. Piere aahtjan bovtsem doekeme **LIJ**?
 Piere father.ILL reindeer.ACC sell.PTCP COP.PRS.3SG
 'HAS Piere sold the reindeer to the father?'

Guébie (Kru): Aux-raising: SOV–SAuxOV alternation

(35) a. e⁴   **ji**³ ɟa³¹   **li**3
     1SG.NOM will coconuts eat
     'I will eat coconuts.'   (Sande et al. 2019: 670)

   b. e⁴   **li**²   ɟa³¹
     1SG.NOM eat.IPFV coconuts
     'I eat coconuts.'   (Sande et al. 2019: 672)

- not V2: no flexible first position (Sande 2017: 94–102)
- also other Kru languages (Sande et al. 2019: 672)
- Kiezdeutsch: V-raising OV like Guébie instead of deviant V2 (pace Alexiadou & Lohndal 2018)

EPP DIAGNOSTICS

- superiority effects (modulo *wh*-in-situ: most OV langs)
- subject expletives (modulo pro-drop (Haider 2010); all langs in my sample)
- extraction asymmetries
- language-specific diagnostics (*Aux*-placement in English, South Sámi)
- psych verbs
- suggestion by Doreen Georgi: word order under valency-changing (not tested)

Korean case-marking

- Korean:
    - asymmetric differential argument marking (DAM) for S and O (Jun 2015)
    - symmetric DAM with *-nun* ...
- Japanese: asymmetric DAM lost, symmetric DAM with *-wa* ...

(36) a. cala   thokki mulessta
          turtle rabbit bite:PST:DECL
          'The turtle bit the rabbit.'   (Jun 2015: 181; citing Yi 1988)

   b. cala   (-ka) thokki mulessta
       turtle -NOM   rabbit bite:PST:DECL

   c. cala   thokki (-lul) mulessta
       turtle rabbit -ACC   bite:PST:DECL

Aux- vs. V-raising in OV languages: V-raising

(37) Guébie (Kru): SAuxOV#–SVO (not V2)

    a.   e^4 (li)^2 ɟa^{31}
        1SG.NOM eat.IPFV coconuts
        S   (V)   O
        'I eat coconuts.'   (Sande et al. 2019: 672)

    b.   e^4 (ji)^3 ɟa^{31} (li)^3
        1SG.NOM will   coconuts eat
        S   (Aux) O   (V)
        'I will eat coconuts.'   (Sande et al. 2019: 670)

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