

Diagnosing VP structure in OV and VO languages¹²

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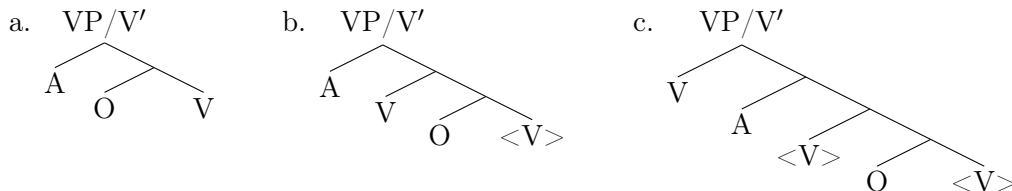
Main point 1 there might be languages with unmarked OV/VO alternation

Main point 2 in OV: V-to-the-left = verbal domain — in VO: V-to-the-left = functional domain

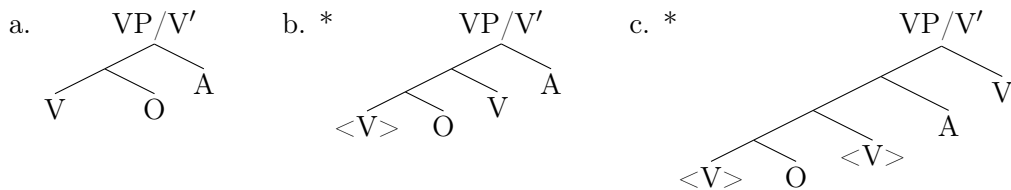
1 Introduction

- Central question: ARE THERE SYSTEMATIC SYNTACTIC OV/VO DIFFERENCES?
- Why should there be differences?
 - word order correlations (Greenberg 1963, Hawkins 1982, Dryer 1992)
 - ergative alignment → OV (Baker 2001)
 - German + Dutch vs. English + Scandinavian (Reuland & Kosemeijer, 1993; Neeleman & Weerman, 1999; Haider, 2010)
 - Japanese vs. English (Fukui, 1986; Oseki & Miyamoto, to appear) = German vs. English
 - word order needs to be (Mazuka, 1996) and is acquired early (Gervain, Nespore, Mazuka, Horie, & Mehler, 2008; Yoshida et al., 2010; Franck, Millotte, & Lassotta, 2011)
- **Theory:** Neeleman (2015): capturing unmarked word order variability in and across languages
 - neutral order = base generation + leftward head-movement
 - ⇒ phrasal (A-bar-)movement = marked order
 - in VP: restrictions on case licensing ('first merge')
 - ⇒ in VO: 'rightward' licensing ⇒ obligatory V-raising (sometimes)
 - ⇒ in OV: 'leftward' licensing ⇒ no V-raising (also Haider 2010)
 - ⇒ **not considered: optional V-raising** (1)

(1) predicted neutral OV word-orders of {V, O, A}: /A O V/, /A V O/, /V A O/



(2) unpredicted neutral VO orders of {V, O, A}: /O V A/, /O A V/



⇒ **prediction: OV allows neutral VO order, VO never allows neutral OV order** (3)

¹Glosses follow the Leipzig Glossing Rules (Bickel, Comrie, & Haspelmath, 2008). The following abbreviations are used in the text and in the glosses: 1 = First person, 2 = Second person, 3 = Third person, ACC = Accusative, ADV = Adverbial, ALL = Allative, AUX = Auxiliary, CAUS = Causative, CONNEG = Connegative, DAT = Dative, DEM = Demonstrative, DO = Direct object, EVD = Evidential particle, FREQ = Frequentive, FUT = Future, GEN = Genitive, ICL = Interrogative clitic, ILL = Illative, IN = Inessive, INF = Infinitive, IO = Indirect object, NEG = Negative, NEG V = Negative verb, NOM = Nominative, PAR = Partitive, PL = Plural, PRS = Present, PRT = Particle, PST = Past, PTC P = Participle, SG = Singular, TRANSL = Translative

²Aitäh, ray, kiitos to the people who provided judgements and commentary! Estonian: Marin Jänes; Udmurt: Svetlana Edygarova, Anna Semenova; Finnish: Susanna and Lauri Tavi, Saara Huhmarniemi, Satu Manninen, Finnish IRC users.

- (3) **Udmurt**: every V-position seems possible
- a. Атае нянез шори **кариз**.
father bread:ACC in.two make:PST.3SG
'The/a father broke the bread in two.'
 - b. Атае нянез **кариз** шори.
father bread:ACC make:PST.3SG in.two
 - c. Атае **кариз** нянез шори.
father make:PST.3SG bread:ACC in.two

⇒ new analysis for postverbal elements in SOV languages (cf. Öztürk 2013)

⇒ in VO: everything to the left of VO = functional domain

– **preverbal domain in OV** ≠ **preverbal domain in VO**

- this talk: apply VP structure diagnostics
- Languages: Uralic (OV: Udmurt, Estonian; VO: Finnish) and Germanic (OV: German; VO: English)
- Typology of base-order and V-raising in table 1

		obligatory verb _{inf} raising	
		yes: where?	no: obligatorily?
		<i>v</i> , T, C	
OV	VO: ?	yes	no
VO	VO: English, Finnish	OV: German, Nenets	OV/VO: Udmurt, Estonian
		XVO: ?Mandarin	?

Table 1: A tentative typology of the interaction of obligatoriness of raising of non-finite verbs (columns) and basic word order (rows), and the resulting neutral surface word order (cells).

- everything: work in progress, only few informants

Structure

2 Word order variability + information structure

2.1 Focus placement

2.2 Verb particle placement

3 Partial predicate fronting

4 Extraction domains

5 Summary

A1 Non-applied diagnostics

A1.1 Adverbial intervention

A1.2 Binding

A2 OS order in OV and VO

2 Focus placement and word order variability

this section shows:

- VO order in OV languages can be derived via movement of V
- OV order in VO languages can only be derived via movement of O (= marked)

2.1 OV/VO alternation and information structure

- OV languages: preverbal X = focus, everything else precedes focus (Kim 1988:150)
- neutral information focus = *in situ* = complement of V (4) (cf. Skopeteas & Fanselow, 2010)

(4) Udmurt

- a. Ко́чыш жы́тазе пы́ддэ ню́нь **кары́лоз**.
 cat evening.IN foot.PL:2SG warm make:FUT.3SG
 ‘The cat will warm your feet this evening.’
- b. Ко́чыш жы́тазе ню́нь пы́ддэ **кары́лоз**.
 cat evening.IN warm foot.PL:2SG make:FUT.3SG
 ‘The cat will warm YOUR FEET this evening.’
- c. Ко́чыш ню́нь жы́тазе пы́ддэ **кары́лоз**.
 cat warm evening.IN foot.PL:2SG make:FUT.3SG

- some Uralic OV languages allow VO order: Udmurt, Estonian, Khanty (Nikolaeva, 1999), South Sámi (Magga & Magga 2012, Mikael Vinka p.c.)

- studies on OV/VO-alternation in **Udmurt**: non-systematic, ‘free’ variation: the pragmatic contexts that allow OV also allow VO (Orsolya Tánczos p.c.)

⇒ OV/VO alternation = semantically vacuous, as with other head-movements

- directly preverbal + sentence-final focus = neutral information focus (Orsolya Tánczos p.c.)³ (5) (7)

(5) Udmurt

- a. Ко́чыш **кары́лоз** жы́тазе пы́ддэ НЮ́НЬ.
 cat make:FUT.3SG evening.IN foot.PL:2SG warm
- b. Ко́чыш **кары́лоз** жы́тазе ню́нь пы́ддэ.
 cat make:FUT.3SG evening.IN warm foot.PL:2SG
- c. Ко́чыш **кары́лоз** ню́нь жы́тазе пы́ддэ.
 cat make:FUT.3SG warm evening.IN foot.PL:2SG

(6) C: What did Sasha watch in the cinema?

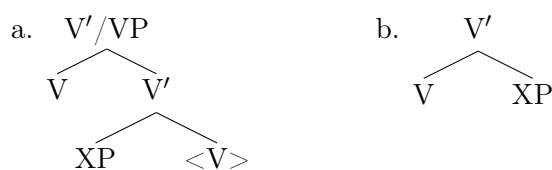
- a. Саша кинотеатрын терминаторез **учкиз**.
 Sasha:[NOM] cinema:IN Terminator:ACC see:PST.3SG
 ‘Sasha saw THE TERMINATOR in the cinema.’ (Tánczos 2010:225; bf by AS)
- b. Саша кинотеатрын **учкиз** терминаторез.
 Sasha:[NOM] cinema:IN see:PST.3SG Terminator:ACC
 ‘Sasha saw THE TERMINATOR in the cinema.’ (Tánczos 2010:225; bf by AS)

(7) C: Who saw the Terminator in the cinema?

- a. Терминаторез кинотеатрын Саша **учкиз**.
 Terminator:ACC cinema:IN Sasha:[NOM] see:PST.3SG
 ‘SASHA saw the Terminator in the cinema.’ (Tánczos 2010:224; bf by AS)
- b. %Терминаторез кинотеатрын **учкиз** Саша.
 Terminator:ACC cinema:IN see:PST.3SG Sasha:[NOM]
 ‘SASHA saw the Terminator in the cinema.’ (Tánczos 2010:224; bf by AS)

- analysis: sentence-final focus = stranded preverbal focus: (8a) » (8b) (Skopeteas & Fanselow 2010)

(8) This talk’s preferred (a) and dispreferred (b) analysis of VO order in OV



³There is also Y-Foc-V-X order in Udmurt (Tánczos 2010). There is no reason to assume that Udmurt can’t have both V-raising *and* extraposition, dislocation, etc.

- to investigate: 1. Is every V-position possible? – 2. Are there mirror-image effects (Neeleman 2015)?
- **Estonian** shows the pre=post-effect as well (9) (contrary to Ehala 2006)

(9) **Estonian:** non-finite V + particle

- a. Ema on lapselt MÄNGUASJA ära **võtnud**.
 mother:[NOM] AUX.PRS.3SG child:ABL toy:ACC PRT take.PTCP
 ‘Mother has taken THE TOY away from the child.’
- b. Ema on lapselt **võtnud** MÄNGUASJA ära.
 mother:[NOM] AUX.PRS.3SG child:ABL take.PTCP toy:ACC PRT
- c. Ema on **võtnud** lapselt MÄNGUASJA ära.
 mother:[NOM] AUX.PRS.3SG take.PTCP child:ABL toy:ACC PRT

- OV sentence-final focus \neq Slavic sentence-final focus (Russian: Kallestinova 2007, Serbian: Boban Arsenijević p.c.):

- SOV/OSV order \neq verb focus
- OSV order = subject focus
- not contrastive (in contrast to Serbian)

\Rightarrow no dedicated postverbal or sentence-final A-bar-position

- **some Uralic VO languages allow OV order:** Finnish (10), North Sámi (11)

(10) **Finnish:** initial focus/emphasis

- a. *Jussi **romaanin** kirjoitti.
 Jussi novel wrote
 int. ‘Jussi wrote a novel.’ (Holmberg 2000:124)
- b. JUSSI **romaanin** kirjoitti.
 Jussi novel wrote
 ‘I was Jussi who wrote a novel.’ (Holmberg 2000:125)
- c. Milloin Jussi **romaanin** kirjoitti?
 when Jussi novel wrote
 ‘When did Jussi write a novel?’ (Holmberg 2000:125)
- d. Onpas Jussi **romaanin** kirjoittanut.
 has.FOC Jussi novel written
 ‘Jussi HAS written a novel.’ (Holmberg 2000:125)
- e. Miksi Jussi ei **romania** kirjoittaisi?
 why Jussi NEGV novel would.write
 ‘Why would Jussi not write a novel?’ (Holmberg 2000:130)

(11) **North Sámi:** contrastive focus

- A: Oaččun go mun máistit **dan guoli**?
 get Q I.NOM taste that fish.ACC
 ‘May I try that fish?’
- B: Dieđusge! Mun aiggun **bierrgu** máistit.
 of-course I.NOM will meat.ACC taste
 ‘Of course! I will try the meat.’

- in contrast to Udmurt + Estonian: VO order = always acceptable; OV order = information-structurally marked (Vilkuna 1989, Holmberg 2000, Kristine Bentzen p.c.), conditions shown in (12)

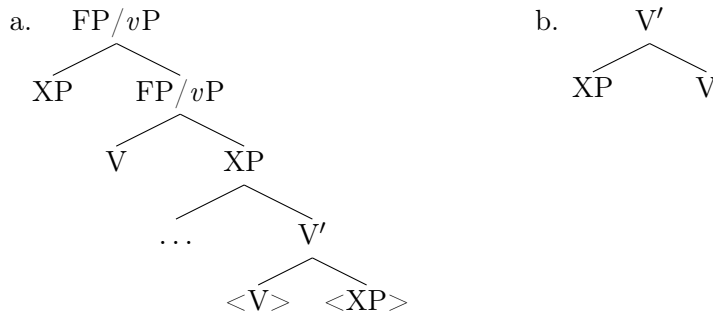
(12) OV contexts in North Sámi and Finnish (following Kristine Bentzen p.c., Holmberg 2000):

- a. strongest: object = topic
- b. given >> new
- c. contrast
- d. clause-initial focus
- e. embedded > matrix-clause (= backgrounding)

⇒ claim: preverbal object ≠ neutral information focus BECAUSE preverbal object ≠ complement position of V (*ex situ* focus, Drubig 2003)

- analysis: **OV order in VO languages always involves movement of O**

(13) This talk's preferred (a) and dispreferred (b) analysis of OV order in VO



- there are no VO languages with directly preverbal focus (Czypionka 2007)
- exceptions, e.g. Mócheno and Dinka (Cognola 2013, 2015), involve O-movement

2.2 Verb-particle stranding

- grammaticalised verb particles (PRT): only occur **in situ**, stranded, or pied-piped (Janke & Neeleman 2012: 171)

⇒ PRT = diagnostic for V-movement (Koster 1975, Haider 2010, 2013, Janke & Neeleman 2012)

⇒ **V-raising** ⇒ **non-adjacent PRT** (14)

(14) Janke & Neeleman (2012:170ff.)

- a. John *looked* (**up**) the information (**up**).
 b. John *sent* (**%off**) the stockholders (**off**) a schedule.

- Alas: no Germanic-like verb-particle constructions in Udmurt and Finnish (Schmidt 2016)
- German V2: verb particles only strand in clause-final position

(15) **German**

- a. Ich *sehe* bis morgen diese Dokumente **durch**.
 I look until tomorrow these documents PRT
 'I shall look over these papers by tomorrow.'
 b. *Ich *sehe* bis morgen **durch** diese Dokumente.
 I look until tomorrow PRT these documents
 c. *Ich *sehe* **durch** bis morgen diese Dokumente.
 I look PRT until tomorrow these documents
 d. *Ich **durch**-*sehe* bis morgen diese Dokumente.
 I PRT-look until tomorrow these documents

- Estonian V2: verb particles strand in any postverbal position: (15b,c) vs (16b,c)

(16) **Estonian**

- a. Ma *vaatan* need paberid homseks **üle**.
 1SG look:PRS.1SG those:PL.ACC paper:PL.ACC tomorrow:TRANSL PRT
 'I shall look over those papers by tomorrow.' (Muischneck, Müürisep, & Puolakainen, 2013)
 b. Ma *vaatan* need paberid **üle** homseks.
 1SG look:PRS.1SG those:PL.ACC paper:PL.ACC PRT tomorrow:TRANSL
 c. Ma *vaatan* **üle** need paberid homseks.
 1SG look:PRS.1SG PRT those:PL.ACC paper:PL.ACC tomorrow:TRANSL
 d. *Ma **üle**-*vaatan* need paberid homseks.
 1SG PRT-look:PRS.1SG those:PL.ACC paper:PL.ACC tomorrow:TRANSL

- German non-finite V: verb particles are only left-adjacent, only adjuncts occur post-V

(17) **German**

- a. Die Mutti hat diese Dokumente vorhin **durch**-gesehen.
 the mother has those documents earlier PRT-looked
 ‘Mother has looked over those papers earlier.’
- b. Die Mutti hat (***durch**) diese Dokumente (***durch**) vorhin gesehen.
 the mother has PRT those documents PRT earlier looked
- c. Die Mutti hat (***durch-gesehen**) diese Dokumente (**durch-gesehen**) vorhin.
 the mother has PRT-looked those documents PRT-looked earlier
- d. Die Mutti hat diese Dokumente (**durch-gesehen**) (***durch**) vorhin (***durch**).
 the mother has those documents PRT-looked PRT earlier PRT

- Estonian non-finite V: verb particles \neq leftward non-adjacent \Rightarrow (17b) = (18b)
- + non-finite Vs appear in any postverbal position \Rightarrow (17c) \neq (18c)
- + PRT of non-finite Vs appear in any post-finite position \Rightarrow (17d) \neq (18d)
- + PRT appear in any post-finite position \Rightarrow (15) \neq (16)

(18) **Estonian**

- a. Ema on need paberid varem **ü**le vaadanud.
 mother:[NOM] AUX.PRS.3SG those:PL.PAR paper:PL.PAR earlier PRT look.PTCP
 ‘A/the mother has looked over those papers earlier.’
- b. Ema on (***ü**le) need paberid (***ü**le) varem
 mother:[NOM] AUX.PRS.3SG PRT those:PL.PAR paper:PL.PAR PRT earlier
 vaadanud.
 look.PTCP
- c. Ema on (**ü**le vaadanud) need paberid (**ü**le
 mother:[NOM] AUX.PRS.3SG PRT look.PTCP those:PL.PAR paper:PL.PAR PRT
vaadanud) varem.
 look.PTCP earlier
- d. Ema on need paberid (**ü**le) vaadanud (**ü**le) varem
 mother:[NOM] AUX.PRS.3SG those:PL.PAR paper:PL.PAR PRT look.PTCP PRT earlier
 (**ü**le) .
 PRT

\Rightarrow optional V-raising in Estonian

2.3 Conclusion

- evidence for optional V-raising in OV (Udmurt + Estonian)
- evidence against optional base-generated OV in VO (Finnish)

3 Partial predicate fronting

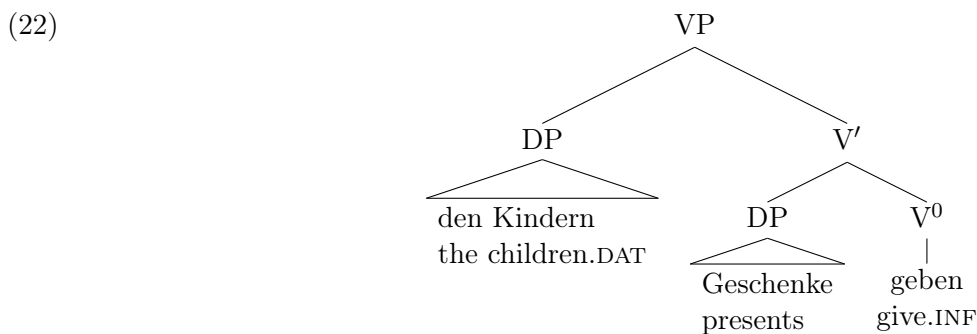
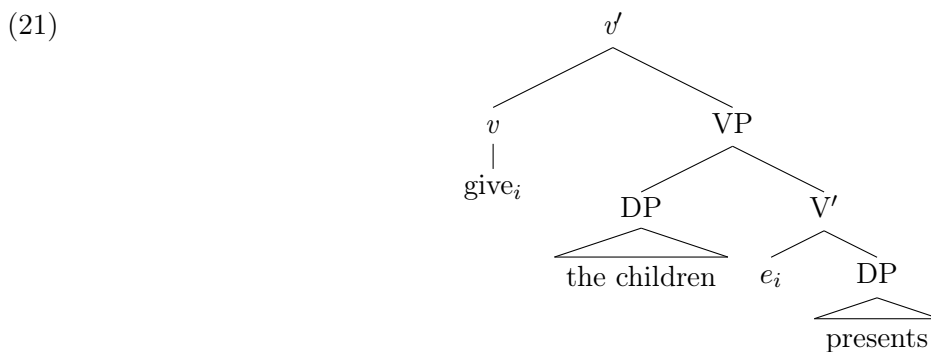
this section shows:

- OV languages allow for partial VP fronting
- availability of full VP-fronting is a V-to-T diagnostic
- fronting = **constituency test** for VP (Pesetsky 1995, Phillips 2003, Haider 2010, Janke & Neeleman 2012, Bruening 2014)
- availability of *partial/remnant VP fronting* in German vs. English ((19) vs. (20)):

- (19) Eddie wanted to show the document to the police... (Haider, 2010, 346)
- ... and **shown the document to the police** he has indeed.
 - *... and **shown** he has **the document to the police** indeed.
 - *... and **shown the document** he has **to the police** indeed.
 - *... and **shown to the police** he has **the document** indeed.

- (20) **German** (following Haider 2010: 346)
- [Die Dokumente der Polizei gezeigt]** hat er.
the documents:ACC the police:DAT shown has he
'[Shown the document to the police] he has (indeed).'
 - [Der Polizei gezeigt]** hat er **die Dokumente**.
the police:DAT shown has he the documents:ACC
 - [Die Dokumente gezeigt]** hat er **der Polizei**.
the documents:ACC shown has he the police:DAT
 - [Gezeigt]** hat er **[die Dokumente] [der Polizei]**.
shown has he the documents:ACC the police:DAT

- historically debated as [\pm scrambling] (Thiersch 1985, Den Besten & Webelhuth 1987, Müller 1998; contra: Fanselow 1993, 2002, Haider 2010)
 - intra-language differences = best explained by *constituency* (Philips 2003, Landau 2007, Janke & Neeleman 2012)
- \Rightarrow different VP-structure in VO (21) vs OV (22) due to V-raising in VO (following Haider 2010)
- \Rightarrow different fronting options (+ scrambling)



- \Rightarrow **prediction: OV always allows for partial-VP fronting; VO has extra restrictions**
- borne out for Udmurt (23) and Estonian (24)

- (23) **Udmurt**
- Доми **нылпиослы кузьымъёсты сёты-ны** медэ.
Domi:[NOM] children:DAT gift:PL:ACC give-INF intend:PRS.3SG
'Domi intends to give presents to the children.'
 - Нылпиослы кузьымъёсты сётыны** Доми медэ.
children:DAT gift:PL:ACC give:INF Domi:[NOM] intend:PRS.3SG

- c. **Сётыны** Доми нылпиослы кузьымъёсты медэ.
give:INF Domi:[NOM] children:DAT gift:PL:ACC intend:PRS.3SG
- d. **Кузьымъёсты сётыны** Доми нылпиослы медэ.
gift:PL:ACC give:INF Domi:[NOM] children:DAT intend:PRS.3SG
- e. **Нылпиослы сётыны** Доми кузьымъёсты медэ.
children:DAT give:INF Domi:[NOM] gift:PL:ACC intend:PRS.3SG

(24) **Estonian:** VP fronting in OV order to preverbal position

- a. Ema on varem **kingitusi lapsele kinki-nud.**
mother.NOM AUX.3SG earlier present:PL.PAR child:PL.ALL give-PTCP
'A/the mother has given presents to (the) children.'
- b. ?**Kingitusi lapsele kinki-nud** on (varem) ema (varem).
present:PL.PAR child:PL.ALL give-PTCP AUX.3SG earlier mother.NOM earlier
- c. **Kingitusi kinki-nud** on ema varem **lapsele.**
present:PL.PAR give-PTCP AUX.3SG mother.NOM earlier child:PL.ALL
- d. **Lapsele kinki-nud** on ema varem **kingitusi.**
child:PL.ALL give-PTCP AUX.3SG mother.NOM earlier present:PL.PAR
- e. ?**Kinki-nud Lapsele** on ema varem **kingitusi lapsele.**
give-PTCP AUX.3SG mother.NOM earlier present:PL.PAR child:PL.ALL

- also grammatical as movement to far left periphery + with VO order (25)
- optional raising + scrambling ⇒ enhanced fronting possibilities

(25) **Estonian:** fronting VO order to far left periphery

- a. **Ost-ma kingitusi** ema *peab* täna **lapsele.**
buy-MAINF present:PL.PAR mother.NOM must.PRS.3SG today child:PL.ALL
'A/the mother had to buy presents for (the) children.'
- b. **Ost-ma lapsele** ema *peab* täna **kingitusi.**
buy-MAINF child:PL.ALL mother.NOM must.PRS.3SG today present:PL.PAR
'A/the mother had to buy presents for (the) children.'
- c. **Ost-ma lapsele kingitusi** ema *peab* täna.
buy-MAINF child:PL.ALL present:PL.PAR mother.NOM must.PRS.3SG today
'A/the mother had to buy presents for (the) children.'

- Udmurt and Estonian pattern with German
- **Finnish** V-to-T prohibits even full VP-fronting (26b) (as in French (Authier 2011:198f.))

(26) **Finnish**

- a. Merja on **antanut lapsille lahjat.**
Merja be:3SG give:PTCP child:PL.ALL present:PL.[ACC]
'Merjaa has given presents to (the) children.'
- b. ***Antanut lapsille lahjat** Merja on.
give:PTCP child:PL.ALL present:PL.[ACC] Merja be:3SG
- c. ***Antanut** Merja on lapsille lahjat.
give:PTCP Merja be:3SG child:PL.ALL present:PL.[ACC]
- d. ***Antanut lahjat** Merja on lapsille.
give:PTCP present:PL.[ACC] Merja be:3SG child:PL.ALL
- e. ***Antanut lapsille** Merja on lahjat.
give:PTCP child:PL.ALL Merja be:3SG present:PL.[ACC]

- grammatical cases of V-fronting (Vilkuna 1989:99,135ff.) are *actual* remnant VP/TP-fronting (Schmidt 2016), as in Scandinavian (Engels & Vikner 2006, Trinh 2009)

Conclusion

- verb-final VP structure allows for partial-VP fronting
- optional OV/VO enhances fronting possibilities
- V-to-T/C prohibits fronting of ‘VP’

4 Preverbal extraction domains

this section shows:

- **preverbal domain in OV \neq preverbal domain in VO**
- subjects are islands to extraction in English (= CED/subject condition)

- (27)
- What_i** does Peter promise [**to read e_i**] on vacation?
 - ***What_i** does [**to read e_i**] on vacation annoy Peter?
 - ***What_i** does [**to read e_i**] on vacation please Peter?

- in Finnish: “extraction out of phrases that occupy a subject position is generally not available” (Huhmarniemi 2009:27), see (28) and (29)

(28) **Finnish:** extraction from DP

- Mitä_i** Pekka sai [tilaisuuden tutkia e_i]?
what Pekka got opportunity study
‘What Pekka got the opportunity to study?’ (Huhmarniemi 2009:28)
- ***Mitä_i** [tilaisuus tutkia e_i] sattuu harvoin omalle kohdalle?
what opportunity study happens rarely to oneself
int. ‘What does the opportunity to study happen rarely to you?’ (Huhmarniemi 2009:27)

(29) **Finnish:** extraction from CP

- Kenet_i** Pekka luuli [***(että) Merja oli tavannut e_i**]?
who.ACC Pekka thought that Merja had met
‘Who did Pekka think Merja had met?’ (Huhmarniemi, 2009, 29)
- ***Minkä** [(se) **että Pekka osti e_i**] harmitti Merjaa.
what.ACC it.NOM that Pekka bought annoyed Merja.PAR
int. ‘*What does when Pekka buys annoy Merja?’
(Huhmarniemi, 2009, 30)
- Minkä/Mitä_i** Merja vihaa [**että Pekka ostaa e_i**]?
what.ACC/PAR Merja dislike that Pekka buys
‘What does Merja hate that Pekka buys?’ (IRC: #reddit-suomi)

- assumption: not ‘subjects’, but functional Specs are islands (Haider 2010, also cf. Stepanov 2007)
- Haider’s (2010) proposal: all **preverbal** positions in VO are *functional* projections \Rightarrow pre-V = island \Rightarrow postverbal subjects can be non-islands, (30a) (also see Romance languages (Bianchi & Chesi, 2014)) \Rightarrow preverbal objects should be islands, (31) (\Rightarrow ‘Freezing’ due to functional projections or Antilocality (Bošković, 2015))

(30) **Finnish**

- Mitä_i** Merja-a harmitti [**tutkia e_i**]?
what.PAR Merja-PAR annoyed study.INF
lit. ‘What did to study annoy Merja?’
- Mitä_i** Merja vihaa [**tutkia e_i**]?
what.PAR Merja:[NOM] dislike study.INF
‘What does Merja hate to study?’

(31) **Finnish**

- a. **Mitä_i** Pekka sai [tilaisuuden tutkia *e_i*?]
 what.PAR Pekka got opportunity study.INF
 ‘What did Pekka get the opportunity to study?’ (Huhmarniemi 2009: 28)
- b. ***Mitä_i** Pekka [tilaisuuden tutkia *e_i*] sai?
 what.PAR Pekka opportunity study.INF got
- c. **Minkä_i** Yrjö laati [suunnitelman kaataa *e_i*?]
 what.ACC Yrjö made plan.ACC kill.INF
 ‘What did Yrjö make a plan to kill?’ (Huhmarniemi 2009: 48)
- d. ***Minkä_i** Yrjö [suunnitelman kaataa *e_i*] laati?
 what.ACC Yrjö plan.ACC kill.INF made

⇒ analysis of preverbal domain in VO: only functional projections

• **In contrast:** preverbal positions in OV languages can be non-functional projections (see (1))

⇒ prediction: extraction from preverbal positions is always licit in OV languages (32) to (34)

(32) **German**

- a. ?**Was_i** hat Peter im Urlaub [*e_i zu lesen*] genervt?
 what has Peter:[ACC] in-the vacation to read annoy.PTCP
 ‘What is the x such that it annoyed Peter when Peter read x on vacation?’
- b. **Was_i** hat Peter im Urlaub [*e_i zu lesen*] gefallen?
 what has Peter:[DAT] in-the vacation to read please.PTCP
 ‘What is the x such that it pleased Peter when Peter read x on vacation?’

(33) **Estonian**

- a. Ma ei tea, **mida_i** Peeter puhkusel [*e_i lugeda*]
 1SG NEG.V.1SG know.CONNEG what.PAR Peter.NOM holiday.ADE read:INF
 tahtis.
 please:PRS.3SG
 ‘I don’t know what Peter wants to read on holiday.’
- b. Ma ei tea, **mida_i** Peetrile puhkusel [*e_i lugeda*]
 1SG NEG.V.1SG know.CONNEG what.PAR Peter.ALL holiday.ADE read:INF
 meeldib.
 please:PRS.3SG
 lit. *‘I don’t know what (does) to read please Peter on holiday.’

(34) **Udmurt**

- a. **Мар_i** отпускын Педор [*e_i лыдзыны*] яратэ?
 what holiday:IN Peter:[NOM] read:INF love:PRS.3SG
 ‘What does Peter like to read on holiday?’
- b. **Мар_i** Педор-лы отпускын [*e_i лыдзыны*] кельше?
 what Peter-DAT holiday:IN read:INF please:PRS3SG
 ‘What is the x such that it pleases Peter when Peter reads x on vacation?’

• IF Estonian and Udmurt postverbal elements = VP-internal

⇒ prediction: no extraction asymmetries between preverbal vs postverbal positions (35) to (37)

(35) **Estonian:** extraction from complement of [[**want**]]

- a. Ma ei tea, **mida_i** Peeter puhkusel [*e_i lugeda*]
 1SG NEG.V.1SG know.CONNEG what.PAR Peter.NOM holiday.ADE read:INF
 tahtis.
 please:PRS.3SG
 ‘I don’t know what Peter wants to read on holiday.’

- b. Ma ei tea, **mida_i** Peeter puhkusel meeldib [e_i lugeda].
 1SG NEG.V.1SG know.CONNEG what.PAR Peter.NOM holiday.ADE want:PRS.3SG
 read:INF
- c. ?Ma ei tea, **mida_i** Peeter [e_i lugeda] puhkusel
 1SG NEG.V.1SG know.CONNEG what.PAR Peter.NOM read:INF holiday.ADE
 tahtis.
 want:PRS.3SG

(36) **Estonian**: ALL-experiencer with NOM-object stimulus (supposedly)

- a. Ma ei tea, **mida_i** Peetrile puhkusel [e_i lugeda] meeldib.
 1SG NEG.V.1SG know.CONNEG what.PAR Peter.ALL holiday.ADE read:INF
 please:PRS.3SG
 lit. *‘I don’t know what (does) to read please Peter on holiday.’
- b. Ma ei tea, **mida_i** Peetrile puhkusel meeldib [e_i lugeda].
 1SG NEG.V.1SG know.CONNEG what.PAR Peter.ALL holiday.ADE please:PRS.3SG
 read:INF
- c. ?Ma ei tea, **mida_i** Peetrile [e_i lugeda] puhkusel meeldib.
 1SG NEG.V.1SG know.CONNEG what.PAR Peter.ALL read:INF holiday.ADE
 please:PRS.3SG

(37) **Udmurt**: extraction from subject of predicative clause

- a. **Мар_i** меда [e_i **ЛЫДЗЫНЫ**] кышкыт?
 what probably read:INF dangerous
 lit. *‘What to read is probably dangerous?’
- b. **Кытчы_i** меда кышкыт [e_i **МЫНЫНЫ**]?
 where probably dangerous go:INF
 lit. *‘Where to go is probably dangerous?’

Conclusion

- preverbal OV ≠ preverbal VO
- preverbal OV *can* be postverbal OV

5 Summary

- evidence for structural differences between OV and VO:
 - preverbal OV domain = extraction domain **vs** preverbal VO domain = extraction island
 - availability of partial-VP fronting in OV
 - unavailability of preverbal, neutral information focus in VO
- evidence for optional V-raising in OV languages:
 - OV/VO alternation is *unmarked*
 - sentence-final focus = preverbal focus = neutral information focus
 - free postverbal positioning of verb particles (Estonian only)
 - fronting of partial VPs in VO order (Estonian only)
- unavailability of full-VP fronting in V-to-T
- future research:
 - scope of quantifiers and adverbials

- more negative data
- more informants
- more languages (Sámi, Mordvin, Mari, Komi, Khanty, Nenets)

Appendix 1: Inapplicable diagnostics

Adverbial intervention

- VO languages require V-O adjacency (Haider 2010, Neeleman 2015), OV languages have scrambling ⇒ there are no V-OBL-O languages (Hawkins 2008)
- Problem: V-raising leads to surface V-X-O orders (Neeleman 2015, e.g. French)
- Finnish: has unsuppressable V-to-T/C + obliques = adverbials (Holmberg, Nikanne, Oraviita, Reime, & Trosterud, 1993; Huhmarniemi, 2012; Manninen, 2003)

Binding

- Binding as a sole diagnostic for hierarchical structure is broken (Bruening, 2014; Janke & Neeleman, 2012)
- Finnish and Udmurt employ *possessive suffixes* (PX) for binding (Huhmarniemi & Brattico 2015, Volkova 2014)
- Finnish PX allow unexpected binding behaviour
- highly variable judgements in Finnish (Manninen 2003: 229ff., p.c., vs. Kaiser 2000, 2002)
- Udmurt and Nenets/Ненец also show unusual binding behaviour (38),(39)

(38) Udmurt

- a. Атай-3-э пинал-ЫЗ яратэ.
 father-3SG-ACC child-NOM.3SG love:3SG
 ‘His child_i loves every father_i.’
- b. Пинал-ЫЗ атай-3-э яратэ.
 child-NOM.3SG father-3SG-ACC love:3SG

(39) Nenets/Ненец

- a. n’eb’a-da n’u-mta n’uoc’ao
 mother-3SG child-ACC.3SG kiss
 ‘The mother kissed her child.’ (Nikolaeva 2014:391)
- b. n’u-mta n’eb’a-da n’uoc’ao
 child-ACC.3SG mother-3SG kiss

Appendix 2: Availability of object-subject (OS) order

tentative:

- **OV: OS order within verbal domain without A-bar-movement**
- **VO: OS order only with functional peripheries and A-bar-movement**

Word order variation: OS order

- **OV languages:** OS order via definiteness and/or subject focus (40)–(42)
- prediction: OV allows OS order without A-bar-movement (functional peripheries)

(40) C: Who solved the problem yesterday?

- Gestern hat das Problem ein ENGLÄNDER gelöst. (German)
 yesterday has the problem an englishman solved
 ‘Yesterday, an englishman solved the problem.’ (Fanselow, 2012, 3)

(41) C: Who saw the Terminator in the cinema?

– Терминаторез кинотеатрын САША учкиз. Удмурт
 Terminator:ACC cinema:IN Sasha:[NOM] see:PST.3SG
 ‘SASHA saw the Terminator in the cinema.’ (Tánczos 2010:224)

(42) C: Who gave gifts to the children earlier?

- a. – Varem on lapsele kingitusi MÜÜJA kinkinud. (Estonian)
 earlier AUX.3SG children:PL.ALL gift:PL.PAR clerk:NOM give:PTCP
 ‘Earlier, a/the clerk gave presents to (the) children earlier.’
- b. – Varem on kingitusi lapsele MÜÜJA kinkinud.
 earlier AUX.3SG gift:PL.PAR children:PL.ALL clerk:NOM give:PTCP
 ‘Earlier, a/the clerk gave presents to (the) children earlier.’

• the sentences in (41) and (42) are fully grammatical — unlike OS orders in Russian (Kallestinova 2007:62)

• Problem: OV languages without OS-order, especially Dutch (Lamers 2001, Neeleman & van de Koot 2008)

⇒ maybe due to obligatory subject-raising (contra Haider 2010)

• **VO languages:** OS order via left periphery (43) or right periphery (44)

• prediction: VO does not allow OS order without A-bar-movement (functional peripheries)

(43) a. That cake I wouldn’t eat.

b. Kuulta voitti Samppa Lajunen. (Finnish)
 gold:PAR won Samppa Lajunen:NOM
 ‘Gold was won by Samppa Lajunen.’ (Kaiser 2006:317)

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

(44) a. POJALLE antoi mopon PULMU. (Finnish)

boy:ALL gave.3SG moped.ACC Pulmu[:NOM]
 ‘PULMU gave a moped TO THE BOY [and SIRKKU gave a moped TO THE GIRL].’
 (Manninen 2003:199; changes by AS)

b. MOPON antoi pojalle PULMU. (Finnish)
 moped.ACC gave.3SG boy:ALL Pulmu[:NOM]
 ‘PULMU gave the boy A MOPED [and SIRKKU gave the boy A SKATEBOARD].’
 (Manninen 2003:200; changes by AS)

• (44) is only okay with double contrast (contrastive topic?), see (45) (described by Manninen 2003:200)

(45) a. *Pojalle antoi mopon PULMU. (Finnish)

boy:ALL gave.3SG moped.ACC Pulmu[:NOM]

b. *Mopon antoi pojalle PULMU.
 moped.ACC gave.3SG boy:ALL Pulmu[:NOM]

c. *POJALLE antoi mopon Pulmu.
 boy:ALL gave.3SG moped.ACC Pulmu[:NOM]

d. *MOPON antoi pojalle Pulmu.
 moped.ACC gave.3SG boy:ALL Pulmu[:NOM]

• the Finnish sentence-final ‘kontrast position’ is a derived position:

– free post-object order of manner, time and space adverbials, all neutral (46)

(46) Sirkku ampui Pulmun {taitavasti, rannalla, keskiviikkona}.
 Sirkku shot:3SG Pulmu:ACC skillfully beach.ADE wednesday.ESS
 ‘Sirkku shot Pulmu skilfully on the beach on wednesday.’

– free pre-object order of adverbials: necessitates ‘kontrastive’ object (47) (Satu Manninen p.c.)

- (47) Sirkku ampui {taitavasti, rannalla, keskiviikkona} PULMUN.
 Sirkku shot:3SG skillfully beach.ADE wednesday.ESS Pulmu:ACC
 ‘Sirkku shot Pulmu skilfully on the beach on wednesday.’

– verb-modifying reading of manner adverbials in V-Adv-O order: only with ‘kontrast’

- (48) a. Me suutelimme rakastuneesti kaikkia sammakoita.
 we kissed:1PL lovingly all:PAR frogs:PAR
 ‘We lovingly kissed all the frogs.’ [event modifying] (Manninen 2003:11)
- b. Me suutelimme kaikkia sammakoita **rakastuneesti**.
 we kissed:1PL all:PAR frogs:PAR lovingly
 ‘We kissed all the frogs lovingly.’ [verb modifying] (Manninen 2003:11)
- c. Sirkku tappoi etanat **nopeasti**.
 Sirkku killed.3SG slugs.ACC fast
 ‘Sirkku killed the SLUGS fast.’ [no contrast] (Manninen 2003:19)
- d. Sirkku tappoi **nopeasti** ETANAT.
 Sirkku killed.3SG fast slugs.ACC
 ‘Sirkku killed the SLUGS fast (not the ants).’ [contrast] (Manninen 2003:20)

⇒ adverbials stay *in situ*, only O is in different position ⇒ no VP-internal reordering

• postverbal OS order in Finnish involves A-bar-movement (≠ preverbal OS order in OV languages)

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