

# The Prolepsis–Hyperraising scale: Evidence for a hierarchy of composite probes

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This work has been supported by the Austrian Science Fund (FWF) Project  
*Implicational hierarchies in clausal complementation* (P34012-G).

GLOW45 - April 2022

## This talk

- Prolepsis

(1) I believe of Nova that \*(she) likes salad.

- Hyperraising

(2) a. \*Nova seems (that) likes salad.

b. *Os meninos parecem [ que t viajaram ontem ]*.  
the boys seem.3PL [ that t traveled.3PL yesterday ]

‘The boys seem to have traveled yesterday.’ Braz. Portuguese  
[Martins and Nunes 2010: 145, (3a)]

- Cross-clausal A-dependencies: Languages differ in whether A-phenomena can span across finite clause boundaries.

- Case, agreement, A-movement (e.g., Raising-to-Subject/Object)

## Definition of the empirical domain $\mathfrak{A}$

Since Prolepsis and Hyperraising (as well as other constructions) share certain properties, we define an empirical domain unifying all relevant constructions.

Domain  $\mathfrak{A}$  includes configurations in which ...

- a **matrix A-element** (argument (position), Case assigner, agreement head) is in
- an **obligatory dependency** (Agree, movement, binding, predication) with **another element** (operator, argument (position), obligatorily bound pronoun, gap)
- situated in an **embedded finite clause**.

→ DPs involved into such dependencies:  $DP.\mathfrak{A}$

## Domain $\mathcal{A}$ constructions

- **Prolepsis**: obligatory dependency between the proleptic DP (**DP. $\mathcal{A}$** ) and an embedded element (pronoun, could be *pro*).  
  
(3) I believe **of Nova** that \*(**she**) likes salad.
- **Hyperraising** [**HyR**] (to subject [**RtS**] or object [**RtO**]): A-movement of a DP originating in the embedded finite clause (**DP. $\mathcal{A}$** ) to the matrix subject or object position.  
  
(4) *Os meninos parecem [ que t viajaram ontem ]*.  
*the boys seem.3PL [ that t traveled.3PL yesterday ]*  
'The boys seem to have traveled yesterday.' Braz. Portuguese  
[Martins and Nunes 2010: 145, (3a)]

## Domain $\mathfrak{A}$ constructions

- Long-distance Agree(ment) [LDA]: a matrix functional head obligatorily agrees with or assigns case to a DP (DP. $\mathfrak{A}$ ) originating in the embedded finite clause.

(5) *eni-r* [ *už-ā* *magalu* *b-āc'ru-ti* ] *b-iy-xo*.  
mother-DAT [ boy-ERG bread.III.ABS III-eat-PST.PRT-NMLZ ] III-know-PRES  
'The mother knows the boy ate the bread.'  
Tsez  
[Polinsky and Potsdam 2001: 584, (1b)]

### But not:

- A'-dependencies: *Wh*-movement, pure topicalization, relativization, (unless fed by a prior  $\mathfrak{A}$ -dependency)
  - Variable binding: not obligatory
- (6) Every bird is convinced that her owner is lazy.

## The challenge

- Disentangling superficially similar configurations
  - Prolepsis and Hyper-ECM may involve the same case-marking.
  - *pro* drop vs. Hyperraising (examples from Korean)
- (7) a. *Cheli-nun Yenghi-lul* [ *t yenglihay-ss-ta-ko* ] *mitnun-ta.*  
Cheli-TOP Yenghi-ACC [ *t smart-PST-DECL-COMP* ] believe-DECL  
'Cheli believes Yenghi to have been smart.' [Yoon 2007: 616, (1b)]
- b. *Cheli-nun Yenghi-lul* [ *pro yenglihay-ss-ta-ko* ] *mitnun-ta.*  
Cheli-TOP Yenghi-ACC [ *pro smart-PST-DECL-COMP* ] believe-DECL  
'Cheli believes of Yenghi that she was smart.' (our paraphrase)

# Roadmap

- Part 1: Domain  $\mathfrak{A}$  and characteristic properties
  - Unifying Prolepsis and Cross-clausal A-dependencies (CC $\mathfrak{A}$ )
  - Four (bundles of) properties
  - A cline of five configurations
- Part 2: Methodology for distinguishing constructions
  - A single language may have more than one configuration.
  - Configurations may appear identical or similar on the surface.
  - But they can be disentangled via combining properties.
- Part 3: Unified account of Domain  $\mathfrak{A}$  and its variation
  - Theoretical implementation: R(elator) Phrase and a CP
  - Fused C & R in some configurations—CP.R to the rescue
  - Composite probe hierarchy

Introduction

**Characteristic properties**

Methodology & CC $\mathcal{A}$  configurations

The composite probe hierarchy

Appendix

Distinction A: Productivity

Distinction B: Movement of DP. $\mathcal{A}$

Distinction C: A-Minimality

Distinction D: Semantic restrictions

# Characteristic properties



## The empirical landscape of $\mathcal{A}$

$\mathcal{A}$ -configurations		①	②	③	④	⑤
Known as		Prolepsis	HyR, LDA High Topic	Major Subject Object, RtO	HyR, LDA	HyR
A	Restricted matrix predicates (c-/I-selection)	no	yes	yes	yes	yes
B	Movement of DP. $\mathcal{A}$ within embedded clause	no	no	yes	yes	yes
C	A-Minimality (highest A-DP)	no	no	no	yes	yes
D	Semantic restrictions of DP. $\mathcal{A}$	yes	yes	yes	yes	no

- ① Buryat, Croatian, English, German, Japanese, Korean, Madurese, Mongolian, Nez Perce, Puyuma, Romanian...
- ② Brazilian Portuguese, Passamaquoddy
- ③ Japanese, Korean
- ④ Romanian, Tsez, Turkish
- ⑤ Brazilian Portuguese, Buryat, Mongolian, Nez Perce, Zulu, ?Uyghur

## Distinction A: Productivity

$\mathcal{A}$ -configurations		①	②	③	④	⑤
Known as		Prolepsis	HyR, LDA High Topic	Major Subject Object, RtO	HyR, LDA	HyR
A	Restricted matrix predicates (c-/I-selection)	no	yes	yes	yes	yes

- **Prolepsis ①**: possible in any context where a full propositional CP could occur (cf. Salzmann 2017).
- **CC $\mathcal{A}$  ②–⑤**: the class of verbs that allow ②–⑤ is smaller, both within and across languages, than the class of verbs that allow ①.
  - Tendency: restricted to verbs of knowledge, belief, and perception.
  - Some languages also allow ②–⑤ configurations with speech verbs.

## Example: Romanian RtO ④

- Romanian RtS/RtO-constructions: only possible with verbs of knowledge, perception, evidentials.

(8) *L-am auzit pe Mihai [ că repară casa ]*.  
him-have.1SG heard DOM Mihai [ that fixes house.the ]  
'I've heard that Mihai is fixing the house.'

[Alboiu and Hill 2016: 256, (1c)]

(9) \**L-am spus pe Victor [ că e fericit ]*.  
him-have.1SG said DOM Victor [ that is.3SG happy ]  
'I said that Victor is happy.'

[I. Giurgea, p.c.]

(10) *Am spus despre Victor [ că e fericit ]*.  
have.1SG said about Victor [ that is.3SG happy ]  
'I said about Victor that he is happy.'

[I. Giurgea, p.c.]

## Distinction B: Movement within the embedded clause

$\mathcal{A}$ -configurations		①	②	③	④	⑤
Known as		Prolepsis	HyR, LDA High Topic	Major Subject Object, RtO	HyR, LDA	HyR
A	Restricted matrix predicates (c-/l-selection)	no	yes	yes	yes	yes
B	Movement of DP. $\mathcal{A}$ within embedded clause	no	no	yes	yes	yes

- Base position of DP. $\mathcal{A}$ : diagnosed via island-sensitivity and connectivity effects

(11) Base positions of the DP. $\mathcal{A}$ :

a.  $V_{matrix}$  DP. $\mathcal{A}$  [ $CP$  ... *pro(noun)* ... ]

b.  $V_{matrix}$  [ $CP$  DP. $\mathcal{A}$  C [ ... *pro(noun)* ... ]]

c.  $V_{matrix}$  [ $CP$  C [ DP. $\mathcal{A}$  ]]

①

②

③–⑤

## No island-sensitivity: ① - ②

- (12) I believe *about Atin* that [the story that *she* captured the thief is untrue].  
English ① [Davies (2005): 659, (54b)]
- (13) *Esses carros<sub>i</sub> parecem* [ *que* [ *as pessoas que compraram pro<sub>i</sub>* ] *se*  
*these cars<sub>i</sub> seem.3PL* [ that [ the people who bought *pro<sub>i</sub>* ] REFL  
*arrependeram* ].  
repented ]  
'It seems that people who bought these cars regretted it.'  
Braz. Portuguese ② [Martins and Nunes (2010): 155, fn. 11, (ib)]

## Island-sensitivity: ③ - ⑤

- (14)? \**Mary-nun Yeonghi-lul* [ [ *t apeci-ka ha-si-nun* ] *sa.ep*]-i  
Mary-TOP *Yenghi-ACC* [ [ *t father do-HON-ADNOM* ] *business*]-NOM  
*manghay-ss-ta-ko sayngkakha-n-ta.*  
go.bankrupt-PAST-DECL-COMP think-PRES-DECL  
Int.: ‘Mary thinks that as for/it is Yeonghi (that) the business her father was running went bankrupt.’ Korean ③ [Lee 2016: 9, (17)]
- (15) \**Ion o mirosise pe Maria* [ *faptul* [ *că-și aranja plecare* ]].  
Ion CL smelled DOM *Maria* [ fact.the [ that-REFL arranged departure.the ]]  
‘Ion figured out the fact that Maria was arranging her departure.’  
Romanian ④ [Alboiu and Hill 2013: 7, (15c)]
- (16) \*‘*Aayat-onm hi-nees-nek-se* [CP [ *ke-kaa mamay’ac*  
woman-ERG 3.SBJ-O.PL-think-IPFV [CP [ when *children.NOM*  
*hi-pa-paay-no’* ], *hi-lloy-no’ qiiwn* ]].  
3SBJ-S.PL-arrive-FUT ], 3.SJB-be.happy-FUT old.man.NOM ]  
Int.: ‘The woman thinks that when the kids arrive, the old man will be happy.’  
Nez Perce ⑤ [Deal 2017: 5, (12)]

## Connectivity effects

- Connectivity effects vary language-specifically (see Appendix for data):
  - Case of DP.ϰ determined in a position below C  
(Japanese, Nez Perce, Korean, Tsez)
  - *Proper Binding Condition [PBC] violation*  
(Buryat, Japanese, Korean, Mongolian, Passamaquoddy, Romanian)
  - *Idiomatic construals of DP.ϰ with the lower predicate*  
(Brazilian Portuguese, Buryat, Mongolian, Uyghur, Zulu)
  - *Binding*  
(Buryat, Romanian, Zulu)
  - *NPI licensing by embedded negation*  
(Brazilian Portuguese, Japanese, Korean, Mongolian, Uyghur)

## Distinction C: A-Minimality

$\mathcal{A}$ -configurations		①	②	③	④	⑤
Known as		Prolepsis	HyR, LDA High Topic	Major Subject Object, RtO	HyR, LDA	HyR
A	Restricted matrix predicates (c-/l-selection)	no	yes	yes	yes	yes
B	Movement of DP. $\mathcal{A}$ within embedded clause	no	no	yes	yes	yes
C	A-Minimality (highest A-DP)	no	no	no	yes	yes

(17) CC $\mathcal{A}$  element [CP DP1 [ DP2 ] ]

- Restriction on DP. $\mathcal{A}$  to be the highest embedded argument
- Structurally defined: highest argument does not have to be a subject.
- It can also be an object relocated via A-movement to a position above the subject.



## No A-Minimality in ① - ③

- (18) Sheryl thought **about/of** Tim that **the police** would never catch **him**.  
English ① [Davies 2005: 654, (34a)]
- (19) *Esses professores parecem [ que a Maria gosta deles ]*.  
*these teachers seem.3PL [ that the Maria likes of.them ]*  
'It seems that Maria likes these teachers.' Brazilian Portuguese ②  
[Martins and Nunes 2010: 152, (21)]
- (20) *Na-nun Pwukhansan-ul [ mwul-i manhi nanta-ko ]*  
I-TOP Mt. Pwukhan-ACC [ **water-NOM** a.lot flow-COMP ]  
*sayngkakhanta.*  
think  
'I believe that there are a lot of springs flowing from Mt. Pwukhan.'  
Korean MS RtO ③ [Yoon 2007: 618, (4c)]

## A-Minimality in ④ - ⑤

- (21) \**Am auzit-o pe Mioara [ c-a invitat Gelu ]*.  
have.1SG heard-her DOM Mioara [ that-has invited Gelu ]  
Int.: ‘I heard from Mioara that Gelu invited her.’ (our paraphrase)  
Romanian ④ [Alboiu and Hill 2016: 268, (30c)]
- (22) \**bi sajən-ar badmə xar-a g3žə m3də-gd-3-b*  
1SG Sajana-INSTR Badma see-PST COMP know-PASS-PST-1SG  
Expected: ‘Sajana found out that Badma saw me.’  
(Lit.: ‘I was known by Sajana that Badma saw (me).’) Buryat ⑤  
[Bondarenko 2017a: 12, (44)]

## Distinction D: Semantic restrictions

$\mathfrak{A}$ -configurations		①	②	③	④	⑤
Known as		Prolepsis	HyR, LDA High Topic	Major Subject Object, RtO	HyR, LDA	HyR
A	Restricted matrix predicates (c-/I-selection)	no	yes	yes	yes	yes
B	Movement of DP. $\mathfrak{A}$ within embedded clause	no	no	yes	yes	yes
C	A-Minimality (highest A-DP)	no	no	no	yes	yes
D	Semantic restrictions of DP. $\mathfrak{A}$	yes	yes	yes	yes	no

- Four of the Domain  $\mathfrak{A}$  configurations show semantic restrictions.
- The restrictions vary across languages.
  - For example: topic requirements, specificity, evidentiality.

## Semantic restrictions in ① - ④

- (23) a. I know of firemen [ that they are available ]. *only generic*  
b. Nova said of a secretary [ that she is looking for him ]. *only specific*
- (24) \**Algum aluno parecia [ que ele ia viajar ].*  
*some student* seemed [ that he went travel ]  
'It seemed that some student was going to travel.'  
Brazilian Portuguese ② [Martins and Nunes (2010): 150, (14)]
- (25) *Ooku-no nihonzin-wa dareka-o [ rosiago-ga dekiru to ] omou.*  
Many-COP Japanese-TOP *someone-ACC* [ Russian-NOM be.able COMP ] think  
'Lots of Japanese think that someone specific can speak Russian.'  
Japanese ①/③ [Horn 2008: 232, (37b); based on Kitano 1990: 23-24, (74)]
- (26) \**Am miroșit pe cineva [ că ne minte ].*  
have.1 smelled DOM *someone* [ that 1PL.DAT lies ]  
Int.: 'I/we suspected that someone was lying to us.' Romanian ④  
[Alboiu and Hill 2016: 276, (46)]

## No semantic restrictions in ⑤

(27) *Algum aluno parecia [ que t ia viajar ].*  
*some student* seemed [ that *t* went travel ]

‘It seemed that some student was going to travel.’

Brazilian Portuguese ⑤ [Martins and Nunes (2010): 150, (14)]

## The full picture: Domain $\mathcal{A}$

$\mathcal{A}$ -configurations		①	②	③	④	⑤
Known as		Prolepsis	HyR, LDA High Topic	Major Subject Object, RtO	HyR, LDA	HyR
A	Restricted matrix predicates (c-/I-selection)	no	yes	yes	yes	yes
B	Movement of DP. $\mathcal{A}$ within embedded clause	no	no	yes	yes	yes
C	A-Minimality (highest A-DP)	no	no	no	yes	yes
D	Semantic restrictions of DP. $\mathcal{A}$	yes	yes	yes	yes	no

- ① Buryat, Croatian, English, German, Japanese, Korean, Madurese, Mongolian, Nez Perce, Puyuma, Romanian...
- ② Brazilian Portuguese, Passamaquoddy
- ③ Japanese, Korean
- ④ Romanian, Tsez, Turkish
- ⑤ Brazilian Portuguese, Buryat, Mongolian, Nez Perce, Zulu, ?Uyghur

# Methodology & CC $\mathfrak{A}$ configurations

## BP: Two configurations

- (28) *Os meninos parecem [ que t viajaram ontem ]*.  
 the boys seem.3PL [ that t traveled.3PL yesterd. ]  
 ‘The boys seem to have traveled yesterday.’

[Martins and Nunes 2010: 145, (3a)]

- (29) *Os meninos parecem [ que eles viajaram ontem ]*.  
 the boys seem.3PL [ that they traveled.3PL yesterd. ]  
 ‘The boys seem to have traveled yesterday.’

[Ibid.: 145, (3b)]

	Property	High Topic ②	HyR ⑤
i.	DP. $\mathfrak{A}$ can correspond to overt pronoun	yes (28)	no (29), (32)
ii.	DP. $\mathfrak{A}$ allows idiomatic construals	no (32)	yes (31)
iii.	DP. $\mathfrak{A}$ requires a topic interpretation	yes (34)	no (33)
iv.	Embedded movement, locality	no (35), (41)	yes (36), (42)



## Connectivity: Idiomatic construals

- Idiomatic construals:

- not possible with topicalization, A'-movement
- (often) possible with A-movement

(30) *A vaca, o João disse [ que foi pro brejo ]*.  
the cow the João said [ that went to.the swamp ]

Lit.: 'John said that the cow went to the swamp.'

\*Idiomatic: 'John said that things went bad.' [M&N 2010: 146, (6b)]

## Methodology

	Property	High Topic ②	HyR ⑤
i.	DP. $\mathfrak{A}$ can correspond to overt pronoun	yes (28)	no (29), (32)
ii.	DP. $\mathfrak{A}$ allows idiomatic construals	no (32)	yes (31)
iii.	DP. $\mathfrak{A}$ requires a topic interpretation	yes (34)	no (33)
iv.	Embedded movement, locality	no (35), (41)	yes (36), (42)

- Combine two properties which diagnose different constructions.
- Conclusion: “anything goes” disappears.
- Properties of ② are incompatible with those of ⑤.

## Idiomatic construals & pronouns

- Either idiomatic interpretation ⑤, or overt pronoun ②
- But not both simultaneously
- If the pronoun is used, only a literal interpretation is possible.

(31) *A vaca parece [ que t foi pro brejo ]*.  
the cow seems [ that t went to.the swamp ]

Lit.: 'It seems that the cow went to the swamp.'

\*②, ⑤

Idiomatic: 'It seems that things went bad'

\*②, ⑤

[Martins and Nunes 2010: 146, (6c)]

(32) *A vaca parece [ que ela foi pro brejo ]*.  
the cow seems [ that it went to-the swamp ]

Lit.: 'It seems that the cow went to the swamp.'

②, \*⑤

\*Idiomatic: 'It seems that things went bad'

\*②, \*⑤

[Martins and Nunes 2010: 150, (13)]

## Topic interpretation & pronouns

- Either a non-topic DP. $\mathfrak{A}$ , (5), or an overt pronoun (2)
- But not both simultaneously
- If the pronoun is used, only topic DP. $\mathfrak{A}$ s are possible.

(33) *Algum aluno parecia [ que t ia viajar ]*.  
some student seemed [ that t went travel ]  
'It seemed that some student was going to travel.' \* $\textcircled{2}$ ,  $\textcircled{5}$   
[Martins and Nunes 2010: 150, (14)]

(34) \**Algum aluno parecia [ que ele ia viajar ]*.  
some student seemed [ that he went travel ]  
'It seemed that some student was going to travel.' \* $\textcircled{2}$ , \* $\textcircled{5}$   
[Martins and Nunes 2010: 150, (14)]

## Embedded movement & topic interpretation

- Either no movement (island-insensitive) ②, or non-topic DP. $\mathfrak{A}$  ⑤
- But not both simultaneously
- If DP. $\mathfrak{A}$  is not a topic, it is moved.

(35) *Esses carros<sub>i</sub> parecem [ que [ as pessoas que compraram pro<sub>i</sub> ] se*  
*these cars<sub>i</sub> seem.3PL [ that [ the people who bought pro<sub>i</sub> ] REFL*  
*arrependeram ].*  
*repented ]*  
'It seems that people who bought these cars regretted it.' ②, \*⑤  
[Martins and Nunes 2010: 155, fn. 11, (ib)]

(36) \**Só três carros<sub>i</sub> parecem [ que [ as pessoas que compraram pro<sub>i</sub> ]*  
*only three cars<sub>i</sub> seem.3PL [ that [ the people who bought pro<sub>i</sub> ]*  
*se arrependeram ].*  
*REFL repented ]*  
'It seems that people who bought these cars regretted it.' \*②, \*⑤  
[R. Lacerda, p.c.]

## A-Minimality & topic interpretation (& pronoun)

- Either no A-Minimality ②, or non-topic DP. $\mathfrak{A}$  ⑤
- But not both simultaneously
- If DP. $\mathfrak{A}$  is not a topic, it is undergoes A-movement.

(37) *Esses professores parecem [ que a Maria gosta deles ]*.  
these teachers seem.3PL [ that the Maria likes them ]  
'It seems that Maria likes these teachers.' ②, \*⑤  
[Martins and Nunes 2010: 152, (21)]

(38) \**Alguém parece [ que a aluna viu t ]*.  
someone seems [ that the student saw t ]  
Int.: 'It seems that the student saw someone.' \*②, \*⑤  
[Kobayashi 2020: 6, (13b)]

## Summary

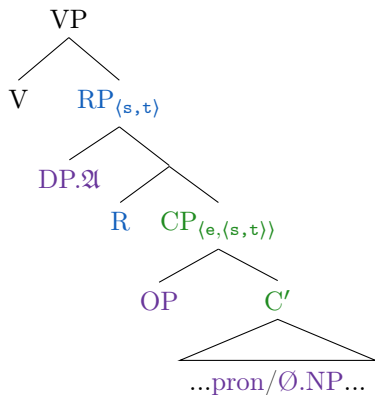
$\mathfrak{A}$ -configurations		②	⑤
Known as		High Topic HyR	HyR
B	Movement of DP. $\mathfrak{A}$ within embedded clause	no	yes
C	A-Minimality (highest A-DP)	no	yes
D	Semantic restrictions of DP. $\mathfrak{A}$	yes	no

- BP: (at least) two constructions.
- They cannot be subsumed under one configuration: mixing and matching of the properties is not possible.
- Combined testing allows us to tease the configurations apart.
- Reconciles HyR approaches (a. o. Nunes 2008) and Prolepsis-like approaches (den Dikken 2017).

# The structure of Domain $\mathfrak{A}$ configurations

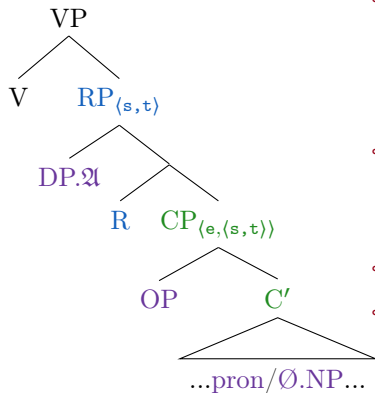


## The syntax of Prolepsis



- R(elator) P(hrase) (Den Dikken 2006, 2017): **R** relates Spec,RP (an A-position) and its complement via predication.
- The embedded **CP** is turned into a predicate by an OP inserted in Spec,CP (Den Dikken 2017, Salzman 2017).
- **DP. $\mathfrak{A}$**  is base generated in Spec,RP and saturates the CP-predicate—**RP** is a semantic proposition.
- The OP binds the embedded pronoun (e.g. via binding of a situation pronoun; Elbourne 2005, 2013).

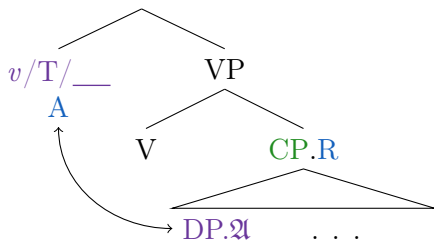
## Deriving A - D in Prolepsis



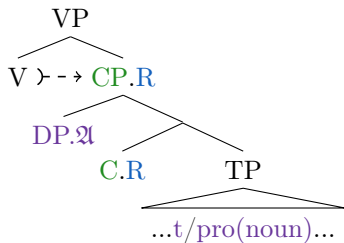
- ↪ **A Productivity:** Any verb that selects a proposition can combine with either RP or a propositional CP (no OP).
- ↪ **B No embedded movement:** DP. $\mathfrak{A}$  in matrix clause, OP in Spec,CP base generated.
- ↪ **C A-Minimality:** N/A
- ↪ **D Semantic restrictions:** via R (cf. Landau 2011)

## Cross-clausal A-dependencies [CC $\mathfrak{A}$ ]: ② - ⑤

- CC $\mathfrak{A}$ : DP. $\mathfrak{A}$  is base generated in the embedded clause

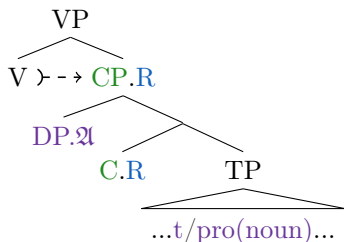


## CP.R: A fused projection



- Fusion of RP (A-properties) and CP (A'-properties)—a bundled CP.R.
- Fused C.R is not available in all languages.
  - English: RP and CP can only occur separately, leading to Prolepsis ①, and disallowing CC $\mathfrak{A}$  ②–⑤.
  - CP.R is similar to a (un)bundled IP, bundling tense, agreement (see Bobaljik and Thráinsson 1998).
- CP.R is lexically selected—not all verbs can combine with a CP.R complement.

## CP.R: A mixed A'/A projection

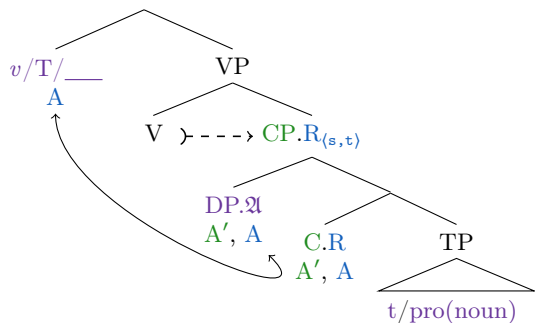


- The combination of C (A') and R (A) yields a mixed A'/A element, a composite probe in the sense of van Urk (2015):
  - C-part: may impose A'-flavors (topic, Major Subject, others).
  - R-part: establishes a predication relation between the argument in its specifier and its complement, thereby setting up an A-dependency.
- Semantically, C.R combines with a predicate—a complement with an open position.

## CP.R to the rescue!

\*A-after-A':

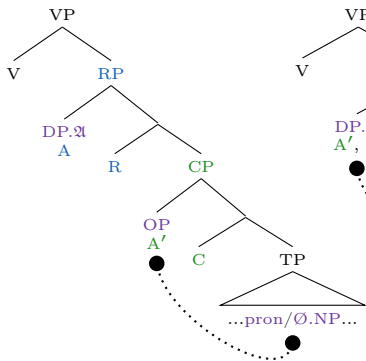
An A-dependency involving X cannot follow a pure A'-dependency with X.



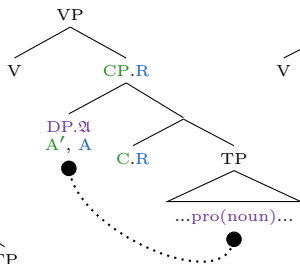
- Combined A'/A status of C.R and Spec,CP.R allows A-dependencies across CP.Rs.
- A regular CP is a pure A' domain, which is subject to the \*A-after-A' constraint.
- CP.R is able to 'rescue' \*A-after-A' violations—the DP. $\mathfrak{A}$  position is an eligible target for further A-relations.

## Three syntactic configurations

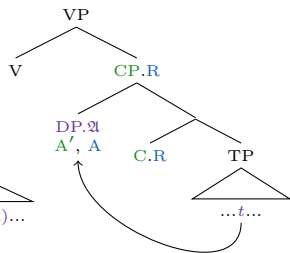
### Prolepsis ①



### CC $\mathfrak{A}$ w/o movement ②



### CC $\mathfrak{A}$ w/ movement ③–⑤



A:  $\rightarrow$  No selection ①

B:  $\rightarrow$  No island-sensitivity ①–②

$\rightarrow$  No connectivity effects ①–②

$\rightarrow$  Selection, fusion ②–⑤

$\rightarrow$  Island-sensitivity ③–⑤

$\rightarrow$  Connectivity effects ③–⑤

# The composite probe hierarchy



## Deriving configurations ③-⑤

$\mathcal{A}$ -configurations		①	②	③	④	⑤
Known as		Prolepsis	HyR, LDA High Topic	Major Subject Object, RtO	HyR, LDA	HyR
A	Restricted matrix predicates (c-/l-selection)	no	yes	yes	yes	yes
B	Movement of DP. $\mathcal{A}$ within embedded clause	no	no	yes	yes	yes
C	A-Minimality (highest A-DP)	no	no	no	yes	yes
D	Semantic restrictions of DP. $\mathcal{A}$	yes	yes	yes	yes	no

- ③ × A-Minimality, ✓ Semantic restrictions
- ④ ✓ A-Minimality, ✓ Semantic restrictions
- ⑤ ✓ A-Minimality, × Semantic restrictions

## A composite probe on C.R

- A'/A-distinction is related to features rather instead of structural positions (van Urk 2015).
- Features can combine, a single head can carry both A'- & A-features and become a composite probe.
  - Aldridge (2004, 2008, 2017), Coon and Bale (2014), Legate (2014), van Urk (2015), Bossi and Diercks (2019), Brannon and Erlewine (2020)
- RP [A] and CP [A'] fuse and render a composite probe [A'/A] on C.R.
  - [A] enables the DP. $\mathfrak{A}$  to take part in a matrix  $\mathfrak{A}$ -dependency.
  - [A'] is responsible for semantic restrictions s.a. topic or focus requirements.

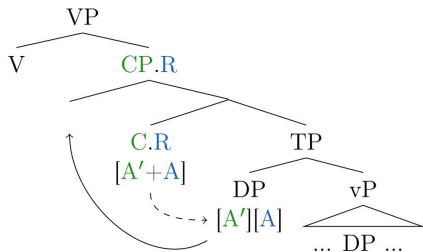
## Where does the three-way split come from?

- Composite probes vary in how dependent their parts are from each other in terms of satisfaction (Scott 2021, Deal 2015).
- A hierarchy of dependence arises:
  - **Conjunctive** probing/satisfaction  $[A' + A]$
  - **Separate dependent** probing/satisfaction  $[A' / A]$
  - **Separate independent** probing/satisfaction  $[A'] [A]$

(39)                    **The composite probe hierarchy**

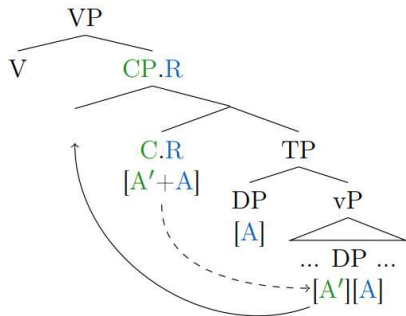
dependent  $\Leftarrow [A' + A] - [A' / A] - [A'] [A] \Rightarrow$  independent

### ③ - Conjunctive Satisfaction $[A'+A]$



- A conjunctive probe can target a goal iff it carries both matching features.
- All partly matching goals are ignored.

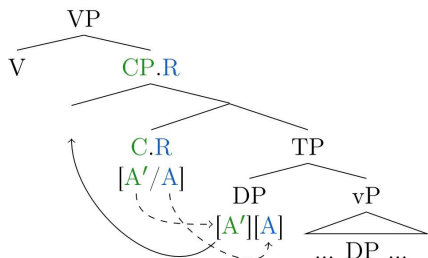
### ③ - Conjunctive Satisfaction $[A'+A]$



× **A-Minimality**: a higher DP can be skipped if it does not carry the relevant  $[A']$ -features but only a subset of matching features.

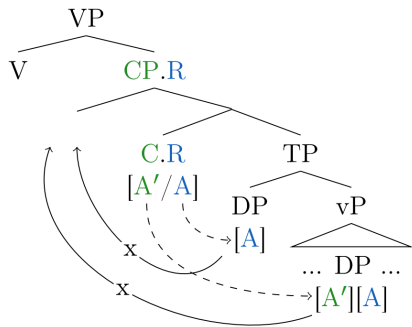
✓ **Semantic restrictions**: the DP.2 has to carry  $[A']$ -features which are responsible for the semantic restrictions.

## ④ - Dependent satisfaction [A'/A]



- The segments of the composite probe can find goals on their own, but cannot trigger feature satisfaction independently. (Coon et al. 2021, Coon and Bale 2014, Deal 2015, 2017)
- *Feature Gluttony* (Coon and Keine 2020): a higher-than-required number of partly fitting goals leads to failure of agreement.

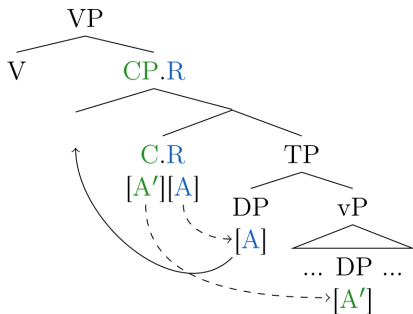
## ④ - Dependent satisfaction $[A'/A]$



✓ **A-Minimality**: if there is a closer partly matching DP, it blocks agreement with a lower DP.

✓ **Semantic restrictions**: in a felicitous agreement configuration, the highest DP carries  $[A']$ -features which are responsible for the semantic restrictions.

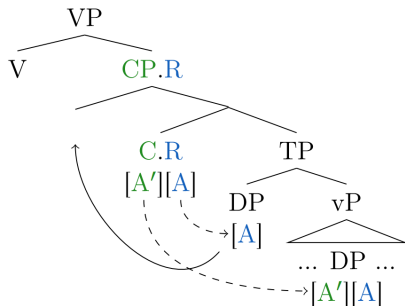
## ⑤ - Independent satisfaction $[A']][A]$



- The two probes probe independently of each other and are able to establish agreement and trigger movement on their own.
- The two probes can agree with two separate goals (Bossi and Diercks 2019).



## ⑤ - Independent satisfaction $[A']$ $[A]$



✓ **A-Minimality**: The  $[A]$ -probe finds the closest DP with  $[A]$ -features and attracts it.

× **Semantic restrictions**: Whether  $DP_{\mathcal{A}}$  carries  $[A']$ -features or not is irrelevant for agreement; the  $[A']$ -probe probes separately.

## What happens to the A'-probe?

- **Option 1:** it attracts an element on its own.
  - Mongolian: another DP can be topicalized simultaneously to HyR.

(40) *Buuz-iig bol Nara* [ *Dorj(-iig) t id-sen gej* ] *khel-sen.*  
*buuz-ACC TOP Nara.NOM* [ *Dorj(-ACC) t eat-PST COMP* ] *say-PST*  
'The buuz, Nara said that Dorj ate.' Mongolian ⑤  
[Fong 2019: 28, fn.29, (iib)]

- **Option 2:** it is ignored.
  - Preminger (2009, 2014): probes can fail without a crash of the derivation.
  - If no suitable goal is found: the result is not ungrammaticality but default agreement.
  - For CC $\mathcal{A}$ : if one or more of the probes fail the derivation leads to a non-CC $\mathcal{A}$  configuration.
  - CC $\mathcal{A}$  is always optional.

## The composite probe hierarchy in a nutshell

Emb. configuration $\rightarrow$		DP[A'] [A]	DP <sub>1</sub> [A] DP <sub>2</sub> [A'] [A]	DP <sub>1</sub> [A] DP <sub>2</sub> [A']	no DP
$\mathfrak{A} \downarrow$	C.R. probe $\downarrow$				
③	[A'+A]	CC $\mathfrak{A}$	CC $\mathfrak{A}$ (DP <sub>2</sub> )	no CC $\mathfrak{A}$	no CC $\mathfrak{A}$
④	[A'/A]	CC $\mathfrak{A}$	no CC $\mathfrak{A}$	no CC $\mathfrak{A}$	no CC $\mathfrak{A}$
⑤	[A'] [A]	CC $\mathfrak{A}$	CC $\mathfrak{A}$ (DP <sub>1</sub> )	CC $\mathfrak{A}$ (DP <sub>1</sub> )	no CC $\mathfrak{A}$

## The entire picture

$\mathcal{A}$		①	②	③	④	⑤
A	Restricted matrix predicates (c-/I-selection)	no	yes	yes	yes	yes
	(Apparent) Improper Move/Agree violation	no	yes			
	Complement of V	RP	CP.R			
B	Movement within embedded CP	no	no	yes	yes	yes
	DP. $\mathcal{A}$ base position	Spec,RI Spec,CP		gap position		
	Island-sensitivity	no		yes		
	Connectivity effects	no		yes		
C	A-Minimality (highest A-DP)	no	no	no	yes	yes
	Conjunctive A'/A probing	N/A		yes	no	
	Separate A'/A probing	N/A		no	yes	
D	Semantic restrictions of DP. $\mathcal{A}$	yes	yes	yes	yes	no
	Dependent A'/A probing	N/A			yes	no

## Summary

- Continuum of  $\mathcal{A}$ -configurations; disentagled via distinctions A-D.
- DP. $\mathcal{A}$ s are...
  - base generated in the matrix clause: ①
  - base generated in the embedded left periphery: ②
  - moved at least to the embedded CP.R: ③–⑤
- CC $\mathcal{A}$  in ②–⑤ involves a bundled C.R head.
- C.R carries a composite probe  $[A'/A]$  which can be structured in three different ways:
  - Conjunctive satisfaction
  - Dependent satisfaction
  - Independent satisfaction

## Conclusion

- Combination of the findings from a range of typologically different languages.
- Covering common features of different types of  $\mathfrak{A}$ -configurations as well as the variation across languages.
- Methodology to disentangle  $\mathfrak{A}$ -constructions within a single language.
- Combined testing of characteristic properties A-D; mixing and matching not possible, not anything goes.

Thank you!

# Appendix



## Some technical details

- Two ways in which fusion of C and R could take place (which we are currently investigating):
  - C & R fuse into a single head at the lexical level.
  - The composite head is formed derivationally via head-movement.
- What kind of features?
  - May vary across languages; A-feature options:  $\phi$ ,  $\theta$ , and D.
  - $\Phi$ -features are good candidates for Brazilian Portuguese since RtS is not possible with a 1.SG pronoun (Nunes 2008: 101, (40a)).
  - Another option: delta-features proposed in Miyagawa (2010).
  - But these may not be sufficient, since Topic and/or Focus A'-features do not suffice to capture all the attested semantic restrictions (see, e.g., the Major Subject restriction in Korean, or the “life-time effect” observed for Japanese in Horn 2008).

## BP: Idiomatic construal & islands (& pronouns)

- (41) *A vaca parece [ que [ o fato de que ela foi pro brejo ] incomodou  
the cow seems [ that [ the fact of that it went to.the swamp ] disturbed  
o Renato ].*  
the Renato ]

Only literal.: 'It seems that the fact that the cow went to the swamp  
disturbed Renato.'

②, \*⑤

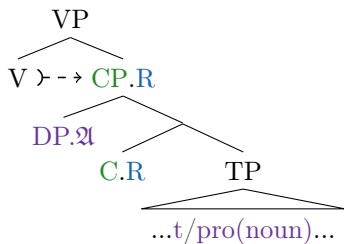
- (42) \**A vaca parece [ que [ o fato de que t/pro foi pro brejo ]  
the cow seems [ that [ the fact of that t/pro went to.the swamp ]  
incomodou o Renato ].*  
disturbed the Renato ]

Idiomatic: 'It seems that the fact that things went bad disturbed Renato.'  
Lit.: 'It seems that the fact that the cow went to the swamp disturbed  
Renato.'

\*②, \*⑤

[R. Lacerda, p.c.]

## CP.R: Not simply an A-domain



- CP.R is not simply an A-projection (or not a phase etc.)
- A-nature arises *only* for the argument that enters the predication relation.
- Any further XPs in Spec,CP.R remain regular A' elements.
- Wurmbrand 2019: examples from Japanese showing that only the DP. $\mathfrak{A}$  appears in an A-position; at the same time, other DPs that move through the embedded CP obligatorily qualify as A' elements.

## CP remains an A' domain/phase

- (43) Japanese ③: CP.R is not transparent for other kinds of A-movement  
(s.a. long distance A-scrambling)

a?\*[Nissan-to *Honda-ni* ]<sub>i</sub> *otagai<sub>i</sub>-no supai-ga* [ *John-o*  
[Nissan-and Honda-with ]<sub>i</sub> *each.other<sub>i</sub>-’s spy- NOM* [ *John-ACC*  
*hoka-no dono-meekaa-yori kuwasii-to* ] *omot-teiru.*  
other-’s whichever-maker-more.than familiar-COMP ] think-PROG  
‘With Nissan and Honda, each other’s spies think of John more  
familiar than any other manufacturers.’ [Tanaka (2004): (8)]

## Productivity in German Prolepsis ①

- (44) a. *Ich hab hier einen Link, von dem ich*  
I have here a link of which.DAT I  
*bezweifle/erwarte/befürchte/vermute/behaupte/...*, [ *dass viele den*  
doubt/expect/am-afraid/suspect/claim.1SG/... [ that many DEM.ACC  
*kennen* ].  
know.3PL ]  
'I have a link here of which I doubt that many know it.'
- [adapted from Salzmann 2017: 5, (8a)]
- b. *Es ist bei diesem Video klar, [ dass viele es kennen ].*  
It is about this video clear [ that many it know.3PL ]  
'It is a video of which it is clear that many people know it.'
- c. *Ich habe bei diesem Video die starke Vermutung, [ dass viele es*  
I have.1SG about this video the strong assumption [ that many it  
*kennen* ].  
know.3PL ]  
'This is a video of which I have a feeling that many people know it.'

## Productivity & case-stacking in Japanese RtO ③

- (45) a. *Taroo-wa Hanako(?-ni)-dake-o* [ (*t*) *eigo-ga*  
 Taro-TOP *Hanako(?-DAT)-only-ACC* [ (*t*) English-NOM  
*hanas-e-ru-to* ] *omot-tei-ru.*  
 speak-can-PRS-COMP ] think-ASP-PRS  
 ‘Taro thinks that only Hanako can speak English.’ [K. Shimamura, p.c.]
- b. *Taroo-wa Hanako(??-ni)-dake-o* [ (??*t*) *eigo-ga*  
 Taro-TOP *Hanako(??-DAT)-only-ACC* [ (??*t*) English-NOM  
*hanas-e-ru-to* ] *it-tei-ru.*  
 speak-can-PRS-COMP ] say-ASP-PRS  
 ‘Taro says that only Hanako can speak English.’ [K. Shimamura, p.c.]
- c. *Koji-wa Eri(\*-ni)-dake-o* [ (*\*t*) *eigo-ga* *hanas-e-ru-to* ]  
 Koji-TOP *Eri(\*-DAT)-only-ACC* [ (*\*t*) English-NOM speak-can-PRS-COMP ]  
*dantei-si-ta.*  
 conclude/assert-do-ASP-PST  
 ‘Koji concluded/asserted that only Eri can speak English.’  
 [K. Shimamura, p.c.]

## Productivity in ③

- ③ Korean:
  - “Verbs that govern SOR [Subject-to-Object-Raising] select embedded clauses construable as expressing a categorical judgment” (Yoon 2007: 630).
  - Used in the literature: *believe, think, consider/conclude, remember*

## Productivity in ④

- ④ Romanian:
  - RtO appears with “the entire class of Romanian verbs of knowledge that are compatible with inferential semantics” (Alboiu and Hill 2016: 257)
  - Used in the literature: *find out, suspect, guess, know*; RtS with *seem* (Giurgea, p.c.)
  - Impossible: *happened, say*
- ④ Tsez:
  - There are several factors which make it difficult to test verb classes.
  - CP must be in absolutive position.
  - Agreement must be visible on the matrix verb, which is only the case for a subset of vowel-initial verbs which do not have an underlying laryngeal (M. Polinsky, p.c.).
  - Within the class of agreeing verbs, LDA is found with “verbs of perception, cognition and some factive predicates” (M. Polinsky, p.c.).



## Productivity in ⑤

- ⑤ **Brazilian Portuguese:**
  - Hyperraising “is limited to a subset of unaccusative clause embedding predicates” (Kobayashi 2020: 12).
  - Used in the literature: *seem*, *turn out*, *be on the verge of* (Nunes 2008)
  - Controversial: Hyperraising with speech verbs such as *say* (Nunes 2008, 2010)
- ⑤ **Buryat:**
  - Used in the literature: *say*, *know*, *decide*, *see*, *hear*
- ⑤ **Mongolian:**
  - Used in the literature: *say*, *think*, *know* (Von Heusinger et al. 2011, Fong 2019)
- ⑤ **Zulu:**
  - RtO: found with *want*, *expect*; prohibited with *ask* (Halpert and Zeller 2015)
  - Hyperraising: *seem*, *be necessary* (Halpert 2016)

## Island-sensitivity in ①

### (46) Puyuma A' extraction vs. Prolepsis ①

- a. \**imanay nu=k<in>aladram* [ *na ma-trangis i Isaw*  
*who* 2SG.GEN=<PRF.PV>know [ LK AV-cry SG.PIVOT Isaw  
*anu m<in>atray* ]?  
 because AV<PRF>die ]

‘Who is the person that you knew that Isaw cried because (he/she)  
 passed away?’

Puyuma A' extraction  
 [Chen 2018: 15, (33)]

- b. *ma-tiya=ku kan Isaw<sub>i</sub>* [ *dra m-uka=yu i Tripul* [   
 AV-dream=1SG.PIVOT SG.ACC Isaw<sub>i</sub> [ C AV-go=2SG.PIVOT LOC Tripul [   
*anu kualeng ec.(PIVOT)<sub>i</sub>* ]].  
 because AV.sick *ec.(PIVOT)<sub>i</sub>* ]]

‘I dreamt that you went to Tripul because Isaw is sick.’

Puyuma ①

[Chen 2018: 14, (32b)]

## Island-sensitivity in ②

### (47) Passamaquoddy ① and ②

- a. *Tihtiyas kosona Sapet* 'kosiciy-uku-l wikuwoss-ol eli psi=te  
 Tihtiyas or Sapet 3-know.TA-INV-OBV 3.mother-OBV C all=EMPH  
*wen macehe* [ *pro kisi-ntu-htit* ].  
 someone leave.3 [ *pro* PERF-sing-3PCONJ ]  
 'Her mother knows (about *Tihtiyas* or *Sapet*) that everyone left after *they*  
 started singing.' Passamaquoddy ①  
 [Bruening 2001: 16, (44b)]
- b. *N-kosiciy-a-k nikihk-únnu-ki* [ *eli Píyel mèc*  
 1-know-DIR-PROX.PL (1)-parent-1PL-PROX.PL [ thus Peter still  
*álk-o-k* [ *utapákon t kis-onuhmuwew-a-htí-t-pon* ]].  
 drive.around-TH-3AN [ (3)-vehicle *t* past-buy.for-DIR-PROX.PL-3AN-PRET ]]  
 'I know about our parents<sub>i</sub> that Peter is still driving the car they<sub>i</sub> bought  
 for him.' Passamaquoddy ②  
 [LeSourd 2019: 376, (27a)]

## Island-sensitivity in ③

### (48) Korean ① vs. ③

- a. *Na-nun Yenghi-lul<sub>i</sub> [[ pro<sub>i</sub>/kunye-ka ha-nun ] il-i ]*  
I-TOP Yenghi-ACC<sub>i</sub> [[ pro<sub>i</sub>/she-NOM do-ADNOM ] work-NOM ]  
*mopemcek-ila-ko sayngkakhanta.*  
exemplary-COP-COMP think

‘I think of Yenghi that the things she does are exemplary.’ Korean ①  
[Yoon 2007: 619, (5)]

- b.?\**Mary-nun Yeonghi-lul [[ t apeci-ka ha-si-nun ] sa.ep]-i*  
Mary-TOP Yenghi-ACC [[ t father do-HON-ADNOM ] business]-NOM  
*manghay-ss-ta-ko sayngkakha-n-ta.*  
go.bankrupt-PAST-DECL-COMP think-PRES-DECL

Int.: ‘Mary thinks that as for/it is Yeonghi (that) the business her father  
was running went bankrupt.’ Korean ③

[Lee 2016: 9, (17)]

## Island-sensitivity in ④

### (49) Romanian ① vs. ④

a. ?*Am auzit despre copii* [ (pentru) că nu vorbesc<sub>k</sub> unul cu  
have.1SG heard about children [ (because) that not talk.3PL one with  
*altul* ].  
other ]

‘I heard about the children that/because they do not speak to each  
other.’

Romanian ①

[Alboiu and Hill 2016: 269, (33b)]

b. \**Ion o mirosise pe Maria* [ *faptul* [ *că-și*  
Ion CL.3SG.F.ACC smelled DOM Maria [ fact.the [ that-DAT.REFL  
*aranja plecarea* ]].  
arranged departure.the ]]

‘Ion figured out the fact that Maria was arranging her departure.’

Romanian ④

[Alboiu and Hill 2013: 7, (15c)]

## Island-sensitivity in ⑤

### (50) Nez Perce ① vs. ⑤

a. ?'Aayat-onm *mamay'as-na hi-nees-nek-se* [CP [ *ke-kaa pro*  
 woman-ERG children-ACC 3.SBJ-O.PL-think-IPFV [CP [ when *pro*  
*hi-pa-paay-no'* ], *hi-lloy-no'* *qiiwn* ]].  
 3.SBJ-S.PL-arrive-FUT ], 3.SJB-be.happy-FUT old.man.NOM ]  
 'The woman thinks that when the kids arrive, the old man will be happy.'  
 Lit.: 'The woman thinks the kids that when they arrive, the old man will  
 be happy.'  
 Nez Perce ①  
 [Deal 2017: 4, (9)]

b. \*'Aayat-onm *hi-nees-nek-se* [CP [ *ke-kaa mamay'ac*  
 woman-ERG 3.SBJ-O.PL-think-IPFV [CP [ when children.NOM  
*hi-pa-paay-no'* ], *hi-lloy-no'* *qiiwn* ]].  
 3.SBJ-S.PL-arrive-FUT ], 3.SJB-be.happy-FUT old.man.NOM ]  
 Int.: 'The woman thinks that when the kids arrive, the old man will be  
 happy.'  
 Nez Perce ⑤  
 [Deal 2017: 5, (12)]

## Connectivity effects in ③

### (51) Korean ① and ③: Case-stacking and remnant movement

- a. *Na-nun yeki-pwuthe-luli* [ *t<sub>i</sub> nay ttang-ila-ko* ] *mitnunta*.  
I-TOP here-from-ACC<sub>i</sub> [ *t<sub>i</sub> my land-COP-COMP* ] believe  
'I believe my land begins from here.' [Yoon 2007: 647, (52b)]
- b. \*[ *t<sub>i</sub> nay ttang-ila-ko* ]<sub>j</sub> *yeki-pwuthe-luli na-nun t<sub>j</sub> mitnunta*.  
[ *t<sub>i</sub> my land-COP-COMP* ]<sub>j</sub> here-from-ACC<sub>i</sub> I-TOP *t<sub>j</sub> believe*  
'I believe my land begins from here.' [Yoon 2007: 647, (52a)]
- c. ?[ *Ku-uy apeci-ka pwuca-yessta-ko* ] *na-nun Cheli-lul kiekhanta*.  
[ *he-GEN father-NOM rich-was-COMP* ] I-TOP *Cheli-ACC* remember  
'I remember Cheli's father as (being) rich.' [Yoon 2007: 648, fn. 30, (i)]

## Connectivity effects in ④

### (52) Romanian ④: PBC violation; binding

- a. \**[ Că ne trage plasa ]<sub>i</sub> l-am ghicit (imediat) pe*  
[ that us draws net.the ]<sub>i</sub> him-have.1SG guessed (immediately) DOM

*Radu t<sub>i</sub>.*

*Radu t<sub>i</sub>*

Int.: ‘As for Radu, I figured out (right away) that he was pulling our leg.’  
[Alboiu and Hill 2016: 271, (36d)]

- b. *O<sub>k</sub> aud [ pe fiecare mamă ]<sub>k</sub> copiii ei<sub>k/j</sub> [ că muncește*  
her<sub>k</sub> hear.3PL [ DOM each mother ]<sub>k</sub> children her<sub>k/j</sub> [ that works

*mult ]*.  
hard ]  
‘Her<sub>k</sub> children hear each of their<sub>k</sub> mothers say she<sub>k</sub> is working hard.’

[Alboiu and Hill 2016: 273, (40)]



## Connectivity effects in ⑤

### (53) Nez Perce ⑤: Case connectivity

- a. *Taamsas-nim hi-nees-nek-se* [ *mamay'as-nim poo-payata-six*  
Taamsas-ERG 3.SBJ-O.PL-think-IPFV [ *children-ERG* 3/3-help-IPFV.S.PL  
*Angel-ne* ].  
Angel-ACC ]  
'Taamsas thinks the children are helping Angel.' [Deal 2017: 5, (11)]
- b. *'Aayat-onm hi-nees-nek-se* [ *watiisx mamay'ac*  
woman-ERG 3.SBJ-O.PL-think-IPFV [ 1.day.away *children.NOM*  
*hi-pa-paay-no'* ].  
3.SBJ-S.PL-arrive-FUT ]  
'The woman thinks the children will arrive tomorrow.' [Deal 2017: 6, (13)]
- c. *'Aayat-onm hi-nees-nek-se* [ *watiisx mamay'as-na Angel-nim*  
woman-ERG 3.SBJ-O.PL-think-IPFV [ 1.day.away *children-ACC* Angel-ERG  
*hi-naas-wapayata-ya* ].  
3.SBJ-O.PL-help-PERF ]  
'The woman thinks Angel helped the children yesterday.'  
[Deal 2017: 6, (16)]

## Connectivity effects in ⑤

### (54) Buryat ① vs. ⑤: Idiom construal

- a. \**badm-in zürxən sajən-ar* [ *pro am-ar-a*  
 Badma-GEN heart.NOM Sajana-INSTR [ *pro* mouth-INSTR-REFL  
*gar-a-b g3žə* ] *m3də-gd-3*  
 go.out-PST1-1SG COMP ] know-PASS-PST1

\*Idiomatic: ‘Sajana saw that Badma got greatly frightened.’

Lit.: ‘Badma’s heart was known by Sajana that (it) went out of his mouth.’

① [Bondarenko 2017b: 123, (51)]

- b. *badm-in zürxən sajən-ar* [ *t am-ar-a gar-a*  
 Badma-GEN heart.NOM Sajana-INSTR [ *t* mouth-INSTR-REFL go.out-PST1  
*g3žə* ] *m3də-gd-3*  
 COMP ] know-PASS-PST1

✓ Idiomatic: ‘Sajana saw that Badma got greatly frightened.’

(Lit.: ‘Badma’s heart was known by Sajana that (it) went out of his mouth.’)

⑤ [Bondarenko 2017b: 123, (50)]

## Connectivity effects in ⑤

### (55) Mongolian Hyperraising ⑤: Idiom construal; NPI licensing

- a. *Dorj chang-aar* [ *Bat-iin nüd(-iig) ore* *deer-ee gar-san gej* ]  
Dorj loud-INSTR [ *Bat-GEN eye(-ACC) top on-REFL.POSS climb-PST COMP* ]

*khel-sen.*

say-PST

‘Dorj said loudly that Bat was very surprised.’

(Lit.: ‘Dorj said loudly that Bat’s eyes climbed on top of themselves.’)

[Fong 2019: 4, (11)]

- b. *Nara* [ *khən(-iig) ch iree-güi* *gej* ] *khel-sen.*  
Nara [ *who(-ACC) CH come.PST-NEG COMP* ] say-PST

‘Nara said that nobody came.’

[Fong 2019: 6, (24a)]

## Connectivity effects in ⑤

### (56) Zulu Hyperraising ⑤: Idiom construal; binding

- a. *iqhina*                      *li-bonakala* [ *ukuthi li-phum-ile embizeni* ].  
 AUG.5steinbok 5S-seems [ that 5S-exit-PFV LOC.9pot ]  
 ‘The secret seems to have come out.’ [Halpert 2016: 36, (53b)]
- b. *ku-fanele* [ *ukuthi* [ *ngo-buhlakana*                      *bukaSipho<sub>i</sub>* ] *pro<sub>i</sub>*  
 17S-necessary [ that [ NGA-AUG.14wisdom 14ASSOC.1Sipho ] *pro<sub>i</sub>*  
*a-m-siz-e*                      *uThemba* ].  
 1SJC-1O-helpsJJC AUG.1Themba ]  
 ‘It’s necessary that out of Sipho<sub>i</sub>’s wisdom, he<sub>i</sub> helps Themba.’  
 [Halpert 2016: 36, (54a)]
- c. \**pro<sub>i</sub>* *u-fanele* [ *ukuthi* [ *ngo-buhlakana*                      *bukaSipho<sub>i</sub>* ] *t<sub>i</sub>*  
*pro<sub>i</sub>* 1S-necessary [ that [ NGA-AUG.14wisdom 14ASSOC.1Sipho ] *t<sub>i</sub>*  
*a-m-siz-e*                      *uThemba* ].  
 1SJC-1O-helpsJJC AUG.1Themba ]  
 Int.: ‘It’s necessary that out of Sipho<sub>i</sub>’s wisdom, he<sub>i</sub> helps Themba.’  
 [Halpert 2016: 36, (54b)]

## A-Minimality is not simply a subject restriction

- (57) *Odgerel* [ *Dulmaa-d shine baishin(\*-g) baigaa gej* ] *khel-sen*.  
Odgerel [ *Dulmaa-DAT new house(\*-ACC) COP.PRES COMP* ] say-PST  
'Odgerel said that Dulmaa has a new house.'  
Mongolian ⑤  
[Fong 2019: 8, (32a)]
- (58) *Odgerel* [ *shine baishin(-g) Dulmaa-d t baigaa gej* ] *khel-sen*.  
Odgerel [ *new house(-ACC) Dulmaa-DAT t COP.PRES COMP* ] say-PST  
'Odgerel said that Dulmaa has a new house.'  
Mongolian ⑤  
[Fong 2019: 8, (32b)]

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