

On the distribution of composite probes and A-feature percolation into CP

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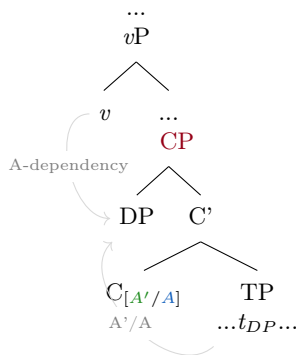
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Cross-clausal A-dependencies and composite probes



- CCA = Hyper ECM, Hyperraising (to subject/object), Long-distance Agreement
- Properties:
 - A-dependency stems from the matrix predicate
 - DP is base-generated inside the embedded clause
 - DP moves to the embedded left edge
 - Embedded clause is a full CP
 - C carries a composite $[A'/A]$
- **A-quality** (typolog. tendencies): A'-moved elements do not feed CCA, A-Minimality, DP is involved in matrix and embedded A-dependencies, no WCO effects.
- **A'-quality** (typolog. tendencies): DP exhibits discourse-relevant properties (focus, topic,...), A'-related reconstruction effects, DP does not feed new binding relations.
- For more details see Wurmbrand 2019, Lohninger, Kovač, and Wurmbrand 2022, Lohninger To appear

The LDA Hierarchy

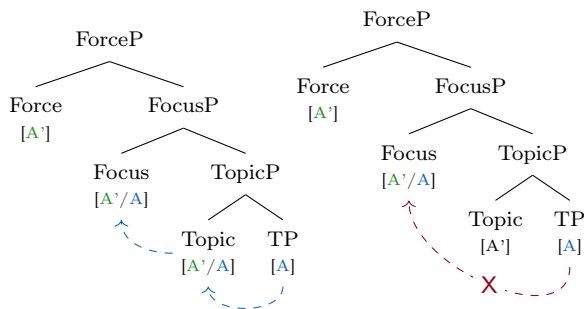
(1) Long distance agreement [LDA] generalization (Mursell 2020)

Languages that allow LDA, allow it either for topics alone or for topics and foci, not however for foci alone.

LDA with	✗ Focus ✗ Topic	✗ Focus ✓ Topic	✓ Focus ✓ Topic	✓ Focus ✗ Topic
	<i>English</i> <i>German</i>	<i>Tsez</i> <i>Turkish</i>	<i>Passamaquoddy</i> <i>Uyghur</i>	
	attested			not attested

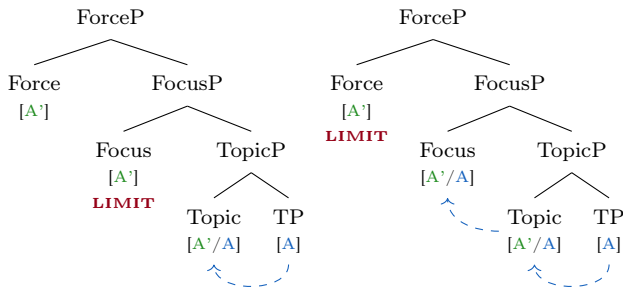
Language data: Bruening 2001, Polinsky and Potsdam 2001, Şener 2008, Asarina and Hartman 2011, LeSourd 2019, Mursell 2020

Upward A-Feature Percolation



- A-features from the inflectional domain percolate into the extended left periphery (Rizzi 1997) and form composite probes therein
- A-features: $[\phi]$, $[\theta]$, $[D]$, $[n]$, $[\text{Case}]$,...
- A'-features: $[\text{FOC}]$, $[\text{TOP}]$, $[\text{WH}]$,...
- A-Percolation cannot skip a projection
- Implicational hierarchy of composite probes
- Restructuring CP: only projects the parts needed, no building (and removal) of empty structure.
- locates DP at embedded left edge where it is visible for matrix A-dependency

Upward A-Percolation and LIMIT

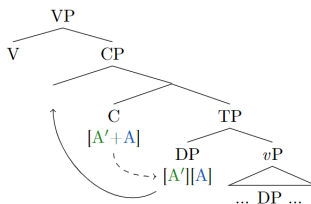


- Language-specific upper LIMIT
- LIMIT halts Percolation
- LIMIT and the inability of Percolation to skip a projection render the LDA hierarchy

LDA with...		[<i>ForceP</i>	[<i>FocusP</i>	[<i>TopicP</i>]]
X <i>Focus</i> + X <i>Topic</i>	✓	A'	A'	A' [LIMIT]
X <i>Focus</i> + ✓ <i>Topic</i>	✓	A'	A' [LIMIT]	A'/A
✓ <i>Focus</i> + ✓ <i>Topic</i>	✓	A' [LIMIT]	A'/A	A'/A
✓ <i>Focus</i> + X <i>Topic</i>	X	A'	A'/A	A'

Three types of A'/A composite probes (Lohninger et al. 2022)

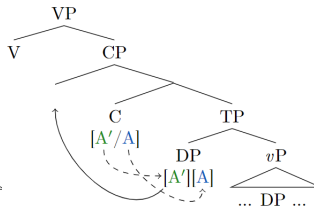
Conjunctive



The composite probe can target a goal iff it carries both matching features.

Korean, Japanese

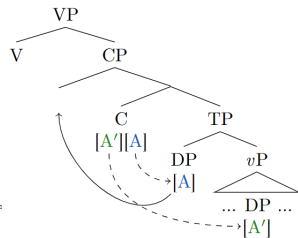
Dependent



The parts of the composite probe can find goals on their own, but cannot trigger agreement independently.

Romanian, Turkish, Tsez

Independent



The two parts probe independently; they can establish agreement and trigger movement on their own.

Braz. Portuguese, Buryat, Mongolian, Nez Perce, Zulu, Uyghur

Three forms of Percolation

- **Conjunctive**

- Features alone move upwards and fuse with features in CP
- Lexical fusion
- Satisfaction condition of the composite probe is conjoint of [A'] and [A] (Deal 2015, Scott 2021)

- **Dependent**

- [A] forms a feature geometry with [A'] (Harley and Ritter 2002, Coon, Baier, and Levin 2021, Coon and Bale 2014)
- [A] restricts the search domain of [A'] (*Contingent Probing*, Branau 2021)

- **Independent**

- Head movement from inflectional domain to CP
- Heads fuse but features remain strong enough to probe on their own

Putting everything together (work in progress)

LIMIT at...	[ForceP	[FocusP	[TopicP]]
Conjunctive	?	<i>Japanese, Korean</i>	N/A
Dependent	<i>Uyghur, Passamaquoddy?</i>	<i>Tsez, Turkish</i>	N/A
Independent	<i>Cantonese, Mongolian</i> <i>Vietnamese</i>	?	N/A

E.g.: Uyghur (Asarina and Hartman 2011):

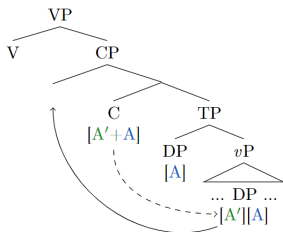
- LIMIT is located above FocP (making both Foc and Top composite A'/A heads)
- CCA with focalized and topicalized DPs is allowed
- Percolation takes place in a feature-geometrical fashion, thus dependent probing
- the CCA.DP has to be A-minimal and carry semantic information (topic or focus).

Language data: Bruening 2001, Polinsky and Potsdam 2001, Yoon 2007, Horn 2008, Şener 2008, Y. Lee 2016, Fong 2019, LeSourd 2019, T. T.-M. Lee and Yip 2020, Lohninger, Kovač, and Wurmbrand 2022

Appendix

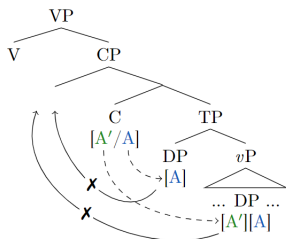
Appendix: A-Minimality and composite probes

Conjunctive



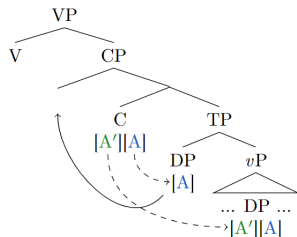
× **A-Minimality**: a higher DP can be skipped if it does not carry the relevant [A']-features but only a subset of matching features.

Dependent



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

Independent



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

Appendix: The LDA Hierarchy examples

- (2) A: *What about John? Did Pelin tell you what he ate at the party?*
B: *Well, he didn't know about John, but...*
- ā. Pelin [**Mete-yi** istakoz-dan ye-di diye] duy-muş.
Pelin [**Mete-ACC** lobster-ABL eat-PAST COMP] hear-EVID.PAST
'Pelin heard that Mete_{CT} ate from the lobster (at the party).'
- Turkish (Şener 2008: 22)*
- (3) A: *Do you know who showed up at Mert's party?*
B: *I haven't asked Mert himself about it but...*
- ā. * Pelin [**Sinan-ı** git-ti diye] duy-muş.
Pelin [**Sinan-ACC** go-past COMP] hear-EV.PAST
'Pelin heard that Sinan_{FOC} went (to the party).'
- Turkish (ibid.: 21)*
- (4) Ma=te n-kosiciy-a-wi [wot **olu n-tatat**, tan-iyut
NEG 1SG-know.TA-DIR-NEG [**this.AN top 1SG-father** WH-this.INAN
keti-nomkuwal-s-it atomupil].
IC.FUT-lend-INTRANS-3SG.CONJ car].
'I don't know which car, my father, he's going to buy.'
- Passamaquoddy (Bruening 2001: 282)*
- (5) N-kosiciy-a [**tehpu Susehp** oc menuwa-c-ihı nuhu
1SG-know.TA-DIR [**only.FOC Susehp** FUT IC.buy-3SG.CONJ-PART.OBV.PL three.OBV.PL
akom].
snowshoe.OBV.PL].
'I know that only Susehp would buy three snowshoes.'
- Passamaquoddy (ibid.: 282)*

- (6) Bat [CP margaash Dulmaa-**g** nom unsh-n gej] khel-sen.
Bat [CP tomorrow Dulmaa-**ACC** book read-PAST COMP] say-PAST
'Bat said that Dulmaa will read a book tomorrow.'
Mongolian Hyper ECM (Fong 2019: 2)
- (7) **Babaandu** ba-lolekhana [CP (mbo) *t* ba-kwa].
2.people **2.SA**-seem [CP (COMP) *t* 2.SA.PST-fall]
'The people seem like they fell/ The people seem to have fallen.'
Lubukusu Hyperraising (Carstens and Diercks 2009: 2)
- (8) Eni-r [CP už-ā **magalu** b-āc'ru-li] **b-iy-xo**.
mother-DAT [CP boy-ERG **bread.III**.ABS III-EAT-PST.PRT.NMLZ] **know.III**
'The mother knows that the boy ate the bread.'
Tsez LDA (Polinsky and Potsdam 2001: 584)

Appendix: Composite probes outside CCA

● Conjunctive

- Dinka Bor focus, relativization, topic (Van Urk 2015)
- Ndengeleko focus (Scott 2021)
- Khanty topic/ passivization (Colley and Privoznov 2020)

● Dependent

- Maori focus, relativization, topic, wh (Douglas 2018)
- Mayan focus, relativization, wh (Coon, Baier, and Levin 2021)
- Toba Batak focus, wh (Branan and Erlewine 2020, Branan 2021)









● Independent

- Kipsigis movement to post verbal position (Bossi and Diercks 2019, Scott 2021)
- Nez Perce complementizer agreement (?) (Deal 2015)









Appendix: Percolation versus Inheritance

- Presumably, both frameworks can derive composite probes; just different directionality.
- LDA Hierarchy: follows from Percolation but would need an extra mechanism in Inheritance.
- Inheritance does not allow unvalued features in CP; however, such are necessary for CCA (Gallego 2014; Obata and Epstein 2011).
- Similar discussion about Restructuring:
 - Upwards: clauses stop building at a certain point (Wurmbrand 2014; Wurmbrand 2015; Wurmbrand and Lohninger 2019)
 - Downwards: clauses always build up to CP and then structure is removed again (Pesetsky 2019; Müller 2020)
- Restructuring framework (where clauses can stop growing at different points) is more compatible with Percolation than Inheritance.

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