(IN)DEPENDENCE OF FEATURES ON COMPOSITE PROBE

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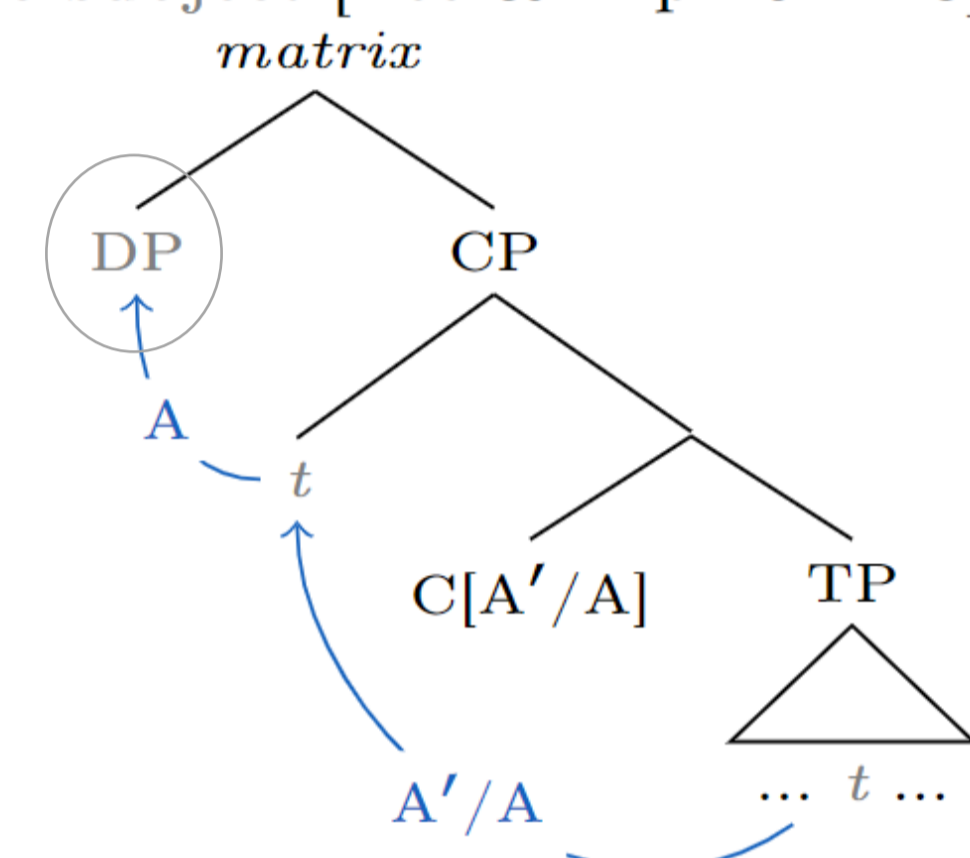Ka Fai Yip • Yale University • *kafai.yip@yale.edu*

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Cross-clausal A-dependencies

• CCA: Hyperraising, Long-distance Agreement, Hyper-ECM

(1)   a.   **I believe* [*that her won the triathlon*].   [Wurmbrand 2019: 1]
    b.   **She seems* [*that t won the triathlon*].   [Wurmbrand 2019:: 1]

(2)   a.   *Bat nokhoi-g chang-aar* [t *gaikhal-ta gej*] *khel-sen.*
    Bat dog-ACC loudly   [*t* wonder-with COMP] say-PST
    'Bat said loudly that dogs are wonderful.'
          Mongolian Hyperraising to object [Fong 2019: 3]
    b.   *Coeng jyu gamgok*/tengman [*waa* t *m-wui ting*]
    CL   rain feel.like/hear   [COMP t not-will stop]
    'It is felt/heard that the rain will not stop.'
          Cantonese Hyperraising to subject [Lee & Yip 2022: 3]

• CCA: A-dependency into & A-movement out of a full CP
• Ban on Improper Movement: **A' ↛ A**
• Composite Probe on CCA.CP: **A'/A → A**
    [Wurmbrand 2019, Lohninger et al 2022]

The A'/A difference

• Positional A'/A difference   [classical view]
   > A-movement targets IP/TP
   > A'-movement targets CP
• Featural A'/A difference   [Obata & Epstein 2011, van Urk 2015]
   > A-features: [Φ], [θ], [n], [D]
   > A'-features: [FOC], [TOP], [WH], [REL]
• Composite [A'/A] probes: mixture of A'- & A-properties
   > E.g.: CCA, wh-movement with A-restrictions, …

Dependent Probe: * CCA+ A'-movement

• [A'] probes together with [A]; they have to find the same goal
• A'-movement (wh-movement, topicalisation, focalisation, relativisation) simultaneously to CCA is impossible

(3)   **Ce l-ai simţit pe Ion* [*că* t *nu vrea* t]?
    <u>what</u> him-have.2SG felt   DOM Ion [COMP t not wants t]
    Int.: 'What did you feel that Ion did not want?'
       Romanian *Hyperraising + Wh-movement [Alboiu & Hill 2016: 277]

(4)   **enir* [<u>*lu*</u> *micxir b-ok'āk'-ru-li*] *b-iyxo*
    mother [<u>who</u>.ERG money.III.ABS III-steal-PSTPRT-NMLZ] III-knows
    Int.: 'The mother knows who stole the money.'
       Tsez *LDA + Wh-movement [Polinsky & Potsdam 2001: 634]

(5)   **[(biz-im)* | *Mert-i* t *öp-tü diye*] *duy-duğ-umuz* | <u>*kιzι-∅*</u>
    [(we-GEN) | Mert-ACC t kiss-PAST COMP] hear-REL-1PL.POSS | <u>girl-NOM</u>
    hasta-y-mιş.
    sick-COP-EVID.PAST
    Int.: 'The girl that we heard that Mert kissed is sick.'
       Turkish *Hyper-ECM + Relativisation [Şener 2008: 34]

(In)dependence of Composite Probe

• Composite probes on C come in different forms   [Scott 2021]
• Typologically different types of CCA-languages, depending on the type of composite probe   [Lohninger et al 2022]
• [A] on C enables CCA   [Alboiu & Hill 2016, Bondarenko 2017, Zyman 2018, Fong 2019, Mursell 2020, Gong 2022]
• [A'] triggers discourse-bound interpretation

• **Dependent** [A'/A] Probe   [van Urk 2015, Erlewine 2018,…]
   > [A] and [A'] search for a single goal with both fitting features
   > [A'] involved in CCA
   > *Japanese, Korean, Romanian, Tsez, Turkish*
• **Independent** [A'][A] Probe   [Scott 2021, Lohninger et al 2022]
   > [A] and [A'] can probe independently and agree with two different goals
   > [A'] not necessarily involved in CCA
   > *Braz. Portuguese, Burat, Cantonese, Mongolian, Nez Perce, Uyghur, Vietnamese, Zulu*
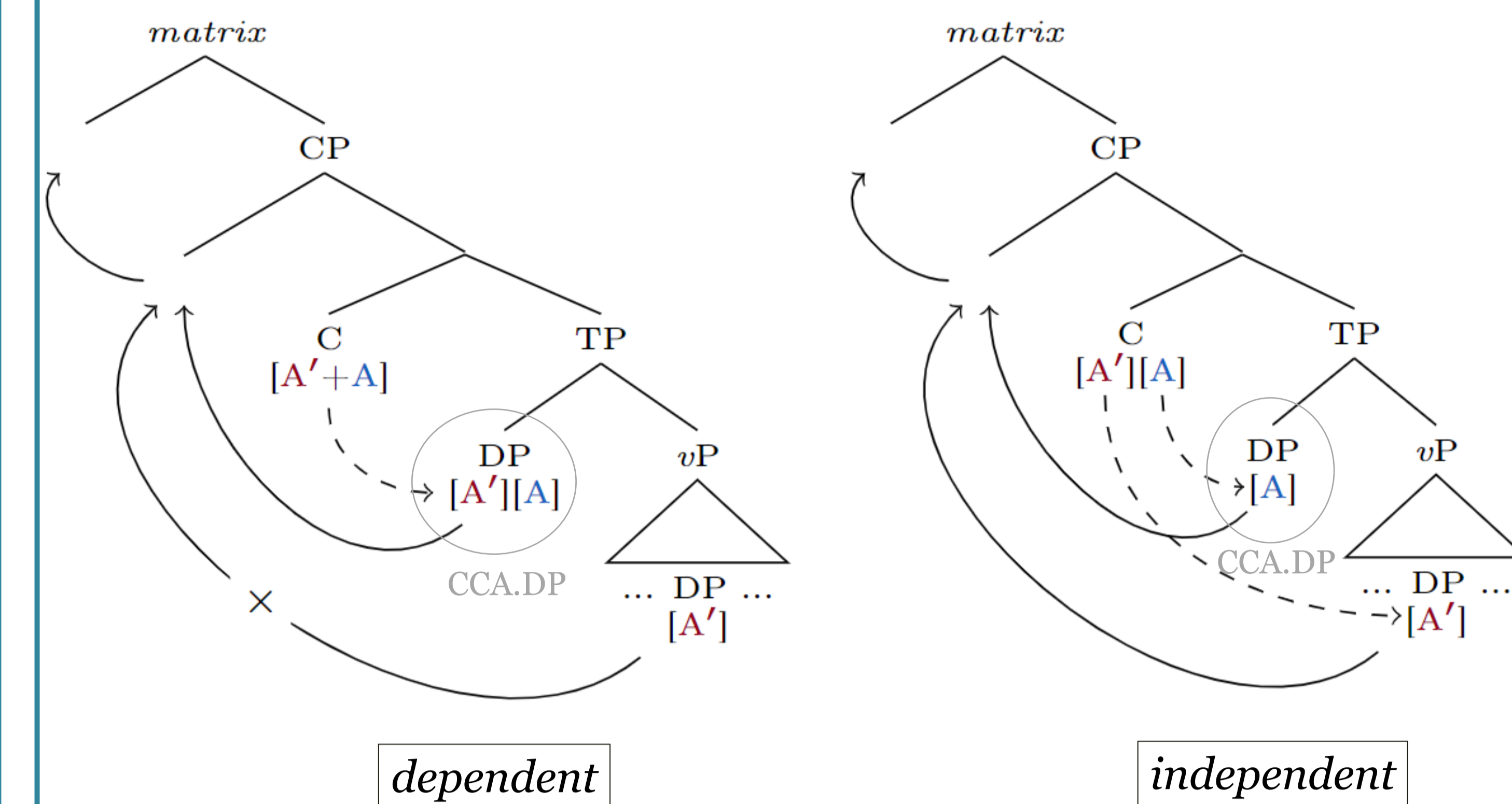
Independent Probe: CCA + A'-movement

• [A] of composite independent probe responsible for CCA
• [A'] can agree with a separate goal & trigger movement thereof
• A'-movement simultaneously to CCA is possible

(6)   *Buuz-iig bol Nara* | *Dorj(-iig)* t *id-sen gej* | *khel-sen.*
    <u>buuz-ACC</u> TOP Nara.NOM | Dorj(-ACC) *t* eat-PST COMP | say-PST
    'The buuz, Nara said that Dorj ate.'
       Mongolian Hyper-ECM + Topicalisation [Fong 2019: 28]

(7)   *Quais livros elas parec-em* [*que* t *ler-am* t]?
    <u>which books</u> they seem-PL [that t read-PL *t*]
    'Which books do they seem to have read?'
       Braz. Portuguese Hyperraising + Wh-movement [Kobayashi 2020: 18]

(8)   *Nó nghe nói* [*ngay c sách* t *cũng không doc* t]]
    3SG hear   [<u>even at.all book</u> *t* also not   read *t*]
    'It is heard that s/he does not even read books.'
       Vietnamese Hyperraising + Focalisation [Lee & Yip 2022: 21]

(9)   [*Go fung gamgok* [*waa* t *wui ceoilam* t]] *ge* <u>*syu*</u>.
    [CL wind feel.like [COMP t will blow.down *t*]] MOD <u>tree</u>
    'The tree which it is felt like the wind will blow down.'
       Cantonese Hyperraising + Relativisation

Typology

Probing	Dependent	Independent
No sem. restr. on CCA.DP	✗	✔
CCA + A'-mvt.	✗	✔
Languages	Japanese, Korean, Romanian, Tsez, Turkish	Braz. Portuguese, Cantonese, Mongolian, Passamaquoddy, Uyghur, Vietnamese, Zulu

Novel Prediction

dependent   *independent*

Dependent probing languages **forbid** CCA + A'-movement

Independent probing languages **allow** CCA + A'-movement

Semantic Restrictions on CCA.DP

• Dependent Probe: CCA.DP needs to receive a certain semantic, discourse-bound interpretation (topic, focus, major subject,…)
• Independent Probe: any DP can undergo CCA
• [A'] → discourse-bound interpretation; "semantic restrictons"
• [A] → CCA

   > Dependent probing   [A'/A]   → semantic restrictions
   > Independent probing [A'][A] → no semantic restrictions

(10)   a.   *Am mirosit (*pe cineva)* [*că* t *ne minte*].
       have.1 smelled (*DOM someone) [COMP t 1PL.DAT lies]
       Int.: 'I/we suspected that someone was lying to us.'
          Romanian (dependent) [Alboiu & Hill 2016: 276]
    b.   *Houdo jan* (*ne,) *gamgok* [*waa* t *wui lai*].
       many person (*TOP) feel.like [COMP t will come]
       'It is felt that many people will come.'
          Cantonese (independent) [Lee & Yip 2022: 18]

Conjoint Probing of Independent Probe

• [A'] and [A] can probe together for one element

(11)   *men* [*Ötkür-niŋ qatʃan kel-idi-ʁan*-(liq)-i-ni] *bil-i-men.*
    I   [Ötkür-GEN <u>when</u> come-IMPF-RAN-(LIQ)-3.POSS-ACC] know-IMPF-1SG
    'I know when Ötkür will come.'
       Uyghur LDA + Wh-movement [Asarina & Hartmann 2011: 8]

(12)   [*Ötkür-iŋ-la kel-gen-lik* | *χever-i muhim.*
    [Ötkür-GEN-only come-RAN-LIQ | news-3.POSS important
    'The news that *only Ötkür* came is important.' (focus)
       Uyghur [A'] and [A] probe together [Asarina & Hartmann 2011: 10]

Selected References

More examples: **Erlewine**, M. Y. 2018. "Extraction and licensing in Toba Batak." *Language* 94.3: 662-697. **Fong**, S. 2019. "Proper movement through Spec-CP: An argument from hyperraising in Mongolian". In: *Glossa* 4.1, 1–42. **Lee**, T. T.-M., **Yip**, K. F. 2022. Hyperraising, evidentiality, and phase deactivation. Ms., University of Southern California and Yale University. **Lohninger**, M., **Kovač**, I., **Wurmbrand**, S. 2022. "From Prolepsis to Hyperraising". In: *Philosophies* 7.2, 1–40. Obata, M. & Epstein S. D. 2011. Feature-Splitting Internal Merge: Improper Movement, Intervention, and the A/A¢ Distinction. In: Syntax 14:2, 122-147. **Scott**, T. 2021. Formalizing three types of mixed A'/A agreement. Ms., UC Berkeley. **van Urk**, C. 2015. "A uniform syntax for phrasal movement: A case study of Dinka Bor". PhD Thesis. MIT. **Wurmbrand**, S. 2019. "Cross-clausal A-dependencies". In: Proceedings of CLS54. 585–604.