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Reexamining Sources of Variation in Adjective Ordering

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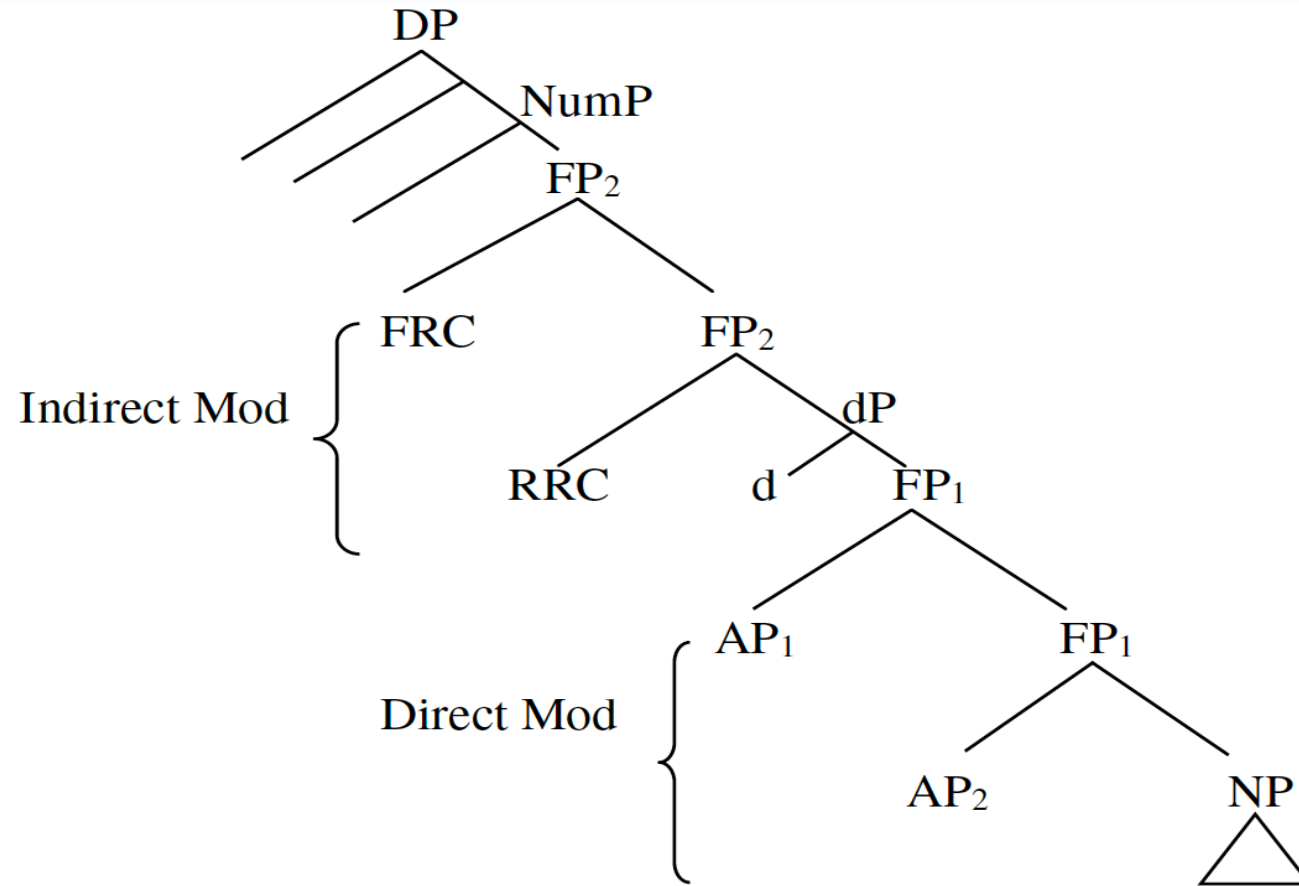
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Prevailing approaches to adjective ordering (AO) in generative grammar

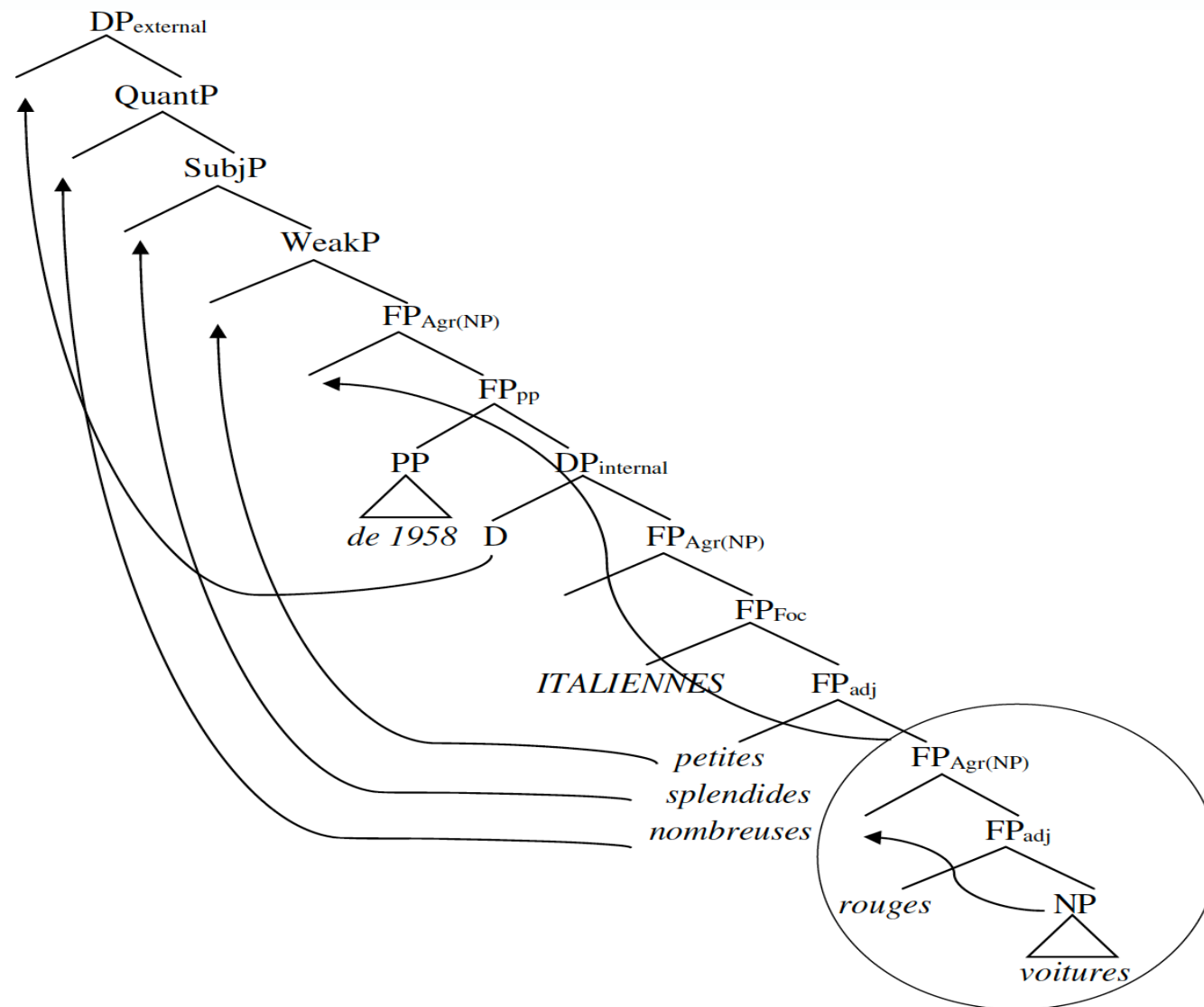
- **Split-DP** combined with **roll-up** movements: e.g., Cinque 2010, Laenzlinger 2005, Svenonius 2008, Kim 2019.
- Guiding insights:
 - **Dem** > **Num** > **Adj** > **N** (Greenberg 1963, Cinque 2005)
 - **Referent-** vs. **Reference-modifying** Semantics (Bolinger 1967)
 - **Relative** vs. **Absolute** Semantics (Sproat & Shih 1988, 1990)
 - **Indirect** vs. **Direct** Modification (Sproat & Shih 1988, 1990)
 - **NP-outer** vs. **NP-inner** Space (Larson 1998, 2000)
 - **Location** > **Quantity** > **Quality** (Rijkhoff 2002)

Cinque's (2010) split-DP

(1)

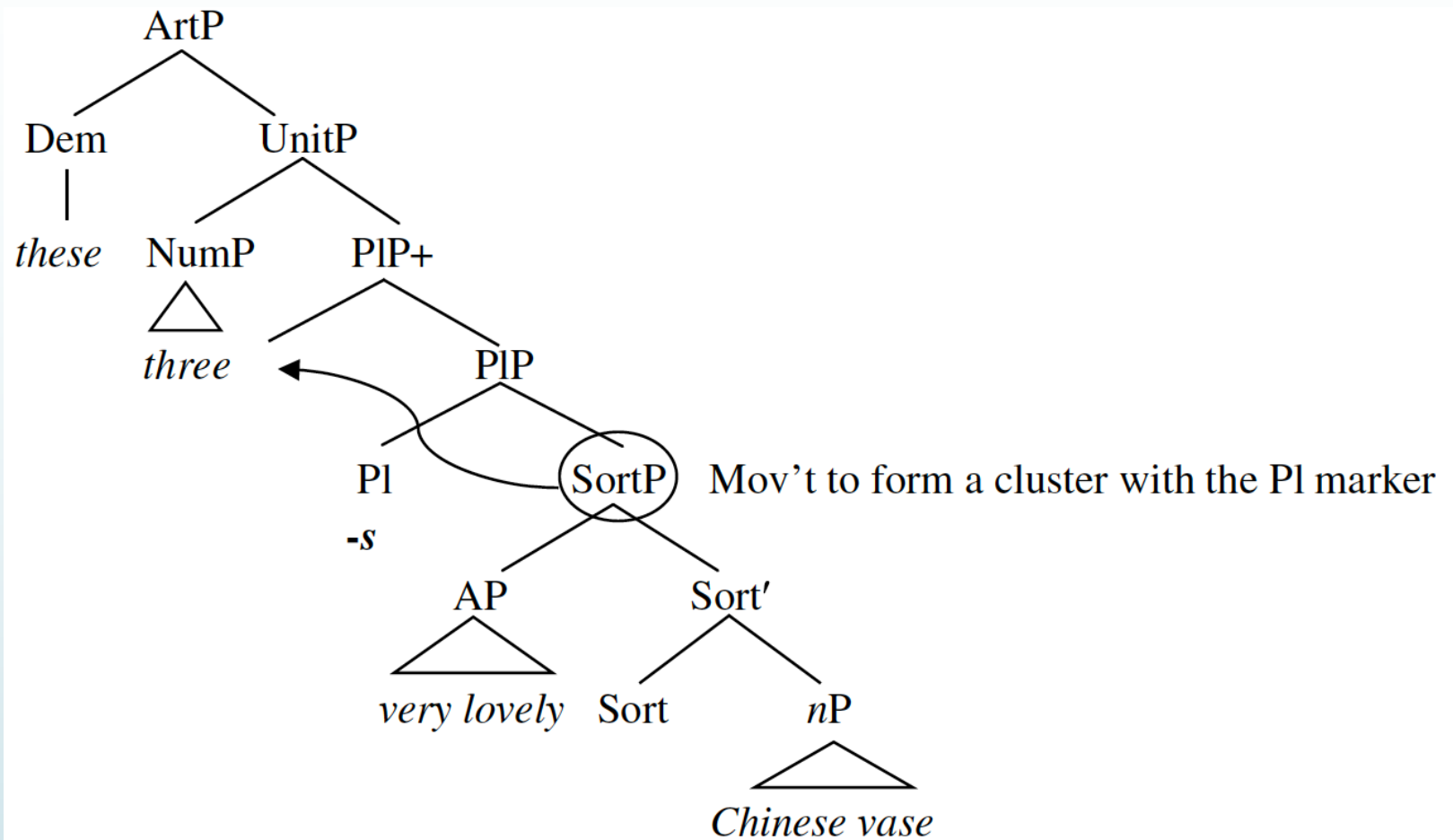


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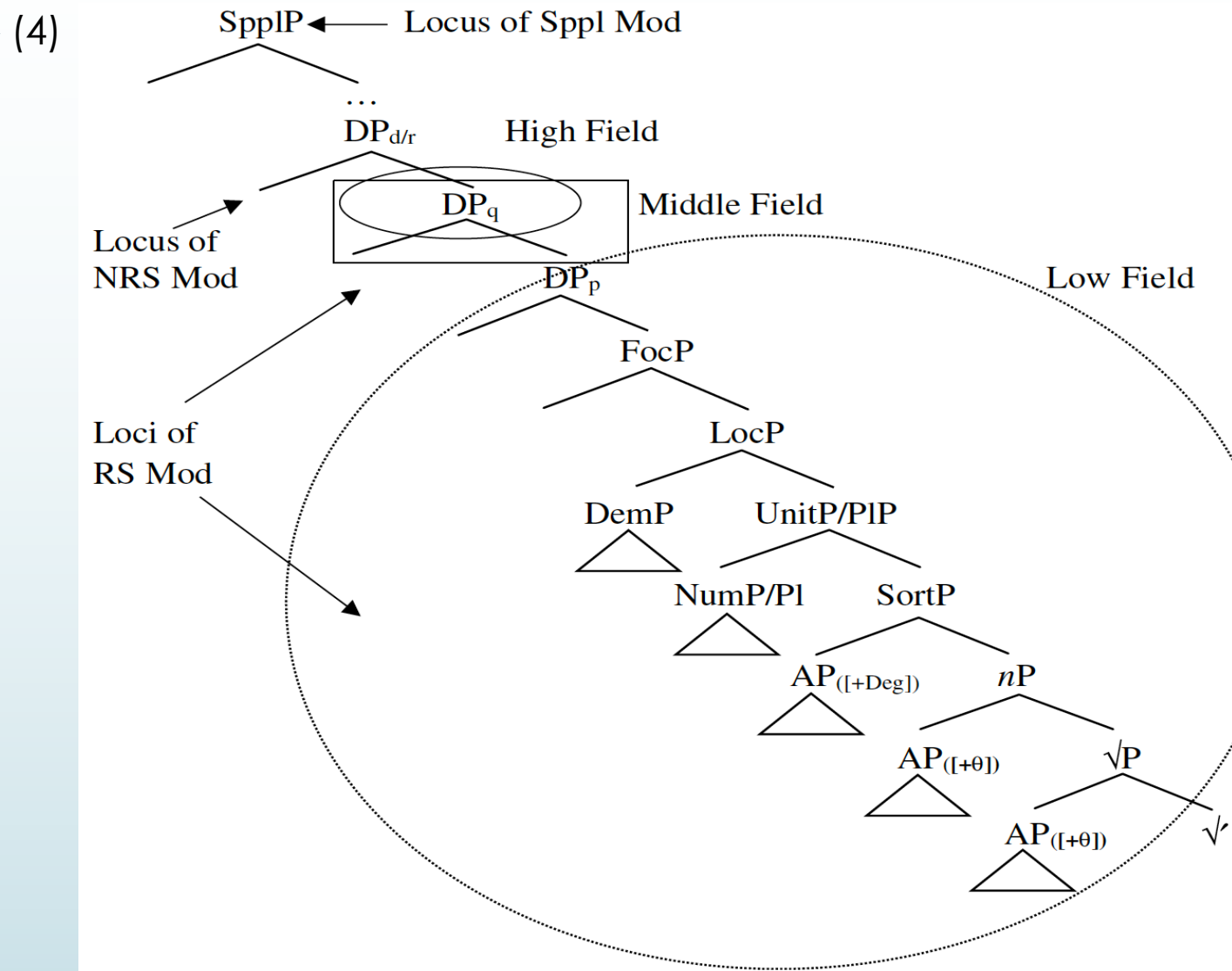


Svenonius' (2008) split-DP

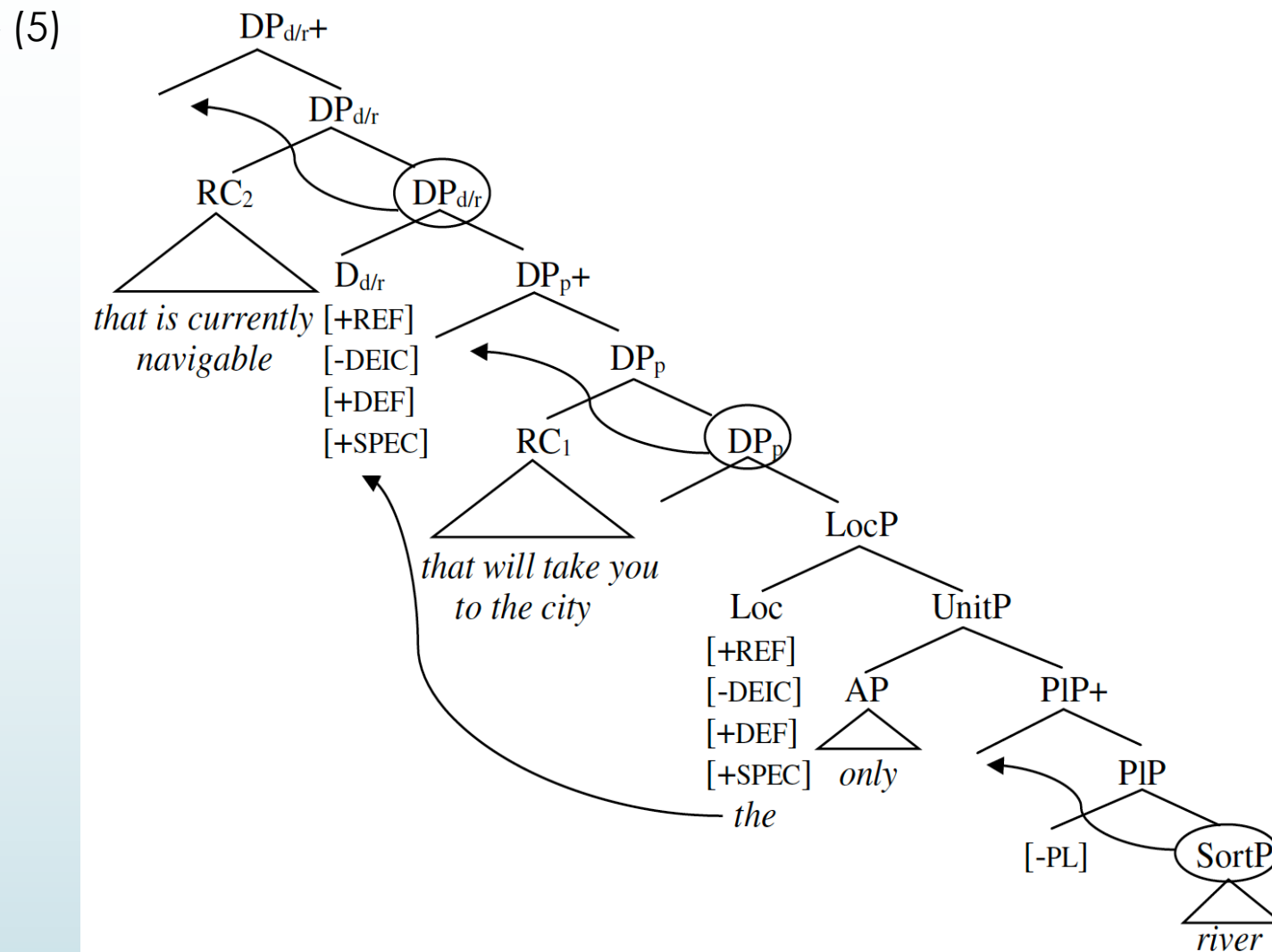
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Kim's (2019) split-DP



Kim's (2019) split-DP cont'd



Goal of this talk

- To reexamine sources of variation in AO by taking a close look at Korean.
- Questions to be asked:
 - To what extent is split-DP real?
 - Are roll-up movements indispensable?
 - Does adopting a derivational system alone give rise to all attested AOs?
 - If not, is it truly necessary to resort to an Optimality-Theoretic output filter, as argued in Kim 2019?

Some background about Korean

- ▶ Language isolate
- ▶ SOV canonical order
- ▶ Scrambling but with strict V-finality
- ▶ Agglutinative
- ▶ Heavy lexical influence from Classical Chinese
- ▶ Case-marking
- ▶ Discourse-oriented
- ▶ Overt topic/focus-marking
- ▶ Alleged absence of a prototypical Adjective class

(Sohn 1999, Kim 2019 and references there)

Inventory of N modifiers in Korean

(6) Major adnominal adjectival classes in Korean:

- (i) adjectival prefixes
- (ii) adjectival Ns
- (iii) attributive determinatives (ATT-DETs)
- (iv) adjectival expressions ending in *-cek* (CEK-APs)
- (v) adjectival expressions ending in *-un* (UN-APs)
- (vi) relative clauses (RCs)

► Note: **UN-APs** and **RCs** have the **same** ending and are considered **indirect** N modifiers (Kang 2006).

Canonical AO in Korean

(7) Canonical AO in Korean:

RC > UN-AP > CEK-AP_{ATT}/ATT-DET > CEK-AP_θ > Adjectival prefix/N > Root N

Clausal verbal nominal nominal nominal nominal

(Kim 2014a, b, 2019)

Illustration

(8) A plural DP containing an RC, an UN-AP, and a CEK-AP_{ATT}:

a. RC > UN-AP > CEK-AP_{ATT} > N + PL:

[_{DP} [_{RC} e_i kyengcey-rul sal-li-]-I,
 [[— economy-ACC live-CAUS-]-REL.FUT,
 [_{UN-AP} **sayrop-un**] [_{CEK-AP} **hapli-cek**] [cengchayk-tul_i]]
 [new-UN] [rational-CEK] [policy-PL]]
 ‘new rational policies which will boost the economy’

b. RC > CEK-AP_{ATT} > UN-AP > N + PL:

?? [_{DP} [_{RC} e_i kyengcey-rul sal-li-]-I, [_{CEK-AP} **hapli-cek**]
 [_{UN-AP} sayrop-un] [cengchayk-tul_i]]

c. RC > Focal-stressed CEK-AP_{ATT} > UN-AP > N + PL:

[_{DP} [_{RC} e_i kyengcey-rul sal-li-]-I, [_{CEK-AP} **HAPLI-CEK**]
 [_{UN-AP} sayrop-un] [cengchayk-tul_i]]

Need to posit an adjunction structure

(9) Ordering between an ATT-DET and a thematic AP:

a. **say,** **tokil-cey** [mohyeng catongcha]
 new German-made [miniature car]
 'a new German-made miniature car'

b. **tokil-cey,** **say** [mohyeng catongcha]
 'a German-made new miniature car'

(10) Ordering between an ATT-DET and a CEK-AP_{ATT}:

a. **say,** **hapli-cek** [kyengcey cengchayk]
 new rational-CEK [economy policy]
 'a new rational economic policy'

b. **hapli-cek,** **say** [kyencey cengchayk]
 'a rational new economic policy'

What (9) and (10) show

- APs that merge above \sqrt{P} may occur **adjoined** to each other.

- (11) a. $[_{DPd/r} [_{DPp} [_{FocP} [_{SortP} [_{nP} \text{say} [_{nP} \text{tokil-cey/hapli-cek} [_{\sqrt{P}} \text{Adjectival N}]]]]]]]]]$
 b. $[_{DPd/r} [_{DPp} [_{FocP} [_{SortP} [_{nP} \text{tokil-cey/hapli-cek} [_{nP} \text{say} [_{\sqrt{P}} \text{Adjectival N}]]]]]]]]]$

Need to posit a roll-up movement

(12) Constituent order variation for a definite, plural DP with a NUM and a CL:

a. RC > Dem > **NumP** > UN-AP > N + PL:

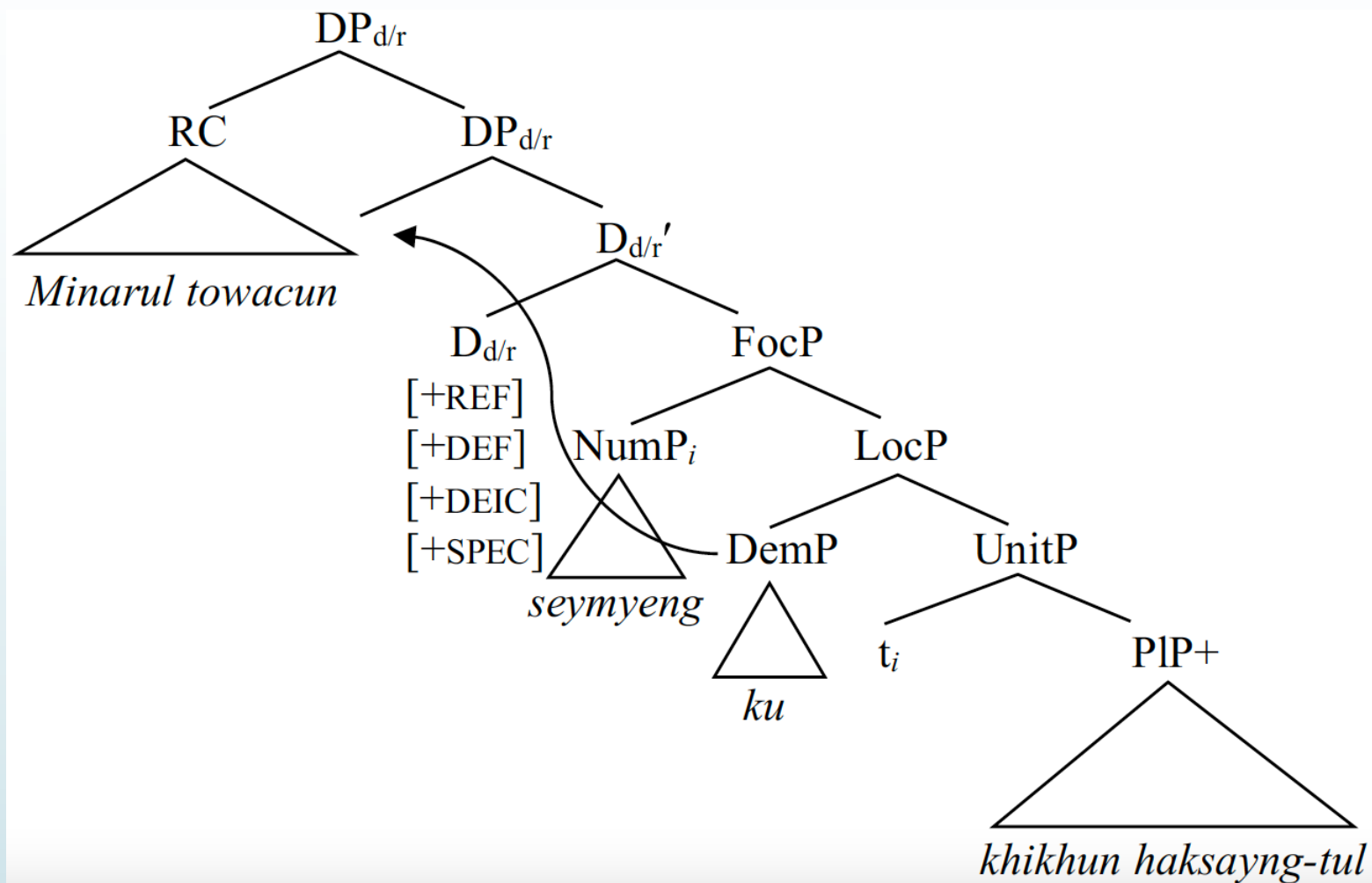
[_{DP} [_{RC} e_i Mina-rul towacwu-Ø]-n, [_{DP} ku
[[M.-ACC help-PRF]-REL [that
[_{NumP} **sey-myeng-uy**], [_{AP} khikhu-un] haksayng-tul]_i]
[three-CL-GEN] [tall-UN] student-PL]]
'those three tall students who helped Mina'

b. RC > Dem > UN-AP > N + PL > **NumP**:

[_{DP} [_{RC} e_i Mina-rul towacwu-Ø]-n, [_{DP} ku,
[_{AP} khikhun] haksayng-tul_i [_{NumP} **sey-myeng**]]
'those three tall students who helped Mina'

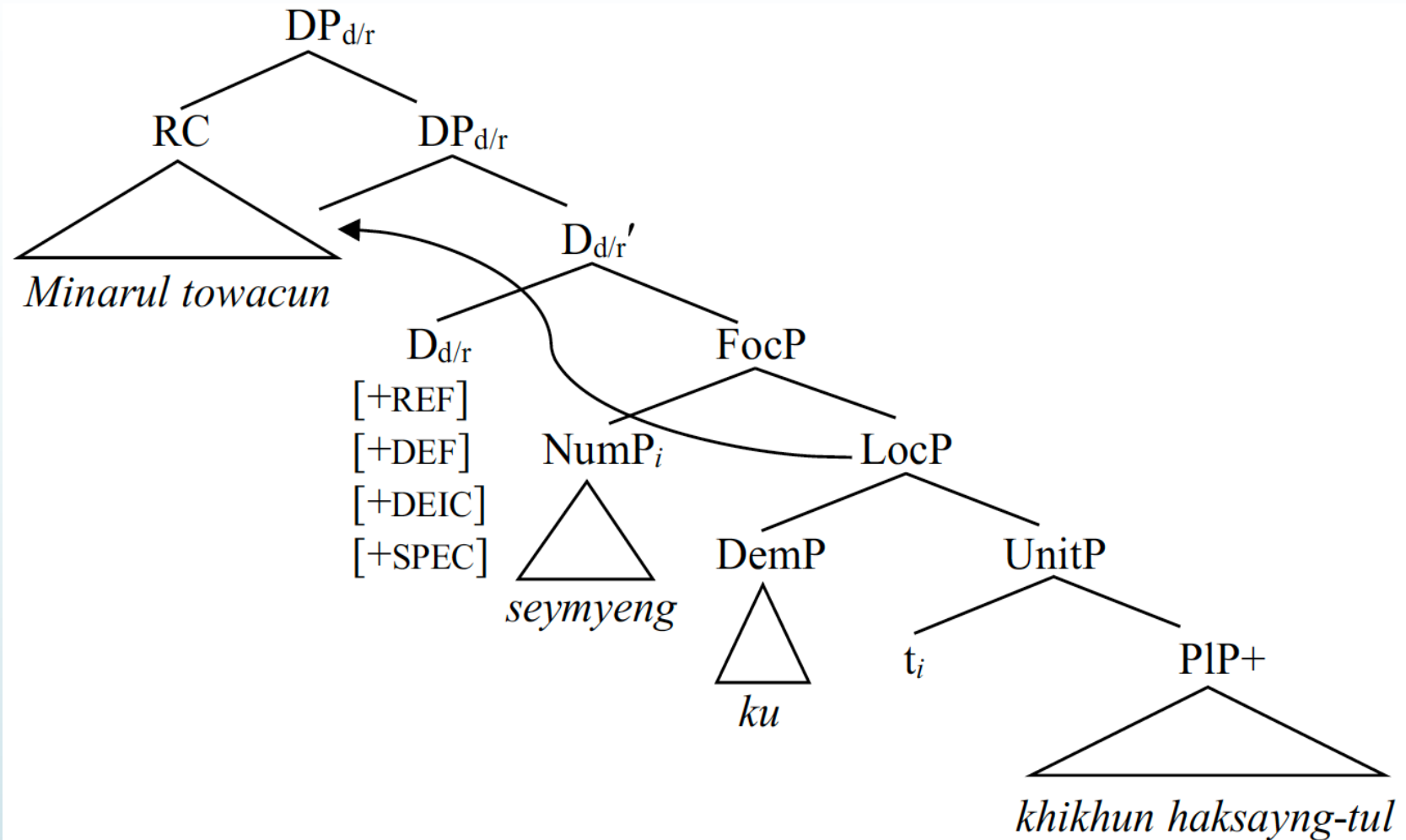
(12a): 'RC > Dem > Num > UN-AP > N + PL'

(13)



(12b): 'RC > Dem > UN-AP > N + PL > Num '

(14)



Interim summary

- We need to have enough **hierarchical structure** and **space** inside a nominal to capture various surface orders.
- We also need to assume some **movements** that occur inside a nominal, some of which are roll-up movements.
- Taken together, these facts provide **support** for a Split-DP analysis such as Kim 2019.

Some challenges

- **Challenge 1:** Relative ordering between an UN-AP and an ATT-DET.
- '**UN-AP > ATT-DET**' obtains if the UN-AP is **bi-syllabic**.

(15) Ordering between a bi-syllabic UN-AP and an ATT-DET:

a. **yeppu-n** **say** kapang (**UN-AP > ATT-DET**)

pretty-UN new bag

'a pretty new bag'

b. ***say** **yeppu-n** kapang (**ATT-DET > UN-AP**)

Intended: 'a new pretty bag'

Challenge 1 cont'd

- 'UN-AP > ATT-DET' may **not** obtain if the UN-AP is phonologically **as light as** the ATT-DET.

(16) Ordering between a mono-syllabic UN-AP and an ATT-DET:

a. ?**khu-n** **say** kapang (UN-AP > ATT-DET)

big-UN new bag

Intended: 'a big new bag'

b. ??**say** **khu-n** kapang (ATT-DET > UN-AP)

Intended: 'a new big bag'

c. **khuu-n** say kapang (vowel lengthened UN-AP > ATT-DET)

d. **KHU-N** say kapang (focal-stressed UN-AP > ATT-DET)

Challenge 1 cont'd

- However, in some cases, '**ATT-DET > UN-AP**' may obtain even if the ATT-DET is **phonologically lighter** than the UN-AP.

- Illustration:

- (17) a. **pwuphayha-n, hyen** cengkwon (**UN-AP > ATT-DET**)
 corrupt-UN present government
 'the corrupt present government'
- b. **hyen, pwuphayha-n** cengkwon (**ATT-DET > UN-AP**)
 'the present corrupt government'

Challenge 2

- UN-APs instantiate **parallel modification** in the sense of Sproat and Shih (1988, 1990) (S&S).
- Even so, they abide by 'Quality > Size > Shape > Color', contra S&S's prediction.

Illustration:

(18) Relative ordering between two UN-APs:

a. **khu-n**, **ppalkah-n** sakwa (size > color)
 big-UN, red-UN apple

'a big, red apple'

b. ??**ppalkah-n**, **khu-n** sakwa (color > size)

Intended: 'a red, big apple'

Challenge 2 cont'd

- When two UN-APs co-occur, 'Quality > Size > Shape > Color' may **not** obtain if **only one** of them is modified by a **degree adverb (DegAdv)**.

- Illustration:

(19) Ordering between two UN-APs, one with a DegAdv, and one without:

a. ??**khu-n**, [**acwu ppalkah-n**] sakwa (size > color)

big-UN, [very red-UN] apple

Intended: 'a big, very red apple'

b. [**acwu ppalkah-n**], **khu-n** sakwa (color > size)

'a very red, big apple'

Challenge 2 cont'd

- When two APs co-occur, 'Quality > Size > Shape > Color' may **not** obtain if one of them is an **UN-AP** and the other is an **adjectival N**.

- Illustration:

(20) Relative ordering between an UN-AP and an adjectival N:

a. **khu-n** **ko-kup** cha (size > quality)

big-UN high-quality car

'a large, high-quality vehicle'

b.***ko-kup** **khu-n** cha (quality > size)

Intended: 'a high-quality, large vehicle'

Challenge 2 cont'd

- If the co-occurring APs are **adjectival Ns**, then 'Quality > Size > Shape > Color' is respected.

- Illustration:

(21) Relative ordering between two adjectival Ns:

a. **ko-kup** **tay-hyeng** cha (quality > size)

high-class big-form car

'a large, luxury vehicle'

b. ??**tay-hyeng** **ko-kup** cha (size > quality)

Intended: 'a large, luxury vehicle'

What to make of these challenges

- In Korean, typically, 'Non-nominal ADJ (NNA) > Nominal ADJ (NA)' obtains.
- But **relative phonological weight** may impact AO.
- Typically, 'Relative ADJ > Absolute ADJ' obtains but **only if** both ADJs are of the **same categories** and it is **not** the case that only of them is modified by a **DegAdv**.

How to deal with these challenges

- **Kim's (2019) approach:** Resort to an Optimality-Theoretic **output filter** by building on works like Grimshaw 2001.

(22) A partial list of constraints regulating AO in human language:

- a. ***NA > NNA**: An ADJ sequence where a nominal AP occurs before a non-nominal one inside a DP_p is banned.
- b. **DEGLFT**: Every DegAdv is at the left edge of a DP_p .
- c. **RELLFT**: Every AP with relative semantics is at the left edge of a DP_p .
- d. **HVYLFT**: For any pair of APs occurring inside a DP_p , the heavier one is at the left edge of the DP_p .

(Kim 2019: 180, (47))

- Important: These constraints target APs **inside DP_p post Spell-out**.


Grimshaw 2001

► Key idea:


- Constituent order variation across languages can be captured by postulating a set of **alignment constraints** such as:
 - **HEADLFT** ('Every X-zero is at the left edge of an X-max')
 - **SPECLFT** ('Every specifier is at the left edge of an X-max')
 - **COMPLFT** ('Every complement is at the left edge of an X-max')
- and then ranking them differently for different languages in accordance with their constituent orders.

Grimshaw 2001: How SVO vs. SOV orders are derived

(23) Ranking: SPEC_{LFT} >> HEAD_{LFT} >> COM_{LFT}

input: Subj V Obj	SPEC_{LFT}	HEAD_{LFT}	COM_{LFT}
a.  [XP Spec [X' Head Complement]]		*	**
b. [XP Spec [X' Complement Head]]		**!	*

(24) Ranking: SPEC_{LFT} >> COM_{LFT} >> HEAD_{LFT}

input: Subj V Obj	SPEC_{LFT}	COM_{LFT}	HEAD_{LFT}
a. [XP Spec [X' Head Complement]]		**!	*
b.  [XP Spec [X' Complement Head]]		*	**

Ranking of the AO constraints in Korean

► **Kim's (2019) proposal:**


(25) Ranking among the four AO constraints for Korean:

***NA > NNA >> {DEGLFT, RELFT} >> HVYLFT**


(Kim 2019: 183, (52))

Explaining (15) vs. (16)

(26) Reason for the contrast between (15a, b):


input: [DP _p <i>yeppun</i> ‘pretty’ <i>say</i> ‘new’ N]	*NA > NNA	RELLFT	HVYLFT
a.  [DP _p [FocP [SortP <i>yeppun</i> [nP <i>say</i> [√P N]]]]]]			
b. [DP _p [FocP <i>SAY</i> [SortP <i>yeppun</i> [nP ____ [√P N]]]]]]	*!		

(27) Reason for the contrast between (16a, b, c):


input: [DP _p <i>khun</i> ‘big’ <i>say</i> ‘new’ N]	*NA > NNA	RELLFT	HVYLFT
a. [DP _p [FocP [SortP <i>khun</i> [nP <i>say</i> [√P N]]]]]]			*!
b. [DP _p [FocP <i>SAY</i> [SortP <i>khun</i> [nP ____ [√P N]]]]]]	*!		
c.  [DP _p [FocP [SortP <i>khu.un</i> [nP <i>say</i> [√P N]]]]]]			

Explaining (18) vs. (19)

(28) Reason for the contrast between (18a, b): 'size > color'


input: [DP _p <i>khun</i> 'big' <i>ppalkahn</i> 'red' N]	DEGLFT	RELLFT	HVYLFT
a.  [DP _p [SortP <i>khun</i> , [SortP <i>ppal.kan</i> [nP [√P N]]]]]			*
b. [DP _p [SortP <i>ppal.kan</i> , [SortP <i>khun</i> [nP [√P N]]]]]		*!	

(29) Reason for the contrast between (19a, b): 'color > size'


input: [DP _p <i>khun</i> 'big' <i>acwu ppalkahn</i> 'very red' N]	DEGLFT	RELLFT	HVYLFT
a. [DP _p [SortP <i>khun</i> , [SortP <i>a.cwu ppal.kan</i> [nP [√P N]]]]]	*		*!
b.  [DP _p [SortP <i>a.cwu ppal.kan</i> , [SortP <i>khun</i> [nP [√P N]]]]]		*	

Explaining (20) vs. (21)

(30) Reason for the contrast between (20a, b): 'size > quality'

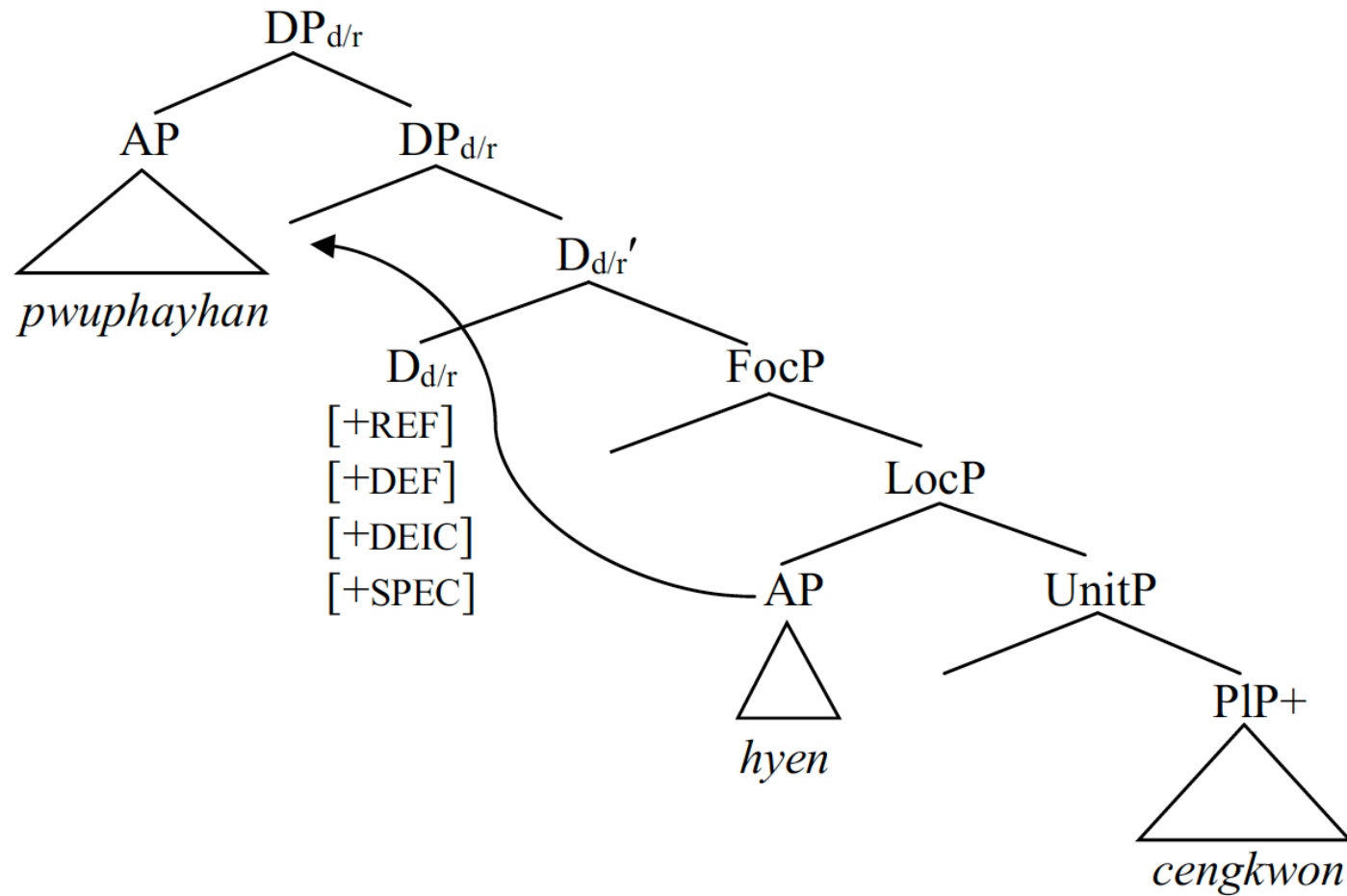
input: [DP _p <i>khun</i> 'big' <i>kokup</i> 'luxury' N]	*NA > NNA	RELLFT	HVYLFT
a.  [DP _p [SortP <i>khun</i> [n _P <i>kokup</i> [√P N]]]]		*	
b. [DP _p [SortP <i>kokup</i> [SortP <i>khun</i> [n _P ____ [√P N]]]]]	*!		

(31) Reason for the contrast between (21a, b): 'quality > size'

input: [DP _p <i>kokup</i> 'luxury' <i>tayhyeng</i> 'big' N]	*NA > NNA	RELLFT	HVYLFT
a.  [DP _p [n _P <i>ko.kup</i> , [n _P <i>tay.hyeng</i> [√P N]]]]			
b. [DP _p [n _P <i>tay.hyeng</i> , [n _P <i>ko.kup</i> [√P N]]]]		*!	

Explaining (17a): 'UN-AP > ATT-DET'

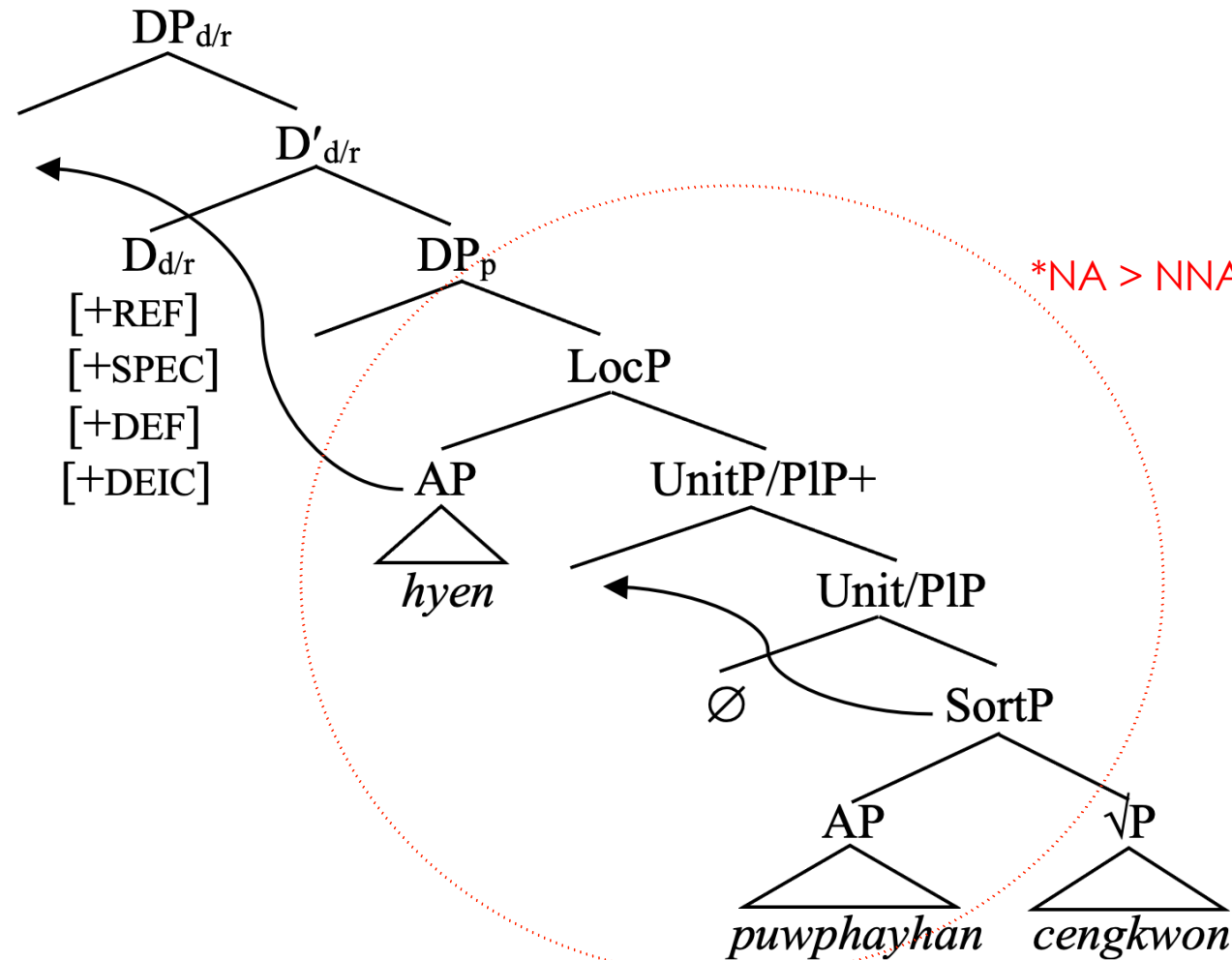
(32)



'the corrupt present government'

Explaining (17b): 'ATT-DET > UN-AP'

(33)



*NA > NNA >> {DEGLFT, RELFT} >> HVYLFT

'the present corrupt government'

Ordering restrictions on RCs

- **Larson and Takahashi's (2007) observation:** An RC with a stage (S)-level predicate (RC_S) occurs farther away from the head N than an RC with an individual (I)-level predicate (RC_I) (see also Del Gobbo 2005).

(34) a. [_{RC1} **nay-ka** **e_i** **ecey** **man-na-Ø-n**],
 [I-NOM ____ yesterday meet-PRF-REL]
 [_{RC2} **e_i** **phyengso** **tampay-rul** **manhi** **phiwu-n-un**]
 [____ usually cigarette-ACC a.lot smoke-IMPRF-REL]
 saram_i-un Chelswu-i-ta.
 person-TOP C.-COP-DECL
 'The person that I met yesterday who smokes a lot is Chelswu.' ($RC_s > RC_i$)

b. ?? [_{RC2} **e_i** **phyengso** **tampay-rul** **manhi** **phiwu-n-un**],
 [_{RC1} **nay-ka** **e_i** **ecey** **man-na-Ø-n**] saram_i-un Chelswu-i-Ø-ta.
 ($RC_i > RC_s$)

Ordering restrictions on RCs cont'd

- However, in some cases, $RC_S > RC_I$ is judged **less good** than $RC_I > RC_S$.

- (35) a. $[_{RC1}$ **nay_j** **nam-tongsayng-i** **e_i** **cohaha-n-]-un,**
 [my male-younger.sibling-NOM — like-IMPRF-]-REL
 $[_{RC2}$ **yec-nal-ey** $[_{DP2}$ **pro_j** **emma]-ka** **wuri-eykey** **e_i**
 [old-day-LOC [— mom]-NOM we-to —
mantul-e **cwu-si-te-]-n** **umsik_i-un** **mantwu-i-Ø-ta.**
 make-CONN give-HON-RTRO-]-REL food-TOP dumpling-COP-N.PST-DECL
 'The food that my younger brother likes which my mom used to make for us is
 dumplings.' ($RC_I > RC_S$)
- b. ?? $[_{RC2}$ **yec-nal-ey** $[_{DP2}$ **pro_j** **emma]-ka** **wuri-eykey** **e_i** **mantul-e**
cwu-si-te-]-n, $[_{RC1}$ **nay_j** **nam-tongsayng-i** **e_i** **cohaha-n-]-un** **umsik_i-un**
mantwu-i-Ø-ta.
 Intended: 'The food that my mom used to make for us which my younger
brother likes is dumplings.' ($RC_S > RC_I$)

Ordering restrictions on RCs cont'd

- In some cases, even two RCs with the **same type of predicates** may occur **only** in certain orders.

(36) Cases where **two RC_i's** co-occurring:

- a. [_{RC1} **Mina-ka** **e_i** **i** **seysang-eyse** **kacang**
 [M.-TOP — this world-LOC most
cohaha-n-]-un, [_{RC2} **e_i** **maumssi-ka** **nemwuna** **chakha-Ø]-n**
 like-IMPRF-]-REL [— heart-NOM really be.good-N.PST]-REL
 chinkwu_i-nun Cinhi-i-Ø-ta.
 friend-TOP C.-COP-N.PST-DECL
 'The friend that Mina likes the most in this world who has a truly beautiful heart is Cinhi.' (RC₁ > RC₂)
- b. **??/?** [_{RC2} **e_i** **maumssi-ka** **nemwuna** **chakha-Ø]-n,**
 [_{RC1} **Mina-ka** **e_i** **i** **seysang-eyse** **kacang** **cohaha-n-]-un**
 chinkwu_i-nun Cinhi-i-Ø-ta. (RC₂ > RC₁)
 Intended: 'The friend who has a truly beautiful heart who Mina likes the most in this world is Cinhi.'

Ordering restrictions on RCs cont'd

(37) Cases where **two RC_s's** co-occurring:

- a. [RC1 **Mina-ka** **ku** **nal** **e_i** **malha-Ø**]-n,
 [M.-NOM that day — mention-ANT]-REL,
 [RC2 **nay-ka** **e_i** **ecey** **manna-Ø**]-n saram_i-un
 [I-NOM — yesterday meet-ANT]-REL person-TOP
 Cinho-i-Ø-ta.

C.-COP-N.PST-DECL

'The person that Mina mentioned that day who I met yesterday is Cinho.'

(RC₁ > RC₂)

- b.?? [RC2 **nay-ka** **e_i** **ecey** **manna-Ø**]-n,
 [RC1 **Mina-ka** **ku** **nal** **e_i** **malha-Ø**]-n saram_i-un
 Cinho-i-Ø-ta.

Intended: 'The person that I met yesterday who Mina mentioned that day is Cinho.'

(RC₂ > RC₁)

Ordering restrictions on RCs cont'd

(38) **Variant of (37)** with two RC_s's co-occurring: **Reversed** grammaticality judgment

a. **??/?** [RC₁ **Mina-ka** **yecnal-ey** **e_i** **sakwi-ess-ta**]-nun,
 [M.-NOM old.day-LOC — date-PST-IND]-HEAR.SAY.COMP,
 [RC₂ **nay-ka** **e_i** **ecey** **manna-Ø**]-n saram_i-un
 [I-NOM — yesterday meet-ANT]-REL person-TOP
 Cinho-i-Ø-ta.
 C.-COP-N.PST-DECL

'The person that Mina is said to have dated in the past who I met yesterday is Cinho.'

(RC₁ > RC₂)

b. [RC₂ **nay-ka** **e_i** **ecey** **manna-Ø**]-n,
 [RC₁ **Mina-ka** **yecnal-ey** **e_i** **sakwi-ess-ta**]-nun
 saram_i-un Cinho-i-Ø-ta.

Intended: 'The person that I met yesterday who Mina is said to have dated in the past is Cinho.'

(RC₂ > RC₁)

What to make of these facts?

- **Kim's (2019) approach:** RC ordering is also subject to an **output filter**.

(39) Constraints on RCs which occur modifying the same referential DP:

- a. **EPCRCLFT**: An RC derived from an episodic event description occurs at the left edge of a $DP_{d/r}$.
- b. **PRERCLFT**: When two RCs modify the same $DP_{d/r}$, the RC whose event time is earlier occurs at the left edge of the $DP_{d/r}$.
- c. **FMLRCLFT**: When two RCs modify the same $DP_{d/r}$, the RC whose content is more familiar to the relevant discourse participant (i.e., S or H) occurs at the left edge of the $DP_{d/r}$.


(Revised from Kim 2019: 202, (94))

(40) Ranking among the three constraints:


FMLRCLFT >> {**EPCRCLFT**, **PRERCLFT**}

Explaining (37) vs. (38)

(41) Reason for the surface order of the RCs in (37):

input: [DP _{d/r} [RC ₁ <i>Minaka kunal malhan</i>] [RC ₂ <i>nayka ecey mannan</i>] [DP _p [_{√P} <i>saram</i>]]]	FMLRC LFT	EPCRC LFT	PRERC LFT
a.  [DP _{d/r} [RC ₁ 'Mina mentioned that day'] [RC ₂ 'I met yesterday'] [DP _p [_{√P} 'person']]]]			
b. [DP _{d/r} [RC ₂ 'I met yesterday'] [RC ₁ 'Mina mentioned that day'] [DP _p [_{√P} 'person']]]]			*!

(42) Reason for the surface order of the RCs in (38):

input: [DP _{d/r} [RC ₁ <i>Minaka yecnaleey sakesstanun</i>] [RC ₂ <i>nayka ecey mannan</i>] [DP _p [_{√P} <i>saram</i>]]]	FMLRC LFT	EPCRC LFT	PRERC LFT
a. [DP _{d/r} [RC ₁ 'Mina is said to have dated'] [RC ₂ 'I met yesterday'] [DP _p [_{√P} 'person']]]]	*!		*
b.  [DP _{d/r} [RC ₂ 'I met yesterday'] [RC ₁ 'Mina is said to have dated'] [DP _p [_{√P} 'person']]]]			

Support from Mandarin Chinese

- **Jhang's (2012) observation:** Mandarin RCs may occur only in certain orders and this has little to do with whether they contain an I-level or an S-level predicate, contra authors like Del Gobbo (2005) and Larson and Takahashi (2007).

(43) a. [**e_i** **bei shiren** **yiwang de**] [**e_i** **cengjing** **weida de**]
 [___ PASS world.people forget DE] [___ once great DE]

 $zuopin_i$

art.work

'The art piece that has been forgotten by the world which was once great'

$$(RC_S > RC_S)$$

b. * $[e_i$ cengjing weida de] $[e_i$ bei shiren yiwang de]


Intended: 'The art piece that has been forgotten by the world which was once great'
($RC_s > RC_s$)

$$(RC_s > RC_s)$$

Support from Mandarin cont'd

- (44) a. [ta xihuan e_i de] [Jay xie e_i de] na shou ge_i
 [she like — DE] [J. write — DE] DEM CL song
 'The song that she likes which Jay wrote' (RC_I > RC_S)
- b. *[Jay xie e_i de] [ta xihuan e_i de] na shou ge_i
 Intended: 'The song that she likes which Jay wrote' (RC_S > RC_I)

(45) Reason for the surface order of the RCs in (44):

input: [DPd/r [RC1 <i>ta xihuan de</i>] [RC2 <i>Jay xie de</i>] [DPd/r [√P <i>na shou ge</i>]]]	FMLRC LFT	EPCRC LFT	PRERC LFT
a.  [DPd/r [RC1 'she likes'] [RC2 'Jay wrote'] [DPd/r [√P 'the song']]]		*	
b. [DPd/r [RC2 'Jay wrote'] [RC1 'she likes'] [DPd/r [√P 'the song']]]	*!		

In sum

- Sources of variation in AO in Korean:
 - Morpho-syntactic complexity
 - Relative vs. Absolute semantics
 - Categorical status
 - Relative phonological weight
 - Discourse prominence or status of the modified nominal

Returning to the questions we started out with

- To what extent is split-DP real?
- Are roll-up movements indispensable?
- Does adopting a derivational system alone give rise to all attested AOs?
- If not, is truly it necessary to resort to an Optimality-Theoretic output filter?

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Thank you for listening!
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