FEATURES IN PHONOLOGY, MORPHOLOGY, SYNTAX AND SEMANTICS

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Word order and A-movement in head-final languages as a window on syntactic features

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Key issue

- There is something ‘special’ about A-movement operations in head-final languages (Japanese, Turkish…)
- Can this be captured by appealing to features?

Five insights into features

Rich enough theory needed to accommodate second-order EPP-features

Distribution of some EPP-features is restricted in certain contexts

Features must form an ordered bundle if we are to derive linearizable structures

The presence of some feature configurations in a language implies other feature settings

Features may or may not require valuation, but can still host EPP-features

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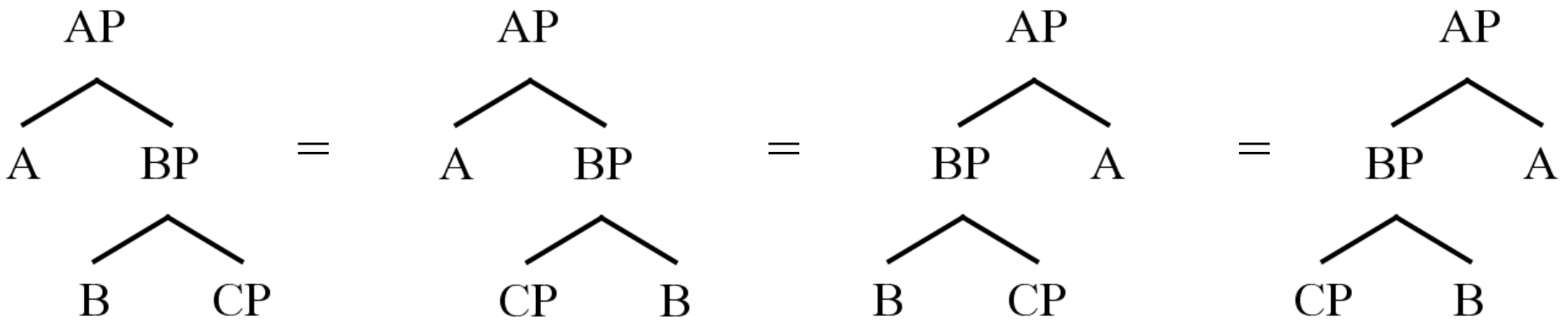
Deriving head-final orders

- Hierarchical structures do not contain intrinsic information about linear order

Uriagereka (1999)



Deriving head-final orders

- Hierarchical structure ➔ linear order?

- **Linear Correspondence Axiom**
  α precedes β iff α asymmetrically c-commands β or if α is contained in γ where γ asymmetrically c-commands β

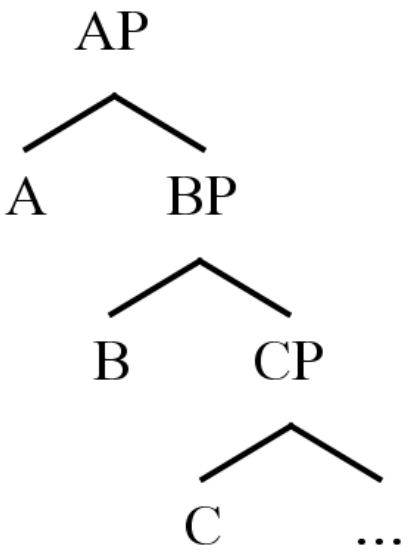
  Kayne (1994)

- **C-command:** ***Transitive closure of sisterhood and containment***
  - α c-commands β if α is a category and β is contained in the sister of α
  - α asymmetrically c-commands β if α c-commands β and β does not c-command α

  Biberauer, Holmberg & Roberts (in press)

Deriving head-final orders

- Asymmetric c-command maps onto linear order (precedence)



➔ A B C …

- Head-final order is derived through **movement**

EPP-features

- Movement is triggered by a general movement-triggering feature or **EPP-feature**

Chomsky (2000, 2001)

- EPP-features are **second-order features**

Adger & Svenonius (2011)

- 'The EPP is a property of a feature of a head — not a property of the head itself. Thus, a head that bears features F and G might have the EPP property for F, but not for G. EPP is thus a "subfeature of a feature," in the sense familiar from feature geometry in phonology.'

Pesetsky & Torrego (2001: 359)

EPP-features

- A diacritic: represented using '^' symbol
- EPP-feature ^ may be parasitic upon:
  - an unvalued probing feature, moving goal to the probing head's spec — e.g. T [uϕ, ˆ]

    A-movement
  - b. a phase head — e.g. C [EF, ˆ]

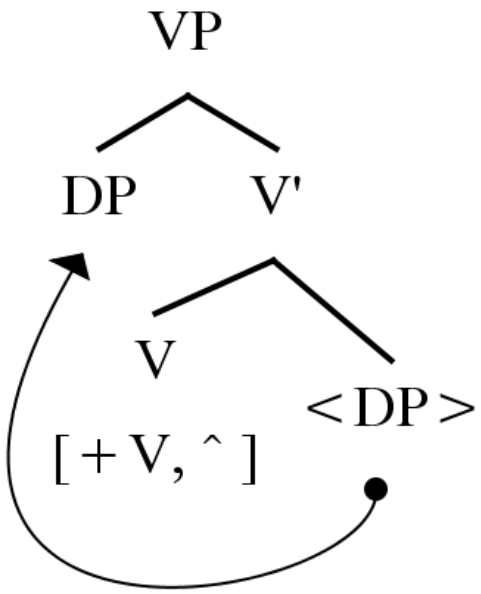
    A'-movement
  - c. a head's categorial feature — e.g. V [+V, ˆ]

    Linearization-movement

Biberauer, Holmberg & Roberts (in press) [based on Müller & Sternefeld 1993]
cf. also Julien (2002)

EPP-features

- Head-final order is the result of linearization-movement:



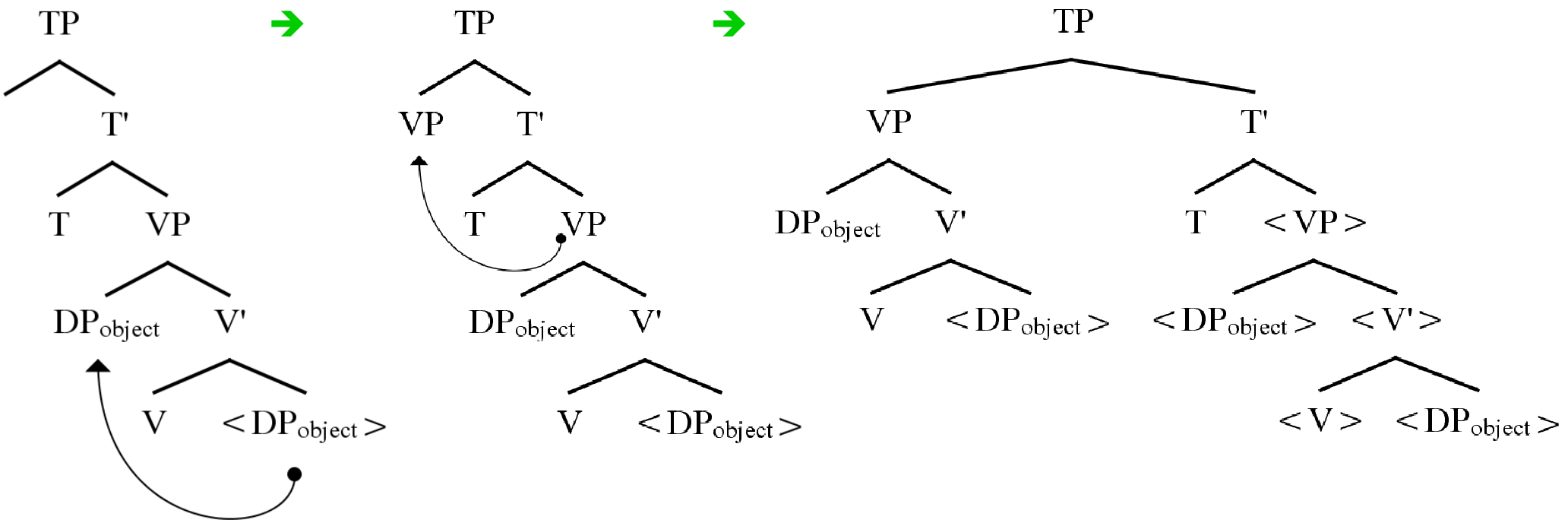
➔ DP V

- Only the highest copy in a chain is pronounced

Nunes (2004), Holmberg (2010)

EPP-features

- Harmonically head-final order is the result of repeated linearization-movement (‘roll-up’):



Insight 1

- Second-order movement-triggering features allow us to readily capture different types of movement.

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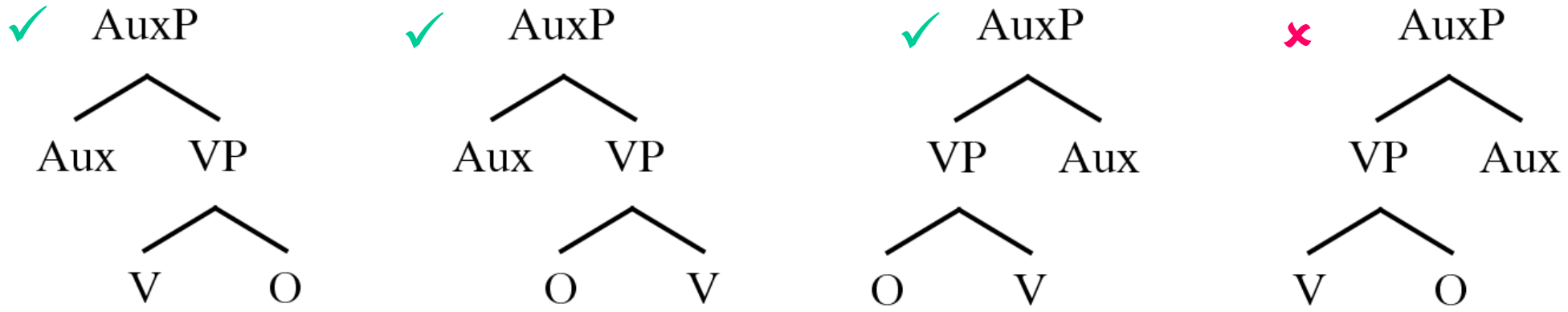
The Final-over-Final Constraint

- If a phrase α is head-initial,then the phrase β immediately dominating α is head-initial. If α is head-final, β can be head-final or head-initial.

Holmberg (2000: 124)



The Final-over-Final Constraint

- * [[V O]Aux] gap attested synchronically…

AuxVO:
… oyb dos yingl vet oyfn veg zen a kats.
whether the boy will on.the way see a cat
'…whether the boy will see a cat on the way.'
(Yiddish – Santorini 1992)

AuxOV:
… da Jan wilt een huus kopen.
that John wants a house buy.INF
'… that John wants to buy a house.'
(West Flemish – Haegeman & Riemsdijk 1986)

OVAux:
… dass Hans das Buch gelesen hat.
that Hans the book read has
'… that Hans has read the book.'
(German)

OAuxV:
… dat Jan het boek wil lezen.
that John the book wants read.INF
'… that John wants to read the book.'
(Dutch – BHR in press)

VAuxO:
… dat hy die boek gegee het vir sy suster.
that he the book given.PART has for his sister
'… that he gave the book to his sister.'
(Colloquial Afrikaans – BHR in press)

*** V O Aux**

The Final-over-Final Constraint

- ...and diachronically

Biberauer, Holmberg & Roberts (in press)

AuxVO:
... þæt he mot ehtan godra manna
that he might persecute good men
'... that he might persecute good men'
(*Wulfstan's Homilies*)

OAuxV:
... þe æfre on gefeohte his handa wolde afylan
who ever in battle his hands would defile
'... whoever would defile his hands in battle'
(*Ælfric's Lives of Saints*)

AuxOV:
... þæt hie mihton [swa bealdlice] Godes geleafan bodian
that they could [so boldly] God's faith preach
'... that they could preach God's faith so boldly'
(*The Homilies of the Anglo-Saxon Church* I 232)

VAuxO:
... þæt ænig mon atellan mæge ealne þone demm
that any man relate can all the misery
'... that any man can relate all the misery'
(*Orosius*)

OVAux:
him þær se gionga cyning þæs oferfæreldes forwiernan mehte
him there the young king the crossing prevent could
'the young king could prevent him from crossing there'

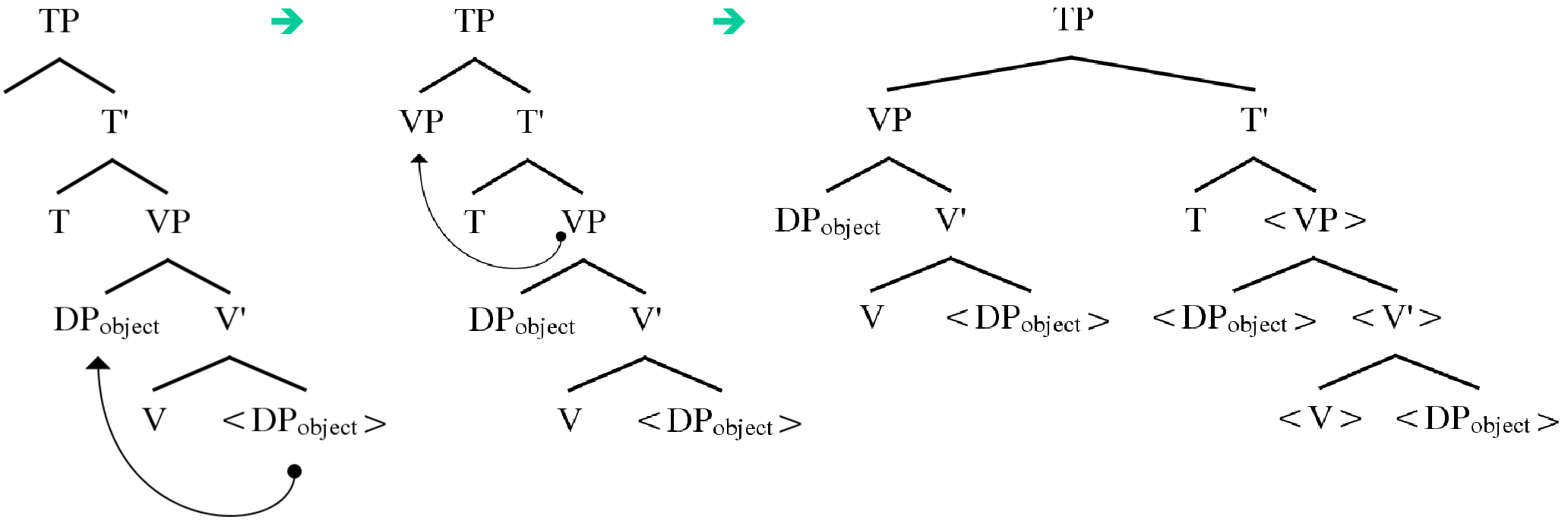
*** V O Aux**

The Final-over-Final Constraint

- Across languages…
  - *VOAux in Finnish — Holmberg (2000)
  - *VOAux in Basque — Haddican (2004)
- …across categories…
  - * [[Asp VP] T] — Julien (2002)
  - * [[Pol TP] C]
  - * [[V O] C]
  - nominals — Biberauer, Holmberg & Roberts (in press)
- …across pathways of change… — Biberauer, Newton & Sheehan (2009a,b)
- …and across domains
  - morphology — Myler (2009)

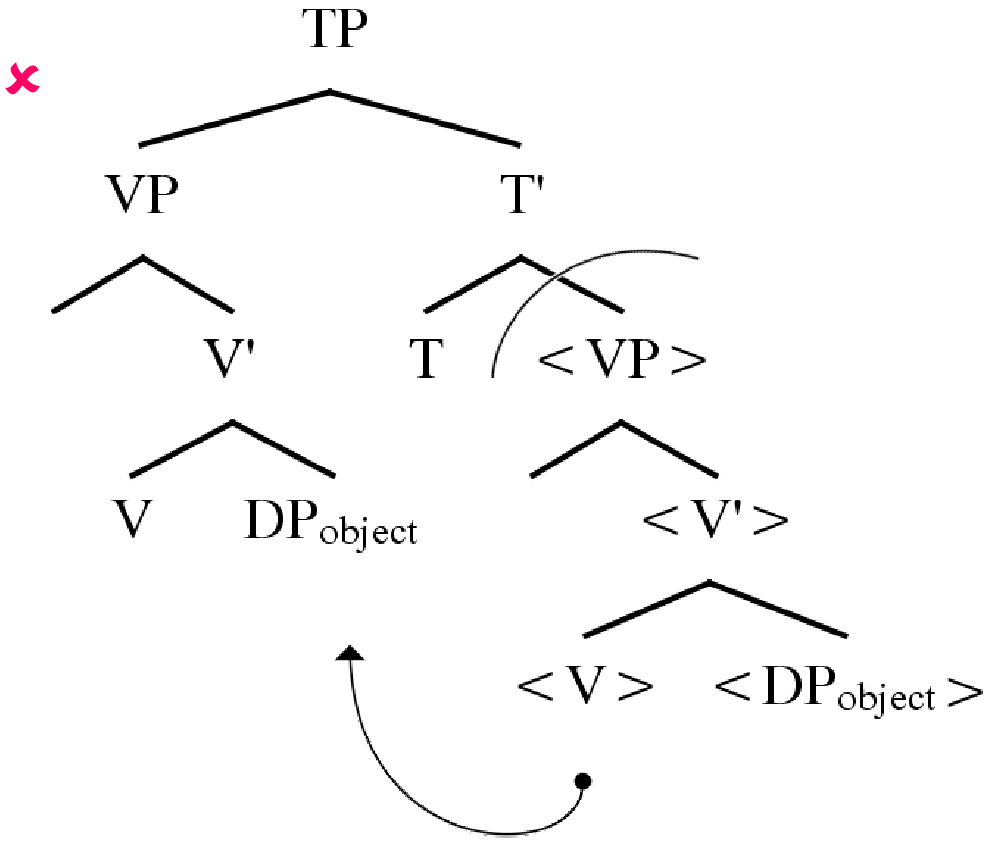
The Final-over-Final Constraint

- Recall head-final order = repeated L-movement



The Final-over-Final Constraint

- It is not possible to start roll-up movement partway up an extended projection, nor is it possible to start roll-up movement, skip one or more heads, and then continue roll-up movement higher up an extended projection:



➔ * [[V O] Aux]

The Final-over-Final Constraint

- Every categorial feature of a lower head in a clausal or nominal extended projection must be associated with an EPP-feature, in order for the categorial features of higher heads in that extended projection to also be associated with an EPP-feature .

Insight 2

- The distribution of EPP-features, when associated with categorial features, is limited. The presence of [±V, ^] high in an extended projection implies the presence of [±V, ^] on *all* lower heads in that extended projection.

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Ordering operations

- In a rigidly head-final language, every head's categorial feature must be associated with an EPP-feature
- We must admit **multiple specifiers** for External (first) Merge and Internal Merge (A- and A'-movement) *pace* Kayne (1994) *et seq*
- How do we order these (and do we need to)?

Insight 3

- Features must be ordered with respect to one another (either in a hierarchy or in a stack) to generate a determinate ordering of specifiers and thus to generate a linear order

On hierarchies and stacks: Harley & Ritter (2002) / Müller (2008, 2010)

Questions

- Assume [F, ^] : movement triggered at the same time as feature satisfaction / valuation
  - How are linearization-movement and External Merge ordered?
  - What happens if a head triggers both linearization-movement and A-movement?

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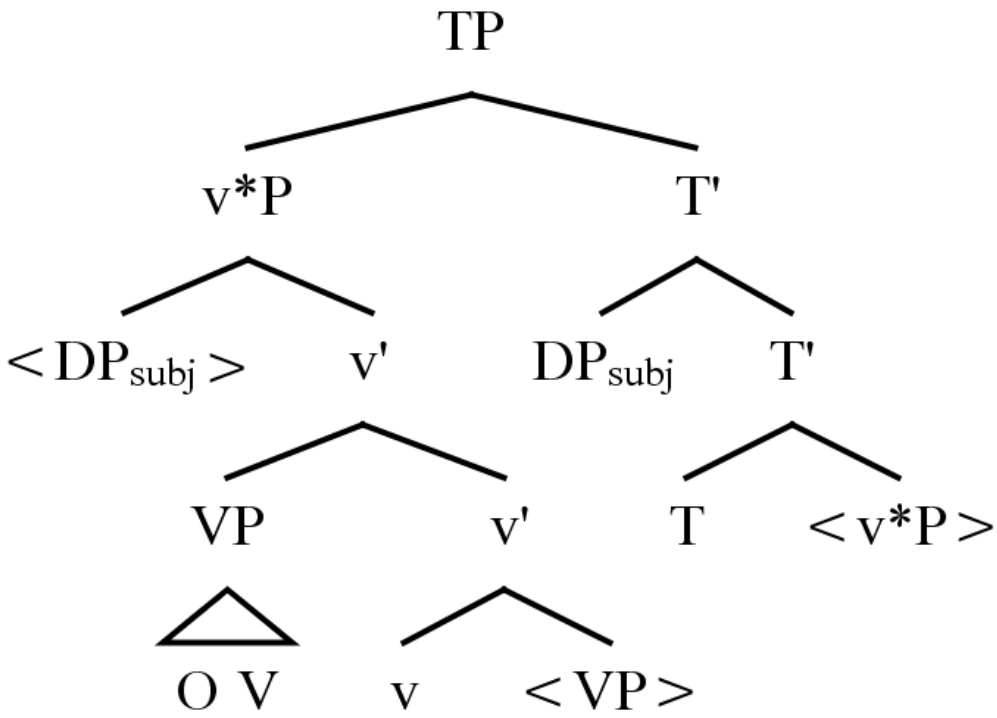
External Merge

- General empirical picture: IM precedes EM
  - Surface SOV order
  - (OVS order? 11 OVS languages *vs* 565 SOV languages)
- Does the Earliness Principle favour IM over EM?

Pesetsky (1989)

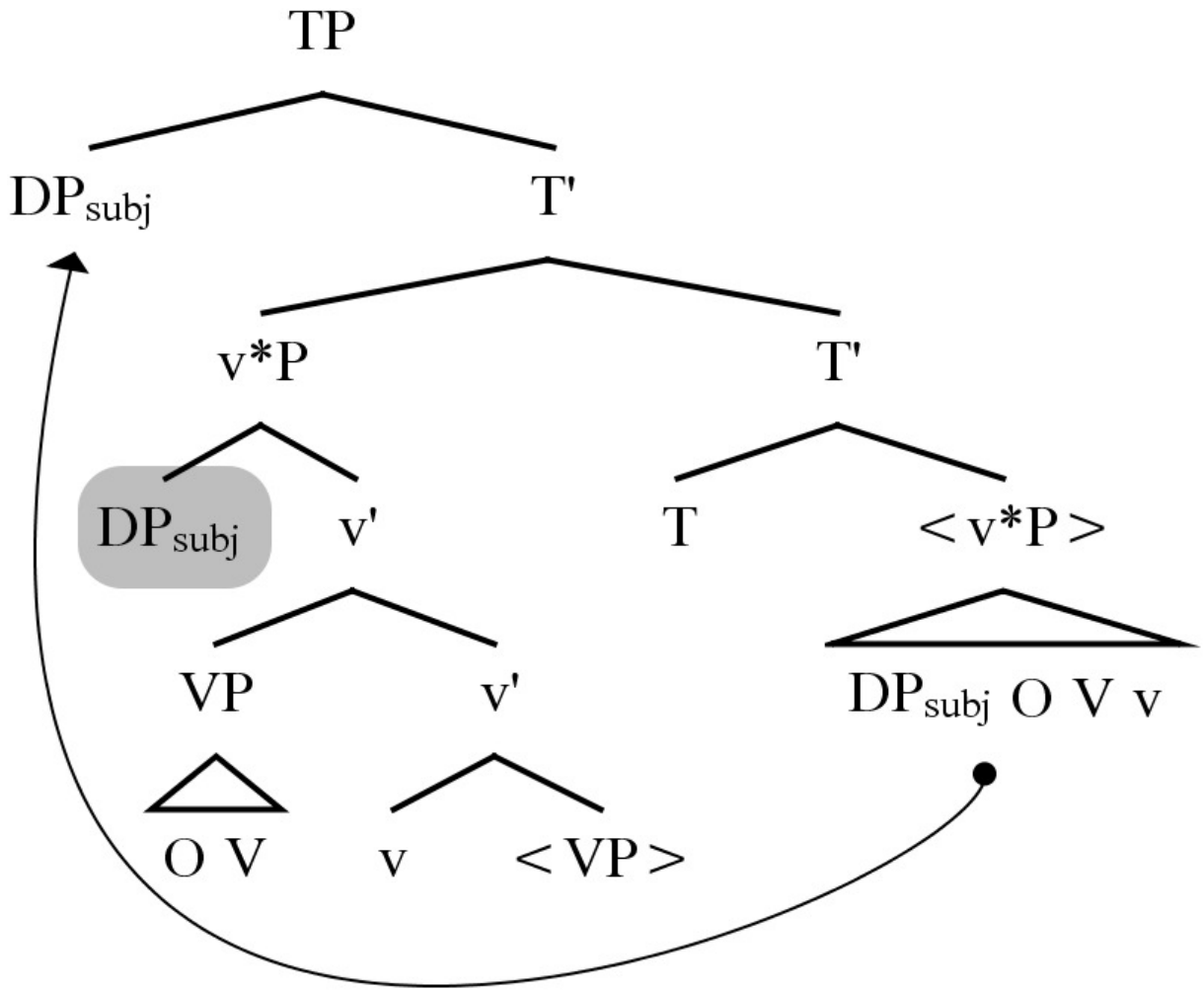
Internal Merge I

A-movement > L-movement



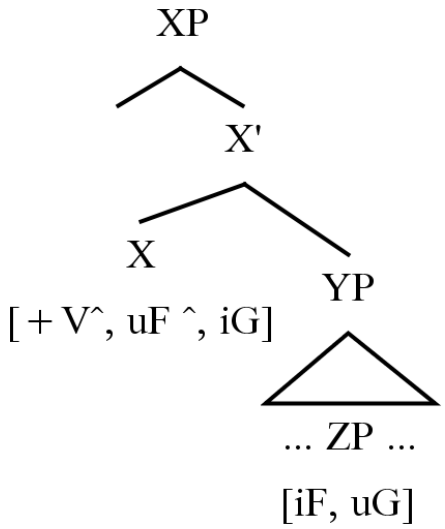
Internal Merge II

L-movement > A-movement

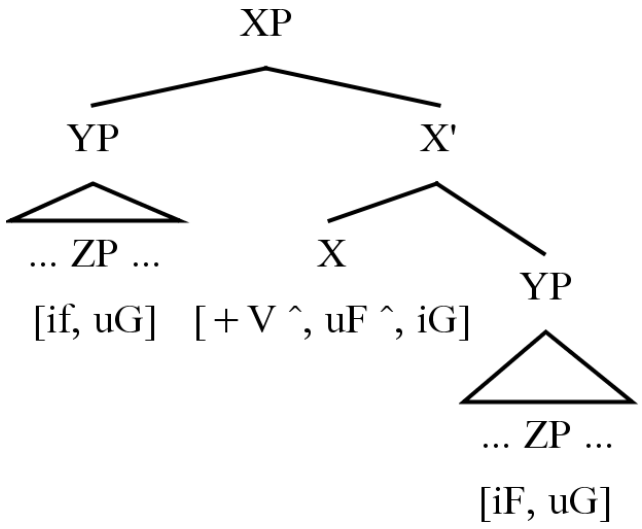


Internal Merge II

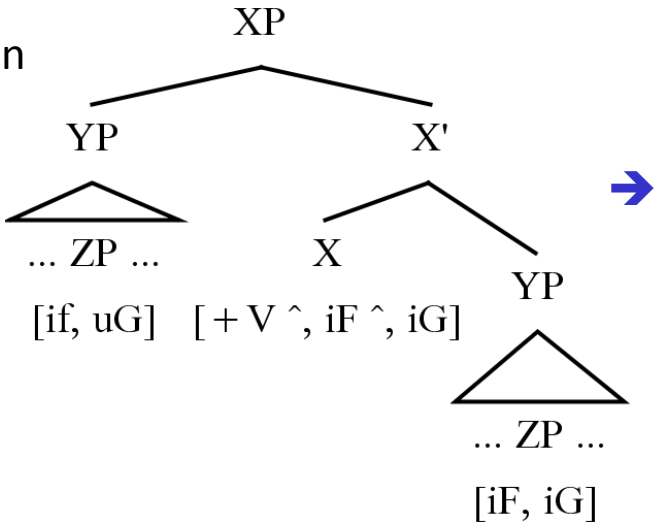
1. Initial configuration



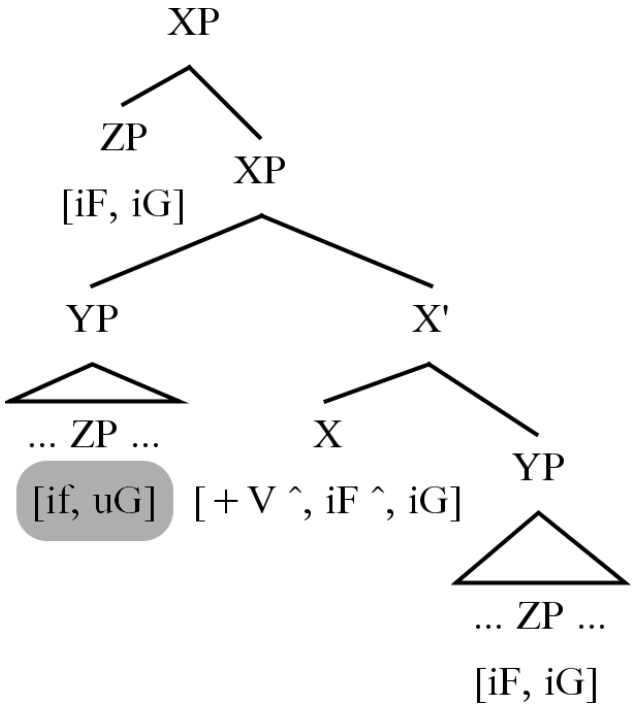
2. L-movement



3. Valuation

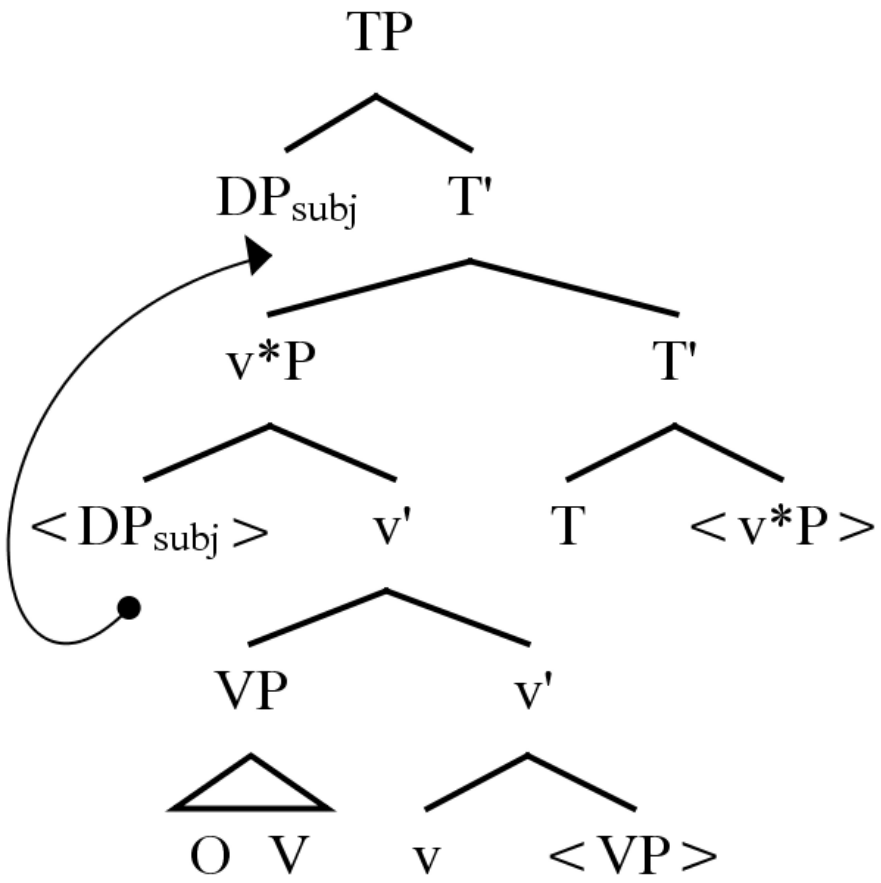


4. A-movement



Internal Merge III

L-movement > A-movement (under m-command)



Insight 4

- Possible feature combinations on a single head:

	[±V]	[±V,^]
[ATT: __]	Yes	Yes
[ATT: VAL,^]	Yes	Yes
[ATT: __ ,^]	Yes	No

- In head-final languages, [+V, ^] implies that no [ATT: __ , ^] bundles are permitted
- *As we will see:* in head-final languages, [+V, ^] may imply possibility of [(±)Focus, ^]

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Assessing the claim

- Does Japanese have an ‘EPP-requirement’ of the kind found in English:
  - Do any arguments move from their base-generated positions within vP to some higher position?
  - If so, what are the landing sites for these movements?
  - **What is the nature of the feature-bundle driving this movement?**

A-scrambling

- Scrambling: Miyagawa (2001) *et seq*.

a) Taroo-ga piza-o tabe-ta.
Taro-NOM pizza-ACC eat-past.

b) Piza-o Taroo-ga tabe-ta.
Pizza-ACC Taro-NOM eat-past.
`Taro ate pizza.'

- (a) might not involve movement; (b) must involve movement
- Semantically equivalent = same number of movement operations
- (a) involves spec,vP-spec,TP movement

A-scrambling

- Movement as A-scrambling: Miyagawa (2001) *et seq*.

a) Taroo-ga zen'in-o home-nakat-ta (yo).
Taro-NOM all-ACC praise-neg-past (excl)
'Taro did not praise all!' = 'Taro didn't praise everybody'
not > all, * all > not

b) Zen'in-ga sono tesuto-o uke-nakat-ta.
All-NOM that test-ACC take-neg-past.
`All did not take that test.' = `Nobody took the test'
* not > all, all > not

- In (b) subject is in spec,TP outside the scope of negation
- Not able to reconstruct in spec,vP = A-movement

A-scrambling

- Object in spec,TP with subject in spec,vP *or* subject in spec,TP with object A'-scrambled to a higher position:

c) Sono tesuto-o zen'in-ga __ uke-nakat-ta.
that- test-ACC all-NOM __ take-neg-past
'That test, all did not take.'
not > all, (all > not)

- **Something** must move to spec,TP…
- …possibly even an adjunct rather than an argument:

d) Hanako-to zen'in-ga __ odora-nakat-ta.
Hanako-with all-NOM __ dance-neg-past
'With Hanako, all didn't dance.'
(?)not > all, all > not

Miyagawa(2003)

A-scrambling as Topic

- *mo* (also) constructions:

a) Taroo-wa HON-o kat-ta.
Taro-TOP book-ACC buy-past
'Taro bought a book.'

b) TAROO-*mo* hon-o kat-ta.
Taro-also book-ACC buy-past
'Taro also bought a book.'

c) Taroo-ga hon-mo kaw-anakat-ta.
Taro-NOM book-also buy-neg-past
'A book is one of the things that Taro did not buy.'
also > not, * not > all

A-scrambling as Topic

- Miyagawa (2010):
  - all referential expressions carry [-focus] by default
  - T carries [-focus] by default
  - T probes for a [-focus] expression; subject and object are both potential goals. These are understood as a topic ('what the sentence is about').
- [-Focus, ^] on T (in the framework assumed here)
  - Induces Match; movement driven by the EPP-feature '^'
  - Crucially movement does not rely on valuation
- [Topic, ^] also a possible feature configuration?

Extant claims

- Julien (2002): arguments in head-final languages remain VP-internal (unless topicalized / focalized)
  - Previously proposed in Yanagida(1996) and Nakajima (1999)
- Not quite right? The subject-in-situ generalization:

a) John-ga/no nihon-e kaetta hi
John-NOM/GEN Japan-to returned day
'the day on which John came back to Japan'

b) John-ga/*no LGB-o kashita hito.
John-NOM/GEN LGB-ACC lent person
'the person to whom John lent LGB'

c) [John-ga/no __ katta] hon.
John-NOM/GEN __ bought book
'the book which John bought' Alexiadou & Anagnostopoulou (2001, 2005)

Extant claims

- Japanese passive
  - Kitagawa and Kuroda (1992): passive without movement
  - Collins (2005): passive **may** not involve A-movement
  - Ariji (2006): no A-movement in passive
- Japanese raising-to-object
  - Hiraiwa (2001) suggests raising is possible but never obligatory
- Japanese 'double object' unaccusative
  - Takano (2011): both theme/goal and goal/theme orders, with both DPs acting as subjects (binding *zibun*)
- Turkish: Öztürk (2009)
  - Passive without A-movement

Insight 5

- Features may (probably) be unary – e.g. [Topic] - or binary (most other features).
- If binary, these need not always require valuation through Agree.

Chomsky 2001

- Any feature may host an EPP-feature, **inducing Match and movement**.

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