When wh-phrases are their own interveners*

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1 When locality conditions are fine-grained

- **Observation**: wh-movement seems to exhibit different restrictions in different languages
  - English: wh-movement only sensitive to intervening wh-phrases, not arguments

    (1) a. What did Rachel buy t?
    b. *What did who buy t?

  - Tagalog: wh-movement is sensitive to Voice

    (2) Agent Voice only permits external argument to move, not internal argument
    a. Sino ang [nagsu∼sulat ng tula]?
    who.NOM NOM AV.IPFV write GEN poem
    'Who is writing a poem?' (Hsieh, 2020, ex. 5a, p. 3)
    b. *Ano ang [nagsu∼sulat ang estudyante]?
    what.NOM NOM AV.IPFV write NOM student
    intended: 'What is the student writing?' (Hsieh, 2020, ex. 5b, p. 4)

  - But there are other dimensions to this story...

- *The DP/non-DP distinction*:
  - **Tagalog**: DPs are sensitive to Voice, non-DPs are not

    (3) Wh-obliques wh-move in any Voice context (Hsieh, 2020, ex. 5, p. 230)
    a. Saan nag-lagay ang kusinero ng kaldero?
    where AV.PFV-put NOM cook GEN pot
    'Where did the cook put a pot?'

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b. Saan i-ni-lagay ng kusinero ang kaldero?
where CV-PFV-put GEN cook NOM pot
'Where did the cook put the pot?'

– **Dinka**: everything is sensitive to Voice

(4) păal [cɛ́ɛmɛ̀/*càm/*cɛ́ɛm môc cu̱i̱n]
knife eat.OBLV/eat.SV/eat.OV man.GEN food
'the knife that the man is eating food with' (van Urk, 2015, ex. 11c, p. 66)

(5) Tagalog even has an oblique Voice alternation! But doesn't have to use it for wh-movement (Hsieh, 2020, ex. 3, p. 33)

a. Mag-u∼usap ang mga mag-aarál tungkol sa nobela.
AV-FUT∼talk NOM PL AN.study about OBL novel
'The students will talk about the novel.'

b. Pag-u∼usap-an ng mga mag-aarál ang nobela.
pag-FUT∼talk-LV GEN PL AN.study NOM novel
'The students will talk about the novel.'

- *External vs. internal arguments*:
  - **Tagalog**: external arguments can wh-move in more Voice contexts than internal arguments can
  - Internal arguments can only move in their corresponding Voice, while external arguments can move from an object/oblique Voice.

(6) ?Sino ang [pinaki∼kingg-an ang mga podcast ng NPR]?
who NOM *pa*.IPFV∼listen-LV NOM PL podcast GEN NPR
'Who listens to NPR podcasts?' (Hsieh, 2020, ex. 55a, p. 178)

  - **Dinka**: everything is equally sensitive to Voice

(7) *móny [cɛ́ɛm cu̱i̱n nɛ̀ păal]
man.CS eat.OV food P knife
intended: 'the man by whom food is being eaten with a knife' (van Urk, 2015, ex. 11a, p. 66)

- Some questions raised by these facts:
  1. Why should wh-movement be sensitive to Voice in any language?
  2. Why do interactions between wh-movement and Voice vary across languages the way that they do?
- The first question has received a lot of attention, but I don't think answers to the first question have given us insight into the second question.

- The goal today: to attempt an answer to the second question that also answers the first question

- Moving towards a proposal...
  - One way to characterize the generalization:
    1. some languages (e.g. English) can wh-move anything without a Voice alternation
    2. some languages (e.g. Tagalog) can only wh-move things above a certain point in the clause without a Voice alternation (on certain assumptions about the positions of non-DP phrases)
    3. some languages (e.g. Dinka) always require a Voice alternation to move anything
  - *Idea*: Maybe there are certain points in the clause, above which things can move and below which things cannot – the way to get to where you need to be (if you're not already there) is to be promoted via Voice alternation
    - Languages differ wrt where that point is:
      1. as low as the lowest argument vs.
      2. above some arguments but below others vs.
      3. above everything
  - I'll show that phase theory/intervention stories don't teach us why wh-movement should work this way.
  - **My proposal**: re-examining our rules of projection

- Bird's eye view of the proposal:
  - I'll propose a slightly modified projection rule that *does not distinguish heads from phrases* – it only distinguishes features that are being checked from those that are not being checked at the time of Merge.
  - I'll show that this theory of projection *requires wh-movement to proceed successive cyclically*.
  - The proposal does not specify where successive cyclic movement must occur, just that it must occur somewhere.
    - Exploring the different options gives us the typology of wh-movement/Voice interactions.

2 Motivating the generalization

- The description I just gave:

Things above a certain point in the clause get to wh-move without a Voice alternation, while things below that point need a Voice alternation to wh-move; languages differ as to where that point is. (inspired by discussion in Keine & Zeijlstra to appear)

- What we expect if this is the right way of thinking about it:
  - Languages that choose a really low point in the clause: everything can wh-move without a Voice alternation → we know many such languages...
  - Languages that choose a really high point in the clause: everything needs to get promoted to wh-move → Dinka
  - Languages that choose a middling point: some things need a Voice alternation to wh-move while others don't → let's focus on Tagalog and Malay

2.1 Tagalog and Malay in more detail

- Both have a Voice that permits agent extraction but not patient extraction: *agent* Voice in Tagalog and *meN-* Voice in Malay

(2) Tagalog: Agent Voice only permits external argument to move, not internal argument

a. Sino ang [nagsu∼sulat ng tula]?
who.NOM NOM AV.IPFV write GEN poem
'Who is writing a poem?' (Hsieh, 2020, ex. 5a, p. 3)

b. *Ano ang [nagsu∼sulat ang estudyante]?
what.NOM NOM AV.IPFV write NOM student
intended: 'What is the student writing?' (Hsieh, 2020, ex. 5b, p. 4)

(8) Malay: *meN-* Voice licenses subject but not object extraction

a. Ali telah mem-baca buku itu.
Ali PFV MEN-read book the
'Ali has read the book.' (Soh, 1998, ex. 6, p. 2)

b. Siapa$_1$-kah yang ___$_1$ telah mem-baca buku itu?
who-Q that PFV MEN-read book the
'Who has read the book?' (Soh, 1998, ex. 9a, p. 3)

c. *Apa$_1$-kah yang Ali telah **mem**-baca ___$_1$?
what-Q that Ali PFV MEN-read
intended: 'What has Ali read?' (Soh, 1998, ex. 9b, p. 3)

- Both have a Voice that permits *both* agent and patient extraction

(6) ?Sino ang [pinaki∼kingg-an ang mga podcast ng NPR]?
who NOM *pa*.IPFV∼listen-LV NOM PL podcast GEN NPR
'Who listens to NPR podcasts?' *Tagalog* (Hsieh, 2020, ex. 55a, p. 178)

(9) Malay: *meN*-less Voice licenses both

a. Ali telah baca buku itu.
Ali PFV read book the
'Ali has read the book.' (Soh, 1998, ex. 1, p. 2)

b. Apa_1-kah yang Ali telah baca $\_\_\_1$?
what-Q that Ali PFV read
'What has Ali read?' (Soh, 1998, ex. 4b, p. 2)

c. Siapa_1-kah yang $\_\_\_1$ telah baca buku itu?
who-Q that PFV read book the
'Who has read the book?' (Soh, 1998, ex. 4a, p. 2)

- Obliques and adjuncts: no wh-movement/Voice interaction

(3) Tagalog: obliques/adjuncts wh-move without a Voice alternation

a. Saan nag-lagay ang kusinero ng kaldero?
where AV.PFV-put NOM cook GEN pot
'Where did the cook put a pot?' (Hsieh, 2020, ex. 5, p. 230)

b. Saan i-ni-lagay ng kusinero ang kaldero?
where CV-PFV-put GEN cook NOM pot
'Where did the cook put the pot?' (Hsieh, 2020, ex. 5, p. 230)

c. [Sa ilog /Saan] nali∼ligo ang kalabaw.
OBL river where AV.IMPF∼bathe NOM water.buffalo
'It's in the river that the water buffalo is bathing.'
'Where is the water buffalo bathing?' (Hsieh, 2020, ex. 19b, p. 88)

(10) Malay: obliques/adjuncts can wh-move in *meN-* Voice

a. Kepada siapakah Minah mem-beri kucing kesayangannya?
to who-Q Minah MEN-give cat beloved-her
'To whom did Minah give her beloved cat?' (Soh, 1998, ex. 32b, p. 9)

b. Bagaimanakah Ali men-jawab soalan itu?
how-Q Ali MEN-answer question the
'How did Ali answer the question?' (Soh, 1998, ex. 32c, p. 9)

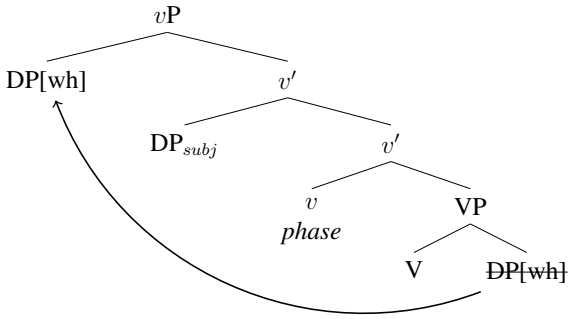
- **Summary**:
  - Things that need Voice alternation to wh-move in Tagalog/Malay: direct objects
  - Things that don't need Voice alternation to wh-move in Tagalog/Malay: agents, obliques, adjuncts

- What do agents/obliques/adjuncts have in common?
  - **Proposal**: they always have the option of being higher than direct objects
    - Seems straightforward for agents/adjuncts, less so for obliques, but here are two options:
      1. Obliques introduced by other heads like Appl, which can show up above or below V
      2. Following Newman (2021): obliques are flexible – can optionally merge with V or v

2.2 Why intervention and phase theory don't help

- Points in the clause that you have to move past in order to extract? Sounds like phases!
  - Except phases don't give us interactions with Voice... why can't an object wh-move to the edge of the phase without altering the Voice of the clause? (on the assumption that phases always have an escape hatch for wh-elements)

    (11) If v is a phase head: don't need a Voice alternation to get the object out



- The intervention story:
  - As seen in e.g. Campana (1992), Ordóñez (1995), Bittner & Hale (1996), Aldridge (2004, 2008), Coon et al. (2014), Tollan & Clemens (2022), Branan & Erlewine (2022)... it has been common to focus on the configuration in (12)

    (12) The intervention story:
    [$_{CP}$ XP[wh] ... DP ... ~~XP[wh]~~]?
    X
  - Different analyses care about this configuration for different reasons:
    - Maybe the intervening DP traps the XP[wh] due to the distribution of phase boundaries (Coon et al., 2014)
    - Maybe not all wh-probes can look past DPs (Branan & Erlewine, 2022)
    - Maybe there is nothing wrong with the movement of XP[wh], but it alters the Voice of the clause if it moves (van Urk, 2015)
  - **Problem**: this configuration only seems to be problematic in the minority of cases we have looked at

    (13) Counterexamples: agents and obliques in other Voices

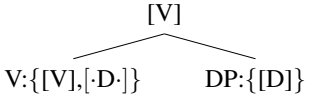
    a. [$_{CP}$ *agent*[wh] ... DP$_{obj}$ ... ~~*agent*[wh]~~]?
    ✓

    b. [$_{CP}$ *oblique*[wh] ... DP$_{subj/obj}$ ... ~~*oblique*[wh]~~]?
    ✓
  - Even if there is a way to salvage this kind of analysis, is it teaching us about the space of possible cross-linguistic variation?
- **Refocusing**: we know that wh-movement is successive cyclic through various positions. How else might this logic be relevant to the facts?

3 Selection and projection

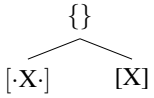
- Traditional view of projection: heads project, phrases don't.

  (14) Head selects phrase, projects its category feature

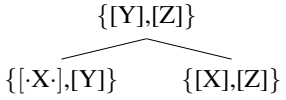
  

- Notice: not everything from the head projects
  - [·D·] doesn't project, probably because it got checked by the [D] on DP, so it deletes or becomes irrelevant somehow
- This raises a potential alternative description of (14):
  - Maybe there is no primitive distinction between heads/phrases.
  - Maybe only [V] projects in (14) because [·D·] and [D] (the only other features) check each other, and thus suppress each other from projecting.
    Hedde Zeijlstra has some recent work arguing for a similar reimagining of the projection rules in order to formalize upward Agree... our missions are clearly different but stay tuned for possible coalescence of the theories!
- Let's formalize the alternative

  (15) The checking rule
  When a feature [·X·] is sister to a corresponding feature [X], neither is projected on the mother node.

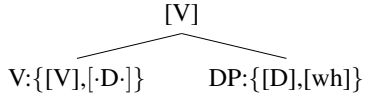
  

  (16) The projection rule
  Every feature that the checking rule fails to apply to projects to the mother node.

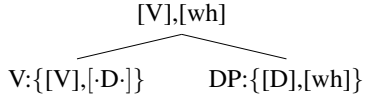
  

- This new projection rule makes the same predictions as the old one in cases like (14).
  - Things get interesting when we give the phrase some more features.

    (17) If the traditional projection rule applies

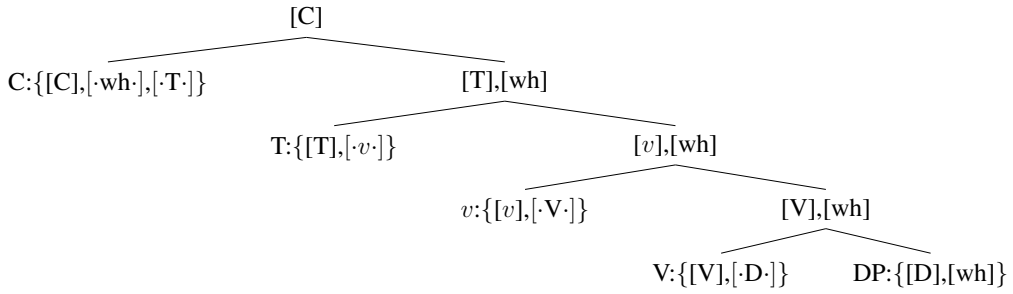
    

    (18) If (16) applies

- The rule in (16) has a funny consequence: that [wh] feature will just keep projecting until something "checks" it.
  - **Prediction**: if the first instance of a corresponding [·wh·] were on C, the DP wouldn't be able to wh-move – C's sister would check [·wh·] upon external Merge.

    (19) If the first instance of [·wh·] were on C:

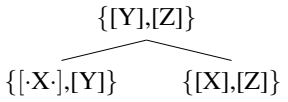


- From this perspective, *wh-phrases create their own intervention problems*.
  - They create pied-piping environments by passing their features up, unless prevented by intermediate instances of [·wh·].
- **Implication**: if a language wants to have any wh-movement, some head lower than C *must have a* [·*wh*·].
  - More generally: movement only licensed when there are at least two instances of some selectional feature in a clause.
    - First result: successive cyclicity under many circumstances
      - If multiple heads need to have the machinery for attracting a wh-phrase in order for any wh-element to move, wh-movement will proceed through these positions whenever their [·wh·] features aren't checked by base-merge.
      - Likewise, if some head (e.g. v) is the choice for licensing wh-movement in some clause, the null hypothesis is that it has [·wh·] in every clause → successive cyclicity across clauses
    - The choice of which lower head has [·wh·] affects which arguments can move and how. → what we will focus on for the rest of the talk

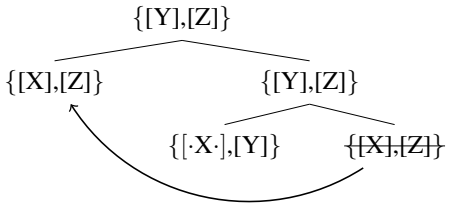
- Summary of proposal:
  - Projection rule doesn't distinguish heads vs. phrases, only cares about feature-checking
  - This forces wh-movement to often be successive cyclic through clause-medial positions, by forcing heads below C to have [·wh·] if wh-movement is ever to take place.
  - The strategy for capturing wh-movement/Voice interactions: varying the positions of clause-medial [·wh·] and seeing what moves and how.

- A more complete description of the proposal:

(20) The projection rule
Every feature that the checking rule fails to apply to projects to the mother node.



Exception: when a phrase c-commands a copy of itself, no features project from that phrase



(21) Feature-driven Merge:
An instance of Merge is only licensed if it feeds the checking rule.

(22) What these features mean:
   a. [X] = has the property of X
   b. $[\cdot X \cdot]$ = wants to merge with [X]

(23) Set notions of features:
   a. {[X],[X]} is equivalent to {[X]}
   b. $\{[\cdot X \cdot],[\cdot X \cdot]\}$ is equivalent to $\{[\cdot X \cdot]\}$

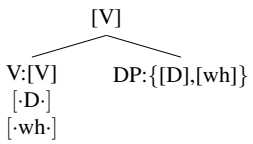
4 Deriving cross-linguistic variation

- If this is right, the framework doesn't care which heads have $[\cdot wh \cdot]$ – we just need some head below C to have $[\cdot wh \cdot]$ if C is ever going to attract a wh-element by movement.
- Three distinctions are important:
   1. whether $[\cdot wh \cdot]$ is on the lowest argument-introducing head, or
   2. the highest argument introducing head, or
   3. above all argument introducing heads.
- For simplicity, I'll call these positions V, v, and T, but there might be other heads that have $[\cdot wh \cdot]$ instead, with similar effects.

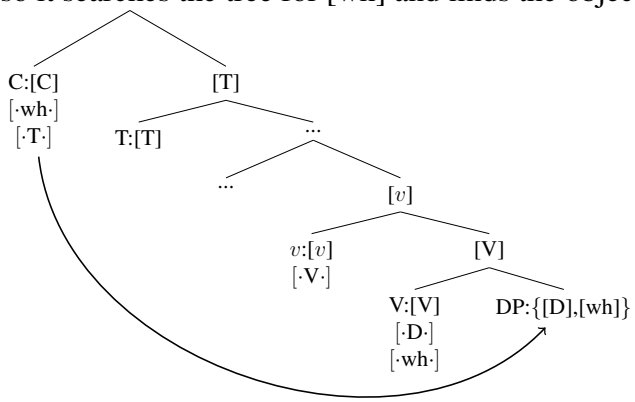
4.1 Putting $[\cdot wh \cdot]$ on V

- Spoiler alert: everything gets to move

(24) Object questions
   a. Step 1: Objects check their [wh] features against $[\cdot wh \cdot]$ on V

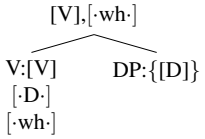


b. Step 2: when the rest of the clause is built, [·wh·] on C remains unchecked upon merging TP, so it searches the tree for [wh] and finds the object

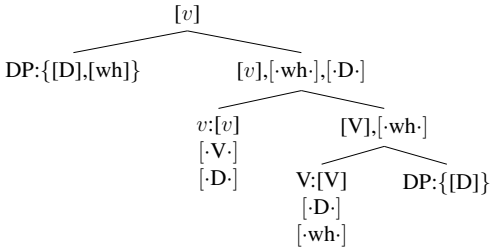


- Subject questions are possible because the projection rule allows *everything* not consumed by selection to project.
- If the object isn't a wh-phrase, the unused [·wh·] on V projects until it finds the subject.

(25) When the object is not a wh-phrase: projection of [·wh·]



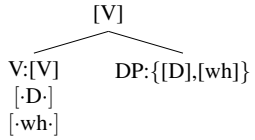
(26) When the wh-subject merges, it checks the [·wh·] from V



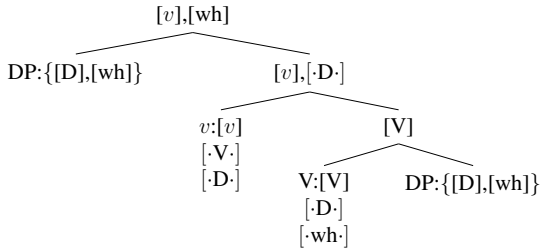
- Implications:
  - No restrictions on what can move: any argument or adjunct can move because it will check the [·wh·] either by merging with V or by merging with any higher head
  - Movement will be successive cyclic through Spec VP from embedded clauses
  - Strange implication for multiple wh-movement: multiple wh-elements should prevent any wh-movement... (stay tuned for a solution after we have seen the rest of the typology)

(27) When both the subject and object are wh-elements

a. Object checks [·wh·]



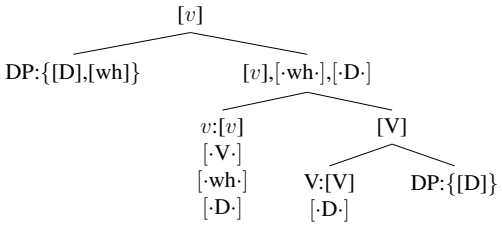
b. When the wh-subject merges, [wh] projects, blocking any wh-movement



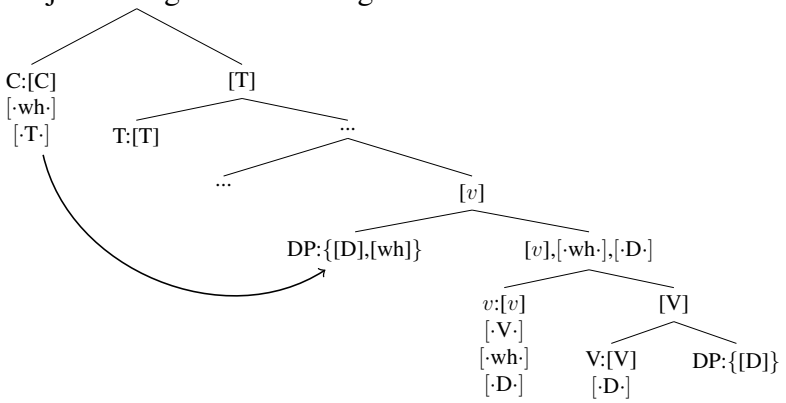
4.2 Putting [·wh·] on v

- Spoiler alert: things that merge in vP or higher get to move, other things need to get promoted at least as high as Spec vP to wh-move

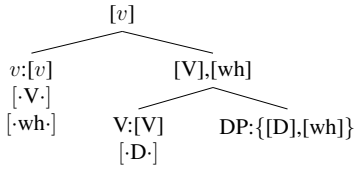
(28) Subjects/things that can merge in vP end up being the highest [wh]-bearers



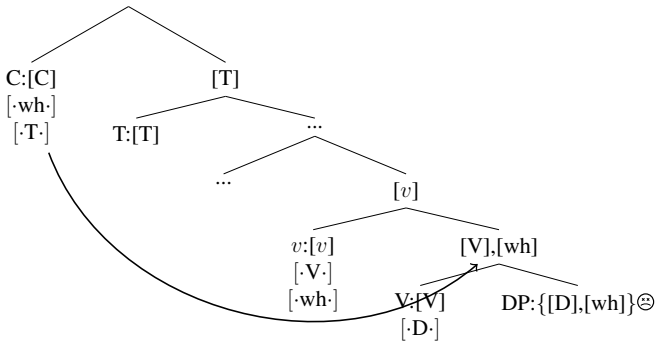
(29) Subjects/things that can merge in vP wh-move like usual



(30) An object wh-phrase projects its [wh] until v is merged: object is not the highest bearer of [wh]



(31) Result: objects can't wh-move, because they're not the most local bearer of [wh]: they are dominated by a node that bears [wh]

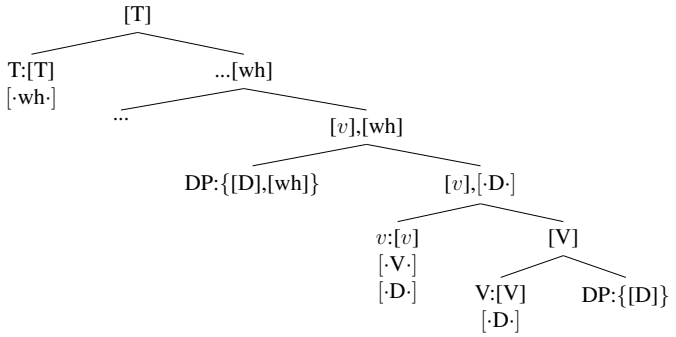


- The prediction is that an object that is not promoted to subject position has to pied-pipe VP in order to wh-move.
  - Do we ever find such pied-piping?
  - Something to investigate more... might be hard to tell if languages don't like such heavy specifiers at their left edges.
  - One thing is certain though: if the object wants to move alone, the theory predicts that it had better promote to some higher position first. (which is what we wanted to explain)
    - Languages might use whatever they have to achieve this: Voice alternations in the case of Tagalog, and whatever the lack of *meN-* corresponds to in Malay.

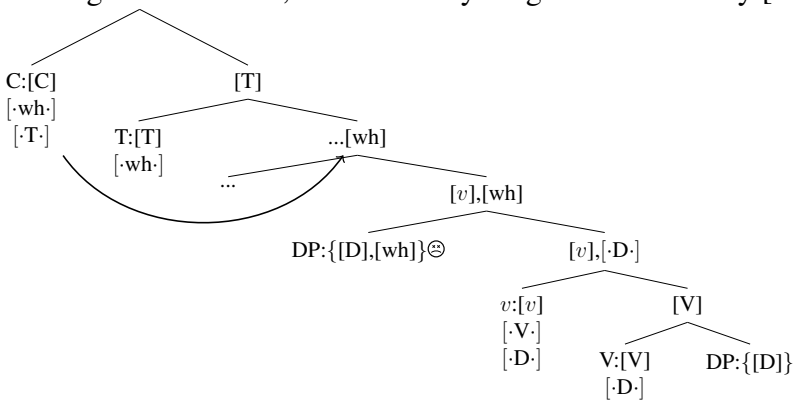
4.3 Putting [·wh·] on T

- Spoiler alert: things that get promoted to Spec TP get to wh-move, nothing else gets to wh-move

(32) Arguments/adjuncts project their features up until T is merged

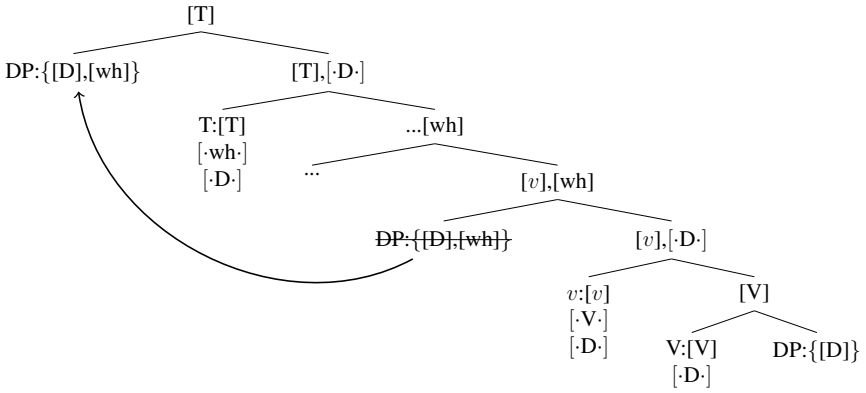


(33) Nothing can wh-move, because everything is dominated by [wh]

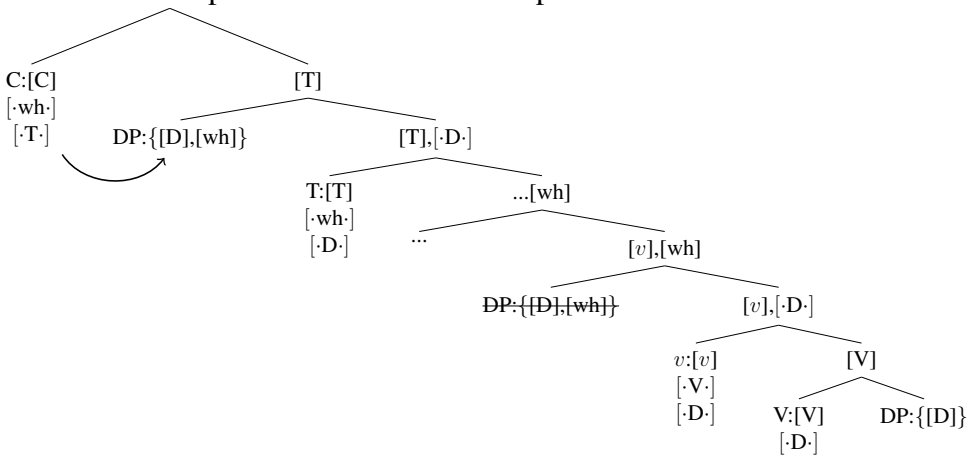


- How to get anything to wh-move: promote it to Spec TP (EPP on T plus Voice alternation to get non-subjects there)

(34) EPP movement to Spec TP: makes the moved element the highest bearer of [wh]



(35) Whatever is in Spec TP can wh-move to Spec CP



- Interesting fact about Dinka: wh-movement is optional
  - wh-in situ is allowed, and doesn't interact with Voice

(36) In situ wh-subjects in different Voice contexts (van Urk, 2015, ex. 6, p. 63)

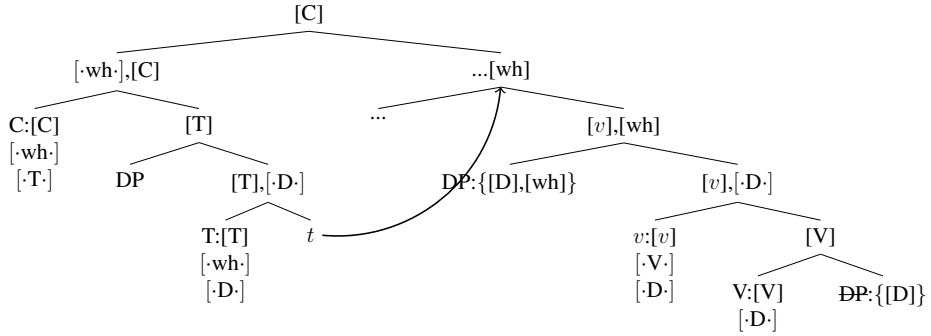
a. Yíi ŋà ɛ̱́-kè-càm cuı̱̈in nɛ̱̀ pɛ̆ɛɛl?
ASSOC who PST-PL-eat.SV food P knives
'Who all was eating food with knives?'

b. Cuı̱̈in ɛ̱́-cɛ́ɛm yíi ŋà nɛ̱̀ pɛ̆ɛɛl?
food PST-food.OV ASSOC who P knives
'The food, who all was eating it with knives?

c. Pɛ̆ɛɛl ɛ̱́-kè-cɛ́ɛmɛ̱̀ yíi ŋà ké cuı̱̈in?
knives PST-PL-eat.OBLV ASSOC who 3PL food
'Knives, who all was eating food with them?'

- Maybe this is the pied-piping case, if what moves gets linearized on the right.

(37) If T's sister wh-moves instead



- Complication: wh-in situ is not sensitive to adjunct islands (adjunct islands are otherwise active in Dinka)

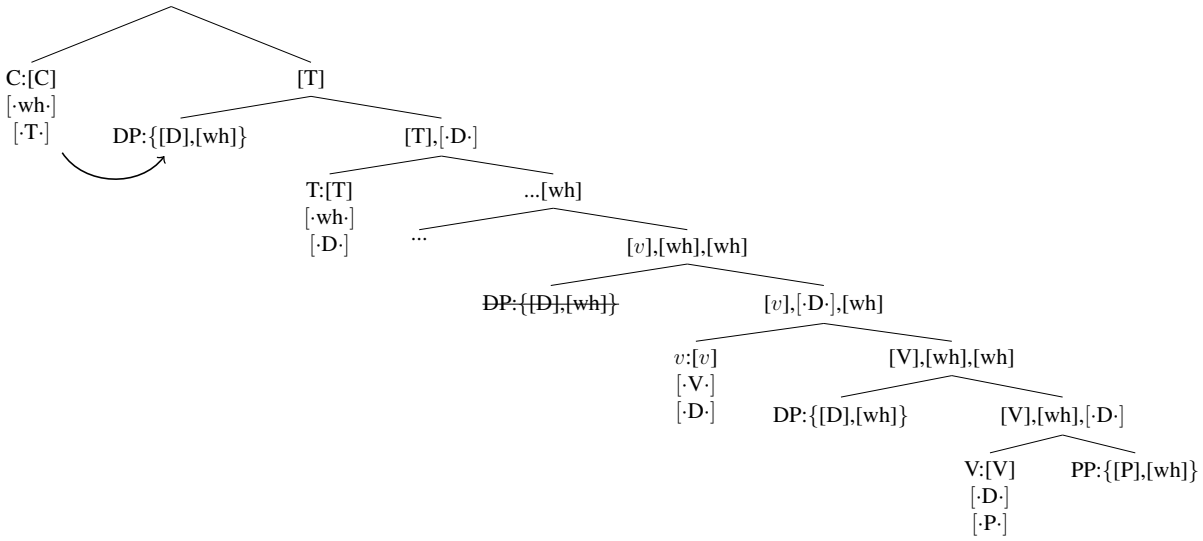
(38) Cé̱ Ádìt jà̱a̱l [wu̱ín cí̱i Máyèn ŋó̱ kuêem]?
PFV.SV Adit.GEN leave when PFV.OV Mayen.GEN what break.NF
'What did Adit leave when Mayen broke?' (van Urk, 2015, ex. 12, p. 99)

- Summary:
  - If [·wh·] is on V: English-type pattern – everything can wh-move without pied-piping or Voice alternation
  - If [·wh·] is on v: Tagalog/Malay-type pattern – everything but direct objects can wh-move without pied-piping or Voice alternation
  - If [·wh·] is on T: Dinka-type pattern – nothing can wh-move without pied-piping or promotion strategy

4.4 Multiple movement revisited

- Observe: multiple questions aren't a problem in Dinka: let's put three wh-phrases in and see what happens

(39) Multiple instances of [wh] coalesce and then check [·wh·] on T together – whatever moves to Spec TP gets to wh-move



- Maybe all languages with multiple questions have a [·wh·] on T.
  - What distinguishes languages further is whether they also have [·wh·] on some lower projection.
  - If they do, they won't have to invoke Voice alternations as often to wh-move things.
  - **Trade-off**: number of [·wh·] in clause vs. likelihood of needing a Voice alternation to wh-move something
- Another way of thinking about this: head movement
  - If there is a [·wh·] on a verbal head, it occurs on every complex that that head is a part of.

5 Long-distance extraction

- Long-distance extraction appears to interact with Voice in Dinka/Tagalog/Malay but not English.

(40) Dinka long distance movement marked with object voice on the matrix clause (van Urk, 2015, ex. 24, p. 71)

a. Kɔ̂ɔc-kɛ̈ áa-cɪ̈́i Bôl ké yö̱ö̱k [kɛ̈ nhiàr ____ Àyén].
people-these 3P-PFV.OV Bol.GEN 3PL find.out.NF C love.SV Ayen
'These people, Bol has found out love Ayen.'

b. Àyén á-cɪ̈́i Bôl yö̱ö̱k [kɛ̈ nhiɛ́ɛr kɔ̂ɔc-kɛ̈ ____].
Ayen 3S-PFV.OV Bol.GEN find.out.NF C love.OV people-these
'Ayen, Bol has found out that these people love.'

(41) Tagalog long distance DP movement

a. duwende=ng [na-panaginip-an ko=ng [h<in>uli-∅ ni Diego ____]]
dwarf=LK PFV.NVOL-dream-LV 1SG.GEN=LK <PFV>catch-PV GEN.P Diego
'the dwarf that I dreamt that Diego caught' (Hsieh, 2020, ex. 47a, p. 132)

b. ?Nagta∼tago ang bata=ng [na-panaginip-an ko=ng [h<in>a∼habol ang
AV.IPFV∼hide NOM child=LK PFV.NVOL-dream-LV 1SG.GEN=LK IPFV∼chase[PV] NOM
duwende]].
dward
'The child who I dreamt was chasing the dwarf is hiding.' (Hsieh, 2020, ex. 47a, p. 175)

(42) Tagalog long distance non-DP movement (Rackowski & Richards, 2005, ex. 49-50)

a. Kailan [i-p<in>angako nang sundalo [na ∅-u∼uwi ang pangulo ____]]?
when CV-<PFV>promise GEN soldier LK AV-FUT∼go.home NOM president
'When did the soldier promise that the president would go home?'

b. *Kailan [n-angako ang sundalo [na ∅-u∼uwi ang pangulo ____]]?
when AV.PFV-promise NOM soldier LK AV-FUT∼go.home NOM president
intended: 'When did the soldier promise that the president would go home?'

- But the interaction is interesting in Dinka/Tagalog: it looks as though the whole embedded clause is controlling Voice.

(43) MATRIX VERB CONSTRAINT (Hsieh, 2020, ex. 46, p. 132)
Higher verbs crossed by a long-distance (DP?) Ā-dependency must appear in the voice form that designates the clause containing the dependency gap as the pivot.

- van Urk & Richards (2015) show this for Dinka with a bunch of diagnostics, including showing that long-distance wh-movement empties various positions in the matrix clause

(44) Showing that long-distance DP-extraction empties every preverbal position (van Urk & Richards, 2015, ex. 46, p. 137-8)

a. Yeŋà cïi Yâär ____ lɛ̈k Dɛ̀ŋ, [yè ____ cïi Bôl ____ tuɔ̀ɔc
who PFV.NS Yaar.GEN tell Deng C PFV.NS Bol.GEN send
wúüt]?
cattle.camp.LOC
'Who did Yaar tell Deng that Bol sent to the cattle camp?'

b. *Yeŋà cïi Yâär Dɛ̀ŋ lɛ̈k, [yè ____ cïi Bôl ____ tuɔ̀ɔc wúüt]?
who PFV.NS Yaar.GEN Deng tell C PFV.NS Bol.GEN send cattle.camp.LOC
intended: 'Who did Yaar tell Deng that Bol sent to the cattle camp?'

(45) Long distance PP empties matrix perverbal positions (but not embedded ones) (van Urk & Richards, 2015, ex. 50, p. 139)

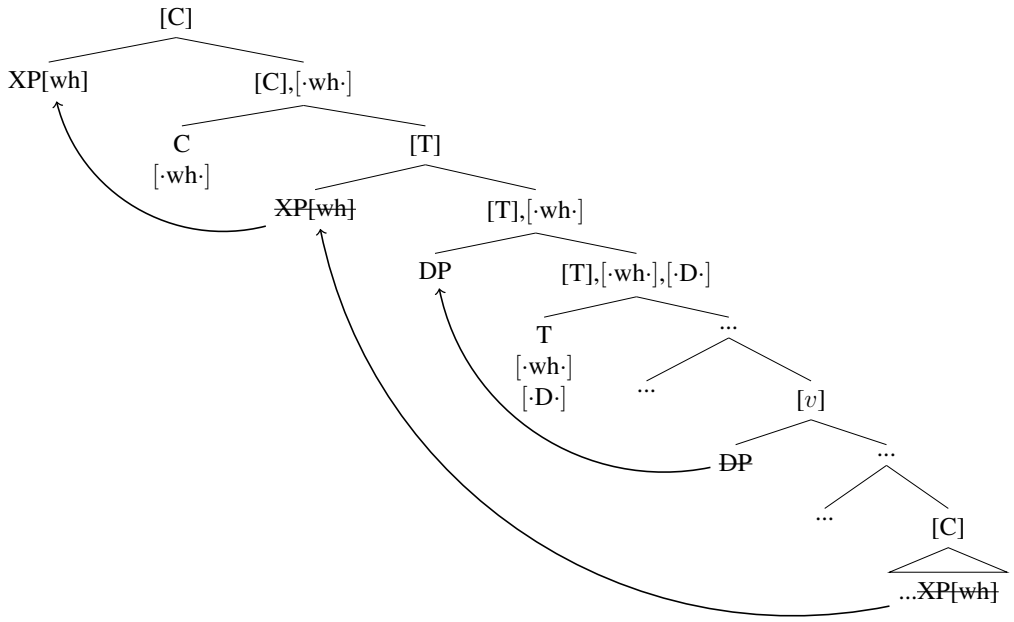
a. Yétenô cïi Yâär ____ lɛ̈k Dɛ̀ŋ, [yè cïi Bôl Ayén tuɔ̀ɔc]?
where PFV.NS Yaar.GEN tell Deng C PFV.NS Bol.GEN Ayen send
'Where did Yaar tell Deng that Bol sent Ayen?

b. *Yétenô cïi Yâär Dɛ̀ŋ lɛ̈k, [yè cïi Bôl Ayén tuɔ̀ɔc]?
where PFV.NS Yaar.GEN Deng tell C PFV.NS Bol.GEN Ayen send
intended: 'Where did Yaar tell Deng that Bol sent Ayen?

- They say that embedded CP is what empties higher Spec vP, because extraction from non-finite clauses does not similarly empty that position, and also because that position is optionally empty (even in non-wh-contexts) when there is an embedded CP.

- What's going on?
  - **What we expected**: some element in the matrix clause to control Voice, and the embedded wh-element to move
  - **What we got**: embedded CP controls Voice when an embedded wh-element moves

(46) Long-distance movement shouldn't interact with Voice



- Some ideas:
  1. CPs are special somehow:
     - You have to agree with them before you can probe their contents (e.g. Rackowski & Richards 2005).
     - Probes on v and T can't look into projections that are higher than them on the functional hierarchy (Keine, 2020) – agreement solves this somehow.
  2. A case of conflicting desires
     - What the grammar would really like to do: Multitask (van Urk & Richards, 2015)
     - BUT Multitasking would lead to a violation of the ban on improper movement
     - Next best option: probe for [wh] first, and use the closest thing to it to control Voice (namely its containing CP)

6 Conclusion

- Observation: Languages differ regarding whether they have interactions between wh-movement and Voice, and if so, when such interactions arise
  - Hypothesis: the ways in which languages do and don't vary in this matter might tell us something fundamental about how wh-movement works

        * Proposal: it's telling us about how "unselected" features like [wh] behave when phrases bearing [wh] merge at various points in the clause
        * Recap:
            · The projection rule isn't about heads vs. phrases – it's about features involved in checking vs. not
            · [wh] features project until a head with [·wh·] is merged, creating intervention problems for themselves
            · If [wh] is allowed to project, for a wh-phrase to move, it must first move outside the scope of its [wh], using whatever means the language provides → usually a Voice alternation
            · Languages distribute [·wh·] differently, leading to languages with no wh-movement/Voice interactions, some wh-movement/Voice interactions, and only wh-movement/Voice interactions.

- Did we do better than phase theory?
    - I think so...
        * On this view, machinery that licenses successive cyclic movement is a precondition for any movement to take place – no need to come up with interface reasons for successive cyclicity.
        * We also predict the interaction with Voice, in contrast with phase theory, in which phases provided an escape hatch that should be usable without a Voice alternation.
        * On the present proposal, [·wh·] on such heads is often checked before any movement takes place, requiring some other strategy for moving the phrase out – like a Voice alternation.

- What we got: an explanation of apparent intervention effects that also derives successive cyclicity and cross-linguistic variation

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