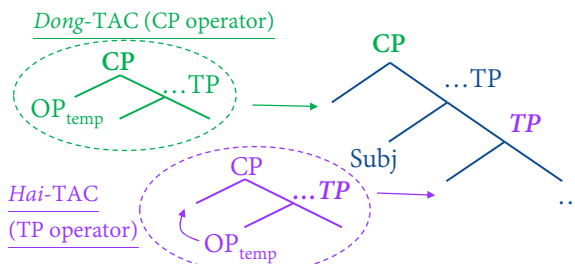


Background

- ▶ The typology of adverbial clauses
 - Central adverbial clauses (CACs)
E.g. temporal *when*, *while*
 - Peripheral adverbial clauses (PACs)
E.g. concessive *while*
- ▶ Internal-external correlation
 - Haegeman (2010):
Int.: ± Operator movement
Ext.: ± Subordination
 - Endo & Haegeman (2019):
Int.: Uniform OP mvt. with diff. launching sites
Ext.: Attachment sites match with OP sites
- ▶ Two types of TACs in Cantonese
 - *Hai* 'at, when'
 - *Dong* 'when, while'
 - Temporal adverbial clauses (TACs) only
 - Differ in both internal & external syntax

Proposal

- ▶ TACs are not uniformly derived by operator movement
 - Only *hai*-TACs involve OP movement, but not *dong*-TACs
- ▶ Operator merge site determines internal and external syntax
 - **Internal:** Merge at TP → move to CP vs. Merge at CP → stay in-situ
 - **External:** Structural matching effects
 - Merge at TP
 - The whole TAC attaches to TP
 - Merge at CP
 - The whole TAC attaches to CP
- ▶ Implications
 - Finer typology of adverbial clauses
 - The significance of operator site
 - Operator merge site determines the external syntax through labeling?



External syntax

- ▶ *Hai*-TAC
 - Attaches to TP
 - Allows a post-subject position
 - Allows reconstruction for binding by matrix subjects (handout)
- (6) *Aaming [hai [Aafan fan-gan gaau] gozan] lai wan keoi*
Ming at Fan sleep-PROG nap that.time come find 3SG
'Ming came find Fan when she was sleeping.'
- ▶ *Dong*-TACs
 - Attaches to CP
 - Must occur at a pre-subject position
 - Disallows reconstruction for binding by matrix subj. (handout)
- (7) **Aaming [dong [Aafan fan-gan gaau] gozan] lai wan keoi*
Ming while Fan sleep-PROG nap that.time come find 3SG
'Ming came find Fan while she was sleeping.'

Internal syntax

- ▶ **High-low ambiguity** (also attested in English *when*-clause, cf. Geis 1970, Larson 1987)
- ▶ *Hai*-TACs
 - allows long-distance low reading
 - The low reading will be blocked by islands (handout)
- (1) *Hai* [_{CP} OP_{temp} [_{TP} Maangaaan t_{high} jyuujin [_{CP} saigaai t_{low} wui waimit]] gozan, ngo zung saangngaungau.
at Maya.ppl. foretell world will destroy that.time 1SG still alive
i. #I'm still alive at the time when Maya people made the apocalyptic prophecy.' (high reading)
ii. 'I'm still alive at the time when Maya people predicted to be the end of the world.' (low reading)
- ▶ *Dong*-TACs
 - disallows long-distance low reading → temporal operator directly merges to the highest CP
- (2) #*Dong* [_{CP} OP_{temp} [_{TP} Maangaaan jyuujin [_{CP} saigaai wui waimit]] gozan, ngo zung saangngaungau.
while Maya.ppl. foretell world will destroy that.time 1SG still alive
#I'm still alive at the time when Maya people made the apocalyptic prophecy.' (only high reading)
- ▶ A note on English *while*-clause
 - No low reading (Larson 1990:174), as opposed to *when*-clause → no OP movement? (contra. Haegeman 2010)
- (3) I didn't see Mary in New York [_{PP} while [_{CP1} she said [_{CP2} she was there]]]

- ▶ **Minimality effects** (Rizzi 2001, 2004)
 - Feature-based Relativized Minimality (RM)
 - Operator movement will be disrupted by quantificational (Qu) elements
- (X) ... Z ... Y
[Qu] ... [Qu] ... [Qu]
- ▶ *Hai*-TACs
 - Disruption by high Qu-elements (>TP)
e.g. *cleft focus*, *epistemic modal*, etc.
 - Low reading blocked by low Qu-elements
e.g. *negation*, *deontic modal*, etc.
- **Hai* [_{CP} OP_{temp} [C... [Z_{[+Qu]]] [_{TP} ... t ...]]]}
- ▶ *Dong*-TACs
 - In-situ operator → no movement
 - No disruption by Qu-elements
 - Existence of OP_{temp}: **Temporal agreement** with converbal *haa*, which also shows RM (handout)
- Dong* [_{CP} OP_{temp} [C... [Z_{[+Qu]]] [_{TP} ...]]}
- (4) *Camjat {hai/dong} [hai-Aaming] fangaau gozan, lousi zau faatnau.*
yesterday at while be-Ming sleep that.time teacher then become.mad
'The teacher became mad {when/while} it was MING (but not someone else) that fell asleep.'
- (5) *Hai* [_{CP} OP_{temp} Maangaaan [_{TP} t_{high} [hoj^{Deo}] jyuujin [_{CP} t_{low} saigaai wui waimit]] gozan
at Maya.ppl. can foretell world will destroy that.time
'At the time when Maya people could make the apocalyptic prophecy.' (only high reading)