

Suffixation in the lexicon or syntax?

- ▶ A long-standing debate: whether affixes attach to the root in the **lexicon** or **syntax**
 - *Lexicalists* (Chomsky 1970; Aronoff 1976) Vs. *Non-lexicalists* (Halle and Marantz 1993; Bruening 2018)

▶ Chinese: rich in aspect suffixes

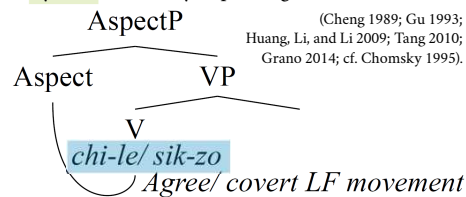
- (1) **chi-le** fan [M(andin)]
sik-zo faan [C(antonese)]
 eat-PFV rice
 ‘ate rice’

▶ We provide novel *arguments* for ② the derivational view over ① the lexicalist view.

Upshot Supports the idea that **syntax is the only generative engine**, in the spirit of Distributed Morphology.

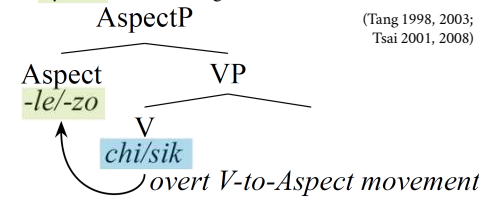
① The lexicalist view

- **Lexicon:** V-suffix string forms a lexical item
- **Syntax:** licensed by Asp via Agree or LF movement



② The derivational view

- **Syntax:** Verbs and suffixes head distinct projections
- **Syntax:** Verbs undergo head movement to suffixes



1: Mirror Principle effects

- ▶ **Conceptual argument:** how to capture the mirroring effects of suffix order and semantic scope (Baker 1985)
 - Assuming that semantic scope reflects syntactic height

▶ Mirroring effects in Cantonese and Mandarin (Tang 2003)

- Universal suffix *-saai* vs. experiential aspect *-gwo*

- (2) a. Keoi **sik-gwo-saai** nidi daangou. [C]
 3SG eat-EXP-ALL these cake
 ‘Each cake, s/he has tried some of it.’ (ALL > EXP)
 b. Keoi **si-gwo sik-saai** nidi daangou.
 3SG once eat-ALL these cake
 ‘S/he has eaten all the cake.’ (EXP > ALL)

- Same in Mandarin *V-guo-le* (PFV > EXP) (Gu 1993, Yip 2020)

- ▶ **View ①:** Not expected
 - Operations in the lexicon have no access to syntax
 - Requires extra mapping rule
- ▶ **View ②:** Natural consequence
 - Roll-up head movement

- (3) a. [QP *-saai* [AspP *sik-gwo* [VP *sik*]]]
 b. [QP *sik-gwo-saai* [AspP *sik-gwo* [VP *sik*]]]

#2: Verb doubling

- ▶ **Empirical argument:** whether verbs can be targeted by focus/topic movement → verb doubling

- (4) **Chi**, ta shi xiang **chi** zhe-wan mian de. [M]
 eat 3SG be want eat this-bowl noodles SFP
 ‘As for eating, s/he wants to eat this bowl of noodles.’
- Long-distance **Head(-to-Spec)** movement
 - Evidence: lexical identity, island, and intervention effects (Cheng & Vicente 2013; Lee 2024)

▶ Only **bare V**, but not V-suffix, can be the higher copy

- (5) {**Chi/ *chi-guo**}, ta shi **chi-guo** zhe-wan mian de.
 eat eat-EXP 3SG be eat-EXP this-bowl noodles SFP
 ‘As for eating, s/he has eaten this bowl of noodles.’ [M]

- (6) Lin {**tai/ *tai-gwo**} keoi dou mou **tai-gwo** ni-bun syu. (7) [FocP/TopP V-Foc/Top ... [AspP V-Asp [VP V ...]]]
 even read read-EXP s/he also not read-EXP this-CL book
 ‘S/he didn’t even READ this book.’ [C]
 (V-to-Foc/Top movement)

- ▶ **View ①:** Not expected
 - Sub-heads (level below V⁰) cannot undergo movement by Lexical Integrity Principle
- ▶ **View ②:** Predicted
 - Bare V projects V⁰: targeted by Foc⁰/Top⁰

#3: P-to-V incorporation

- ▶ **Empirical argument:** P incorporates to V when DO is moved out in Mandarin

- [V-suffix + DO + P-IO] → [DO + V-P-suffix + IO] (Li 1990; Feng 2019)

- (8) Ta **fang-le** [zhe-ben shu] [zai zhuozi-shang].
 3SG put-PFV this-CL book at table-top
 ‘S/he put this book on the table.’

- (9) [Zhe-ben shu], ta {**fong-zai-le/ *fong-le zai**}
 this-CL book 3SG put-at-PFV put-PFV at [zhuozi-shang].
 table-top ‘This book, s/he put on the table.’

- ▶ **View ①:** Not expected
 - V-suffix is an integral unit → V and V-P must be different entries → duplicated listing
 - Also wrongly predicts [V-suffix]+[P] to be OK
- ▶ **View ②:** Captured
 - P-to-V-to-Asp head movement (trigger: NSR)

- (10) a. [AspP *-le* [VP *fong-zai* [PP *zai* IO]]]
 b. [AspP *fong-zai-le* [VP *fong-zai* [PP *zai* IO]]]

#4: Separable verbs

- ▶ **Empirical argument:** Disyllabic verbs can be separated syntactically in Cantonese

- By suffixes and/or phrases
- Even with mono-morphemic verbs (*oukei < okay*) (Chan & Cheung 2020, Lee & Yip 2025, to appear)

- (11) Keoi **oukei-zo** [saam ci].
 3SG okay-PFV three time
 ‘S/he agreed three times.’

- (12) Keoi **ou-zo** [saam ci] **kei**.
 3SG okay-PFV three time okay
 ‘S/he agreed three times.’

- ▶ **View ①:** Not expected
 - A phrase cannot be inserted to sub-head syllables (≠ morphemes) of a root
- ▶ **View ②:** Captured
 - V-to-Asp movement leaves copies
 - Partial deletion on both copies

- (13) a. [AspP *-zo* [VP [DurP *saam ci*] [*oukei*]]]
 b. [AspP *oukei-zo* [VP [DurP *saam ci*] [*oukei*]]]

Against lexicalist arguments

- ▶ **Lexicalist argument:** Manner adverbs are placed higher than V-suffix → lack of V-to-Asp movement

- (14) Zhangsan {**hen kuaide**} **xie-le** {***hen kuaide**} yi-feng xin. [M] (Cheng 1989; Gu 1993; Huang, Li, and Li 2009)
 Zhangsan very quickly write-PFV very quickly one-CL letter
 ‘Zhangsan quickly wrote a letter.’

▶ **Counter-argument:** Manner adverbs can attach to AspP

- (15) Aaming **jat-daam sik-maai** ni-faai kukkei. □ may reconstruct back to VP
 Ming one.bite eat-also this-CL cookie

- a. ‘Ming ate (something in one bite, and) this cookie in one bite too.’ (total: 2 bites) (Narrow: also > in 1 bite)
 b. ‘Ming ate this cookie and other stuff together in one bite.’ (total: 1 bite only) (Wide: in 1 bite > also) [C]

- ▶ **Why not Lowering?**
 - ☞ Can only capture #1-3, but not #4 which requires copies by movement