

# ***Focus and minimality***

Michael Yoshitaka ERLEWINE

National University of Singapore

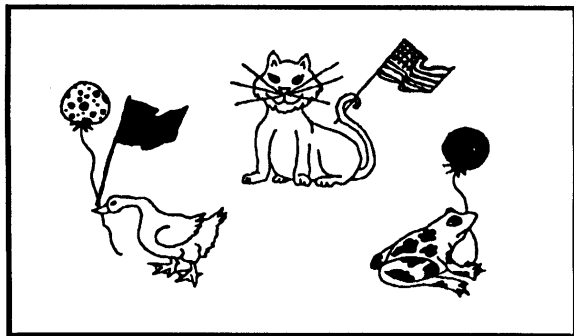
mitcho@nus.edu.sg

Macquarie University

December 2016

# Only the cat is holding a flag

Crain, Philip, Drozd, Roeper, and Matsuoka (1992); Crain, Ni, and Conway (1994):



- (1) a. **Only** the cat is holding a flag.  
Adults: false; children: **true** for many 3–6 year olds;
- b. The cat is **only** holding a flag.  
Adults: true; children: true

Subsequent work has shown the same effect in child Mandarin (Yang, 2002; Zhou and Crain, 2009, 2010; Notley, Zhou, Crain, and Thornton, 2009).

(2) **Zhǐyǒu** māo xiānsheng chī-le húluóbo.  
ONLY cat mister eat-PRF carrot

- a. ✓ Only [Mr. Cat]<sub>F</sub> ate the carrot.
- b. \* Mr. Cat only ate [the carrot]<sub>F</sub>.

...but most children 4;5–4;10 have the (b) interpretation.

In both English and Mandarin, pre-subject **ONLY** cannot associate with the VP or VP-internal material.

- I investigate the nature of this restriction in (adult) Mandarin Chinese and Vietnamese.
- I argue that Mandarin *zhǐ(yǒu)* (and *shì*) and Vietnamese *chỉ* are **all uniformly sentential modifiers**.
  - Sentential focus particles must be **as low as possible** while being interpretable, **within their phase**.
  - This requirement is a strict syntactic constraint.
  - This constraint forms **a new argument for cyclic structure-building** by phase (Chomsky, 2000, 2001).

# ***Background***

Operators such as *only*, *even*, and *also* are “**focus-sensitive**,” as their interpretation depends on the placement of focus elsewhere in the utterance.

- (3) a. David will **only** wear a bow tie when TEACHING.
- b. David will **only** wear a BOW TIE when teaching.

based on Beaver and Clark (2008)

Focus triggers the computation of **alternatives** which vary in the focused position and focus-sensitive operators quantify over these alternatives (Rooth, 1985, 1992).

☞ The semantics of focus requires that the focused constituent—the “**associate**”—be c-commanded by the operator (Jackendoff, 1972; Tancredi, 1990; Aoun and Li, 1993; Erlewine, 2014).

- (4) \* DAVID will **only** wear a bow tie when teaching.  
Intended: ‘Only [David]<sub>F</sub> will wear a bow tie when teaching.’

I will refer to this as **the c-command requirement**.

## Two types of focus particles

(5) **Two types of focus particles in English:**

- a. The cat is **only** holding [a flag]<sub>F</sub>. *sentential only*
- b. The cat is holding **only** [a flag]<sub>F</sub>. *constituent only*

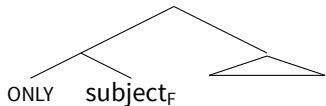
If presubject *only* is unambiguously a constituent *only*, this naturally explains the unavailability of VP association:

- (6) a. [**Only** [the cat]<sub>F</sub>] is holding a flag.
- b. \* [**Only** the cat] is holding [a flag]<sub>F</sub>.  
*violates the c-command requirement!*

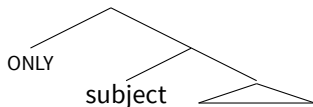


# No presubject sentential ONLY

Zhou and Crain (2009, 2010) propose that adult English and Mandarin presubject ONLY are necessarily constituent ONLYs; there is no presubject sentential ONLY.



\*



If the latter structure were available, the c-command requirement alone would predict that ONLY can associate with any constituent in the sentence, contrary to fact (for adults). But children begin by analyzing all ONLY as sentential modifiers.

(I do not make a claim regarding the status of English presubject *only*.)

# ***Mandarin Chinese***

In Mandarin, I will look at two focus-sensitive operators: *zhǐ* 只 and *shì* 是.

(7) *zhǐ* 只:

- semantics of *only* (Tsai, 2004); glossed here as ONLY
- In some positions, appears as *zhǐyǒu* 只有.

(8) *shì* 是:

- “focus marker” (Teng, 1979, a.o.): indicates narrow/contrastive focus, often translated as a cleft—see Erlewine (2015b) for its semantics;
- glossed here as SHI;
- homophonous/homographous with the copular verb

👉 I argue that *zhǐ/zhǐyǒu* and *shì* are always **sentential particles**, not constituent-adjoined.

ONLY appears in some positions as *zhǐyǒu* instead of *zhǐ*, most notably in pre-subject position.

We might imagine that *zhǐyǒu* is a constituent ONLY, unlike *zhǐ* which is a sentential ONLY. But if that is the case, *zhǐyǒu* is very restricted:

(9) *Zhǐyǒu* is not constituent-marking:

- a. \* Zhāngsān hē **zhǐyǒu** [hóngjiǔ]<sub>F</sub>.  
Zhangsan drinks ZHIYOU wine  
Intended: 'Zhangsan drinks only [wine]<sub>F</sub>.'
- b. \* Zhāngsān duì **zhǐyǒu** [Lǐsì]<sub>F</sub> rēng-le qiú.  
Zhangsan to ZHIYOU Lisi throw-PERF ball  
Intended: 'Zhangsan threw a ball at only [Lisi]<sub>F</sub>.'

☞ Instead, I analyze *zhǐyǒu* as an allomorph of *zhǐ*.

A couple arguments for this position:

- The choice of *zhǐyǒu* vs *zhǐ* is determined by the presence or absence of an adjacent functional head.

(10) ...{<sup>✓</sup>**zhǐ**, <sup>??</sup>**zhǐyǒu**} zài jiālǐ...  
          ONLY                   at home

(11) ...{<sup>?</sup>**zhǐ**, <sup>✓</sup>**zhǐyǒu**} zúotiān...  
          ONLY                   yesterday

- In pre-subject position, *only* generally must be realized as *zhǐyǒu*. However, when the *only* is preceded by negation, it is realized as *bù-zhǐ* ‘NEG-ONLY,’ and the extra *yǒu* is not necessary and in fact impossible.

(12) {\***Zhǐ**, ✓**zhǐyǒu**} [Zhāngsān]<sub>F</sub> lái-le.  
ONLY                      Zhangsan      come-PERF  
‘Only [Zhangsan]<sub>F</sub> came.’

(13) {✓**Bù-zhǐ**, \***bù-zhǐyǒu**} [Zhāngsān]<sub>F</sub> lái-le.  
NEG-ONLY                      Zhangsan      come-PERF  
‘Not only [Zhangsan]<sub>F</sub> came.’

(14) **Contextual allomorphy of zhǐ vs zhǐyǒu:**

ONLY ↔  $\begin{cases} zhǐ & \text{if linearly adjacent to a verb,} \\ & \text{preposition, or functional morpheme;} \\ zhǐyǒu & \text{otherwise} \end{cases}$

(15) **Allomorphy can be sensitive to adjacent syntactic category:**

a. Lively is an adjective:  
\*more lively, ✓livelier

b. Slowly is an adverb:  
✓more slowly, \*slowlier

(16) **...but only within the same syntactic domain:**

{\*Zhǐ, ✓Zhǐyǒu} [<sub>DP</sub> [dài yǎnjìng]<sub>F</sub> de rén] lái-le.  
ONLY                      wear glasses    DE person come-PERF  
'Only people who [wear glasses]<sub>F</sub> came.'

## Zhǐ and shì are sentential focus particles

(17) **Zhǐ and shì cannot be postverbal:**

Zhāngsān ✓**zhǐ/shì** [<sub>VP</sub> hē \***zhǐ/shì** [hóngjiǔ]<sub>F</sub>].  
Zhangsan ONLY/SHI drinks \*ONLY/SHI wine

‘Zhangsan *only* drinks [wine]<sub>F</sub>.’

(18) **Zhǐ and shì cannot be inside PPs:**

Zhāngsān ✓**zhǐ/shì** [<sub>PP</sub> duì \***zhǐ/shì** [Lǐsì]<sub>F</sub>] rēng-le qiú.  
Zhangsan ONLY/SHI to \*ONLY/SHI Lisi throw-PERF ball

‘Zhangsan (*only*) threw a ball at [Lisi]<sub>F</sub>.’



## Zhǐ and shì are sentential focus particles

English sentential *only* can associate with multiple foci, but constituent *only* cannot:

- (19) a. ✓ I **only** saw [the children]<sub>F</sub> ask [the adults]<sub>F</sub> to be quiet.  
b. \* I saw **only** [the children]<sub>F</sub> ask [the adults]<sub>F</sub> to be quiet.  
c. \* **Only** [the children]<sub>F</sub> asked [the adults]<sub>F</sub> to be quiet.

Mandarin *zhǐ* and *shì* can associate with multiple foci:

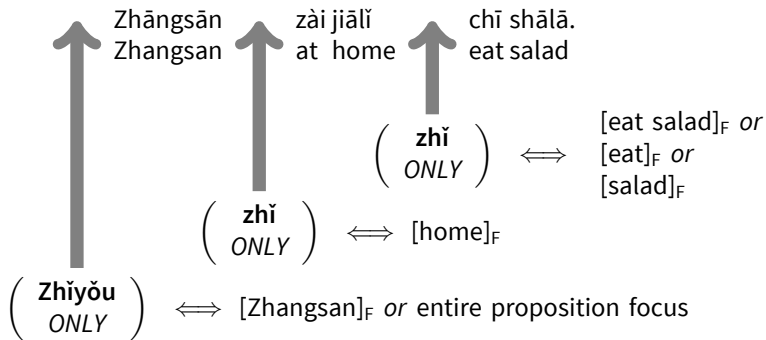
(20) **Multiple focus with *shì* (Cheng, 2008):**

**Shì** [érzi]<sub>F</sub> jiào [dàrén]<sub>F</sub> bié chǎo, bú **shì** [dàrén]<sub>F</sub> jiào [érzi]<sub>F</sub> bié chǎo.  
SHI son ask adult not noisy NEG SHI adult ask son not noisy  
'The son asked the adult not to make noise, not the other way around.'

- ☞ *Zhǐ(yǒu)* and *shì* have the distribution of a sentential focus particle, not a constituent particle.

# The position of *zhǐ/shǐ*

(21) **A simplex clause:**



(22) **Generalization (first):**

Sentential focus particles must be in *the lowest position possible* while taking their associate in their scope.

# The position of *zhǐ/shì*

☞ *Zhǐ/shì* can also associate down from a higher clause, long-distance.

(23) ***Zhǐ* (and *shì*) can associate long-distance:**

- a. ✓ Lǐsì **zhǐ** shūo [<sub>CP</sub> Zhāngsān hē [chá]<sub>F</sub>].  
Lisi ONLY say      Zhangsan drink tea  
‘Lisi *only* said that Zhangsan drinks [tea]<sub>F</sub>.’      only > say
- b. ✓ Lǐsì shūo [<sub>CP</sub> Zhāngsān **zhǐ** hē [chá]<sub>F</sub>].  
Lisi say      Zhangsan ONLY drink tea  
‘Lisi said that Zhangsan *only* drinks [tea]<sub>F</sub>.’      say > only

## The position of *zhǐ/shì*

For long-distance association, *shì/zhǐ* must be at the *vP* edge: (cf 23a)

- (24) a. \* **Zhǐyǒu** Lǐsì shūo [<sub>CP</sub> Zhāngsān hē [chá]<sub>F</sub>].  
ONLY Lisi say Zhangsan drink tea
- b. \* Lǐsì **zhǐ(yǒu)** zuótiān shūo-guò [<sub>CP</sub> Zhāngsān hē [chá]<sub>F</sub>].  
Lisi ONLY yesterday say-PAST Zhangsan drink tea  
(ungrammatical with the intended association)

(25) **Generalization (revised):**

Sentential focus particles must be in the lowest position possible while taking their associate in their scope, *within a given clause* (CP).

## The position of *zhǐ/shì*

Finally, evidence from verbs with nonfinite embeddings shows that domain over which the ‘as low as possible’ condition holds must be smaller than CP.

(26) ***Zhǐ* before and after the control verb *xiǎng* ‘want’:**

- a. ✓ Zhāngsān **zhǐ** [<sub>VP</sub> xiǎng [<sub>VP</sub> chī [shūcài]<sub>F</sub>]].  
Zhangsan only want eat vegetables.  
‘Zhangsan *only* wants to eat [vegetables]<sub>F</sub>.’      only > want
- b. ✓ Zhāngsān [<sub>VP</sub> xiǎng **zhǐ** [<sub>VP</sub> chī [shūcài]<sub>F</sub>]].  
Zhangsan want only eat vegetables.  
‘Zhangsan wants to *only* eat [vegetables]<sub>F</sub>.’      want > only

Both are possible because they are lowest *within their respective phases*.

(27) **Generalization (final):**

Sentential focus particles must be in the lowest position possible while taking their associate in their scope, *relative to a particular phase*.

This behavior parallels the behavior of German, as described by Jacobs (1983, 1986) and Buring and Hartmann (2001), although their characterization has been controversial (see e.g. Reis, 2005). (See Appendix.)

# ***Vietnamese***

(Erlewine, to appear)

# *Chỉ* is a sentential focus particle

In Vietnamese, I will look at two *only* words: *chỉ* and *mỗi*.

(28) Hole (2013) argues:

a. *chỉ* is a sentential *only*; (glossed here as ONLY<sub>sent</sub>)

b. *mỗi* is a constituent *only*. (glossed here as ONLY<sub>cons</sub>)

(29) Nam (**chỉ**) mua (**mỗi**) [cuốn sách]<sub>F</sub>.

Nam ONLY<sub>sent</sub> buy ONLY<sub>cons</sub> CL book

‘Nam bought *only* [the book]<sub>F</sub>.’



# *Chỉ* is a sentential focus particle

(30) *Chỉ* vs *mỗi* associating into a preverbal PP:

a. Tôi **chỉ** [[<sub>PP</sub> ở [trường]<sub>F</sub>] học tiếng anh].  
I ONLY<sub>sent</sub> at school study English

b. \* Tôi [<sub>PP</sub> ở **chỉ** [trường]<sub>F</sub>] học tiếng anh.  
I at ONLY<sub>sent</sub> school study English

c. Tôi [<sub>PP</sub> ở **mỗi** [trường]<sub>F</sub>] học tiếng anh.  
I at ONLY<sub>const</sub> school study English

'I only study English at [school]<sub>F</sub>.'

(a = c)

# *Chỉ* is a sentential focus particle

With preverbal foci, *chỉ*, *mỗi*, or both can occur, but only in *chỉ*-*mỗi* order.

(31) **Stacking the two *only*s on the subject:**

- a. ✓ **Mỗi** [Nam]<sub>F</sub> mua cuốn sách.  
ONLY<sub>cons</sub> Nam bought CL book  
'Only [Nam]<sub>F</sub> bought the book.'
- b. ✓ **Chỉ** [Nam]<sub>F...</sub>  
ONLY<sub>sent</sub> Nam
- c. ✓ **Chỉ** **mỗi** [Nam]<sub>F...</sub>  
ONLY<sub>sent</sub> ONLY<sub>cons</sub> Nam
- d. \* **Mỗi** **chỉ** [Nam]<sub>F...</sub>  
ONLY<sub>cons</sub> ONLY<sub>sent</sub> Nam

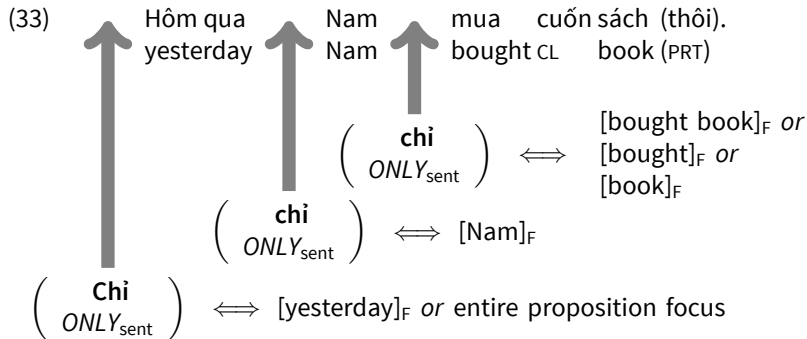
This is what is predicted by Hole and Löbel's (2013) analysis of *chi* as sentential ONLY and *mỗi* as constituent ONLY: the sentential modifier is necessarily linearly outside of the constituent ONLY.

(32) **The structure of (31c):**

[<sub>TP</sub> **Chi** [<sub>TP</sub> [<sub>DP</sub> **mỗi** [<sub>DP</sub> Nam]<sub>F</sub>] mua cuốn sách]]  
ONLY<sub>sent</sub>            ONLY<sub>cons</sub>    Nam    buy CL    book

# The position of *chi*

Here I use sentences with a temporal adjunct.



## The position of *chỉ*

*Chỉ* can associate long-distance, into a lower clause, but when it does, it must be in immediately preverbal position:

- (34) (\***Chỉ**) Tôi ✓**chỉ** nói [<sub>CP</sub> là Nam thích [Ngân]<sub>F</sub> (thôi).  
ONLY<sub>sent</sub> I ONLY<sub>sent</sub> say that Nam like Ngan (PRT)  
'I *only* said Nam likes [Ngân]<sub>F</sub>.'
- (35) Tôi nói [<sub>CP</sub> là (\***chỉ**) Nam ✓**chỉ** thích [Ngân]<sub>F</sub> (thôi).  
I say that ONLY<sub>sent</sub> Nam ONLY<sub>sent</sub> like Ngan (PRT)  
'I said Nam *only* likes [Ngân]<sub>F</sub>.'

## The position of *chỉ*

*Chỉ* can be above or below the negator *không*, which is formally a verb embedding a *v*/VP (or a reduced clause) (Trinh, 2005).

- (36) Tôi **chỉ** [vP không [vP đọc cuốn sách [này]<sub>F</sub>].  
I ONLY<sub>sent</sub> NEG read CL book this

‘I *only* didn’t read [this]<sub>F</sub> book.’ ⇒ I read all other books.

- (37) Tôi [vP không **chỉ** [vP đọc cuốn sách [này]<sub>F</sub>].  
I NEG ONLY<sub>sent</sub> read CL book this

‘I didn’t *only* read [this]<sub>F</sub> book.’ ⇒ I read (some) other books too.

The “as low as possible” requirement is again relative to each phase.

- ☞ Vietnamese shows us a case where we can clearly distinguish between sentential and constituent ONLYs, and we see that ONLY<sub>sent</sub> follows the generalization in (27), repeated:

(38) **Generalization:** (=27)

Sentential focus particles must be in the lowest position possible while taking their associate in their scope, relative to a particular phase.

# ***A semantically-sensitive hypothesis***



# A semantically-sensitive hypothesis

We might imagine that *shì/zhǐ/chǐ* must be as low as possible (within a particular domain) *unless it being in a higher position introduces a truth-conditional difference*.

Similar semantically-sensitive constraints have been proposed previously:

(39) **Scope Economy (Fox, 2000, p. 3):**

Scope-shifting operations cannot be semantically vacuous.

- ☞ The “as low as possible” behavior is not semantically-sensitive in this way.

(40) **Subject quantifier baseline:**

Měi-ge kèrén dōu **zhǐ** [VP hē [chá]<sub>F</sub>].

Every-CL guest all ONLY drink tea

✓ ‘Every guest is such that they only drink [tea]<sub>F</sub>.’      every > only

\* ‘Tea is the only thing that every guest drinks.’      \*only > every

*Zhǐ* in (40) is in the lowest possible position to take its focus associate in its scope.

What if *zhǐ* moves in front of the subject but keeps associating with “tea”?

# A semantically-sensitive hypothesis

(41) **Zhǐ cannot be higher, even if it would lead to a different reading:**

\* **Zhǐ(yǒu)** měi-ge kèrén dōu hē [chá]<sub>F</sub>.  
ONLY every-CL guest all drink tea

Intended: 'Only [tea]<sub>F</sub> is such that<sub>i</sub> every guest drinks it<sub>i</sub>.'

This reading can of course be expressed, but it requires fronting the associate:

(42) **Fronting can be used to force zhǐ to scope higher, above every:**

✓ **Zhǐyǒu** [chá]<sub>F</sub> měi-ge kèrén dōu hē \_\_\_\_\_.  
ONLY tea every guest all drink

'Only [tea]<sub>F</sub> is such that<sub>i</sub> every guest drinks it<sub>i</sub>.'      only > every

# A semantically-sensitive hypothesis

The argument against this purely semantic hypothesis also applies to Vietnamese:

(43) *Chi* can't be higher, even if it changes the meaning:

- a. Ai cũng **chi** mua [cuốn sách]<sub>F</sub>.  
who also ONLY buy CL book  
'Everyone *only*<sub>sent</sub> bought [the book]<sub>F</sub>.'  $\checkmark \forall > \text{only}, * \text{only} > \forall$
- b. \* **Chi** ai cũng mua [cuốn sách]<sub>F</sub>.  
ONLY<sub>sent</sub> who also buy CL book  
Int: '*Only* [the book]<sub>F</sub> is s.t.<sub>i</sub> everyone bought it<sub>i</sub>.' only >  $\forall$
- c.  $\checkmark$  **Chi** (**mỗi**) [cuốn sách]<sub>F</sub> ai cũng (**mới**) mua \_\_\_\_.  
ONLY<sub>sent</sub> (ONLY<sub>cons</sub>) CL book who also (PRT) buy \_\_\_\_  
'*Only* [the book]<sub>F</sub> is s.t.<sub>i</sub> everyone bought it<sub>i</sub>.' only >  $\forall$

# A semantically-sensitive hypothesis

- ☞ The “as low as possible” behavior cannot be the result of a semantically-sensitive condition à la Scope Economy (39).

There must be *syntactic constraints*, not just semantic interface requirements, governing the position of sentential modifiers (cf Ernst 2002).

# ***Proposal***

The requirement to take the associate in its scope in (27) follows from the semantics of focus (Rooth, 1985). **However, the requirement to be as low as possible, within a particular domain, is not explained by the semantics alone.**

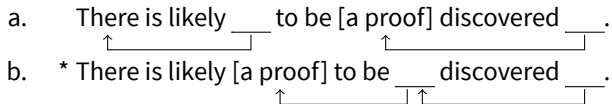
- ☞ The “as low as possible” requirement is due to the **syntax** of sentential-modifier placement.

# Constraining derivational choices

I propose that this behavior reflects a general principle governing **local derivational choices**. (See Erlewine 2015a for alternatives.)

A famous example of this form is **Merge over Move**. See (44) from Chomsky (2000):

(44) Based on Chomsky (2000, p. 104):

- a.     There is likely \_\_\_ to be [a proof] discovered \_\_\_\_.  
          ↑                  ↓                  ↑                  ↓
- b.     \* There is likely [a proof] to be \_\_\_ discovered \_\_\_\_.  
                                  ↓                  ↑                  ↓
- 

Roughly: if the expletive *there* is going to be used, it must be Merged in as soon as it can, blocking movement of the subject.




# Constraining derivational choices

At the same time, Merge over Move does not hold over the entire structure:

(45) Based on Chomsky (2000, p. 103):

There is a possibility [<sub>CP</sub> that [a proof] will be \_\_\_\_\_ discovered \_\_\_\_\_].



Chomsky proposes that, while building the embedded CP, we do not yet “know” that the expletive *there* will be chosen for use in the matrix clause. **These “chunks” of structure-building are called *phases***, traditionally CP and vP (here simply VP).

These same architectural assumptions allow us to straightforwardly model the “as low as possible” behavior here:

(46) **Adjoin As Soon As Possible:**

Adjuncts should be adjoined as soon as they will be interpretable.

...or, in top-down/left-to-right structure-building, *Adjoin As Late As Possible*.

(47) **Derivation of a VP phase with object focus:**

a.  $LA_1 = \{ \text{buy}, [_{DP} \text{CL book}]_F \}$

b.  $[_{VP} \text{buy DP}]$

(48) **Derivation of the CP phase, following (47):**

a.  $LA_2 = \{ C, T, VP (47), ONLY_{sent}, [_{DP} \text{Nam}] \}$

b. i. Adjoin  $ONLY_{sent}$  to VP       $[_{VP} ONLY_{sent} VP]$

ii. Merge T and (i)       $[T [_{VP} ONLY_{sent} VP]]$

iii. Merge subject with (ii)       $[_{TP} DP [T [_{VP} ONLY_{sent} VP]]]$

iv. Merge C with (iii)       $[_{CP} C [_{TP} DP [T [_{VP} ONLY_{sent} VP]]]]$

⇒ “Nam ONLY bought  $[_{CL} \text{book}]_F$ ” (33)

(49) **Derivation of a VP phase with no focus:**

- a.  $LA_1 = \{\text{buy}, [_{DP} \text{CL book}]\}$
- b.  $[_{VP} \text{buy DP}]$

(50) **Derivation of the CP phase with subject focus:**

- a.  $LA_2 = \{C, T, VP (49), ONLY_{sent}, [_{DP} \text{Nam}]_F\}$
  - b.
    - i. Merge T and VP  $[T VP]$
    - ii. Merge subject with (i)  $[_{TP} DP [T VP]]$
    - iii. Adjoin  $ONLY_{sent}$  to TP (ii)  $[_{TP} ONLY_{sent} [_{TP} DP [T VP]]]$
    - iv. Merge C with (iii)  $[_{CP} C [_{TP} ONLY_{sent} [_{TP} DP [T VP]]]]$
- $\Rightarrow$  “ $ONLY [Nam]_F$  bought CL book” (33)

(Ask me about VP-internal subjects.)

## “Competition” within each phase

The higher and lower adjunction positions in (48/50) “block” each other, because ONLY is introduced in the same phase in these derivations.

- ☞ This “blocking” of higher positions by lower positions will only apply within the same phase. The introduction of ONLY in a higher phase is not blocked by a lower phase ONLY.

This accounts for the possibility of optionality in ONLY placement in examples with clausal embeddings and embedded foci:

- (51) Matrix and embedded positions for *chi*, given embedded focus, repeated from (34–35):

- a. [CP1 Tôi **chi** [VP1 nói [CP2 là Nam [VP2 thích [Ngân]<sub>F</sub>.  
I ONLY<sub>sent</sub> say that Nam like Ngan  
'I only said Nam likes [Ngan]<sub>F</sub>.'
- b. [CP1 Tôi [VP1 nói [CP2 là Nam **chi** [VP2 thích [Ngân]<sub>F</sub>.  
I say that Nam ONLY<sub>sent</sub> like Ngan  
'I said Nam only likes [Ngan]<sub>F</sub>.'

# ***Conclusion***

Today I discussed the distribution and syntax of (exhaustive) focus particles in Mandarin Chinese and Vietnamese.

- I argue that Mandarin *zhǐ(yǒu)* and *shì* and Vietnamese *chỉ* are **always sentential focus particles**, adjoining to the clausal spine, and not constituent focus particles.
  - This is tricky to see in Mandarin, but particularly clear in Vietnamese, where there is a separate, constituent ONLY: *mỗi*.
- This requires a new explanation for the inability of presubject particles to associate with or into the VP.
  - ☞ **Sentential focus particles must adjoin as low as possible in their phase**, while associating with their intended associate.
  - The fact that this “blocking”/“competition” behavior is only observed within each phase is a new type of evidence for phase-based, cyclic conception of structure-building (Chomsky, 2000, 2001).

Back to the acquisition of focus particle behavior in Mandarin Chinese (Yang, 2002; Zhou and Crain, 2009, 2010; Notley et al., 2009):

- Recall the proposal that (preverbal) *zhǐyǒu* is a constituent ONLY in the adult grammar of Mandarin, which children misparse as a sentential modifier.
- **This cannot be the difference between child and adult Mandarin.**
- Instead, such children are not yet aware of or not correctly utilizing the “as low as possible” constraint to identify the correct focus associate, at least in comprehension.



# Thank you! Questions?

For judgements and discussion of data, I thank Tingchun Chen, Victor Junnan Pan, Ning Tang, and Yimei Xiang for Mandarin Chinese and Trang Dang, Anne Nguyen, Cat-Thu Nguyen Huu, Chieu Nguyen, and Tran Thi Huong Giang for Vietnamese. For comments and discussion, I especially thank Noah Constant, Jeanette Gundel, Martin Hackl, Claire Halpert, Irene Heim, Tim Hunter, Hadas Kotek, Waltraud Paul, David Pesetsky, Bernhard Schwarz, Radek Šimík, Luis Vicente, Michael Wagner, Malte Zimmermann, and audiences at Theoretical East Asian Linguistics 9 and NELS 45. Errors are mine.

Papers at <http://mitcho.com/projects/focus-particles/>

# References I

- Aoun, Joseph, and Yen-hui Audrey Li. 1993. *Wh*-elements in situ: Syntax or LF? *Linguistic Inquiry* 24:199–238.
- Beaver, David Ian, and Brady Clark. 2008. *Sense and sensitivity: How focus determines meaning*. Wiley-Blackwell.
- Büring, Daniel, and Katharina Hartmann. 2001. The syntax and semantics of focus-sensitive particles in German. *Natural Language & Linguistic Theory* 19:229–281.
- Cheng, Lisa Lai-Shen. 2008. Deconstructing the *shì...de* construction. *The Linguistic Review* 25:235–266.
- Chomsky, Noam. 2000. Minimalist inquiries: the framework. In *Step by step: Essays on minimalist syntax in honor of Howard Lasnik*, ed. Roger Martin, David Michaels, and Juan Uriagereka, 89–156. MIT Press.
- Chomsky, Noam. 2001. Derivation by phase. In *Ken Hale: A life in language*, ed. Michael Kenstowicz, 1–52. MIT Press.
- Crain, Stephen, Weijia Ni, and Laura Conway. 1994. Learning, parsing and modularity. In *Perspectives on sentence processing*, 443–467. Lawrence Erlbaum.

## References II

- Crain, Stephen, William Philip, Kenneth Drozd, Tom Roeper, and Kazumi Matsuoka. 1992. Only in child language. Paper presented at BUCLD 17.
- Erlewine, Michael Yoshitaka. 2014. Movement out of focus. Doctoral Dissertation, Massachusetts Institute of Technology. URL <http://ling.auf.net/lingbuzz/002210/current.pdf>.
- Erlewine, Michael Yoshitaka. 2015a. Minimality and focus-sensitive adverb placement. In *Proceedings of NELS 45*, ed. Thuy Bui and Deniz Özyıldız, volume 1, 193–202.
- Erlewine, Michael Yoshitaka. 2015b. The semantics of the Mandarin focus marker *shì*. Presented at the 9th meeting of the European Association of Chinese Linguistics (EACL 9).
- Erlewine, Michael Yoshitaka. to appear. Vietnamese focus particles and derivation by phase. *Journal of East Asian Linguistics* URL <http://ling.auf.net/lingbuzz/003177/current.pdf>.
- Ernst, Thomas. 2002. *The syntax of adjuncts*. Cambridge University Press.
- Fox, Danny. 2000. *Economy and semantic interpretation: a study of scope and variable binding*. MIT Press.

## References III

- Hole, Daniel. 2013. Focus particles and related entities in Vietnamese. In Hole and Löbel (2013), 265–303.
- Hole, Daniel, and Elisabeth Löbel, ed. 2013. *Linguistics of Vietnamese: an international survey*. de Gruyter.
- Jackendoff, Ray. 1972. *Semantic interpretation in generative grammar*. MIT Press.
- Jacobs, Joachim. 1983. *Fokus und Skalen: Zur Syntax und Semantik der Gradpartikeln im Deutschen*. Tübingen: Niemeyer.
- Jacobs, Joachim. 1986. The syntax of focus and adverbials in German. In *Topic, focus, and configurationality*, ed. Werner Abraham and Sjaak de Meij, 103–128. John Benjamins.
- Notley, Anna, Peng Zhou, Stephen Crain, and Rosalind Thornton. 2009. Children's interpretation of focus expressions in English and Mandarin. *Language Acquisition* 16:240–282.
- Reis, Marga. 2005. On the syntax of so-called focus particles in German: A reply to Buring and Hartmann 2001. *Natural Language & Linguistic Theory* 23:459–483.
- Rooth, Mats. 1985. Association with focus. Doctoral Dissertation, University of Massachusetts, Amherst.

- Rooth, Mats. 1992. A theory of focus interpretation. *Natural Language Semantics* 1:75–116.
- Tancredi, Chris. 1990. Not only EVEN, but even ONLY. Manuscript, Massachusetts Institute of Technology.
- Teng, Shou-Hsin. 1979. Remarks on cleft sentences in Chinese. *Journal of Chinese Linguistics* 7:101–113.
- Trinh, Tue. 2005. Aspects of clause structure in Vietnamese. Master's thesis, Humboldt University.
- Tsai, Wei-Tien Dylan. 2004. 談「只」與「連」的形式語義 [On the formal semantics of *only* and *even* in Chinese]. *Zhongguo Yuwen* 2:99–111.
- Yang, Xiaolu. 2002. 儿童汉语中的限制焦点 [restrictive focus in child Mandarin]. *当代语言学* [Contemporary Linguistics] 3:225–237.
- Zhou, Peng, and Stephen Crain. 2009. Focus in child language: Evidence from the acquisition of Chinese. In *Proceedings of GALANA 3*, 336–346.
- Zhou, Peng, and Stephen Crain. 2010. Focus identification in child Mandarin. *Journal of Child Language* 37:965–1005.

In some cases, it is hard to distinguish between a focus-sensitive operator being an adverb or constituent-marking.

(52) **Two hypotheses for German focus operators:**

(Büring and Hartmann, 2001)

Ich habe **nur** [einen ROMAN]<sub>F</sub> gelesen.

I have ONLY a novel read

a. Nur as adverb:

Ich habe [<sub>VP</sub> **nur** [<sub>VP</sub> [<sub>DP</sub> einen Roman]<sub>F</sub> gelesen]]

b. Nur as constituent-marking:

Ich habe [<sub>VP</sub> [<sub>DP</sub> **nur** [<sub>DP</sub> einen Roman]<sub>F</sub>] gelesen]

**Jacobs (1983, 1986); Buring and Hartmann (2001):** German focus particles are always adverbs.

(53) \* [<sub>PP</sub> mit [ **nur** [<sub>DP</sub> Hans]<sub>F</sub> ]]  
with ONLY Hans

(54) \* [<sub>DP</sub> der Bruder [ **nur** [<sub>DP</sub> des Grafen]<sub>F</sub> ]]  
the brother ONLY the-GEN count-GEN

# The Closeness constraint debate

In many (but not all) cases, focus operators must be *adjacent* to their associate:

- (55) a. ✓ Gestern hat Rufus **sogar** dem [mädchen]<sub>F</sub> Blumen geschenkt.  
yesterday has Rufus EVEN the.DAT girl flowers given
- b. \* Gestern hat **sogar** Rufus dem [mädchen]<sub>F</sub> Blumen geschenkt.  
yesterday has EVEN Rufus the.DAT girl flowers given

(56) **Closeness (informal):**

(Büring and Hartmann 2001; following Jacobs 1983, 1986)

Focus particles are as close to the focus as possible.



# The Closeness constraint debate

However, the Closeness constraint has been criticized as “spurious” and “more than doubtful” (Reis, 2005).

- ☞ The behavior of Mandarin Chinese and Vietnamese presented here shows that Closeness-type behavior is attested in other, unrelated languages.