

On the position of focus adverbs*

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The question

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

- (1) a. David **only** wears a BOW TIE when teaching. (exx Beaver and Clark, 2008)
b. David **only** wears a bow tie when TEACHING.

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

☞ The Roothian semantics of focus requires that the focused constituent—the “**associate**”—be in the scope of the operator.¹

In the case of **focus adverbs** associating with an **in-situ associate**, this translates into a **c-command requirement** (Jackendoff, 1972; Tancredi, 1990; Aoun and Li, 1993).

Q: Are there other constraints on the position of focus adverbs?

Today

I investigate exclusive focus adverbs in Mandarin Chinese and Vietnamese and show that the **c-command requirement is insufficient** to explain their distribution.

- I show that focus adverbs must be **as low as possible** while c-commanding their associate, **relative to a particular domain**.
 - Reminiscent of Büring and Hartmann’s (2001) description of focus particles in German as adverbs.
- I propose a **new syntax of focus adverbs** which, together with the established Roothian semantics of focus, explains this distribution.
- This closeness constraint has the flavor of an Economy constraint, but **cannot be explained in terms of Scope Economy** (Fox, 1995, 2000).

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1 Mandarin Chinese

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

- (2) *zhǐ* 只:
- semantics of *only* (Tsai, 2004); glossed here as ONLY
 - In some positions—notably sentence-initially—appears as *zhǐyǒu* 只有.
 - I argue *zhǐ* and *zhǐyǒu* are allomorphs. (See appendix.)
- (3) *shì* 是:
- “focus marker” (Teng, 1979, a.o.); indicates narrow / contrastive focus, often translated as a cleft; glossed here as SHI
 - homophonous/homographous with the copular verb (see appendix)
- NB: Here I do not discuss the *shì...de* construction.

1.1 *Zhǐ* and *shì* are focus adverbs

For reference, English has two varieties of *only*:

- (4) a. David **only** drinks [red wine]_F. *adverb*
b. David drinks **only** [red wine]_F. *adfoc* (*focused-constituent-marking*)
- (5) ***Zhǐ* and *shì* cannot immediately precede postverbal constituents:**
- a. ✓ Zhāngsān **zhǐ/shì** [_{VP} hē [hóngjiǔ]_F].
Zhangsan ONLY/SHI drinks wine
'Zhangsan (*only*) drinks [wine]_F.'
- b. * Zhāngsān [_{VP} hē **zhǐ/shì** [hóngjiǔ]_F].
Zhangsan drinks ONLY/SHI wine
- (6) ***Zhǐ* and *shì* cannot be inside PPs:**
- a. ✓ Zhāngsān **zhǐ/shì** [_{PP} duì [Lǐsì]_F] rēng-le qiú.
Zhangsan ONLY/SHI to Lisi throw-PERF ball
'Zhangsan (*only*) threw a ball at [Lisi]_F.'
- b. * Zhāngsān [_{PP} duì **zhǐ/shì** [Lǐsì]_F] rēng-le qiú.
Zhangsan to ONLY/SHI Lisi throw-PERF ball

English adverb *only* can associate with multiple foci, but *adfoc* *only* cannot:

- (7) a. ✓ I **only** saw [the children]_F ask [the adults]_F to be quiet.
b. * I saw **only** [the children]_F ask [the adults]_F to be quiet.
c. * **Only** [the children]_F asked [the adults]_F to be quiet.

¹In some cases, the associate can move out of the operator’s scope. Exclusives (e.g. *only*) are used here because they do not allow their associate to move out of their scope. See Erlewine (2014).

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

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

Shì [érzi]_F jiào [dàrén]_F bié chǎo, bú **shì** [dàrén]_F jiào [érzi]_F 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 adult asking the son.’

☞ *Zhǐ* and *shì* pattern with English adverb *only*, not with adfocus *only*.

(There is much literature analyzing the focus marker *shì* as a copular main verb.)
 (Here I concentrate on the fact that *shì* has the same distribution as *zhǐ* in its position and possible patterns of focus association. See the appendix.)

1.2 The position of *zhǐ/shì*²

I begin with sentences with preverbal adjuncts, choosing a fixed position for *zhǐ* and seeing what it can associate with. (Here I use *zhǐ* as its truth-conditional effect is clearer but the association facts are the same with *shì*.)

(9) **“ONLY S Adjunct VP”:**

Zhǐyǒu Zhāngsān zài jiālǐ chī shālā.
 ONLY Zhangsan at home eat salad
 ‘Only [Z]_F eats salad at home.’ * ‘Z only eats [salad]_F at home.’
 * ‘Z only [eats salad]_F at home.’ * ‘Z only eats salad at [home]_F.’...
 ‘It’s only the case that [Z eats salad at home]’

(10) **“S ONLY Adjunct VP”:**

Zhāngsān **zhǐ** zài jiālǐ chī shālā.
 Zhangsan ONLY at home eat salad
 * ‘Z only [eats salad]_F at home.’ * ‘Z only eats [salad]_F at home.’
 * ‘Z only [eats]_F salad at home.’ * ‘Z only eats salad at [home]_F.’...

(11) **“S Adjunct ONLY VP”:**

Zhāngsān zài jiālǐ **zhǐ** chī shālā.
 Zhangsan at home ONLY eat salad
 ‘Z only [eats salad]_F at home.’ * ‘Z only eats [salad]_F at home.’
 ‘Z only [eats]_F salad at home.’ * ‘Z only eats salad at [home]_F.’...

(12) **Generalization (first):**

Focus adverbs must be in *the lowest position possible* while c-commanding their focus associate.

²The pattern described here for *zhǐ* and *shì* may also hold for the adverbial *even* in Mandarin, *shènzhì* 甚至, but with one twist: when *shènzhì* is not in immediately preverbal position, the VP must be marked by *dōu* 都 / *yě* 也 (Shyu, 1995, p. 11).

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

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

- a. ✓ Lǐsì **zhǐ** shuō [CP Zhāngsān hē [chǎ]_F].
 Lisi ONLY say Zhangsan drink tea
 ‘Lisi *only* said that Zhangsan drinks [tea]_F.’ only > say
- b. ✓ Lǐsì shuō [CP Zhāngsān **zhǐ** hē [chǎ]_F].
 Lisi say Zhangsan ONLY drink tea
 ‘Lisi said that Zhangsan *only* drinks [tea]_F.’ say > only

For long-distance association, *Op* must be in *immediately preverbal position*: (cf 13a)

- (14) a. * **Zhǐyǒu** Lǐsì shuō [CP Zhāngsān hē [chǎ]_F].
 ONLY Lisi say Zhangsan drink tea
- b. * Lǐsì **zhǐ(yǒu)** zuótiān shuō-guò [CP Zhāngsān hē [chǎ]_F].
 Lisi ONLY yesterday say-PAST Zhangsan drink tea
 (ungrammatical with the intended association)

(15) **Generalization (revised):**

Focus adverbs must be in the lowest position possible while c-commanding their focus associate, *within a given clause* (CP).

Finally, evidence from verbs with nonfinite embeddings shows that domain over which the ‘as low as possible’ condition holds must be smaller than CP.³

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

- a. ✓ Zhāngsān **zhǐ** [vP xiǎng [vP chī [shūcài]_F].
 Zhangsan only want eat vegetables.
 ‘Zhangsan *only* wants to eat [vegetables]_F.’ only > want
- b. ✓ Zhāngsān [vP xiǎng **zhǐ** [vP chī [shūcài]_F].
 Zhangsan want only eat vegetables.
 ‘Zhangsan wants to *only* eat [vegetables]_F.’ want > only

Both positions are possible because they are lowest *relative to different vP edges*.

(17) **Generalization (final):**

Focus adverbs must be in the lowest position possible while c-commanding their focus associate, *relative to a particular extended vP(-CP) domain*.

³As noted by a reviewer, if we assume the control verb in (16) embeds a (nonfinite) CP complement, the generalization in (15) perhaps does not need to be refined at this point.

4 Vietnamese

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

- (25) Hole (2013) argues:
- chỉ* is an adverb *only*;⁴ (glossed here as *ONLY_{adv}*)
 - mỗi* is an adfocus *only*. (glossed here as *ONLY_{adf}*)

(Some examples will also have a preverbal *mới* (not to be confused with *ONLY_{adf}*) which is *mỗi*) and clause-final *thôi*, which I gloss as *PRT* here. For *mới*, see Nguyen (2012); Hole (2013). For *thôi*, see Hole (next talk).

(26) Two different *onlys* in Vietnamese:

- Nam **chỉ** mua [cuốn sách]_F.
Nam *ONLY_{adv}* buy CL book
'Nam *only* bought [the book]_F.'
 - Nam mua **mỗi** [cuốn sách]_F. c. * Nam **mỗi** mua [cuốn sách]_F.
Nam buy *ONLY_{adf}* CL book Nam *ONLY_{adf}* buy CL book
'Nam bought *only* [the book]_F.'
 - Nam **chỉ** mua **mỗi** [cuốn sách]_F.
Nam *ONLY_{adv}* buy *ONLY_{adf}* CL book
'Nam bought *only* [the book]_F.'
- (a = b = d)

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

(27) Stacking the two *onlys* on the subject:

- ✓ **Mỗi** [Nam]_F mua cuốn sách. b. ✓ **Chỉ** [Nam]_F...
ONLY_{adf} Nam bought CL book *ONLY_{adv}* Nam
'*Only* [Nam]_F bought the book.'
- ✓ **Chỉ** **mỗi** [Nam]_F... d. * **Mỗi** **chỉ** [Nam]_F...
ONLY_{adv} *ONLY_{adf}* Nam *ONLY_{adf}* *ONLY_{adv}* Nam

This is what is predicted by Hole's (2013) analysis of *chỉ* as an adverb and *mỗi* as adfocus: the adverb is necessarily linearly outside of the adfocus *only*.

☞ **The distribution of *chỉ* follows the generalization in (17)**, developed for Mandarin *zhǐ* and *shì*, repeated here:

- (28) **Generalization: (=17)**
Focus adverbs must be in the lowest position possible while c-commanding their focus associate, relative to a particular extended *vP*(-CP) domain.

⁴*Chỉ* is Sino-Vietnamese, written 只 in Chữ Nôm, the Chinese script no longer used in Vietnamese. Neither of my non-linguist consultants speak any Mandarin Chinese or knew that this cognate exists in Mandarin.

Here I use sentences with a temporal adjunct. (Note that the unmarked, base order is different than in Mandarin.)

(29) "ONLY Adjunct S VP":

Chỉ hôm qua Nam (mới) mua cuốn sách (thôi).
ONLY_{adv} yesterday Nam (PRT) bought CL book (PRT)
* 'Only [N]_F bought the book ystdy.' * 'N only bought [the book]_F ystdy.'
* 'N only [bought]_F the book ystdy.' ✓ 'N only bought the book [ystdy]_F.'

(30) "Adjunct ONLY S VP":

Hôm qua **chỉ** Nam (mới) mua cuốn sách (thôi).
yesterday *ONLY_{adv}* Nam (PRT) bought CL book (PRT)
✓ 'Only [N]_F bought the book ystdy.' * 'N only bought [the book]_F ystdy.'
* 'N only [bought]_F the book ystdy.' * 'N only bought the book [ystdy]_F.'

(31) "S Adjunct ONLY VP":

Hôm qua Nam **chỉ** mua cuốn sách (thôi).
yesterday Nam *ONLY_{adv}* bought CL book (PRT)
* 'Only [N]_F bought the book ystdy.' ✓ 'N only bought [the book]_F ystdy.'
✓ 'N only [bought]_F the book ystdy.' * 'N only bought the book [ystdy]_F.'

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

(32) Pre-verbal *chỉ* can associate long-distance, with anything it c-commands:

Tôi **chỉ** [_{vP} nói [_{CP} là Nam thích Ngan (thôi)].
I *ONLY_{adv}* say that Nam like Ngan (PRT)
* 'Only [I]_F said Nam likes Ngan.' ✓ 'I *only* said Nam [likes]_F Ngan.'
✓ 'I *only* said [Nam]_F likes Ngan.' ✓ 'I *only* said Nam likes [Ngan]_F...'

The argument against a scope economy view also applies to Vietnamese:

(33) *Chỉ* cannot move further than necessary, even if it changes the meaning:

- Ai cũng **chỉ** mua [cuốn sách]_F.
who also *ONLY* buy CL book
'Everyone *only_{adv}* bought [the book]_F.' ✓ 'every > only, *only > every'
- * **Chỉ** ai cũng mua [cuốn sách]_F.
ONLY_{adv} who also buy CL book
Int: '*Only* [the book]_F is such that_i everyone bought it_i.' only > every
- ✓ **Chỉ** (**mỗi**) [cuốn sách]_F ai cũng (mới) mua ____.
ONLY_{adv} (*ONLY_{adf}*) CL book who also (PRT) buy ____
'*Only* [the book]_F is such that_i everyone bought it_i.' only > every

☞ Vietnamese shows us a case where we can clearly observe the different distributions of adverb and adfocus *only*, and we see that *ONLY_{adv}* follows the generalization in (28).

5 Conclusion

In this talk I investigated the distribution of exclusive focus-sensitive operators in Mandarin Chinese and Vietnamese.

- I argued that **Mandarin Chinese *zhǐ* and *shì* are adverbs**, and study their distribution together with **Vietnamese *chỉ***, which is also an adverb (Hole, 2013).

☞ Their distribution follows the following generalization:

Focus adverbs must be in **the lowest position possible** while **c-commanding their focus associate, relative to a particular extended *v*P domain**.

- This uniform behavior of focus adverbs in Mandarin Chinese and Vietnamese (and German, following Büring and Hartmann 2001) points towards **a possible universal in focus association**.
 - The c-command condition is required by the semantics of focus (Rooth, 1985, a.o.) and therefore expected to be universal.
 - I proposed **a new syntax for focus adverbs** which derives the distribution.
- This work highlights the necessity of **syntactic constraints**, in addition to semantic constraints on interpretation, on adverb placement (cf Ernst, 2002).

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Appendix A: *zhǐyǒu* vs *zhǐ*

As noted at the beginning of section 1, in certain positions, *only* is realized as *zhǐyǒu* 只有 instead of *zhǐ* 只. Note that *yǒu* 有 is the existential verb, raising the question of whether *zhǐyǒu* is made up of the adverb *zhǐ* and the verb *yǒu*. For example, one might think that a sentence-initial *zhǐyǒu* is a sentence-initial *yǒu*, embedding a (small) clause, modified by *zhǐ*, schematized in (34).

- (34) **A hypothesis: *zhǐyǒu* = *zhǐ* + main verb *yǒu***
Zhǐ [_{vP} *yǒu* [_{clause} *S_F* ...]]

☞ Instead, I analyze *zhǐyǒu* as an allomorph of *zhǐ*,⁵ with *zhǐyǒu* appearing when *zhǐ* cannot form a polysyllabic prosodic word with an adjacent head.

There are a few arguments for this position:

- The choice of *zhǐyǒu* vs *zhǐ* is often determined by whether the adjacent constituent includes a functional head or not. For example, when preceding a PP ‘at home,’ *zhǐ* is preferred; when preceding a time ‘yesterday,’ *zhǐyǒu* is preferred.

(35) ...{[✓]*zhǐ*, ^{??}*zhǐyǒu*} zài jiālǐ...
ONLY at home

(36) ...{[?]*zhǐ*, [✓]*zhǐyǒu*} zúotiān...
ONLY yesterday

- In pre-subject position, *only* generally must be realized as *zhǐyǒu*.⁶ 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.

(37) {^{??}*Zhǐ*, [✓]*zhǐyǒu*} [Zhāngsān]_F lái-le.
ONLY Zhangsan come-PERF
 ‘Only [Zhangsan]_F came.’

(38) {[✓]*Bù-zhǐ*, ^{*}*bù-zhǐyǒu*} [Zhāngsān]_F lái-le.
NEG-ONLY Zhangsan come-PERF
 ‘Not only [Zhangsan]_F came.’

- I argued for the generalization that *only* in immediately preverbal position (at a *vP* edge) is able to associate long-distance, into embedded clauses. If *zhǐyǒu* were decomposed using a main verb *yǒu*, as schematized in (34), we predict *zhǐyǒu* to be able to associate long-distance with any constituent it c-commands, contrary to fact.

⁵Although, as noted by Lü (1980), there are also clear cases of *zhǐyǒu* that are an adverb *zhǐ* modifying the main verb *yǒu*. The discussion here is on cases of *zhǐyǒu* where *yǒu* is clearly not the main verb of the clause.

⁶Some speakers report that *zhǐ* in pre-subject position is okay, provided that it is heavily stressed. This is why I give *zhǐ* ?? instead of *.

Appendix B: previous analyses of *shì*

There is more literature on *shì* than on *zhǐ*, and most of this literature describes the placement of *shì* in one of two ways:

A: *Shì* has two possible positions, sentence-initial and sentence-medial/preverbal (Huang, 1988; Paul and Whitman, 2008; Li, 2008)

- if sentence-initial, it must associate with the subject (or a subpart thereof) or the entire proposition;
- if sentence-medial, it can associate with any part of its complement.

For example: Huang (1988) proposes that there are two focus marker *shì*s. One is a raising verb and can associate with anything in its complement. The other takes a finite clausal complement and is required to associate with its entire complement or with the complement’s subject.

☞ This view must lexically encode the possible structural positions for association. Furthermore, this view only derives the contrast between preverbal and presubject *Op*; it does not derive the full pattern observed with sentences with preverbal adjuncts (above).

B: *Shì* always immediately precedes the constituent it associates with (Huang, 1982; Cheng, 2008).

☞ This strategy must explain the inability of *Op* to immediately precede a focused constituent postverbally (5) or inside a PP (6).

Shyu (1995), based on Chiu (1993), and Yang (2011) give characterizations which are potentially similar to (12). Note, however, that the above work generally looks only at simplex clauses, and therefore does not discuss the behavior of complex clauses, e.g. the restriction of long-distance association (into an embedded clause) to immediately preverbal operators.