

Polar questions with narrow focus in Vietnamese: another argument for the bi-clausal analysis

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Questions

The LF of a question tells us how to construct a set of propositions

(1) $[\psi \text{ who}_1 [\phi \text{ John talked to } t_1]]$

a. $\text{who}_n \phi = \{\phi^{n \rightarrow x} \mid x \text{ is a person}\}$

b. $\psi = \{\text{John talked to } x \mid x \text{ is a person}\}$
 $= \{\text{John talked to Mary, John talked to Sue, ...}\}$

(2) $[\psi \text{ whether}_1 [\phi t_1 \text{ John talked to Mary}]]$

a. $\text{whether}_1 \phi = \{\phi^{n \rightarrow x} \mid x \text{ is YES or NO}\}$

b. $\phi = \{x \text{ John talked to Mary} \mid x \text{ is YES or NO}\}$
 $= \{\text{YES John talked to Mary, NO John talked to Mary}\}$
 $= \{\text{John talked to Mary, } \neg \text{John talked to Mary}\}$

??????

Scope of wh: WHEN

- (3) when did John say he fixed the car
- a. $[\text{when}_1 [\text{John said } t_1 [\text{he fixed the car}]]]$
 $= \{ \text{John said yesterday that he fixed the car, John said last week that he fixed the car, ... } \}$
 - b. $[\text{when}_1 [\text{John said } [\text{he fixed the car } t_1]]]$
 $= \{ \text{John said that he fixed the car yesterday, John said that he fixed the car last week , ... } \}$

Scope of wh: WHETHER

(4) Did John even solve problem 2?

- a. $[\text{whether}_1 [t_1 [\text{even} [\text{John solved problem 2}]]]]$
 $= \{\text{even}(\text{John solved problem 2}), \neg \text{even}(\text{John solved problem 2})\}$
 $\rightsquigarrow$ problem 2 is hard
- b. $[\text{whether}_1 [\text{even} [t_1 [\text{John solved problem 2}]]]]$
 $= \{\text{even}(\text{John solved problem 2}), \text{even}(\neg \text{John solved problem 2})\}$
 $\rightsquigarrow$ problem 2 is easy (& speaker thinks John didn't solve it)

?

Excursus: grammaticality

A property of LFs

- (5) John likes him
 - a. John₁ likes him₂
 - b. *John₁ likes him₁

- (6) when did John say who fixed the car
 - a. [when₁ [John said t_1 [who fixed the car]]]
 - b. *[when₁ [John said [who fixed the car t_1]]]

- (7) *what did John say who fixed
 - a. *[what₁ [John said t_1 [who fixed]]]
 - b. *[what₁ [John said [who fixed t_1]]]

??

EVERY

(8) Did every boy come?

- a. Yes.
- b. No.

$$\forall x.p$$

$$\neg\forall x.p \text{ / } *\forall x.\neg p$$

(9) a. [whether₁ [*t*₁ [every boy₂ [*t*₂ came]]]]

= {every boy came, not every boy came}

b. *[whether₁ [every boy₂ [*t*₁ [*t*₂ came]]]]

= {every boy came, every boy didn't come}

SOME

(10) Did some boy come?

- a. Yes.
- b. No.

$$\exists x.p$$

$$\neg \exists x.p \text{ / } *\exists x.\neg p$$

(11) a. [whether₁ [*t*₁ [some boy₂ [*t*₂ came]]]]

= {some boy came, no boy came}

b. *[whether₁ [some boy₂ [*t*₁ [*t*₂ came]]]]

= {some boy came, some boy didn't come}

ONLY

(12) Did only John come?

a. Yes.

b. No.

only(p)

$\neg \text{only}(p)$ / $*\text{only}(\neg p)$

(13) a. [whether₁ [*t*₁ [only John₂ [*t*₂ came]]]]

= {only John came, not only John came}

b. *[whether₁ [only John₂ [*t*₁ [*t*₂ came]]]]

= {only John came, only John didn't come}

CERTAINLY

(14) Is John certainly going to win?

- a. Yes.
- b. No.

$\Box p$
 $\neg \Box p / * \Box \neg p$

- (15) a. [whether₁ [*t*₁ [certainly [John is going to win]]]]
 = { $\Box$ John wins, $\neg \Box$ John wins}
- b. *[whether₁ [certainly [*t*₁ [John is going to win]]]]
 = { $\Box$ John wins, $\Box \neg$ John wins}

Partition by Exhaustification (PbE)

(16) Partition by Exhaustification

A question Q is only felicitous in a context C if the elements of Q , once exhaustified, partitions C

(17) a. $Q = \{p, q, r\}$

b. $C = \underbrace{(p \wedge \neg q \wedge \neg r)}_{\text{exh}(p)} \vee \underbrace{(q \wedge \neg p \wedge \neg r)}_{\text{exh}(q)} \vee \underbrace{(r \wedge \neg p \wedge \neg q)}_{\text{exh}(r)}$

??

Illustration of PbE

(18) Which girl came to the party?

- a. $Q = \{\text{Mary came, Sue came, Anne came}\}$
- b. $C = (m \wedge \neg s \wedge \neg a) \vee (s \wedge \neg m \wedge \neg a) \vee (a \wedge \neg m \wedge \neg s)$
 $= \text{'exactly one girl came'}$

??

Form of explanation

The question is deviant because the context that has to be accommodated for it to satisfy PbE would make it infelicitous for other reasons.

Explaining EVERY and SOME

- (19) a. $*Q = \{\text{every boy came, every boy didn't come}\}$
 b. $C = (\text{every boy came} \wedge \neg \text{every boy didn't come}) \vee$
 $(\text{every boy didn't come} \wedge \neg \text{every boy came})$
 $= \text{every boy came} \vee \text{no boy came}$
- (20) a. $*Q = \{\text{some boy came, some boy didn't come}\}$
 b. $C = (\text{some boy came} \wedge \neg \text{some boy didn't come}) \vee$
 $(\text{some boy didn't come} \wedge \neg \text{some boy came})$
 $= \text{every boy came} \vee \text{no boy came}$

Homogeneous contexts militate against quantifiers in favor of definites.

- (21) the/#all/#some Argentinians won the 2022 World Cup

????

Explaining ONLY

- (22) a. $*Q = \{\text{only John came, only John didn't come}\}$
 b. $C = (\text{only John came} \wedge \neg \text{only John didn't come}) \vee$
 $(\text{only John didn't come} \wedge \neg \text{only John came})$
 $= \text{only John came} \vee \text{only John didn't come}$

The use of **only** is deviant in contexts where **only** is superfluous.

(23)#Did only Trump win?

Explaining CERTAINLY

- (24) a. $*Q = \{\Box \text{John win}, \Box \neg \text{John wins}\}$
 b. $C = (\Box \text{John wins} \wedge \neg \Box \neg \text{John wins}) \vee$
 $(\Box \neg \text{John wins} \wedge \neg \Box \text{John wins})$
 $= \Box \text{John wins} \vee \Box \neg \text{John wins}$

The use of **certainly** is deviant in opinionated contexts.

- (25) Look out the window and tell me whether it is (*#certainly*) raining!

?

Syntactic profile

An affirmative sentence followed by negation.

- (26) a. Nam đến
Nam came
'Nam came'
- b. Nam có đến
Nam YES came
'Nam did come'
- c. Nam không đến
Nam NO came
'Nam didn't come'

- (27) Nam có đến không
Nam YES came NO
'Did Nam come?'

Puzzle

Affirmative sentences which are independently acceptable become deviant when followed by NO in polar questions.

THE vs. ALL/SOME

- (28) a. bọn con trai có đến
the boys YES came
b. bọn con trai có đến không
the boys YES came NO
- (29) a. đứa con trai nào cũng có đến
every boy YES came
b. *đứa con trai nào cũng có đến không
every boy YES came NO
- (30) a. một đứa con trai có đến
some boy YES came
b. *một đứa con trai có đến không
some boy YES came NO

NP vs. ONLY-NP

- (31) a. Nam có đến
Nam YES came
- b. Nam có đến không
Nam YES came NO
- (32) a. chỉ Nam có đến
only Nam YES came
- b. *chỉ Nam có đến không
only Nam YES came NO

CERTAINLY-YES vs. YES-CERTAINLY

- (33) a. Nam có chắc chắn đến
 Nam YES certainly came
- b. Nam có chắc chắn đến không
 Nam YES certainly came NO
- (34) a. Nam chắc chắn có đến
 Nam certainly YES came
- b. *Nam chắc chắn có đến không
 Nam certainly YES came NO

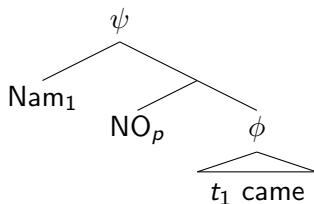
Aim

To propose a syntactic analysis of Vietnamese polar question so that the deviant questions can only have a reading that is infelicitous due to PbE

Monoclausal analysis (MA)

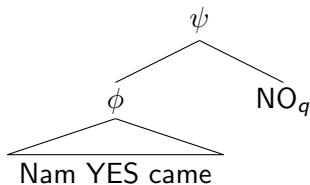
There are two NOs in Vietnamese.

(35) a.



$$\text{NO}_p \phi = \neg \phi$$

b.



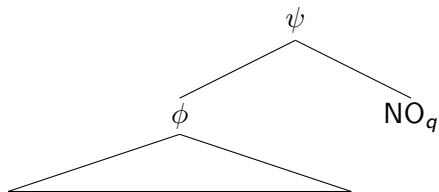
$$\text{NO}_q \phi = \{\phi, \neg \phi\}$$

???

Challenge for MA

It's not clear how to state the selectional properties of NO_q .

(36)

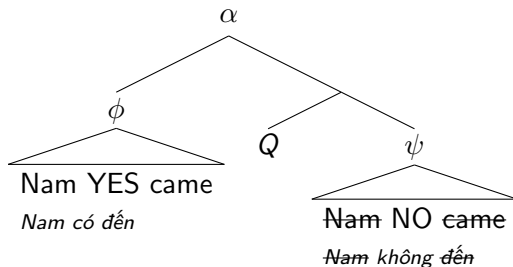


the boys YES came
 *all/some boys YES came
 Nam YES came
 *only Nam YES came
 Nam YES certainly came
 *Nam certainly YES came

The bi-clausal analysis (BA)

There is one NO, which is the sentential negation.

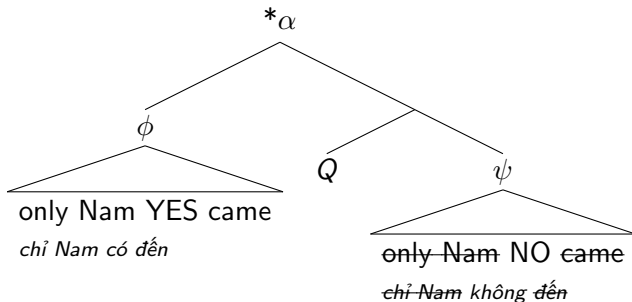
(37)



- $\phi \ Q \ \psi = \{\phi, \psi\}$
- YES in ϕ indicates the position of NO in ψ

ONLY

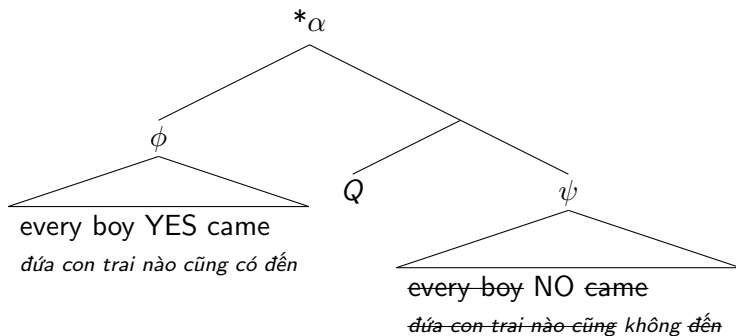
(38)



(39) $\alpha = \{\text{only Nam came, only Nam didn't come}\}$
 $= *[\text{whether}_1 [\text{only John}_2 [t_1 [t_2 \text{ came}]]]]$

EVERY

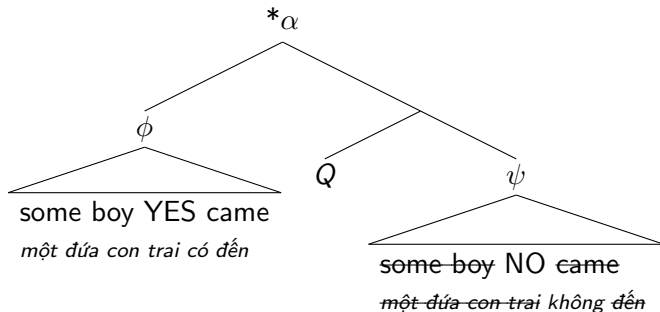
(40)



(41) $\alpha = \{\text{every boy came, every boy didn't come}\}$
 $= *[\text{whether}_1 [\text{every boy}_2 [t_1 [t_2 \text{ came}]]]]$

SOME

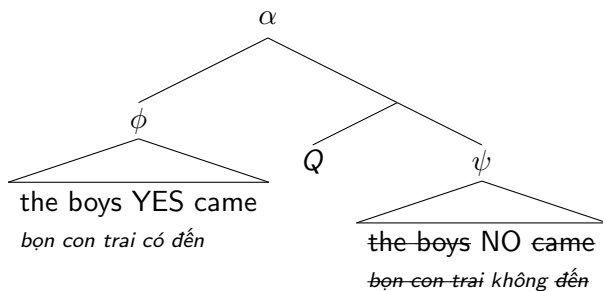
(42)



(43) $\alpha = \{\text{some boy came, some boy didn't come}\}$
 $= *[\text{whether}_1 [\text{some boy}_2 [t_1 [t_2 \text{ came}]]]]$

THE

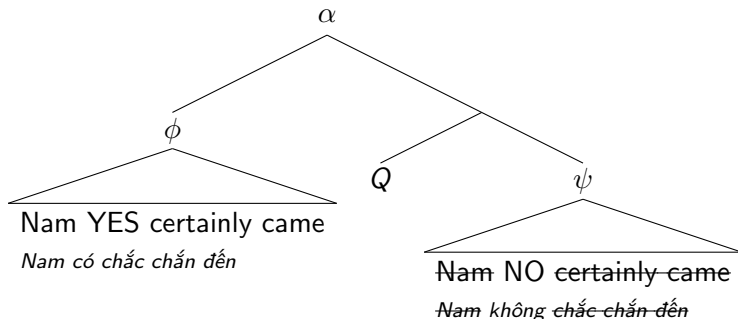
(44)



(45) $\alpha = \{\text{the boys came, the boys didn't come}\}$
 $= [\text{whether}_1 [\text{the boys}_2 [t_1 [t_2 \text{ came}]]]]$

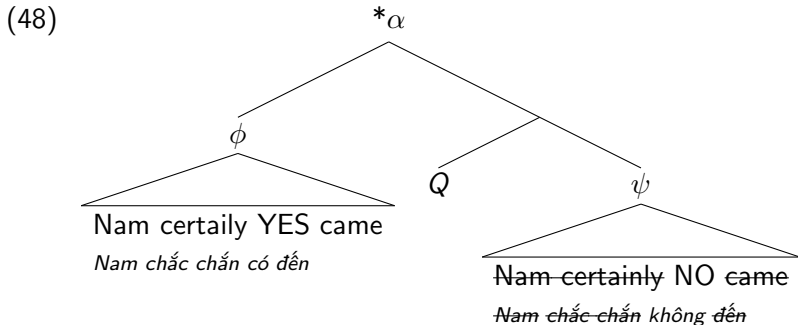
CERTAINLY-YES

(46)



(47) $\alpha = \{\Box \text{Nam came}, \neg \Box \text{Nam came}\}$
 $= [\text{whether}_1 [t_1 [\text{certainly} [\text{John is going to win}]]]]$

YES-CERTAINLY



(49) $\alpha = \{\Box \text{Nam came}, \Box \neg \text{Nam came}\}$
 $= *[\text{whether}_1 [\text{certainly} [t_1 [\text{John is going to win}]]]]]$

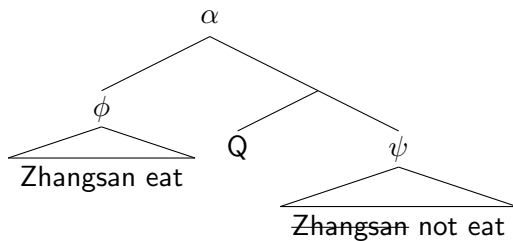
Chinese A-not-A questions

- (50) a. Zhangsan chi
Zhangsan eat
- b. Zhangsan chi-bu-chi
Zhangsan eat-not-eat
- (51) a. zhiyou zhangsan chi
only Zhangsan eat
- b. *zhiyou Zhangsan chi-bu-chi
only Zhangsan eat-not-eat
- (52) a. meigerendou chi
everyone eat
- b. *meigerendou chi-bu-chi?
everyone eat-not-eat
- (53) a. youren chi
someone eat
- b. *youren chi-bu-chi?
someone eat-not-eat
- (54) a. Zhangsan yi-bu-yiding chi?
Zhangsan certain-not-certain eat
- b. *Zhangsan yiding chi-bu-chi?
Zhangsan certain eat-not-eat

???, Ruoying Zhao p.c.

Hypothesis

(55)



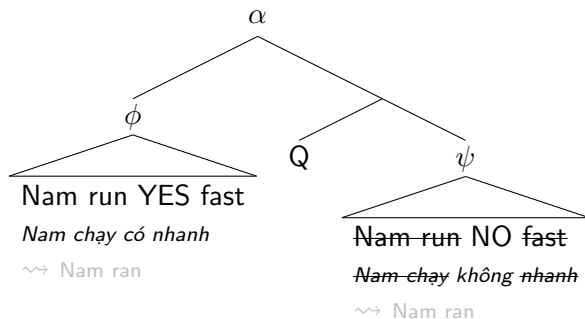
Observation

- (56) Nam chạy có nhanh không
Nam run YES fast NO
~→ Nam ran

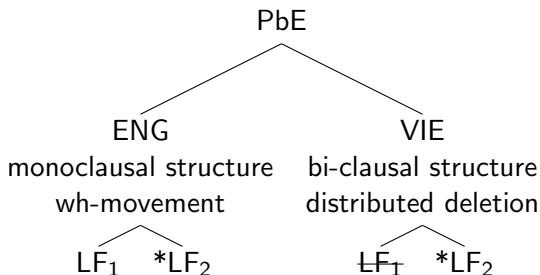
Account

A question licenses the inference that p if each of its answers does.

(57)



One semantic principle, two syntactic strategies



Alternative questions

- (58) did every boy come or did no boy come
- a. $\ast\{\text{every boy came, no boy came}\}$
 - b. $\{\text{ASSERT every boy came, } \neg\text{S ASSERT no boy came}\}$
- (59) chỉ Nam (có) đến hay chỉ Nam không đến
only Nam YES came or only Nam NO came

Wide scope polarity

(60) có phải đứa con trai nào cũng đến không
YES true every boy came NO

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