

# Vietnamese polar questions

Tue Trinh

Leibniz-ZAS Berlin

ISVL-2, Konan University, 20/03/2022

- 1 Questions and answers
- 2 An analysis of polar questions in Vietnamese
- 3 Predictions
  - The auxiliary system
  - Quantifiers
    - EVERY
    - SOME
    - MANY
  - Distribution of ONLY
  - Island sensitivity
  - Embeddability
- 4 Previous works and future research

- 1 Questions and answers
- 2 An analysis of polar questions in Vietnamese
- 3 Predictions
  - The auxiliary system
  - Quantifiers
    - EVERY
    - SOME
    - MANY
  - Distribution of ONLY
  - Island sensitivity
  - Embeddability
- 4 Previous works and future research

# Questions

- To ask a question is to request the hearer to choose one proposition from a set of propositions (Searle, 1969)
- A question represents a set of propositions, namely those that count as its answers (cf. Hamblin, 1958; Karttunen, 1977; Groenendijk and Stokhof, 1984)

(1)  $\llbracket \text{who likes John} \rrbracket =$   
 $\{\text{Mary likes John, Sue likes John, Anne likes John, ...}\}$

# Alternatives

- The set of answers to a question is a set of “alternatives” (Rooth, 1992)
- (2) Definition (Fox and Katzir, 2011)
- $\psi$  is an alternative of  $\phi$  iff  $\psi$  is derivable from  $\phi$  by replacement of a constituent of  $\phi$  with an expression of the same type

# Focus

- We call the constituent of an alternative which distinguishes it from the other alternatives the “focused constituent” or “focus”

(3) Ai thích Nam?

- [Lan]<sub>F</sub> thích Nam
- [Hoàng đế Nhật Bản]<sub>F</sub> thích Nam
- [Người đàn bà tôi gặp hôm qua]<sub>F</sub> thích Nam

- There is always the option of formulating the question by listing its answers using the disjunctive particle **hay**

(4) Lan thích Nam **hay** Hoàng đế Nhật Bản thích Nam?

# Disjunctive questions

- **hay** maps two propositions  $p$  and  $q$  to the question  $\{p, q\}$

$$(5) \quad \left[ \begin{array}{c} \alpha \\ \swarrow \quad \searrow \\ S_1 \quad \text{hay} \quad S_2 \end{array} \right] = \{S_1, S_2\}$$

- 1 Questions and answers
- 2 An analysis of polar questions in Vietnamese
- 3 Predictions
  - The auxiliary system
  - Quantifiers
    - EVERY
    - SOME
    - MANY
  - Distribution of ONLY
  - Island sensitivity
  - Embeddability
- 4 Previous works and future research



# Description

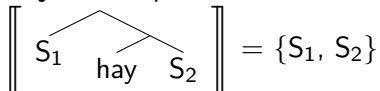
- We take “polar questions” to be those exemplified by (6a) and (6b)

- (6) a. Nam có đọc sách không?  
b. Nam đã đọc sách chưa?

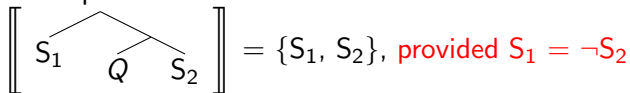
# Proposal

- Vietnamese polar questions are headed by a silent  $Q$  whose meaning is akin to **hay**

(7) a. Disjunctive questions



b. Polar questions



## Syntactic conditions imposed by $Q$

### (8) Syntactic condition

- a.  $S_1$  and  $S_2$  are alternatives
- b.  $S_1$  has positive polarity

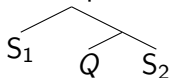
- Syntax has access to alternative generation (cf. Horn, 1972; Katzir, 2007, 2008; Fox and Katzir, 2011; Trinh and Haida, 2015; Trinh, 2018)
- Syntax has access to polarity (cf. Klima, 1964; Progovac, 1994; den Dikken, 2002; Szabolcsi, 2004)

## Phonological conditions imposed by $Q$

- (9) Phonological condition
- a. Pronounce  $S_1$  normally
  - b. Pronounce only the focus of  $S_2$
  - c. Pronounce only one syllable of  $S_2$
- Phonology has access to focus marking
  - Phonology has access to syllabic structure

## Consequences of the conditions

(10) Polar questions



(11) Requirements

- a.  $S_2$  is derivable from  $S_1$  by replacing exactly one word in  $S_1$
- b.  $S_2$  is the negation of  $S_1$

- 1 Questions and answers
- 2 An analysis of polar questions in Vietnamese
- 3 Predictions**
  - The auxiliary system
  - Quantifiers
    - EVERY
    - SOME
    - MANY
  - Distribution of ONLY
  - Island sensitivity
  - Embeddability
- 4 Previous works and future research

- 1 Questions and answers
- 2 An analysis of polar questions in Vietnamese
- 3 **Predictions**
  - **The auxiliary system**
  - Quantifiers
    - EVERY
    - SOME
    - MANY
  - Distribution of ONLY
  - Island sensitivity
  - Embeddability
- 4 Previous works and future research

# Subj có VP không

(12) Nam có đọc sách không?

(13) Nam có      đọc sách  
      ~~Nam~~ không   đọc sách



# Subj đã VP chưa

(14) Nam đã đọc sách chưa?

(15) Nam đã đọc sách  
Nam chưa đọc sách

## \*Subj được VP phải

(16) \*Nam được đọc sách phải?

(17) Nam được đọc sách =  $\diamond p$   
 Nam phải đọc sách =  $\square p$

Problem:  $S_1 \neq \neg S_2$

## \*Subj có sẽ VP không

(18) \*Nam có sẽ đọc sách không?

(19) Nam có        sẽ đọc sách  
       ~~Nam~~ không sẽ đọc sách

Problem: both  $S_1$  and  $S_2$  are syntactically ill-formed

(20) \*Nam có sẽ đọc sách hay Nam không sẽ đọc sách

## \*Subj sẽ có VP không

(21) \*Nam sẽ có đọc sách không?

(22) Nam sẽ có       đọc sách  
       ~~Nam~~ sẽ không   đọc sách

Problem:  $S_1 \neq \neg S_2$

- (23) a.  $\llbracket S_1 \rrbracket = \forall d, d \text{ a future development, Nam reads books in } d$   
 b.  $\llbracket S_2 \rrbracket = \forall d, d \text{ a future development, } \neg \text{Nam reads books in } d$   
 (cf. Thomason, 1970)
- (24)  $\forall x \neg Px$  is not the negation of  $\forall x Px$

## \*Subj có đã VP không

(25) \*Nam có đã đọc sách không?

(26) Nam có        đã đọc sách  
      Nam không đã đọc sách

Problem:  $S_1$  and  $S_2$  are ill-formed syntactically

(27) \*Nam có đã đọc sách hay Nam không đã đọc sách

## \*Subj đã có VP không

(28) \*Nam đã có đọc sách không?

(29) Nam đã có       đọc sách  
       Nam đã không   đọc sách

Problem:  $S_1 \neq \neg S_2$

- (30) a.  $\llbracket S_1 \rrbracket = \exists t, t$  a relevant past time, Nam reads books at  $t$   
 b.  $\llbracket S_2 \rrbracket = \exists t, t$  a relevant past time,  $\neg$ Nam reads books at  $t$   
 (cf. Partee, 1984)
- (31)  $\exists x \neg Px$  is not the negation of  $\exists x Px$

- 1 Questions and answers
- 2 An analysis of polar questions in Vietnamese
- 3 Predictions**
  - The auxiliary system
  - Quantifiers**
    - EVERY
    - SOME
    - MANY
  - Distribution of ONLY
  - Island sensitivity
  - Embeddability
- 4 Previous works and future research

- 1 Questions and answers
- 2 An analysis of polar questions in Vietnamese
- 3 Predictions**
  - The auxiliary system
  - Quantifiers**
    - EVERY
    - SOME
    - MANY
  - Distribution of ONLY
  - Island sensitivity
  - Embeddability
- 4 Previous works and future research



## Scope of negation and position of *đều*

(32) tất cả mọi người đều đọc sách  
 everyone                    deu read books  
 $\forall x P_x$

(33) a. tất cả mọi người đều không đọc sách  
 everyone                    deu not    read books  
 $\forall x \neg P_x$

b. tất cả mọi người không đều đọc sách  
 everyone                    not    deu read books  
 $\neg \forall x P_x$

# everyone có đều VP không

(34) tất cả mọi người có đều đọc sách không?

(35) everyone có đều đọc sách =  $\forall xPx$   
 everyone không đều đọc sách =  $\neg\forall xPx$

# \*everyone đều có VP không

(36) \*tất cả mọi người đều có đọc sách không?

(37)	everyone đều có	đọc sách	= $\forall x P_x$
	everyone đều không	đọc sách	= $\forall x \neg P_x$

Problem:  $S_1 \neq \neg S_2$

- 1 Questions and answers
- 2 An analysis of polar questions in Vietnamese
- 3 Predictions**
  - The auxiliary system
  - Quantifiers**
    - EVERY
    - SOME**
    - MANY
  - Distribution of ONLY
  - Island sensitivity
  - Embeddability
- 4 Previous works and future research

# Surface scope

- (38) a. một số người đọc sách  
some people read books  
 $\exists x P_x$
- b. một số người không đọc sách  
some people not read books  
 $\exists x \neg P_x$

# \*some people có VP không

(39) \*một số người có đọc sách không?

(40) some people có đọc sách =  $\exists x P_x$   
 some people không đọc sách =  $\exists x \neg P_x$

Problem:  $S_1 \neq \neg S_2$

- 1 Questions and answers
- 2 An analysis of polar questions in Vietnamese
- 3 Predictions**
  - The auxiliary system
  - Quantifiers**
    - EVERY
    - SOME
    - MANY**
  - Distribution of ONLY
  - Island sensitivity
  - Embeddability
- 4 Previous works and future research

# Ambiguity

- (41) a. Nam đọc nhiều sách  
Nam read many books  
 $MxPx$
- b. Nam không đọc nhiều sách  
Nam not read many books  
 $\neg MxPx, Mx\neg Px$



# Disambiguation by $Q$

(42) A: Nam có đọc nhiều sách không?

B: Không!

$\neg MxPx, *Mx\neg Px$

→  $Q$  forces  $S_2$  to have the meaning which is the negation of  $S_1$

(43) Nam có đọc nhiều sách

$= MxPx$

Nam không đọc nhiều sách

$= \neg MxPx, *Mx\neg Px$

- 1 Questions and answers
- 2 An analysis of polar questions in Vietnamese
- 3 Predictions**
  - The auxiliary system
  - Quantifiers
    - EVERY
    - SOME
    - MANY
  - **Distribution of ONLY**
  - Island sensitivity
  - Embeddability
- 4 Previous works and future research

## Position and scope

- (44) Nam chỉ đọc sách  
= Nam has no property other than 'reading books'  
*only(p)*
- (45) a. Nam không chỉ đọc sách  
= Nam has some property other than 'reading books'  
 $\neg$ *only(p)*
- b. Nam chỉ không đọc sách  
= Nam has no property other than 'not reading books'  
*only(\neg p)*

# Subj có chỉ VP không

(46) Nam có chỉ đọc sách không?

(47) Nam có chỉ đọc sách =  $only(p)$   
 Nam không chỉ đọc sách =  $\neg only(p)$

## \*Subj chỉ có VP không

(48) \*Nam chỉ có đọc sách không?

(49) Nam chỉ có đọc sách = *only(p)*  
 Nam chỉ không đọc sách = *only(¬p)*

Problem:  $S_1 \neq \neg S_2$

- 1 Questions and answers
- 2 An analysis of polar questions in Vietnamese
- 3 Predictions**
  - The auxiliary system
  - Quantifiers
    - EVERY
    - SOME
    - MANY
  - Distribution of ONLY
  - Island sensitivity**
  - Embeddability
- 4 Previous works and future research

## A contrast

- Disjunctive questions can “associate” out of islands while polar questions cannot
- (50) Intended question = {Nam likes people who **do** read books, Nam likes people who **don't** read books}
- (51) Nam thích [NP người [ **có** đọc sách hay **không** đọc sách ]]  
 Nam likes people **do** read books hay **don't** read books
- (52) \*Nam thích [NP người [ **có** đọc sách **không** ]]  
 Nam likes people **do** read books **don't**

## hay has no presupposition

(53) Nam thích [NP người [ có đọc sách hay không đọc sách ]]  
 Nam likes people do read books hay don't read books

(54) Nam thích [NP người [ có đọc sách]]  
 Nam likes people do read books

hay

~~Nam thích~~ [NP ~~người~~ [ không đọc sách]]  
 Nam likes people don't read books



## Q presupposes $S_1 = \neg S_2$

(55) \*Nam thích [NP người [ có đọc sách không ]]  
 Nam likes people do read books don't

(56) Nam thích [NP người [ có đọc sách ]]  
 Nam likes people do read books

Q

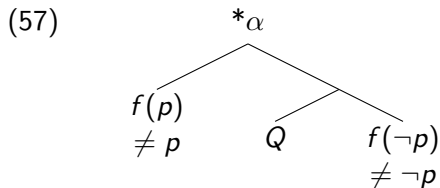
Nam thích [NP người [ không đọc sách ]]  
 Nam likes people don't read books

Problem:  $S_1 \neq \neg S_2$

- 1 Questions and answers
- 2 An analysis of polar questions in Vietnamese
- 3 Predictions**
  - The auxiliary system
  - Quantifiers
    - EVERY
    - SOME
    - MANY
  - Distribution of ONLY
  - Island sensitivity
  - **Embeddability**
- 4 Previous works and future research

# Non-trivial embedding

- Let  $f$  be some non-trivial semantic environment, i.e.  $f(p) \neq p$ . We predict the following.



- This means polar question cannot associate out of any non-trivial embedded position

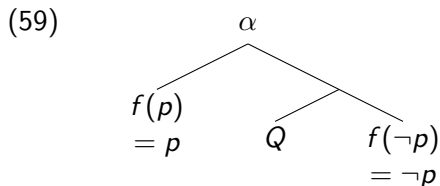
# Prediction confirmed

- Intended question = {Nam wants My to read books, Nam wants My not to read books}

(58) \*Nam muốn [My có đọc sách không]  
Nam want My có read books không

# Trivial embedding

- Now let  $f$  be a trivial semantic environment, i.e.  $f(p) = p$ . We predict the following.



- This means polar question can associate out of trivial embedded positions

# Prediction confirmed

- Intended question = {It is true that Nam **does** read books, It is true that Nam **doesn't** read books}

(60) Đúng ra là [Nam có đọc sách không ]  
It is true that Nam **does** read books **doesn't**

- 1 Questions and answers
- 2 An analysis of polar questions in Vietnamese
- 3 Predictions
  - The auxiliary system
  - Quantifiers
    - EVERY
    - SOME
    - MANY
  - Distribution of ONLY
  - Island sensitivity
  - Embeddability
- 4 Previous works and future research

## Previous works

- Trinh (2005), Duffield (2007, 2013), Phan and Duffield (2019)
  - these works analyze polar question as a monoclausal and not as a biclausal structure
    - have to fit affirmation and negation into one TP
    - have to postulate remnant movements which are unmotivated
  - they do not make a systematic connection between the structure of the question and the structure of its answers
    - fail to assimilate polar questions to wh-questions
    - fail to account for many correlations between facts about polar questions and facts about negated and non-negated declaratives
  - they do not provide a semantically transparent syntax



## Future research

- work out the semantics of future and preterite tense
- extend the proposal to Chinese A-not-A questions (cf. Huang, 1981, 1982; McCawley, 1994; Tsai, 1994; Biberauer et al., 2014)
- relate the analysis to English polar questions (Guerzoni and Sharvit, 2014)
- situate the investigation in the wider context of the research on the interface between logic and grammar (cf. Fintel, 1993; Fox, 2000; Gajewski, 2002; Abrusán, 2007; Magri, 2009; Chierchia, 2013, among others)

Thanks!

- Abrusán, Martha. 2007. Contradiction and Grammar: the Case of Weak Islands. Doctoral Dissertation, MIT.
- Biberauer, Theresa, Anders Holmberg, and Ian Roberts. 2014. A syntactic universal and its consequences. Linguistic Inquiry 45:169–225.
- Chierchia, Gennaro. 2013. Logic in grammar. Oxford: Oxford University Press.
- den Dikken, Marcel. 2002. Direct and parasitic polarity item licensing. The Journal of Comparative Germanic Linguistics 5:35–66.
- Duffield, Nigel. 2007. Aspects of Vietnamese clausal structure: separating tense from assertion. Linguistics 45:765–814.
- Duffield, Nigel. 2013. On the head-initiality of Vietnamese clauses. In Linguistics of Vietnamese: An International Survey, ed. Daniel Hole, 127–155. Berlin: Mouton de Gruyter.
- Fintel, Kai von. 1993. Exceptive constructions. Natural Language Semantics 1:123–148.
- Fox, Danny. 2000. Economy and semantic interpretation. Cambridge, Massachusetts: MIT Press.

- Fox, Danny, and Roni Katzir. 2011. On the characterization of alternatives. Natural Language Semantics 19:87–107.
- Gajewski, Jon. 2002. L-analyticity and natural language. Manuscript, MIT.
- Groenendijk, Jeroen, and Martin Stokhof. 1984. Studies on the Semantics of Questions and the Pragmatics of Answers. Doctoral Dissertation, University of Amsterdam.
- Guerzoni, Elena, and Yael Sharvit. 2014. Whether or not anything but not Whether anything or not. In The Art and Craft of Semantics: A Festschrift for Irene Heim, 199–224. MITPWL.
- Hamblin, Charles Leonard. 1958. Questions. The Australasian Journal of Philosophy 36:159 – 168.
- Horn, Laurence R. 1972. On the semantic properties of the logical operators in English. Doctoral Dissertation, UCLA.
- Huang, C.-T. James. 1981. Move Wh in a language without Wh movement. The Linguistic Review 1:369–416.
- Huang, C.-T. James. 1982. Logical relations in Chinese and the theory of grammar. Doctoral Dissertation, Massachusetts Institute of Technology.

- Karttunen, Lauri. 1977. Syntax and semantics of questions. Linguistics and Philosophy 1:3–44.
- Katzir, Roni. 2007. Structurally-defined alternatives. Linguistics and Philosophy 30:669–690.
- Katzir, Roni. 2008. Structural Competition in Grammar. Doctoral Dissertation, MIT.
- Klima, Edward S. 1964. Negation in English. In The structure of language: Readings in the philosophy of language, ed. Jerry A. Fodor and Jerrold J. Katz, 246–323. Prentice Hall.
- Magri, Giorgio. 2009. A theory of individual-level predicates based on blind mandatory scalar implicatures. Natural Language Semantics 17:245–297.
- McCawley, James D. 1994. Remarks on the syntax of Mandarin-yes-no questions. Journal of East Asian Linguistics 3:179–194.
- Partee, Barbara. 1984. Nominal and temporal anaphora. Linguistics and Philosophy 7:243–286.
- Phan, Trang, and Nigel Duffield. 2019. The Vietnamese perfect: a compositional analysis. In Cross-linguistic Perspectives on the Semantics

- of Grammatical Aspect, ed. Adeline Patard, Rea Peltola, and Emmanuelle Rossel, Cahiers Chronos, 38–63. Leiden: E Brill.
- Progovac, L. 1994. Negative and positive polarity: a binding approach. Cambridge University Press.
- Rooth, Mats. 1992. A theory of focus interpretation. Natural Language Semantics 1:75–116.
- Searle, J.R. 1969. Speech acts: An essay in the philosophy of language. Cambridge University Press.
- Szabolcsi, Anna. 2004. Positive polarity – negative polarity. Natural Language and Linguistic Theory 22:409–452.
- Thomason, Richmond. 1970. Indeterminist time and truth-value gaps. Theoria 36:264–281.
- Trinh, Tue. 2005. Aspects of Clause Structure in Vietnamese. MA Thesis, Humboldt-Universität zu Berlin .
- Trinh, Tue. 2018. Keeping it simple. Natural Language Semantics 26:111–124.
- Trinh, Tue, and Andreas Haida. 2015. Constraining the derivation of alternatives. Natural Language Semantics 23:249–270.

Tsai, Wei-Tien Dylan. 1994. On nominal islands and LF extraction in Chinese. Natural Language and Linguistic Theory 12:121–175.