

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)

ψ is an alternative of ϕ iff ψ is derivable from ϕ by replacement of a constituent of ϕ 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?

- a. [Lan]_F thích Nam
- b. [Hoàng đế Nhật Bản]_F thích Nam
- c. [Người đàn bà tôi gặp hôm qua]_F 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 $\{p, q\}$

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

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

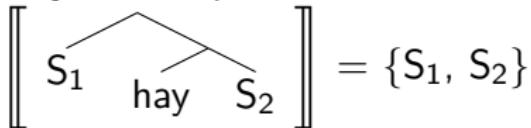
- We take “polar questions” to be those exemplified by (6a) and (6b)

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

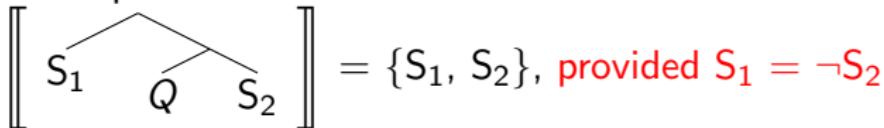
Proposal

- 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

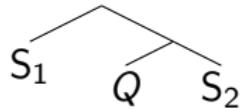
(9) Phonological condition

- 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

- S_2 is derivable from S_1 by replacing exactly one word in S_1
- 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 $= \Box p$

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. $\llbracket S_1 \rrbracket = \exists t, t \text{ a relavant past time, Nam reads books at } t$
b. $\llbracket S_2 \rrbracket = \exists t, t \text{ a relavant past time, } \neg \text{Nam reads books at } t$
(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
 $\forall xPx$

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

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

everyone có đều VP không

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

(35) everyone **có** deu đọc sách $\equiv \forall xPx$
 everyone **không** deu đọc sách $\equiv \neg \forall xPx$

*everyone đều có VP không

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

(37) everyone deu có đọc sách = $\forall xPx$
everyone deu không đọc sách = $\forall x\neg Px$

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
 $\exists xPx$

b. một số người không đọc sách
some people not read books
 $\exists x\neg Px$

*some people có VP không

(39) *một số người có đọc sách không?

(40) some people có đọc sách
some people không đọc sách

$$= \exists x Px$$
$$= \exists x \neg Px$$

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 $= \text{only}(p)$
Nam **không** chỉ đọc sách $= \neg \text{only}(p)$

*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*($\neg p$)

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

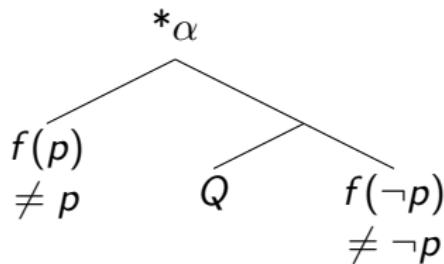
- Embeddability

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.

(57)



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

Prediction confirmed

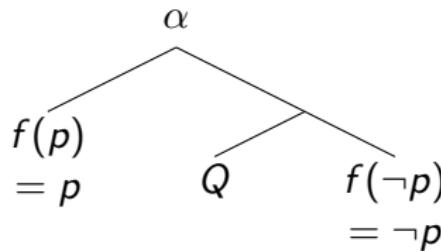
- Intended question = {Nam wants My to read books, Nam wants My not to read books}

(58) *Nam muôn [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.

(59)



- 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.