

# Speech Acts in Grammar

## Arguments from meta-questions

Tue Trinh, Itai Bassi, Danny Fox

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New York University

- 1 **Introduction**
- 2 Interpretation of meta-questions
- 3 Distribution of meta-questions

# Sentences and speech acts

Speech acts are the minimal units of linguistic communication

(1) Sentences

A: Is it raining?

B: It's not (raining).

(2) Speech acts

A asks whether it's raining

B asserts that it's not raining

Wittgenstein (1921); Searle (1969)

# An old idea

- (3) The Performative Hypothesis (PH)  
There are (silent) speech act operators in grammar

Stenius (1967); Ross (1970); Lakoff (1970); Gazdar (1979)

# Implementing PH: performative prefixes

Logical forms under PH contain 'performative prefixes'

- (4) A: Is it raining?
- (i) [whether [it is raining]]
  - (ii) [A ASK [whether [it is raining]]] → PH-analysis
- B: It is raining.
- (i) [it is raining]
  - (ii) [A ASSERT [it is raining]] → PH-analysis

Stenius (1967); Ross (1970); Lakoff (1970); Gazdar (1979); Chomsky (1981, 1986, 2001); Krifka (2001b); Miyagawa (2012); Krifka (2015); Sauerland and Yatsushiro (2017); Trinh and Truckenbrodt (2018); Krifka (2019, forthcoming); Trinh (2022); Wiltschko (2021); Miyagawa (2022); Trinh and Bassi (2023); Trinh (2024); Fox (2024); Fox et al. (2024)

# Goal

To present some new evidence in support of PH

# Empirical focus

We will discuss 'meta-questions'

- (i) Excursive questions
- (ii) Repetitive questions
- (iii) Declarative questions
- (iv) Echo-questions

# Excursive questions

An excursus is made for clarification

- (5) A: Did John use the car?  
B: **When?**  
A: Yesterday.  
B: No.

Schmitt (2021); Trinh and Bassi (2023)



# Repetitive questions

A question is repeated

- (6) A: Are you married?  
B: Am I married?  
A: Yes. Are you?  
B: No.

Trinh (2024)

# Declarative questions

A question exhibits declarative word order

- (7) A: I have to go pick up my sister.  
B: You have a sister?  
A: Yes.

Gunlogson (2003); Safarova (2005); Trinh and Crnic (2011)

# Echo questions

A question imitates another utterance

- (8) A: John talked to Mary.  
B: John talked to who?  
A: Mary.

Blakemore (1994); Noh (1998); Iwata (2003); Reis (2012); Beck and Reis (2018)

# Roadmap

- We show how meta questions receive a straightforward analysis under PH
- We discuss a restriction on meta question recursion. We propose to derive the restriction based on auxiliary assumptions, most of which independently motivated
- We show that the proposal make a striking and correct prediction about obviation of the restriction

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## Excursive questions

(9) A: Did you use the car?

B: **When?**

(i) \*for which time  $x$ : B used the car at  $x$

(ii) for which time  $x$ : A asks whether B used the car at  $x$

A: Yesterday.

B: No.

(10) [when<sub>1</sub> [A ASK [whether [John used the car  $t_1$ ]]]]

Trinh and Bassi (2023)

# Repetitive questions

(11) A: Are you married?

B: Am I married?

(i) \*whether B is married

(ii) whether A asks whether B is married

A: Yes. Are you?

B: No.

(12) [whether [A ASK [whether [B is married]]]]

Trinh (2024)

# Declarative questions

(13) A: I have to go pick up my sister.

B: You have a sister?

(i) \*whether A has a sister

(ii) whether A asserts A has a sister

A: Yes.

(14) [whether [A ASSERT [A has a sister]]]

Trinh (2024)



# Echo questions

(15) A: John talked to Mary.

B: John talked to who?

(i) \*for which person  $x$ : John talked to  $x$

(ii) for which person  $x$ : A asserts John talked to  $x$

A: Mary.

(16) [who<sub>1</sub> [A ASSERT [John talked to  $t_1$ ]]] (eventual analysis: in-situ)

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# Generalization

There can be no meta-meta-questions

## Repetitive questions

- (17) A: Are you married to Andrea?  
B: Am I married to Andreas?  
A: No. Are you married to Andrea?  
B: I'm married to Anna.
- (18) A: Are you married to Andrea?  
B: Am I married to Andreas?  
A: #Are you married to Andreas?  
B: Yes.  
A: No. Are you married to Andrea?  
B: I'm married to Anna.

Trinh (2024)

# Declarative questions

- (19) A: I feel guilty.  
B: Are you having an affair?  
A: Am I having an affair?  
B: Yes.  
A: No. I'm not.
- (20) A: I feel guilty.  
B: You're having an affair?  
A: #I'm having an affair?  
B: Yes.  
A: No. I'm not.

Trinh (2024)

# Echo questions

A: I sent a letter to Andrea.

B: You sent what to Andrea?

A: I sent a letter to Andrea.

B: You sent what to Andreas?

A: #I sent what to who?

B: You sent what to Andreas?

A: I said 'Andrea', not 'Andreas'. I sent a book to Andrea.

Trinh (2024)

# Account

- (A) No wh-phrase can move to the specifier of a performative head
- (B) In-situ questions cannot be embedded

Bošković (2000); Cheng and Rooryck (2000); Stepanov et al. (2001); Fox (2024)

# Notation

- (21) a.  $[Q_i \text{ wh}_i \text{ C}_{[+\text{wh}]} \dots t_i \dots]$   
 b.  $[Q_j \text{ f}_j \dots \text{wh}_j \dots]$

→ ex-situ question

→ in-situ question



# Repetitive questions

(22) A: Are you married to Andrea?

[A ASK [<sub>Q1</sub> whether<sub>1</sub> C<sub>[+wh]</sub> [t<sub>1</sub> B is married to Andrea]]]

B: Am I married to Andreas?

[<sub>Q2</sub> f<sub>2</sub> whether<sub>2</sub> [A ASK [<sub>Q1'</sub> whether<sub>1</sub> C<sub>[+wh]</sub> [t<sub>1</sub> ... Andreas]]]

A: #Are you married to Andreas?

[<sub>Q3</sub> f<sub>3</sub> whether<sub>3</sub> [B ASK <sub>Q2</sub>]] → embedded in-situ Q

Bennett (1977); Higginbotham (1993); Krifka (2001a); Guerzoni (2004)

# Declarative questions

- (23) A: I feel guilty.  
 B: Are you having an affair?  
     [B ASK [ $Q_1$  whether<sub>1</sub> C<sub>[+wh]</sub> [ $t_1$  A is having an affair]]]  
 A: Am I having an affair?  
     [ $Q_2$   $f_2$  whether<sub>2</sub> [B ASK  $Q_1$  ]]
- (24) A: I feel guilty.  
 B: You're having an affair?  
     [ $Q_1$   $f_1$  whether<sub>1</sub> [A ASSERT [A is having an affair]]]  
 A: #I'm having an affair?  
     [ $Q_2$   $f_2$  whether<sub>1</sub> [B ASK  $Q_1$  ]]

Gunlogson (2002, 2003); Trinh and Crnic (2011); Krifka (2017); Trinh (2024)

# Echo questions

A: I sent a letter to Andrea.

B: You sent what to Andreas?

$[Q_1 \ f_1 \ [A \text{ ASSERT } [A \text{ sent what}_1 \text{ to Andreas}]]]$

A: #I sent what to who?

$[Q_2 \ f_2 \ [B \text{ ASK } [Q_1' \ f_1 \ [A \text{ ASSERT } [A \text{ sent what}_1 \text{ to who}_2]]]]]$

Fox (2024)

## Apparent counter-example: excursive questions

- (25) A: Did you use the car?  
B: When?  
A: When?  
B: Yes, when?  
A: Yesterday.  
B: No he didn't use the car yesterday.

Trinh (2024)

# Account (revised & final)

- (A) No wh-phrase can move to the specifier of a performative head  
except when followed by ellipsis
- (B) In-situ questions cannot be embedded

Lasnik (1999)

# Ellipsis & overt movement

- (26) a. A boy talked to a girl, but I don't know which boy to which girl.  
 b. Which boy<sub>1</sub> to which girl<sub>2</sub> C<sub>[+wh]</sub> [~~t<sub>1</sub> talked to t<sub>2</sub>~~]
- (27) a. \*A boy talked to a girl, but I don't know which boy to which girl talked.  
 b. \*A girl talked to John, but I don't know which girl to John.

# Excursive questions explained

(28) A: Did John use the car?

$[Q_1 \text{ whether}_1 C_{[+wh]} [t_1 \text{ John used the car}]]$

B: When?

$[Q_2 \text{ when}_2 [A \text{ ASK } [Q_1' \text{ whether}_1 C_{[+wh]} [t_1 \text{ John used ... } t_2]]]]$

A: When?

$[Q_3 f_3 \text{ whether}_3 [B \text{ ASK } Q_2]]$

Fox (2024)

## Prediction: island effects

- (29) A: Did John talk to the man who used the car?  
B: #When?
- (30) a. John ate, but I don't know what  
b. #John met the man who ate, but I don't know what

Chung et al. (1995); Trinh and Bassi (2023)



## Prediction: non-elliptical excursive questions

- (31) A: Did you use the car?  
B: Did I use the car when?  
A: #Did you use the car when?

Fox (2024)

# Pronunciation

- (32) A: Is John married?  
 [A ASK [WHETHER<sub>1</sub> is<sub>2</sub> [t<sub>1</sub> [John t<sub>2</sub> married]]]]  
 B: Is he married?  
 [f<sub>3</sub> WHETHER<sub>3</sub> [A ASK [WHETHER<sub>1</sub> is<sub>2</sub> [t<sub>1</sub> he t<sub>2</sub> married]]]]
- (33) A: John's married?  
 [A ASSERT [John is married]]  
 B: He's married?  
 [f<sub>3</sub> WHETHER<sub>3</sub> [A ASSERT [he is married]]]
- (34) A: John talked to Mary.  
 [A ASSERT [John talked to Mary]]  
 B: John talked to who?  
 [f<sub>3</sub> [A ASSERT [John talked to who<sub>3</sub>]]]

# Hypothesis

Pronunciation of  $\alpha$  requires  $\alpha$  to be the complement of a (phase) head

Chomsky (2001)

# Consequence for analysis

- (35) a. It's raining  
S ASSERT [it's raining]  
b. I assert it's raining  
S ASSERT [I assert [it's raining]]

Speas and Tenny (2003); Trinh and Bassi (2023)

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- Beck, Sigrid, and Marga Reis. 2018. On the form and interpretation of echo wh-questions. Journal of Semantics 35:369–408.
- Bennett, Michael. 1977. A response to Karttunen. Linguistics and Philosophy 1:279–300.
- Blakemore, Diane. 1994. Echo questions: A pragmatic account. Lingua 94:197–211.
- Bošković, Željko. 2000. Sometimes in [Spec, CP], sometimes in situ. In Step by Step: Essays on Minimalist Syntax in Honor of Howard Lasnik, ed. Roger Martin, David Michaels, and Juan Uriagereka, 53–87. Cambridge, Mass.: MIT Press.
- Cheng, Lisa Lai-Shen, and Johan Rooryck. 2000. Licensing wh-in-situ. Syntax 3:1–19.
- Chomsky, Noam. 1981. Lectures on Government and Binding. Dordrecht: Foris.
- Chomsky, Noam. 1986. Barriers. Cambridge: MIT Press.
- Chomsky, Noam. 2001. Derivation by phase. In Ken Hale: A Life in Linguistics, ed. Michael Kenstowicz, 1–52. Cambridge, Massachusetts: MIT Press.
- Chung, Sandra, William A. Ladusaw, and James McCloskey. 1995. Sluicing and Logical Form. Natural Language Semantics 3:239–282.
- Fox, Danny. 2024. Diagnosing Tree Tops. MIT class handout.
- Fox, Danny, Tue Trinh, and Itai Bassi. 2024. New perspectives on speech acts in grammar. Manuscript in progress.
- Gazdar, Gerald. 1979. Pragmatics: Implicature, Presupposition and Logical Form. New York: Academic Press.
- Guerzoni, Elena. 2004. Even-NPIs in Yes/No Questions. Natural Language Semantics 12:319–343.
- Gunlogson, Christine. 2002. Declarative questions. Proceedings of SALT 12:144–163.

- Gunlogson, Christine. 2003. True to Form: Rising and Falling Declaratives as Questions in English. New York: Routledge.
- Higginbotham, James. 1993. Interrogatives. In The View from Building 20, ed. Kenneth Hale and Samuel Jay Keyser, 195–228. Cambridge: MIT Press.
- Iwata, Seizi. 2003. Echo questions are interrogatives? Another version of a metarepresentational analysis. Linguistics and Philosophy 26:185–204.
- Krifka, Manfred. 2001a. For a structured account of questions and answers. In Audiat Vox Sapientiae. A Festschrift for Arnim von Stechow, ed. Caroline Fery and Wolfgang Sternefeld, 287–319. Berlin: Akademie Verlag.
- Krifka, Manfred. 2001b. Quantifying into question acts. Natural Language Semantics 9:1–40.
- Krifka, Manfred. 2015. Bias in Commitment Space Semantics: Declarative questions, negated questions, and question tags. Proceedings of SALT 25:328–345.
- Krifka, Manfred. 2017. Negated polarity questions as denegations of assertions. In Contrastiveness in Information Structure, Alternatives and Scalar Implicatures, ed. Chungmin Lee, Ferenc Kiefer, and Manfred Krifka, 359–398. Springer Cham.
- Krifka, Manfred. 2019. Commitments and beyond. Theoretical Linguistics 45:73–91.
- Krifka, Manfred. forthcoming. Zur Negierbarkeit von epistemischen Modalen. In Grammatik und Pragmatik der Negation im Deutschen, ed. Laura Neuhaus. Berlin: De Gruyter.
- Lakoff, George. 1970. Linguistics and natural logic. Synthese 22:151–271.
- Lasnik, Howard. 1999. On feature strength: Three minimalist approaches to overt movement. Linguistic Inquiry 30:197–217.
- Miyagawa, Shigeru. 2012. Agreement beyond Phi. Cambridge: MIT Press.
- Miyagawa, Shigeru. 2022. Syntax in the Treetops. Cambridge: MIT Press.

- Noh, Eun-Ju. 1998. Echo questions: Metarepresentation and pragmatic enrichment. Linguistics and Philosophy 21:603–628.
- Reis, Marga. 2012. On the analysis of echo questions. Tampa Papers in Linguistics 3:1–24.
- Ross, John Robert. 1970. On declarative sentences. In Readings in English Transformational Grammar, ed. Roderick A. Jacobs and Peter S. Rosenbaum, 222–272. Waltham: Ginn and Company.
- Safarova, Marie. 2005. The semantics of rising intonation in interrogatives and declaratives. Proceedings of Sinn und Bedeutung 9:355–369.
- Sauerland, Uli, and Kazuko Yatsushiro. 2017. Remind-me presuppositions and speech-act decomposition: Evidence from particles in questions. Linguistic Inquiry 48:651–677.
- Schmitt, Marvin. 2021. Towards a computational model of sequence organization: The adjacency pair. Talk given at Humboldt-Universität zu Berlin.
- Searle, John R. 1969. Speech Acts: An Essay in the Philosophy of Language. Cambridge: Cambridge University Press.
- Speas, Peggy, and Carol Tenny. 2003. Configurational properties of point of view roles. In Asymmetry in Grammar. Volume 1: Syntax and Semantics, ed. Anna Maria di Sciullo, 315–344. John Benjamins.
- Stenius, Erik. 1967. Mood and language games. Synthese 17:254–274.
- Stepanov, Arthur, Penka Stateva, and Cedric Boeckx. 2001. Optionality, presupposition, and wh-in situ in French. In Romance Syntax, Semantics and L2 Acquisition, ed. Joaquim Camps and Caroline R. Wiltshire. John Benjamins.
- Trinh, Tue. 2022. Three ways of referring to discourse participants in Vietnamese. Journal of the Southeast Asian Linguistics Society 15:221–230.



- Trinh, Tue. 2024. A note on speech act recursion. Proceedings of the Olomouc Linguistics Colloquium 2023:165–175.
- Trinh, Tue, and Itai Bassi. 2023. Excursive questions. Open Linguistics 9:20220232.
- Trinh, Tue, and Luka Crnic. 2011. The rise and fall of declaratives. Proceedings of Sinn und Bedeutung 15:645–660.
- Trinh, Tue, and Hubert Truckenbrodt. 2018. The Participant-Pronoun Restriction: English and Vietnamese. Proceedings of NAFOSTED 5:317–321.
- Wiltschko, Martina. 2021. The Grammar of Interactional Language. Cambridge: Cambridge University Press.
- Wittgenstein, Ludwig. 1921. Logisch-philosophische Abhandlung. Annalen der Naturphilosophie 14:185–262.