

Wh-scope-marking in Tamil*

Yoshiki Fujiwara, *Yamaguchi University*

y-fujiwara@yamaguchi-u.ac.jp

1. Introduction

- The goal of this study is twofold:
 - (i) to show that Tamil has *wh*-scope-marking constructions.
 - (ii) to provide syntactic evidence for an underlying structure of *wh*-scope-marking that has been adopted in the semantic analysis of this construction.
- The construction under investigation is subordinate *wh*-scope-marking.¹ *Wh*-scope-marking constructions consist of two interrogative clauses: a matrix propositional *wh*-question and an embedded question. Together, these clauses form a single question that seeks an answer to the embedded question.
 - (1) a. Was glaubst du, [_{CP} **mit wem** Maria gesprochen hat]? [German]
What think you with whom Maria spoken has
lit. ‘What do you think: who Maria spoke to.’
≙ ‘among the possible answers to ‘who did Maria speak to?’, what do you think?’
b. raam kyaa soctaa hai, [_{CP} (ki) ramaa **kis-se** baat karegii]? [Hindi]
Ram what think that Ramaa who-ins talk do-future
lit. ‘What does Ram think: who Ramaa will talk to.’
≙ ‘among the possible answers to ‘who will Ramaa talk to?’, what does Ram think?’
- This construction has been analyzed as the embedded question functioning as a restriction on the matrix *wh*-phrase (e.g. Dayal 1994, 2000; Stepanov 2001; Lahiri 2002; Stepanov & Stateva 2006; Legate 2011). Semantically, (1b) poses the question of what Ram thinks, whose answers are limited to answers to the embedded question of who Ramaa will talk to.²

* This study is based on a final project for the Field Methods course in Spring 2018 at the University of Connecticut. I am deeply grateful to Lakshminarayanan Sriram for his patience and constant support throughout this time. I also extend my sincere thanks to Asia Pietraszko, the course instructor, and Željko Bošković for their valuable feedback and insightful comments.

¹ The other version of *wh*-scope-marking is sequential *wh*-scope-marking, which involves two separate matrix questions, as illustrated by the English example in (i):

(i) What do you think? Who will Mary see? (Dayal 2000, 171)

For further details on this type of *wh*-scope-marking, see Dayal (2000).

² An alternative analysis of this construction considers it a variant of long-distance *wh*-questions (Hiemstra 1986; McDaniel 1989; Cheng 2000; Sabel 2000; Stechow 2000; a.o.). In this approach, the matrix *wh*-phrase is treated as a *wh*-expletive or as an articulated *wh*-feature of the embedded *wh*-phrase, serving only to mark the scope of the embedded *wh*-phrase. However, several studies argue that this construction cannot be adequately treated as a variant

- To derive this semantics, this approach assumes that the matrix *wh*-phrase and the embedded *wh*-question form a constituent in the underlying structure.

(2) <Underlying Structure>

a. Ram think [NP what [CP₂ who Ramaa will talk to]]

<Surface Syntax>

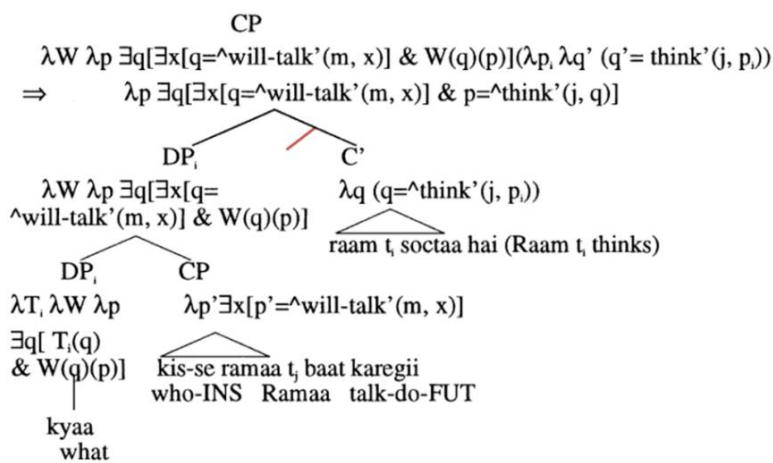
b. Ram [NP what t_{CP2}] think, [CP₂ who Ramaa will talk to] (Hindi: CP₂ extraposition)

<LF Structure>

c. [CP₁ [NP what [CP₂ who Ramaa will talk to]] [C₁' Ram think t]]

➤ Semantic representation adopted in Lahiri (2002)

(3)



(Lahiri 2002; 513)

- In the literature, however, as far as I know, this structure has been motivated solely for semantic reasons and lacks explicit syntactic support.
- This study attempts to provide syntactic evidence for this analysis by introducing Tamil *wh*-scope-marking.

2. Tamil *wh*-scope-marking

- Tamil is a head-final language that allows relatively free word order with scrambling (Sarma 2003).
- In this section, I show that Tamil examples in (4) are instances of *wh*-scope marking by illustrating that Tamil *wh*-scope-marking shares the general properties of *wh*-scope-marking observed in other languages.

(4) a. {Ankita} [Sinduja **enna** sapta-nu] {Ankita} enna sonna?
 Ankita Sinduja what ate-C Ankita what said

of long-distance *wh*-questions (Dayal 1994; Herburger 1994; Pafel 2000; Reis 2000; Stepanov 2001; Lahiri 2002; Legate 2011; Fujiwara 2021). See these works for relevant arguments supporting this perspective.

‘What did Ankita say: what did Sinduja eat?’

- b. [neṭṭi(kki) raṭṭiri Rahul **enga** iru-nd-aa-n endru] enna son-n-aa-n?
yesterday night Rahul where was C what say-past-3.sg-masc
‘What did (he) say: where was Rahul last night?’

A. Any *wh*-phrases can be embedded:

- (5) Ger: a. Was glaubst du [**wo/wann/warum/wie** Maria getanzt hatte]?
what think you where/when/why/how Maria danced had
‘What do you think: where/when/why/how did Maria dance?’

(Beck & Berman 2000, 19)

Hin: b. Jaun kyaa soctaa hai [Meri **kahaaN** jaayegii]?

John what think-PRES Mary where will-go

‘What does John think: where will Mary go?’ (Dayal 1994, 140)

c. Tum kyaa socte ho [ki **kyaa** vo aayegaa]?

you what think be that **whether** he come-FUTURE

‘What do you think: will he come?’ (Fanselow & Mahajan, 2000, 214)

- (6) Tamil: who/what/how/where/when/why/yes-no

a. [**Yaaru** malailendu tirumba vanda-nu] Ankita enna sonna?

Who mountain.from return came-C Ankita what said

‘What did Ankita say: who returned from a mountain?’

b. [Sinduja **enna/edha** sapta-nu] ni enna nenaikkara?

Sinduja what/what_{OBJ} ate-C you what think

‘What do you think: What did Sinduja ate?’

c. Avan [malail-endu **eppidi** tirumba vandan-nu] enna sonnan?

he mountain-from how return came-C what said

‘what did he say: how did he return from a mountain?’

d. Ankita [**Eng**-endu aval-oda akka vanda-nu] enna sonna?

Ankita where-from she-poss sister came-C what said

‘What did Ankita say: where did her elder sister return from?’

e. Avan [malailendu **eppo** tirumba vandan-nu] enna sonnan?

he mountain-from when return came-C what said

‘What did he say: when did he return from a mountain?’

f. [Sinduja **yen** apple sapta-nu] ni enna nenaikkara? -yenna avalukku pasi

Sinduja why apple ate-C you what think because she.poss hunger

‘What do you think: why did Sinduja eat an apple? -Because she was hungry.’

g. [[neṭṭi(kki) raṭṭiri aval viṭu-læ iruṇḍaa-**la**-nuu] enna sonna?

yesterday night she home-at was-Q-C what said

‘What did she say: was she at home last night?’

B. More than one *wh*-phrase can appear in the embedded clause:

- (7) Ger: a. Was glaubst du [wann Hans an welcher Universität studiert hat]?
what think you when Hans at which University studied has
'When do you think Hans studied at which university?' (Dayal 1994, 140)
Hin: b. Raam-ne kyaa kahaa thaa [ki mohan-ne kab kis-ko kEse maaraaa]?
Ram-ERG what said that Mohan-ERG when whom how hit
'How did Ram say that Mohan hit whom when?' (Mahajan 1990, 170)
- (8) Tamil: [avan enga enna pannaran-nu] ni enna nenaikkara?
he where what do-C you what think
'What do you think: What is he doing where?'

C. An embedded *wh*-phrase can take matrix scope across multiple clauses if each intermediate clause also has a propositional *wh*-phrase:

- (9) Ger: a. Was meinst du [was/*daß sie glaubt [wen Fritz liebt]]?
what think you what/that she believes who Fritz loves
'Who do you think that she believes that Fritz loves?'
Hin: b. Tum kyaa socte ho [ki us-ne *(kyaa) kahaa [ki kəOn aayegaa]]?
you what think be that he-ERG what said that who come-FUT
'Who do you think he said will come?' (Fanselow & Mahajan 2000, 212)
- (10) Tam: [[neṭṭi(kki) raṭṭiriaval viṭu-læ iruṇḍaa-la-nu] *(enna) solluva-nu]
yesterday night she home-in was-Q-C what say.future-C
kavaladigari enna sonnan?
policemen what said
'What did the policemen say: what she would say: was she at home last night?'

D. The embedded clause must be interrogative:

- (11) Ger: a. *Was glaubst du [daß Maria mit Hans gesprochen hat]?
what think you that Maria with Hans spoken has
Hin: b. *Jaun kyaa jaantaa hai [Meri Ravi-se baat karegii]?
John what know-PRES Mary Ravi-with will-talk (Dayal 1994, 141)
- (12) Tam: *Avan [malai-lendu tirumba vandan-nu] enna sonnan?
He mountain-from return came-C what said

- Many *wh*-scope-marking languages have a declarative counterpart of *wh*-scope-marking: matrix declarative with propositional demonstrative + embedded declarative

- (13)Ger: a. Fred hat es behauptet, [dass Wilma wegfährt].
 Fred has it claimed that Wilma leave
 ‘Fred has claimed that Wilma is leaving.’ (Truckenbrodt 2016, 118)
- Hin: b. Siitaa yeh jaantii hai [ki Ravi-ne Anu-ko dekhaa].
 Sita this knows that Ravi-ERG Anu-ACC saw
 ‘Sita knows that Ravi saw Anu.’ (Dayal 2017, 160)
- (14)Tam: ?[Ankita malai-lendu tirumba vanda-nu] Sinduja idhu sonna.
 Ankita mountain-from return came-C Sinduja this said
 ‘Sinduja said that Ankita came from a mountain.’

E. The matrix predicate must be able to take a declarative complement:

- (15)Ger: a. *Was fragst du [mit wem Maria gesprochen hat]?
 what ask you with whom Maria spoken has
- Hin: b. *Jaun kyaa puuchhtaa hai [Meri **kis-se** baat karegii]?
 John what ask-PRES Mary who-with will-talk (Dayal 1994, 141)
- (16)Tam: ?*[Sinduja enna sapta-nu] ni enna ketta?
 Sinduja what ate-C you what asked

- When the matrix predicate is anti-rogative predicates such as ‘think,’ the matrix propositional *wh*-phrase cannot be dropped.

- (17)Ger: a. *John glaubt [mit wem Mary reden wird]?
 John think with whom Mary talk will
- Hin: b. Siitaa-ne *(kyaa) socaa [ki Ravii-ne **kis-ko** dekhaa]?
 Sita-ERG what thought that Ravi-ERG who saw (Mahajan 2000, 319)
- (18)Tam: Ni [Sinduja apple sapta-la-nu] *(enna) nenaikkara?
 you Sinduja apple ate-Q-C what think

F. the matrix clause must be affirmative:

- (19)Ger: a. *Was glaubst du nicht [mit wem Maria gepochen hat]?
 what think you not with whom Maria talked has
 ‘Who don’t you think Maria has spoken to?’ (Dayal 1994, 145)
- Hin: b. *Jaun kyaa nahiiN soctaa hai [Merii **kis-se** baat karegii]?
 John what not think-PRES Mary who-with will-talk
 ‘Who doesn’t John think Mary will talk to?’ (Dayal 1996, 57)
- (20)Tamil: *[**Yaaru** virakku varuvanga-nu] ni enna nenaikkala?³

³ In regular long-distance *wh*-questions in Tamil, the matrix clause can contain negation, as shown in (i).

(i) Tam: [Yaaru vira-kku varuvanga-nu] ni nenaikkala?
 who party-to come.will-C you thought.not
 ‘Who didn’t you think would come to the party?’

who to.party come-C you what think.not
 ‘Who didn’t you think would come to the party?’

G. Principle C: R-expressions in the embedded question must be free.

(21) Ger: *Was sagt er_i [**wo** Kai_i wohnt]?

what says he where Kai lives

‘Where did he_i say Kai_i lives?’ (Haida 2007, 138)

(22) Hin: *Us_i-ne kyaa socaa [ki Ravi_i-ne **kis-ko** dekhaa]?

he-ERG what thought that Ravi-ERG who saw

‘Who did he_i think that Ravi_i saw? (Mahajan 2000; 324)

(23) Tam: a. *Avan_i [neṭṭi(kki) raṭṭiri Rahul_i **enga** iruṇḍaan-nu] enne sonnaan?

he yesterday night Rahul where was-C what said

‘What did he_i say: Where was Rahul_i last night?’

b. Rahul_i [neṭṭi(kki) raṭṭiri avan_i **enga** iru-ṇḍ-aa-n-nu] enne son-n-aa-n?

- Based on the data above, I conclude that Tamil has *wh*-scope-marking, similar to German and Hindi.

3. Constituency of “*what_{prop}*” and “CP₂”

- Recall that the current analysis of *wh*-scope-marking, where the matrix propositional *wh*-phrase and the embedded question underlyingly form a constituent.

(24) <Underlying Structure>

a. John think [_{NP} what [_{CP2} who Mary will talk to]]

<Surface Syntax>

b. John [_{NP} what t_{CP2}] think, [_{CP2} who Mary will talk to] (Hindi: extraposition of CP₂)

c. [_{NP} what t_{CP2}] John think t_{wh}, [_{CP2} who Mary will talk to] (German: +*wh*-movement)

<LF Structure>

d. [_{CP1} [_{NP} what [_{CP2} who Mary will talk to]]] [_{CP1} John think t]

- This structure is motivated simply by the need for the embedded question to function as a restriction on the matrix *wh*-phrase semantically.

- No syntactic evidence has been presented to support the constituency of [*what_{PROP}*, CP₂].

- This is because the two elements are separated by *wh*-movement or extraposition of the embedded clause.

(25) a. German: wh-movement (+ extraposition of CP)

[_{NP} Was _{CP2}] glaubst du, [_{CP2} mit wem Maria gesprochen hat]?

What think you with whom Maria spoken has

lit. ‘What do you think: who did Maria talk to?’

b. Hindi: extraposition of CP

Jaun [_{NP} kyaa _{CP2}] sochta hai, [_{CP2} (ki) merii kis-se baat karegii]?

John what think that Mary who-ins talk do-future

lit. ‘What does John think: who will Mary talk to?’

- Tamil is suggestive in this regard: the two phrases can appear adjacent to each other.

(26) Tamil:

Ankita [_{NP} [_{CP2} Sinduja enna sapta-nu] enna] sonna?

Ankita Sinduja what ate-C what said

lit. ‘What did Ankita say: what did Sinduja eat?’

- The question is: Can we actually show that the propositional ‘what’ and the embedded CP constitute a constituent?

- Tamil allows relatively free word order, due to scrambling (Sarma 2003).

(27) a. krishnaa-kku, saadatt-ai draupadi _{t_{IO}} _{t_{DO}} poT-T-aaL.

Krishna-DAT rice-ACC Draupadi-NOM put-PAST-3SF

‘To Krishna, the rice, Draupadi gave.’ (Sarma 2003, 262)

b. enge et-ai yaar _{t_{place}} _{t_{Obj}} vaang-in-aan?

where what-ACC who buy-PAST-3SM

‘Who bought what where?’ (Leung 2018, 46)

- There is a restriction on the word order in Tamil *wh*-scope-marking.

(28) a: Subj [_{CP2}] [what] V

Ni [_{CP2} Sinduja apple sapta-la-nu] enna nenaikkara?

you Sinduja apple ate-Q-C what think

lit. ‘What do you think: did Sinduja eat an apple?’

b: [_{CP2}] Subj _{t_{CP2}} [what] V

[_{CP2} Sinduja apple sapta-la-nu] ni enna nenaikkara?

c: [_{CP2}] [what] Subj _{t_{CP2}} _{t_{wh}} V

[_{CP2} Sinduja apple sapta-la-nu] enna ni nenaikkara?

d: *[what] [_{CP2}] Subj _{t_{CP2}} _{t_{NP}} V

*Enna [_{CP2} Sinduja apple sapta-la-nu] ni nenaikkara?

- I take the impossibility of the “what-CP-Subj-V” order in (28d) as indicating a classical PBC effect.
- PBC restricts a configuration like (29) (i.e. remnant movement). Crucially, the PBC effect presumes that X and Y constituted a constituent in the first place.

(29) *[_{YP} ... t_X ... Y] ... X ... t_{YP}

- The derivation of (28):

(30) a. Subj [_{NP} [CP] **what**] V (= 28a)
 b. [CP] Subj [_{NP} t_{CP} **what**] V (= 28b)
 c. * [_{NP} t_{CP} **what**] [CP] Subj t_{NP} V (= 28d)
 (cf. d. [_{NP} [CP] **what**] Subj t_{NP} V (= 28c))

- The ungrammaticality of (28d) suggests that [CP₂] and [what] form a constituent in an underlying structure.
- It provides syntactic evidence for the current semantic analysis of this construction.
- This contributes to the coherence of the syntactic and semantic analysis of *wh*-scope-marking.

4. Summary

- This study has shown that Tamil has *wh*-scope-marking.
- It has also provided syntactic evidence for the constituency of the propositional *wh*-phrase and the embedded question, using classical PBC effects as a constituency test.
- The list of *wh*-scope-marking languages:
 [Indo-Iranian] Bangla (Bayer 1996), Dari Persian (Karimi & Taleghani 2007), Hindi (Dayal 1994, a.o), Kashmiri (Manetta 2010), Marathi (Fanselow 2017), Punjabi (Bhatia 1993), Romani (McDaniel 1989), [Germanic] Dutch (Strik 2008; Schippers 2016), Frisian (Hiemstra 1986), German (Riemsdijk 1983, a.o.), [Slavic] Polish (Stepanov 2001), Russian (Stepanov 2001; Rojina 2011), Slovenian (Golden 1995; Marušič 2008), [Albanian] Albanian (Turano 1998), [Semitic] Iraqi-Arabic (Wahba 1992), [Ugric] Hungarian (Horvath 1997), [Dravidian] Tamil, [Japonic] Japanese (Fujiwara 2021), [Algonquian] Passamaquady (Bruening 2001), [Pama-Nyungan] Warlpiri (Legate 2011)

References

- Bayer, Josef. 1996. *Directionality and Logical Form: On the Scope of Focusing Particles and Wh-in-situ* (Studies in Natural Language and Linguistic Theory). Dordrecht: Springer Netherlands. doi:10.1007/978-94-017-1272-9_1. https://doi.org/10.1007/978-94-017-1272-9_1 (12 March, 2020).
- Beck, Sigrid & Stephen Berman. 2000. Wh-Scope Marking: Direct vs. Indirect Dependency. In Uli Lutz, Gereon Muller & Arnim Von Stechow (eds.), *Wh-Scope Marking*, 17–44. Amsterdam; Philadelphia: John Benjamins Publishing.
- Bhatia, Tej K. 1993. *Punjabi: A cognitive-descriptive grammar*. Routledge.
- Bruening, Benjamin. 2001. Syntax at the Edge: Cross-Clausal Phenomena and the Syntax of Passamaquoddy. MIT Ph.D. dissertation.
- Cheng, Lisa Lai-Shen. 2000. Moving Just the Feature. In Uli Lutz, Gereon Muller & Arnim Von Stechow (eds.), *Wh-Scope Marking*, 79–99. Amsterdam; Philadelphia: John Benjamins Publishing.
- Dayal, Veneeta. 1994. Scope marking as indirect wh-dependency. *Natural Language Semantics* 2(2), 137–170. doi:10.1007/BF01250401.
- Dayal, Veneeta. 2000. Scope Marking: Cross-Linguistic Variation In Indirect Dependency. In Uli Lutz, Gereon Muller & Arnim Von Stechow (eds.), *Wh-Scope Marking*, 157–193. Amsterdam; Philadelphia: John Benjamins Publishing.
- Dayal, Veneeta. 2017. Does Hindi-Urdu Have Feature-Driven Wh-Movement to Spec,vP? *Linguistic Inquiry* 48(1), 159–172.
- Fanselow, Gisbert. 2017. Partial Wh-Movement. In Martin Everaert & Henk C. van Riemsdijk (eds.), *The Wiley Blackwell Companion to Syntax, Second Edition*, 2885–2941. Somerset, NJ: John Wiley and Sons. doi:10.1002/9781118358733.wbsyncom088. <https://onlinelibrary.wiley.com/doi/abs/10.1002/9781118358733.wbsyncom088> (16 July, 2018).
- Fanselow, Gisbert & Anoop K. Mahajan. 2000. Towards a Minimalist Theory of Wh-Expletives, Wh-Copying, and Successive Cyclicity. In Uli Lutz, Gereon Muller & Arnim Von Stechow (eds.), *Wh-Scope Marking*, 195–230. Amsterdam; Philadelphia: John Benjamins Publishing.
- Fujiwara, Yoshiki. 2021. Wh-Scope Marking in Japanese: Evidence for the Indirect-Dependency Approach. *Linguistic Inquiry* 52(3), 627–639. doi:10.1162/ling_a_00379.
- Golden, Marija. 1995. Interrogative wh-movement in Slovene and English. *Acta Analytica* 14, 145–186.
- Herburger, Elena. 1994. A Semantic Difference between Full and Partial Wh-Movement in German. Boston, MA.
- Hiemstra, Inge. 1986. Some aspects of wh-questions in Frisian. *NOWELE: North Western European Language Evolution* 8, 97–110.
- Horvath, Julia. 1997. The Status of ‘Wh-Expletives’ and the Partial Wh-Movement Construction of Hungarian. *Natural Language & Linguistic Theory* 15(3), 509–572. doi:10.1023/A:1005842214213.
- Karimi, Simin & Azita H. Taleghani. 2007. Wh-movement, interpretation, and optionality in Persian. In Simin Karimi, Vida Samiian & Wendy K. Wilkins (eds.), *Phrasal and Clausal Architecture: Syntactic derivation and interpretation. In honor of Joseph E. Emonds*, 167–187. Amsterdam: John Benjamins Publishing Company. <https://benjamins.com/catalog/la.101> (21 April, 2020).
- Lahiri, Utpal. 2002. On the proper treatment of “expletive wh” in Hindi. *Lingua* 112(7), 501–540. doi:10.1016/S0024-3841(01)00059-6.
- Legate, Julie Anne. 2011. Warlpiri Wh-Scope Marking. *Syntax* 14(2), 97–121. doi:10.1111/j.1467-9612.2011.00151.x.

- Leung, Tommi. 2018. The syntax of two types of sluicing in Tamil. *The Linguistic Review* 35(1), 35–82. doi:10.1515/tlr-2017-0017.
- Mahajan, Anoop K. 1990. The A/A-bar Distinction and Movement Theory. MIT Ph.D. dissertation.
- Mahajan, Anoop K. 2000. Towards a Unified Treatment of Wh-Expletives in Hindi and German. In Uli Lutz, Gereon Muller & Arnim Von Stechow (eds.), *Wh-Scope Marking*, 317–332. Amsterdam; Philadelphia: John Benjamins Publishing.
- Manetta, Emily. 2010. Wh -Expletives in Hindi-Urdu: The vP Phase. *Linguistic Inquiry* 41(1), 1–34.
- Marušič, Franc. 2008. CP under control. In Gerhild Zybatow, Luka Szucsich, Uwe Junghanns & Roland Meyer (eds.), *Formal description of Slavic languages: The fifth conference, Leipzig 2003*, 409–422. Frankfurt am Main: Peter Lang.
- McDaniel, Dana. 1989. Partial and multiple Wh-movement. *Natural Language & Linguistic Theory* 7(4), 565–604. doi:10.1007/BF00205158.
- Pafel, Jürgen. 2000. Absolute and Relative. On Scope in German Wh-Sentences, W- ... W-Constructions Included. In Uli Lutz, Gereon Muller & Arnim Von Stechow (eds.), *Wh-Scope Marking*, 333–358. Amsterdam; Philadelphia: John Benjamins Publishing.
- Reis, Marga. 2000. On the Parenthetical Features of German. Was... W-Constructions and How to Account for them. In Uli Lutz, Gereon Muller & Arnim Von Stechow (eds.), *Wh-Scope Marking*, 359–407. Amsterdam; Philadelphia: John Benjamins Publishing.
- Riemsdijk, Henk van. 1983. Correspondence Effects and the Empty Category Principle. *Studies in Generative Grammar and Language Acquisition: A Report on Recent Trends in Linguistics*, 5–16. Editorial Committee.
- Rojina, Nina. 2011. The syntactic structures of Russian wh-questions. University of Geneva Ph.D. dissertation. <https://archive-ouverte.unige.ch/unige:17415> (12 March, 2018).
- Sabel, Joachim. 2000. Partial Wh-Movement and the Typology of Wh-Questions. In Uli Lutz, Gereon Muller & Arnim Von Stechow (eds.), *Wh-Scope Marking*, 409–446. Amsterdam; Philadelphia: John Benjamins Publishing.
- Sarma, Vijayanthi. 2003. Non-Canonical Word Order: Topic and Focus in Adult and Child Tamil. *Word Order and Scrambling*, 238–272. John Wiley & Sons, Ltd. doi:10.1002/9780470758403.ch11. <https://onlinelibrary.wiley.com/doi/abs/10.1002/9780470758403.ch11> (12 September, 2024).
- Schippers, Ankelien. 2016. Partial Wh-Movement and Wh-Copying in Dutch: Evidence for an Indirect Dependency Approach - eScholarship. *Proceedings of the Annual Meeting of the Berkeley Linguistics Society* 36(36). <https://escholarship.org/uc/item/0jx7j1pf> (22 November, 2017).
- Stechow, Arnim Von. 2000. Partial Wh-Movement, Scope marking, and Transparent Logical Form. In Uli Lutz, Gereon Muller & Arnim Von Stechow (eds.), *Wh-Scope Marking*, 447–478. Amsterdam; Philadelphia: John Benjamins Publishing.
- Stepanov, Arthur. 2001. Cyclic domains in syntactic theory. University of Connecticut Ph.D. dissertation.
- Stepanov, Arthur & Penka Stateva. 2006. Successive cyclicity as residual wh-scope marking. *Lingua* 116(12), 2107–2153. doi:10.1016/j.lingua.2005.06.004.
- Strik, Nelleke. 2008. Syntaxe et acquisition des phrases interrogatives en français et en néerlandais: une étude contrastive. Université Paris 8 Ph.D. thesis.
- Turano, Giuseppina. 1998. Overt and covert dependencies in Albanian. *Studia Linguistica* 52(2), 149–183. doi:10.1111/1467-9582.00032.
- Wahba, Wafaa Abdel-Faheem Batran. 1992. LF Movement in Iraqi Arabic. In C.-T. James Huang & Robert May (eds.), *Logical Structure and Linguistic Structure: Cross-Linguistic Perspectives* (Studies in Linguistics and Philosophy), 253–276. Dordrecht: Springer Netherlands. doi:10.1007/978-94-011-3472-9_9.