Island sensitivity of (non-)standard wh-in-situ in Korean

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The puzzle

- Wh-in-situ languages like Chinese exhibit an argument/adjunct asymmetry regarding island sensitivity (Huang 1982a,b):
 - (1)a. ni zui xihuan [NP [CP mai **shenme**] de ren]? you most like buy what DE person 'What do you like [the person who bought t]?' (Huang et al. 2009: (120))
 - b. *ni zui xinshang [NP [CP weishenme gongzuo] de ren]? you most appreciate why work DE people 'What is the reason x such that you appreciate most people who work for x?' (Stepanov & Tsai 2008: (9b))
- It becomes more complicated when we consider weishenme/wei-le shenme 'why/for what' asymmetry in island sensitivity (Tsai 1994a,b; Stepanov & Tsai 2008):
 - (2)ni zui xinshang [NP [CP wei(-le)shenme gongzuo] de ren]? you most appreciate for(-LE)what work DE beef 'What is the purpose x such that you appreciate most people who work for x?' (Stepanov & Tsai 2008: (9a))
 - be the reason adjunct weishenme is island-sensitive, whereas the purpose adjunct wei(-le) shenme is island-insensitive. イロト 不倒り イヨト イヨト

Noun versus Adverb Generalization

- Many researchers (Tsai 1994a,b; 1999; Stepanov & Tsai 2008; Fujii et al. 2014; a.o.) have argued that the island behaviors of wh-in-situ fall under the morphological generalization in (3), which, following Fujii et al. (2014), will be referred to as the Noun versus Adverb Generalization:¹
 - (3) Noun versus Adverb Generalization (NAG):
 An in-situ wh-phrase is island-insensitive iff it is (or contains) a wh-nominal.

 (Fujii et al. 2014; (3))
- In (1), the island-insensitive shenme is a wh-nominal, whereas the island-sensitive weishenme is a pure adverb.
- In (2), the island-insensitive, purpose *weishenme* has a nominal element *shenme* 'what' in it.

Goals of this talk

In this talk, we aim

- to show that the NAG is not sufficient to explain the island behaviors of (non-)standard *wh*-in-situ in Korean.
- to suggest that the island behaviors of in-situ *wh*-phrases closely correlate with base positions, not categorial status: specifically, an in-situ *wh*-phrase is island-sensitive iff it is base-generated in the CP domain (Spec-CP).

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Standard wh-questions

- Standard wh-questions using mwe-l 'what-ACC', mwes-ulo 'what-with', and ettehkey 'how':²
 - (4) Mimi-nun mwe-l ilk-ess-ni? Mimi-TOP what-ACC read-PST-QUE 'What did Mimi read?'
 - (5) ne-nun mwes-ulo kkochpyeng-ul kkay-ss-ni? you-TOP what-with vase-ACC break-PST-QUE 'With what did you break the vase?'
 - (6) Mimi-nun **ettehkey** cha-lul kochi-ess-ni?
 Mimi-TOP how car-ACC fix-PST-QUE
 'How did Mimi fix the car?'

²The wh-phrases mwe-l and mwes-ulo are contracted forms of mwes-ul and mwes-ulo respectively. 💈 🔻 👙 🔾 🗢

Non-standard wh-questions

- The three *wh*-phrases can be used "non-standardly" in that they receive 'why'-like interpretations in certain contexts:
 - (7) Mimi-nun **mwe-l^w** *(kulehkey) manhun nonmwun-ul ilk-ess-ni?
 Mimi-TOP what-ACC so many paper-ACC read-PST-QUE
 'Why (the hell) did Mimi read so many papers?'
 - (8) PRO_i cha-ka iss-umyense, ne_i-nun **mwes-ulo^w** tto cha-lul sa-ss-ni?³⁴ car-NOM exist-though you-TOP what-with again car-ACC buy-PST-QUE 'Although PRO_i having the car, why did you_i buy a car again?'
 - (9) Mimi-nun ettehkey^w mikwuk-ey ka-key toy-ess-ni? Mimi-TOP how America-LOC go-CONN become-PST-QUE 'Why did Mimi go to America?'
- We use the w superscript to indicate the non-standard wh-items.

³[암행]어사는 소라껍질을 보고 물었다. "저건 **뭣으로** 저렇게 달아매었느냐?" "거 풍경으로 그저 바람 불면 성강성강 소리 나라고 달았습니다." (https://www.jeju.go.kr)

Non-standard wh-questions (Cont'd)

- The non-standard wh-items can be replaced by the regular wh-adjunct way 'why':
 - (10) Mimi-nun way kulehkey manhun nonmwun-ul ilk-ess-ni?
 Mimi-TOP why so many paper-ACC read-PST-QUE

 'Why (the hell) did Mimi read so many papers?'
 - (11) PRO_i cha-ka iss-umyense, ne_i-nun way tto cha-lul sa-ss-ni? car-NOM exist-though you-TOP why again car-ACC buy-PST-QUE 'Although PRO_i having the car, why did you_i buy a car again?'
 - (12) Mimi-nun way mikwuk-ey ka-key toy-ess-ni? Mimi-TOP why America-LOC go-CONN become-PST-QUE 'Why did Mimi go to America?'

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Island-sensitive mwe-lw

- If the NAG is correct, it is expected that *mwe-l*^w is island-insensitive, since it is a *wh*-nominal; however, this is not the case, as shown below:
 - (13) a. *Mimi-nun [[mwe-l* kulehkey manhun nonmwun-ul ilk-un] salam]-ul Mimi-TOP what-ACC so many paper-ACC read-MOD people-ACC pinanhayss-ni? criticized-QUE
 - 'Mimi criticized the people who read so many papers why?'
 - b. *Mimi-nun [Kim-i **mwe-l^w** kulehkey ilccik ttena-se] hwakanass-ni? Mimi-TOP Kim-NOM what-ACC so early leave-because got.angry-QUE 'Mimi got angry because Kim left so early why?'

Island-insensitive ettehkey

- The NAG incorrectly predicts *ettehkey* 'how' to be island-sensitive, since it is a *wh*-adverb:
 - (14) Mimi-nun [[Kim-i ettehkey yoliha-n] umsik]-ul mekess-ni?

 Mimi-TOP Kim-NOM how cook-MOD food-ACC ate-QUE

 'Mimi ate the food that Kim cooked how?'
- Chung (2005): *ettehkey* is island-insensitive because it has a nominal part *tte* in it, as in [DP/NP *e-tte*]-*h-key* 'Det-CNP-do-adverbializer'.
- If Chung's view is correct, ettehkey^w is expected to be island-insensitive, since it is isomorphic to its standard counterpart, but this expectation is not borne out:⁵
 - (15) *Mimi-nun [[Kim-i ettehkey* yoliha-key toy-n] umsik]-ul mekess-ni?

 Mimi-TOP Kim-NOM how cook-CONN become-MOD food-ACC ate-QUE

 'Mimi ate the food that Kim cooked why?'

⁵Ettehkey^w is also sensitive to an adjunct island, unlike its standard counterpart. $\square \rightarrow \langle \bigcirc \rangle \rightarrow \langle \bigcirc \rangle \rightarrow \langle \bigcirc \rangle$

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Intervention Effect

- Unlike other *wh*-items, *way* does not exhibit the Intervention Effect (IE), given that it can be preceded by Scope Bearing Elements (SBEs, a.k.a. interveners) like *man* 'only' and *amwuto* 'anyone' (Beck & Kim 1997; Ko 2005; Beck 2006; a.o.):
 - (16) a. *Mimi-man mwe-l ilk-ess-ni?

 Mimi-only what-ACC read-PST-QUE

 'What did only Mimi read?'
 - b. mwe-l Mimi-man ilk-ess-ni? what-ACC Mimi-only read-PST-QUE 'What did only Mimi read?'
 - (17) a. Mimi-man way manhun chayk-ul ilk-ess-ni?
 Mimi-only why many book-ACC read-PST-QUE
 'Why did only Mimi read many books?'
 - way Mimi-man manhun chayk-ul ilk-ess-ni?
 why Mimi-only many book-ACC read-PST-QUE
 'Why did only Mimi read many books?'

Ko (2005): external merge of way in Spec-CP

To account for the peculiar behaviors of way, Ko assumes that

- in an interrogative clause, way 'why' is externally merged in its checking position, Spec-CP, whereas other wh-phrases undergo LF movement to Spec-CP for feature checking.
- IE is taken as a constraint on wh-movement at LF:
 - (18) Intervention Effect: *[... $C_{[+Q]}$ SBE wh ... $]_{LF}$ At LF, a wh-phrase cannot be attracted to its checking (scope) position across an SBE. (Ko 2005: 871)

(19) a. LF for (16a):
$$[CP \quad C_{[+Q]} \quad ... \quad SBE \quad ... \quad wh \quad]$$
 b. LF for (16b): $[CP \quad C_{[+Q]} \quad ... \quad wh_i \quad SBE \quad ... \quad t_i \quad]$

Supporting data for the external merge of way in Spec-CP

The external merge of way in Spec-CP is supported by the fact that

- way always scopes over negation:
 - (21)John-un way Mary-lul cohaha-ci-anh-ni? John-TOP why Mary-ACC like-CI-not-QUE 'What is the reason x such that John does not like Mary? $(Reason \gg Not)'$ "*What is not the reason x such that John likes Mary for x? $(Reason \ll Not)'$ (Ko 2005: (55))
- way cannot be preceded by epistemic adverbs like amato 'probably' and pwunmyenghi 'evidently', which cannot undergo A'-scrambling or A'-topicalization to the CP domain:
 - (22)a. {*?amato/*?pwunmyenghi} way John-i ttena-lkeskath-ni? probably/evidently why John-NOM leave-is.likely-QUE 'For what reason x is it {probable/evident} that John will leave for x?'
 - b. way {amato/pwunmyenghi} John-i ttena-lkeskath-ni? why probably/evidently John-NOM leave-is.likely-QUE

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'What is the reason x s.t. for x, it is {probable/evident} that John will leave?'

(Ko 2005: (57))

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(D) (A A) (B) (B)

Three diagnostic tests for identifying wh-items base-generated in Spec-CP

 Adopting Ko's ideas, we employ (i) Intervention Effect, (ii) scopal interactions with negation, and (iii) ability to follow epistemic adverbs as diagnostic tests to detect whether a given wh-item is base-generated in Spec-CP or not.

External merge of mwe-lw in Spec-CP

- We assume that *mwe-l*^w is externally merged in Spec-CP as its licensing position, given that it behaves exactly like *way* in regard to the three diagnostics:
 - (23) a. Mimi-man mwe-l^w kulehkey manhun chayk-ul ilk-ess-ni?
 Mimi-only what-ACC so many book-ACC read-PST-QUE

 'Why did only Mimi read so many books?'

John-un **mwe-l**^w kulehkey swipkey cichi-cito

- b. mwe-l^w kulehkey manhun chayk-ul Mimi-man ilk-ess-ni? what-ACC so many book-ACC Mimi-only read-PST-QUE 'Why did only Mimi read so many books?'
- John-TOP what-ACC so easily get.tired-CONN not-QUE 'What is the reason x such that John does not get tired so easily? (Reason \gg Not)' '*What is not the reason x such that John gets tried so easily for x? (Reason \ll Not)'
- (25) {*amato/*pwunmyenghi} **mwe-l**^w kulehkey John-i ilccik ttena-lkeskath-ni? probably/evidently what-ACC so John-NOM early leave-is.likely-QUE
 - 'For what reason x is it {probable/evident} that John will leave for x?'6

(24)

anh-ni?

Island-sensitive *mwe-l*^w is base-generated in Spec-CP

- As we have already seen in (13), repeated here as (26), $mwe-l^w$ is island-sensitive:
 - (26) a. *Mimi-nun [[mwe-l*w kulehkey manhun nonmwun-ul ilk-un] salam]-ul
 Mimi-TOP what-ACC so many paper-ACC read-MOD people-ACC
 pinanhayss-ni?
 criticized-QUE
 - 'Mimi criticized the people who read so many papers why?'
 - b.*Mimi-nun [Kim-i **mwe-l^w** kulehkey ilccik ttena-se] hwakanass-ni? Mimi-TOP Kim-NOM what-ACC so early leave-because got.angry-QUE 'Mimi got angry because Kim left so early why?'
- However, its standard counterpart (i.e. *wh*-argument) is island-free:
 - (27) a. Mimi-nun [[mwe-l ha-n] salam]-ul pinanhayss-ni? Mimi-TOP what-ACC do-MOD people-ACC criticized-QUE 'Mimi criticized the people who did what?'
 - b. Mimi-nun [Kim-i mwe-l hay-se] hwakanass-ni? Mimi-TOP Kim-NOM what-ACC do-because got.angry-QUE 'Mimi got angry because Kim did what?'
- Whereas standard *mwe-l*, base-generated below CP (specifically, in *v*P), is island-insensitive, non-standard *mwe-l*^w, base-generated in Spec-CP, is island-sensitive.

External merge of ettehkeyw in Spec-CP

- We assume that *ettehkey*^w is externally merged in Spec-CP, given that it patterns like *way* and *mwe-l*^w with respect to the three diagnostics:
 - (28) a. Mimi-man ettehkey* mikwuk-ey ka-key toyess-ni?
 Mimi-only how America-LOC go-CONN became-QUE

 'Why did only Mimi go to America?'
 - ettehkey^w Mimi-man mikwuk-ey ka-key toyess-ni? how Mimi-only America-LOC go-CONN became-QUE 'Why did only Mimi go to America?'
 - (29) John-un ettehkey^w mikwuk-ey ka-ci anh-key toyess-ni?
 John-TOP how America-LOC go-CONN not-CONN became-QUE
 'What is the reason x such that John didn't go to America? (Reason ≫ Not)'
 '*What is not the reason x such that John went to America for x? (Reason ≪ Not)'
 - (30) {*?amato/*?pwunmyenghi} **ettehkey**^w John-i ttena-key toy-lkeskath-ni? probably/evidently how John-NOM leave-CONN become-is.likely-QUE 'For what reason *x* is it {probable/evident} that John will leave for *x*?'⁷

⁷Epistemic adverbs can follow etteheky^w, as in ettehkey^w {amato/pwunmyenghi}-John-ittena-key toy-lkeskathini? • 9 9 0

Base-generation of manner/instrumental ettehkey below NegP

- Example (31) illustrates the so-called *how-why* asymmetry with regard to the Negative Island Effect, a phenomenon in which negation blocks extraction of certain *wh*-phrases (Rizzi 1990; Shlonsky & Soare 2011; a.o.):
 - (31) a. Why didn't Geraldine fix her bike?b. *How didn't Geraldine fix her bike? (Shlonsky & Soare 2011: (14))
- The asymmetry can receive a natural account if we assume that while *how* is base-generated below NegP, *why* is directly merged in the CP region (Rizzi 2001; Tsai 2008):

Base-generation of manner/instrumental ettehkey below NegP (Cont'd)

- In Korean, unlike *way*, manner/instrumental *ettehkey* exhibits the Negative Island Effect, indicating that the latter originates below NegP (or in *v*P):
 - (33) a. Mimi-nun way cha-lul kochi-ci anh-ass-ni?
 Mimi-TOP why car-ACC fix-CONN not-PST-QUE
 'Why didn't Mimi fix the car?'
 - b. *Mimi-nun ettehkey cha-lul kochi-ci anh-ass-ni?

 Mimi-TOP how car-ACC fix-CONN not-PST-QUE

 'How didn't Mimi fix the car?'
- Meantime, ettehkey^w does not exhibit the Negative Island Effect, since it is externally merged in Spec-CP:
 - (34) Mimi-nun **ettehkey**^w cha-lul kochi-ci anh-key toyess-ni?
 Mimi-TOP how car-ACC fix-CONN not-CONN became-QUE
 'Why didn't Mimi fix the car?'

Island-sensitive ettehkeyw is base-generated in Spec-CP

- As we have already seen, *ettehkey*^w is island-sensitive, whereas manner/instrumental *ettehkey* is island-insensitive. The relevant examples are repeated below:
 - (35) a. Mimi-nun [[Kim-i ettehkey yoliha-n] umsik]-ul mekess-ni?

 Mimi-TOP Kim-NOM how cook-MOD food-ACC ate-QUE

 'Mimi ate the food that Kim cooked how?'
 - b. *Mimi-nun [[Kim-i ettehkey* yoliha-key toy-n] umsik]-ul
 Mimi-TOP Kim-NOM how cook-CONN become-MOD food-ACC
 mekess-ni?
 ate-QUE
 - 'Mimi ate the food that Kim cooked why?'
- Whereas standard *ettehkey*, base-generated below NegP, is island-insensitive, non-standard *etteheky*^w, base-generated in Spec-CP, is island-sensitive.

External merge of mwes-ulow in Spec-CP

- Like other non-standard *wh*-phrases, *mwes-ulo*^w is assumed to originate in Spec-CP as its licensing position:
 - (36) a. Mimi-man mwes-ulo^w tto ilpon-ey ka-ss-ni? Mimi-only what-with again Japan-LOC go-PST-QUE 'Why did only Mimi go to Japan again?'
 - b. mwes-ulo^w tto Mimi-man ilpon-ey ka-ss-ni? what-with again Mimi-only Japan-LOC go-PST-QUE 'Why did only Mimi go to Japan again?'

 - (38) {*amato/*pwunmyenghi} **mwes-ulo**^w tto John-i ttena-lkeskath-ni? probably/evidently what-with again John-NOM leave-is.likely-QUE 'For what reason *x* is it {probable/evident} that John will leave for *x*?'

Base-generation of instrumental mwes-ulo below NegP

- Unlike reason mwes-ulo^w, instrumental mwes-ulo is sensitive to the Negative Island, suggesting that it originates below NegP:
 - (39) a. *ne-nun **mwes-ulo** hakkyo-ey ka-ci anh-ass-ni? you-TOP what-with school-LOC go-CONN not-PST-QUE 'How didn't you go to school?'
 - b. ne-nun **mwes-ulo**^w tto hakkyo-ey ka-ci anh-ass-ni? you-TOP what-with again school-LOC go-CONN not-PST-QUE 'Why didn't you go to school again?'
- Since reason *mwes-ulo*^w is base-generated in Spec-CP, it is not subject to the Negative Island Effect, just like *way* 'why', *mwe-l*^w, and *ettehkey*^w.

Island-sensitive *mwes-ulo*^w is base-generated in Spec-CP

- Unlike instrumental mwes-ulo, reason mwes-ulo^w is sensitive to strong islands such as a complex NP island:
 - (40) a. *ne-nun [NP [CP John-i **mwes-ulo*** tto kkwumi-n] pang-ul] you-TOP John-NOM what-with again decorate-REL room-ACC cohaha-ni? like-QUE
 - 'You like the room that John decorated why again?'
 - b. ne-nun [NP [CP John-i **mwes-ulo** kkwumi-n] pang-ul] cohaha-ni?
 you-TOP John-NOM what-with decorate-REL room-ACC like-QUE
 'You like the room that John decorated with what?'
- Whereas standard mwes-ulo, base-generated below NegP, is island-insensitive, non-standard mwes-ulo^w, base-generated in Spec-CP, is island-sensitive.

Merge sites and island (in)sensitivity of other wh-phrases

- The other wh-phrases that we have not discussed so far, such as nwukwu 'who' and 'low' wh-adjuncts like encey 'when' and eti 'where', are all island-insensitive:
 - (41) a. John-un [NP [CP **nwu-ka** yoriha-n] umsik-ul] mek-ess-ni? John-TOP who-NOM cook-REL food-ACC eat-PST-QUE 'John ate the food that who cooked?'
 - b. John-un [NP [CP Mimi-ka encey yoriha-n] umsik-ul] mek-ess-ni?

 John-TOP Mimi-NOM when cook-REL food-ACC eat-PST-QUE

 'John ate the food that Mimi cooked when?'
 - c. John-un [NP [CP Mimi-ka eti-se yoriha-n] umsik-ul] mek-ess-ni? John-TOP Mimi-NOM where-LOC cook-REL food-ACC eat-PST-QUE 'John ate the food that Mimi cooked where?'
- All the island-insensitive wh-phrases presented above are known as being base-generated below CP

Summary

Table 1: Correlation between the island (in)sensitivity and base positions of (non-)standard wh-items

| | wh-items | categories | island (in)sensitivity | base positions |
|--------------|---------------------------|------------|------------------------|------------------|
| | mwe/mwues 'what' | NP | insensitive | below CP |
| | nwukwu 'who' | NP | insensitive | below CP |
| | ettehkey 'how' | AdvP | insensitive | below CP |
| standard | encey 'when' | NP/PP | insensitive | below CP |
| | eti 'where' | NP/PP | insensitive | below CP |
| | mwes-ulo 'what-with' | NP/PP | insensitive | below CP |
| | way 'why' | AdvP | sensitive | in the CP domain |
| non-standard | mwe-l ^w 'what' | NP | sensitive | in the CP domain |
| | ettehkeyw 'how' | AdvP | sensitive | in the CP domain |
| | mwes-ulow 'what-with' | AdvP | sensitive | in the CP domain |

• A *wh*-phrase, base-generated below CP, is island-insensitive, whereas a *wh*-phrase, base-generated in Spec-CP, is island-sensitive, regardless of whether the given *wh*-phrase is a *wh*-nominal (e.g. *mwe-l^w*) or a *wh*-adverb (e.g. *ettehkey*), a standard or a non-standard *wh*-phrase.

In other wh-in-situ languages

• Our preliminary literature review reveals that the proposed correlation between island (in)sensitivity and base positions may also hold for Chinese and Japanese.

Table 2: Correlation between island (in)sensitivity and base positions of wh-in-situ in other languages

| lg. | wh-items | island (in)sensitivity | base positions | references |
|----------|---|------------------------|------------------|---|
| Chinese | reason weishenme 'why' | sensitive | in the CP domain | Lin 1992, Ko 2005, Tsai 2008, Stepanov & Tsai 2008 |
| | purpose wei(-le) shenme 'for what' | insensitive | below CP | Stepanov & Tsai 2008 |
| | causal zenme 'how' | sensitive | in the CP domain | Tsai 2008 |
| | manner zenme 'how' | insensitive | below CP | Jin 2016, Murphy 2017 |
| | zenmeyang 'how' | insensitive | below CP | Lin 1992, Murphy 2017 |
| | other whs (e.g. 'who', 'what', 'when', 'where') | insensitive | below CP | |
| Japanese | naze 'why' | sensitive | in the CP domain | Ko 2005, Ochi 2015 |
| | donna riyuu-des 'for what reason' | insensitive | below CP | Ко 2005 |
| | doo (yatte) 'how' | insensitive | below CP | Nishigauchi 1990 |
| | other whs (e.g. 'who', 'what', 'when', 'where') | insensitive | below CP | |

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Concluding remarks

- The NAG is not sufficient to explain the island behaviors of (non-)standard in-situ *wh*-phrases in Korean.
- The island (in)sensitivity of (non-)standard in-situ wh-phrases closely correlates with base positions: specifically, an in-situ wh-phrase is island-sensitive iff it originates in the CP domain (Spec-CP) (possibly, IntP in a split-CP system).
- Further work ②: we don't yet have an account of why and how the island (in)sensitivity of (non-)standard in-situ *wh*-phrases correlates with their base positions (i.e. Spec-CP vs. below CP).

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References

- Beck, Sigrid, and Shin-Sook Kim. 1997. On wh-and operator scope in Korean. Journal of East Asian Linguistics 6(4): 339-384.
- Beck, Sigrid. 2006. Intervention effects follow from focus interpretation. Natural Language Semantics 14(1): 1-56.
- Fujii, Tomohiro, Kensuke Takita, Barry Chung-Yu Yang, and Wei-Tien Dylan Tsai. 2014.
 Comparative remarks on wh-adverbials in situ in Japanese and Chinese. Japanese Syntax in Comparative Perspective: 181-205.
- Huang, C.-T. James. 1982a. Logical Relations in Chinese and the Theory of Grammar. Doctoral dissertation, MIT. Cambridge, MA.
- Huang, C.-T. James. 1982b. Move wh in a language without wh-movement. Linguistic Review 1(4): 369-416
- Jin, Dawei. 2016. The Semantics-Pragmatics Interface and Island Constraints in Chinese. PhD thesis, University of Buffalo.
- Ko, Heejeong. 2005. Syntax of why-in-situ: Merge into [Spec, CP] in the overt syntax. Natural Language & Linguistic Theory 23(4):867-916. DOI: https://doi.org/10.1007/s11049-004-5923-3
- Ko, Heejeong. 2006. On the structural height of reason wh-adverbials: Acquisition and consequences.
 In N. C. Lisa Lai-Shen Cheng & Norbert Corver (eds.), Wh-Movement: Moving on: 319-349. MIT Press. Cambridge, MA.
- Lin, Jo Wang. 1992. The syntax of *zenmeyang* 'how' and *weishenme* 'why' in Mandarin Chinese.

 Journal of East Asian Linguistics 1: 293-331.

References (Cont'd)

- Murphy, Andrew. 2017. Toward a unified theory of wh-in-situ and islands. Journal of East Asian Linguistics 26(2): 189-231.
- Nishigauchi, Taisuke. 1990. Quantification in the Theory of Grammar. Dordrecht: Kluwer.
- Ochi, Masao. 2015. Wh-adjuncts, left periphery, and wh-in-situ. In Chinese syntax in a cross-linguistic perspective, 401–428. New York: Oxford University Press.
- Rizzi, Luigi. 1990. Relativized Minimality, MIT Press. Cambridge, MA.
- Rizzi, Luigi. 2001. On the position of 'Int(errogative)' in the left periphery of the clause. In Guglielmo Cinque and Giampaolo Salvi (eds.) Current Studies in Italian Syntax: 267-296. Amsterdam: Elsevier.
- Shlonsky, Ur and Gabriela Soare. 2011. Where's 'why'? Linguistic Inquiry 42: 651-669.
- Stepanov, Arthur, and Wei-Tien Dylan Tsai. 2008. Cartography and licensing of wh-adjuncts: a cross-linguistic perspective. Natural Language & Linguistic Theory 26(3): 589-638.
- Tsai, Wei-Tien Dylan. 1994a. On economizing the theory of A-bar dependencies. Doctoral dissertation, MIT. Cambridge, MA.
- Tsai, Wei-Tien Dylan. 1994b. On nominal islands and LF extraction in Chinese. Natural Language and Linguistic Theory 12: 121-175.
- Tsai, Wei-Tien Dylan. 1999. The hows of why and the whys of how. In Francesca Del Gobbo and Hidehito Hoshi (eds.), UCI Working Papers in Linguistics, Vol. 5: 155-184. University of California, Irvine.
- Tsai, Wei-Tien Dylan. 2008. Left periphery and how-why alternations. Journal of East Asian Linguist 17(2): 83-115. DOI 10.1007/s10831-008-9021-0