Workshop "Ellipsis and Head Movement at the Syntax-Semantics-Pragmatics Crossroad: Japanese and Beyond". LSJ168 @ ICU, Tokyo, Japan. June 30, 2024

Argument Ellipsis, Pragmatic Enrichment and Head Movement: Why is Japanese So Special?*

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1. Introduction

✧ Oku (1998:172): "…it is hard (or impossible, for some speakers) to get the interpretation in which the adverb is understood in the elliptic object."

(1) a. Bill-wa kuruma-o teineini aratta.
Bill-TOP car-ACC carefully washed
'Bill washed the car carefully.'
b. John-wa *e* arawanakatta.
John-TOP wash.NEG.PST
'lit. John did not wash.' (Oku 1998:171)

✧ Funakoshi (2016:118): "In fact, not a few Japanese speakers, including the author, accept the null adjunct reading. … It is not impossible, at least for some speakers, to get the null adjunct reading in (1)." (see also Takahashi 2008, Abe 2013, Tanaka 2023 and Kobayashi et al. 2024).

(2) Bill-wa kuruma-o teineini aratta-kedo, John-wa *e* arawanakatta.
Bill-TOP car-ACC carefully washed-but John-TOP wash.NEG.PST
'lit. Bill washed the car carefully, but John did not wash.' (Funakoshi 2016:119)

A new trend in the latest ellipsis research → pragmatic enrichment, question-under-discussion, adjunct ellipsis

(3) A: Was John present at the ball?
B: Yes, he danced all night. (Recanati 2010:85)

(4) ∃e∃t [PAST(t)∧TIME(t.e)∧Dancing(e)∧AGENT(John, e)∧ALL-NIGHT(e)∧LOCATION(the-ball, e)]
(Recanati 2010:92)

✧ The **pragmatic enrichment** approach to the Adjunct-Inclusive (AI) reading has been gaining wide currency in the literature on ellipsis over the last five years or so (Ahn and Cho 2021; Landau 2020, 2023; Park 2023, Tanabe and Kobayashi 2024, Kobayashi et al. 2024; see also Collins 2015 for "adjunct ellipsis" in English).

The major take-away from my talk today: The AI reading has its roots in syntax, not in pragmatics!

(5) " … General processes of pragmatic enrichment can be assumed to be **equally available to speakers of all languages and are not parametrizable (emphasis: YS)** in the way that specific syntactic phenomena such as verb movement may be." (Simpson 2023:446)

● The availability of the AI reading in an argument ellipsis language has a solid grounding in syntactic ellipsis tools that it has at its disposal. **If a language has both AE and VP-ellipsis, then the AI reading is uniformly blocked under argument ellipsis and is only allowed under VPE**.

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● Importantly, Japanese exhibits considerable interspeaker variation with respect to the AI reading in null object sentences (Kobayashi et al. 2024). **Given the cross-linguistically stable division of labor between AE and VPE, this variability is explained if VP-ellipsis is available to some Japanese speakers, but not others**.

● This result suggests that **there is a population split among Japanese speakers concerning grammatical accessibility of verb raising**, a likely scenario given that there is no clear cue directing them to one setting of the head movement parameter over the other in this language (Han et al. 2007, 2016; Sato 2023; Sato and Oda 2024).

Roadmap of my talk today

§2: argument ellipsis and the AI reading: A cross-linguistic landscape
§3: Argument ellipsis and the AI reading in Japanese (and Korean)
§4: conclusion

2. Argument Ellipsis and the AI Reading: A Cross-Linguistic Landscape

(6) Mandarin Chinese
a. Wo jian-guo ta san-ci; tamen ye jian-guo (tamen zhi jian-guo yi-ci).
I see-ASP him three-time they also see-ASP they only see-ASP one-time
'I have seen him three times; they have seen him, too. (They only saw once.)' [* AI reading]
b. Wo yao tanwang ta san-ci; tamen ye yao.
I will visit him three-time they also will
'I will visit him three times; they will, too.' [OK AI reading] (Aoun and Li 2008:253, 255)

(7) Colloquial Singapore English/Singlish
a. John can solve that syntax problem quickly.
b. … but Mary cannot solve leh! # She can do it slowly, though. [* AI reading]
c. … but Mary cannot leh! She can do it slowly, though. [OK AI reading]
((7a, b) from Sato 2014:372; (7c) from Qizhong Chang, pers.comm.)

(8) Javanese
a. Esti njawab soal matematika-ne cepet-cepet.
Esti solve problem mathematics-DEM quickly
'Esti solved that mathematics problem quickly.'
b. Tapi Budi ora njawab. # Budi njawab lindik meni.
but Budi NEG solve Budi solve slowly very
'… but Budi did not solve. Budi solved very slowly.' [* AI reading]
c. Tapi Budi ora isso. Budi njawab lindik meni.
but Budi NEG can Budi solve slowly very
'… but Budi couldn't. Budi solved very slowly.' [OK AI reading]
(adopted from Sato 2015:66 with modifications; Dwi Hesti Yuliani, pers.comm.)

(9) Persian
a. Kimea mâshin-esh-o bâ deghghat shost, va Arezu xoshk kard.
Kimea car-her-RÂ with precision washed.3SG and Arezu dried did.3SG
'Kimea washed her car carefully, and Arezu dried.' [* AI reading]
b. Kimea mâshin-ro bâ deghghat shost, Arezu ham laminator.
Kimea car-RÂ with precision washed.3SG Arezu also this.way
'Kimea washed the car carefully, Arezu did so, too.' [OK AI reading]
((9a) from Sato and Karimi 2016:5; (9b) from Simin Karimi, pers.comm.)

(10) Hindi

Amit-ne	dheere-dheere	ek	vritt	banaya.	Gita-ne	bhi	banaya.
Ami-ERG	slowly	one	circle	draw-PRES.MASC.SG	Gita-ERG	also	draw-PRES.MASC.SG

'Ami drew a circle slowly. Gita also drew.' [OK AI reading] (Simpson et al. 2013:110)

→ An adjunct can be interpreted as present only when all other VP-internal materials are also elided, indicating that VP-ellipsis is involved in (10) (see also Funakoshi 2016 for the same observation/analysis in Japanese).

(11) Hindi

a. Ram-ne Chomsky-ka naya lekh do baar paha.
Ram-ERG Chomsky-GEN new writing two time read-PST.MASC.SG
'Ram read the new paper by Chomsky twice.'

b. Raj-ne-bhi parha.
Raj-ERG-also read-PST.MASC.SG
'Raj also read.' [OK AI reading]

c. Raj-ne-bhi vo lekh parha.
Raj-ERG-also that writing read-PST.MASC.SG
'Raj also read that writing.' [* AI reading]

(Simpson et al. 2013:112)

Observations:

◆ When a language has both AE and VPE as its syntactic ellipsis toolkit, there is a trade-off between these two operations such that the latter must apply to yield the AI reading. **AE doesn't yield this reading**.

◆ Now, if the AI reading were derived through pragmatic enrichment, which seems to be universally available to all languages, then the trade-off relationship noted above would remain mysterious. **All AE languages should allow the AI reading in null object sentences, contrary to facts!**

3. Why is Japanese So Special then? Head Movement in the Two-Grammar Competition Model

3.1. *Interspeaker Variation on the AI Reading in Null Object Sentences in Japanese*

Kobayashi et al. (2024): The AI reading in a null object example in Japanese is available depending on what QUD and implicit prosody one has in mind to parse/read it. More specifically, the AI reading is facilitated by verum focus but inhibited by predicate focus of negation.

(12) Taroo-wa kuruma-o teineini aratta-kedo, Hanako-wa arawanakatta.
Taro-TOP car-ACC carefully washed-but Hanako-TOP wash.NEG.PST
'Taro washed the car carefully, but Hanako didn't wash.'

(13) a. Hanako-wa ARAwa-nakat-ta.
(no prosodic boundary between subject and verb → **verum focus**)

b. Hanako-wa / ARAWA-NAkat-ta.
(prosodic boundary between subject and verb → **predicate focus of negation**)

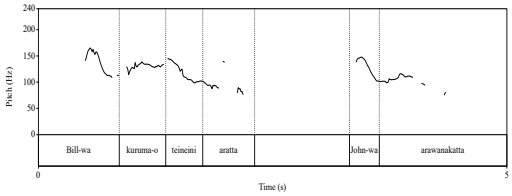


Figure 1: F_0-pitch contour of Sound Stimulus 1

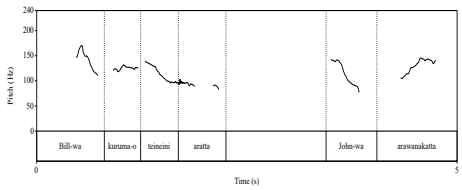
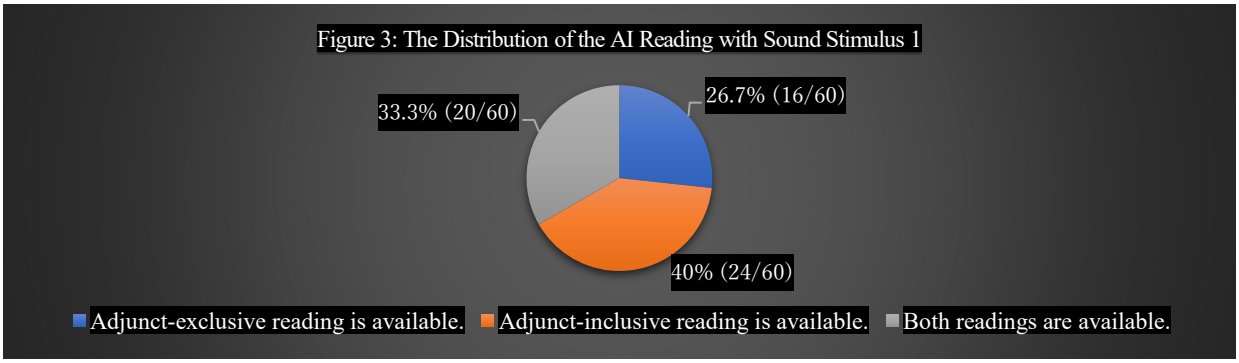
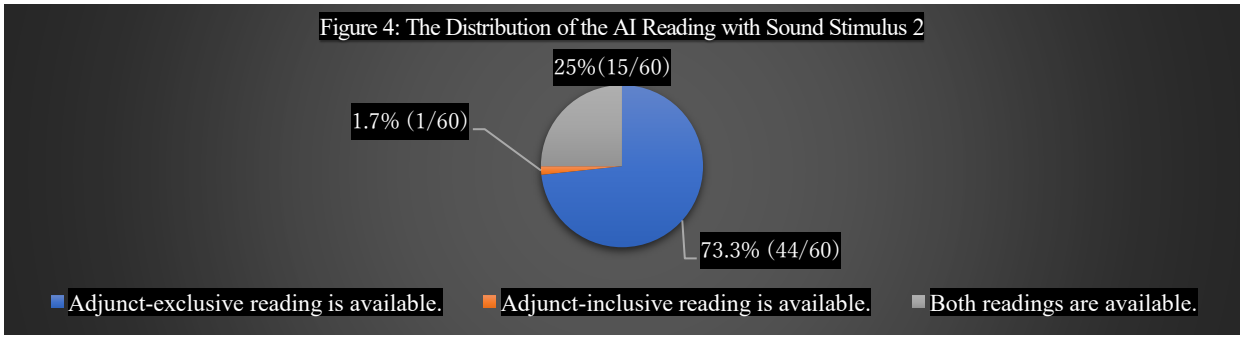


Figure 2: F_0-pitch contour of Sound Stimulus 2

(Kobayashi et al. 2024:9,10)





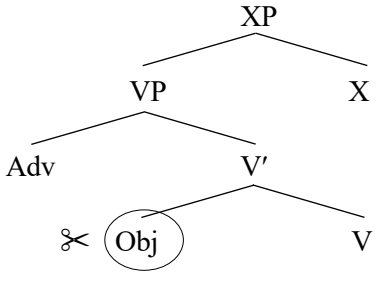
✧ In the verum focus condition, 16/60 speakers rejected the AI reading but 44 speakers accepted it. As long as the premise holds that the AI reading is derived not through AE but VPE, this interspeaker variation implies that **a population split arises in synchronic Japanese grammar regarding the generation of null object sentences**.

✧ This conjecture is reasonable, for Japanese speakers cannot really ascertain whether Japanese has string-vacuous verb movement based on incoming PLD alone. **There is a 'poverty-of-stimulus' argument here indicating that they failed to learn Japanese grammar, for there is no available learning cue that sets the HM parameter either way in a deterministic manner**, unlike structure-dependence, a principle probably at work in all languages (Han et al. 2007; Roeper 1999; Yang 2002; Sato 2023; Sato and Oda 2024).

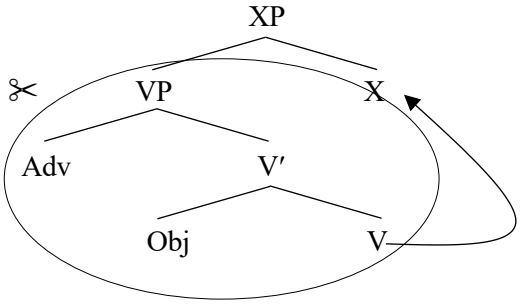
[Note that VPE does not necessarily yield the AI reading: see (14a, b). It is consistent with the lack of the AI reading. Thus, it is **the availability of the AI reading** that cannot be accounted for through the AE approach.]

(14) English
a. Alan had chopped up the garlic carefully. Heather had as well.
b. Hiro imitated shellfish with great accuracy. Leila did, too. (Goldberg 2005:89, 90)

(15) **Grammar A: No Head Movement→no AI**



(16) **Grammar B: Head Movement→no AI or AI**



3.2 *Interspeaker Variation on the AI Reading in Null Object Sentences in Korean*

✧ The idea of population split and competing grammar was first developed for Korean (Han et al. 2007). The vast majority of Korean researchers report that **the AI reading is unavailable under AE** (Park 1997; Lee 2016; Ahn and Cho 2021; Park and Park 2018; Han et al. 2020, among others).

(17) Korean

John-i	cemsim-ul	ppalli	mek-ess-ko	Mary-to	mek-ess-e.
John-NOM	lunch-ACC	quickly	eat-PST-CONJ	Mary-also	eat-PST-DECL

'John ate lunch quickly and Mary also ate.' [* AI reading] (Park and Park 2018:121)

✧ However, there is a number of works pointing out that **the AI reading IS available under AE** (Kim 2012; Park 2023). For example, compare (17) and (18), a near minimal pair that can be taken to exhibit interspeaker variation. Indeed, 8 out of 41 Korean native speakers reported that they can get the reading in (18).[1]

(18) Korean

Chelswu-ka	sakwa-lul	ppalli	mek-ess-e-yo.	Yenghuy-to	mek-ess-e-yo.
Chelswu-NOM	apple-ACC	quickly	eat-PST-DECL-POL	Yenghuy-also	eat-PST-DECL-POL

'Chelswu ate apples quickly. Yenghuy ate, too.' [OK AI reading] (Kim 2012:53, 54)

(19) Korean

John-un	kkomkkomhi	cha-lul	takk-ass-ta.	Mary-to	cha-lul	takk-ass-ta.
John-TOP	carefully	car-ACC	wash-PST-DECL	Mary-also	car-ACC	wash-PST-DECL

'John washed a car carefully. Mary also washed a car.' [OK AI reading] (Park 2023:167)

(20) Han et al. (2020:336) "A question remains: namely, why the null adjunct reading becomes available to some speakers in similarly constructed null object sentences in Japanese, as reported by Funakoshi (2016), unlike in Korean … While we must leave this question for future research, one possibility is that **potential differences in the position of the verb in the clause structure in the two languages play a major role in whether the verb-stranding VP-ellipsis analysis is available.**"

4. Conclusion

- There is a growing body of literature arguing for the general approach to the adjunct-inclusive reading in elliptic contexts in terms of pragmatic enrichment and QUD. General processes of contextual enrichment, by assumption, are universally available to speakers with different languages/syntax.

- However, AE languages seem to prohibit the AI reading through AE quite systematically. The reading instead is syntactically derived through VPE. Therefore, whether a language allows the AI reading or not has a solid ground in the underlyingly available ellipsis process permitted in the language.

- Japanese (and possible Korean) is special in that there is a population split with respect to the grammatical accessibility of head movement, a case of grammatical indeterminacy which ends up yielding interspeaker variation concerning the AI reading and probably beyond.

"The test of a first-rate intelligence is the ability to hold two opposed ideas in mind at the same time and still retain the ability to function." (F. Scott Fitzgerald, *The Crack-Up*)

[1] Thanks to Dongwoo Park (pers. comm) for sharing this information with me and to Mike Barrie (pers. comm) and Myung-Kwan Park (pers. comm) for drawing my attention to the Korean literature. Is there any prosodic/QUD influence on this reading in Korean null object sentences as reported by Kobayashi et al. (2024) for Japanese? An interesting question for another occasion!

References

Abe, Jun. 2013. Why not VP-ellipsis analysis for Japanese null arguments? Paper presented at the 31st Annual Meeting of English Linguistic Society of Japan, Fukuoka University, Fukuoka, Japan.

Ahn, Hee-Don, and Sungeun Cho. 2021. On the distribution of missing arguments and adjuncts under the pro approach. *Language Research* 57: 111–142.

Aoun, Joseph and Audrey Li Y.-H. 2008. Ellipsis and missing objects. *Foundational issues in linguistic theory: Essays in honor of Jean-Roger Vergnaud*, ed. by Robert Freidin, Carlos P. Otero and Maria Luisa Zubizarreta, 251–273.

Collins, Chris. 2015. Relative clause deletion. *50 years later: Reflections on Chomsky's Aspects,* ed. by Ángel J. Gallego and Dennis Ott, 57–69. Cambridge, MA: MITWPL.

Funakoshi, Kenshi. 2016. Verb-stranding verb phrase ellipsis in Japanese. *Journal of East Asian Linguistics* 25:113–142.

Goldberg, Lotus. 2005. *Verb-stranding VP ellipsis: A cross-linguistic study*. Doctoral dissertation, McGill University.

Han, Chung-Hye, Jeffrey Lidz, and Jullien Musolino. 2007. V-raising and grammar competition in Korean: Evidence from negation and quantifier scope. *Linguistic Inquiry* 38:1–47.

Han, Chung-Hye, Jullien Musolino, and Jeffrey Lidz. 2016. Endogenous sources of variation in language acquisition. *Proceedings of the National Academy of Sciences of the United States of America,* 113: 942-947.

Han, Chung-Hye, Keyong-min, Keir Moulton, and Jeffrey Lidz. 2020. Null objects in Korean: Experimental evidence for the argument ellipsis analysis. *Linguistic Inquiry* 51: 319–340.

Kim, Jin-Sook. 2012. *Comprehension of elided phrases in Korean and English: VP-ellipsis, null object constructions, and one-substitution*. Doctoral dissertation, University of Hawai'i, Manoa.

Kobayashi, Ryoichiro, Tomoya Tanabe, and Yosuke Sato. 2024. The adjunct test in Japanese ellipsis at the prosody-information structure interface. Ms., Tokyo University of Agriculture, Hokkaido University and Tsuda University.

Landau, Idan. 2020. On the nonexistence of verb-stranding VP-ellipsis. *Linguistic Inquiry* 51: 341–365.

Landau, Idan. 2023. More doubts on V-stranding VP-ellipsis: Reply to Simpson. *Syntax* 26: 449–470.

Lee, Wooseung. 2016. Argument ellipsis vs. V-stranding VP ellipsis in Korean: Evidence from disjunction. *Linguistic Research* 33:1–20.

Oku, Satoshi. 1998. *A theory of selection and reconstruction in the minimalist perspective*. Doctoral dissertation, University of Connecticutt.

Park, Myung-Kwan. 1997. The syntax of VP ellipsis in Korean. *Language Research* 33:629–648.

Park, Dongwoo, and Myung-Kwan Park. 2018. A *pro-drop* analysis of verb-echo answers in Korean. *Language and Information* 22: 105–127.

Park, Jong Un. 2023. QUD, focus, and adjunct ellipsis. *The Linguistic Association of Korea Journal* 31:153–179.

Recanati, François. 2010. *Truth-conditional pragmatics*. Oxford: Oxford University Press.

Roeper, Thomas. 1999. Universal bilingualism. *Bilingualism: Language and cognition* 2:169–186.

Sato, Yosuke. 2014. Argument ellipsis in Colloquial Singapore English and the anti-agreement hypothesis. *Journal of Linguistics* 50: 365–401.

Sato, Yosuke. 2015. Argument ellipsis in Javanese and voice agreement. *Studia Linguistica* 69: 58–85.

Sato, Yosuke. 2023. Endogenous computational variability: Toward a more inclusive generative paradigm. Ms., Tsuda University.

Sato, Yosuke and Simin Karimi. 2016. Subject-object asymmetries in Persian argument ellipsis and the anti-agreement theory. *Glossa* 1:1–31.

Sato, Yosuke, and Hiromune Oda. 2024. Interspeaker variation in particle stranding ellipsis in the two-grammar model for Japanese. Paper presented at the 42nd West Coast Conference on Formal Linguistics (WCCFL42). University of California, Berkeley, CA. USA. April 12.

Simpson, Andrew. 2023. In defense of verb-stranding VP ellipsis. *Syntax* 26:431–448.

Simpson, Simpson, Arumina Choudhury, and Mythili Menon. 2013. Argument ellipsis and the licensing of covert nominals in Bangla, Hindi and Malayalam. *Lingua* 134:103–128.

Takahashi, Daiko. 2008. Null arguments in transformational generative syntax. Handout for LING6530 at University of Connecticut, Storrs.

Tanabe, Tomoya, and Ryoichiro Kobayashi. 2024. Arguments against head-stranding ellipsis in Japanese: Reply to Funakoshi (2016). *Syntax*. [Early View]

Tanaka, Hidekazu. 2023. Against verb-stranding VP-ellipsis in Japanese: Reply to Funakoshi (2016). *Journal of East Asian Linguistics* 32:1–28.

Yang, Charles. 2002. *Knowledge and learning in natural language*. Oxford: Oxford University Press.