

The use of mimetics and gesture among speakers of Japanese as a second language

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Significance of mimetic words in Japanese as a second language (L2)

- ▶ The importance of mimetics in teaching/learning Japanese as L2 is recognized by L2 educators (e.g., Akimoto 2007, Makino & Tsutsui 1986):
 - ▶ (Mimetic words are an) integral part of adult spoken and written Japanese. Therefore, it is of vital importance that students of Japanese learn these sound symbolism as part of their ordinary vocabulary (Makino & Tsutsui 1986: 50).

L1 Learners

Iconicity and sound symbolism in L1 development

- ▶ 3-year olds learn the meanings of novel action words better when the words are sound-symbolic (Imai et al. 2008).
- ▶ Mimetics form the **basis** of infants' and toddlers' language production (Osaka 1999; Murasugi 2017).
 - ▶ Creative, innovative mimetic words, and then conventional, lexicalized mimetic words (Izumi 1978, Okubo 1967).
 - ▶ Sound mimetic words (phonomimes), and then other semantic/sensual domains (phenomimes) (Okubo 1967, Herlofsky 1998).

L2 learners?

Is learning Japanese mimetics **difficult**?

- ▶ Do sound symbolism and iconicity facilitate the learning of mimetic words in L2 learning?
 - ▶ There are numerous anecdotal reports that Japanese mimetic words pose challenges to L2 learners (e.g., Hamano 1998, Yamaguchi 2004)
 - ▶ English speakers were found to be capable of guessing some aspects of the meanings of Japanese mimetic words (Iwasaki et al. 2007a, b; Naito-Billen, 2013).
 - ▶ Dutch speakers could learn Japanese mimetics better when provided with their real meanings better (than with fake opposite meanings), showing that sound-symbolism facilitates the word learning (Lockwood et al. 2016).
 - ▶ Yet, understanding Japanese mimetics is indeed challenging even for advanced learners (Naito-Billen 2013; Nakaishi, Sakamoto & Sakai 2014).

L2 learners? Is learning mimetics **different** from learning other words?

- ▶ Mimetics are fundamentally different from other words in semantic properties (as well as phonological, morphological and syntactic properties).
- ▶ The semantics of mimetics belongs to **affecto-imagistic** dimensions (Kita 1997, 2002). Mimetics are almost always accompanied by gesture strokes (i.e. the meaningful phase of a gesture which tends to be most forcefully performed) (94% mimetics vs. 40% verbs in Kita's analysis) (but much lower rate in conversations in Siwu, Dingemanse 2013).
- ▶ L2 speakers' use of affective words (emotion words and colloquial words) are affected by variables such as extraversion (e.g. Dewaele & Pavlenko 2002).

L2 Japanese learner's use of mimetics and gesture: Longitudinal case study (Yoshioka 2017)

- ▶ Story retellings over the 4 years of language development by a single Dutch learner of Japanese ('Frog Story').
- ▶ Data in 3 stages: upper beginning (1/2 year), lower intermediate (1 year with a stay in Japan), mid/upper intermediate (4 years).
- ▶ The use of mimetics increases as the proficiency develops:
 - Stage 1 None
 - Stage 2 1 highly conventional mimetics (*bikkuri* 'be surprised')
 - Stage 3 7 (**5 phonomimes, 2 phenomimes**)
- ▶ Gesture frequency (absolute number) increases with proficiency.
- ▶ Gesture rate in 3 stages shows an inverted U curve.
- ▶ The skill to depict events iconically in speech (mimetics) and gesture is linked to the development of language proficiency.



L2 learners? Does L2 Japanese speakers' L1 affect their use of Japanese mimetics?

▶ L2 learners' L1 is known to affect L2 acquisition.

→ Comparing L1 English and L1 Korean speakers who learned Japanese as L2 might be revealing.

Korean: typologically similar to Japanese and it has a rich repertoire

English: typologically very different from Japanese and it has a limited set of sound-symbolic words

Japanese vs. Korean: Sound symbolism

- ▶ Some Japanese and Korean sound-symbolic words (e.g. animal & object noises) are similar. (Garrigues 1995; Shibasaki 2002) (though symbolic values of sounds differ in these languages),

Korean	Japanese	English translation
<i>ssuk-ssuk</i>	<i>suku-suku</i>	growing rapidly
<i>col-col</i>	<i>choro-choro</i>	flowing smoothly

- ▶ Yet, elicitation experiments utilizing the same stimuli for Japanese and Korean speakers showed more similarities than differences (Iwasaki et al. 2013).

Previous Study:

Comparing English & Korean speakers' use of Japanese mimetic words (Iwasaki 2008)

- ▶ Iwasaki (2008) examined KY Corpus of L2 Japanese (Oral Proficiency Interviews (OPIs)).
- ▶ 60 L2 speakers: 30 each LI language group (Novice 5, Intermediate 10, Advanced 10, and Superior 5)
- ▶ Korean speakers did not show any advantage in their frequency of use of mimetics.
 - ▶ 13 English speakers used mimetic words (I: 3, A: 6, S: 4)
 - ▶ 13 Korean speakers used mimetic words (I: 3, A: 7, S: 3)
 - ▶ **English speakers: 42 types and 53 tokens**
 - ▶ **Korean speakers: 28 types and 31 tokens**
- ▶ They rarely used sound mimetics unlike Japanese speaking children who first use phonomimes (but low proficient English speakers used a few).

Limitation of production studies

- ▶ Both topics and tasks in the OPIs vary between levels and between individuals (e.g., tasks required at the Advanced level, such as narratives, may elicit more mimetic words).
 - ▶ Yoshioka (2017) only examined a single learner.
- Eliciting the use of mimetics from a larger number of L2 Japanese speakers utilizing the same stimuli would be necessary to understand how L2 Japanese speakers use mimetics and gesture.

The current study

- ▶ The current study examines:
 - ▶ the use of mimetic words **and gesture**
 - ▶ **by** L2 Japanese speakers whose L1 is either English or Korean
 - ▶ for the description of **events for which L1 Japanese speakers were found to use mimetics**
- ▶ in order to examine:
 - ▶ L1 influence on L2 use of mimetics and
 - ▶ L2 speakers' use of mimetics and gesture
 - ▶ In relation to their proficiency levels

Research Questions and Predictions (1): **Frequency and Types of mimetics**

Given the stimuli that include **sound-emitting events**,

1. Do English and Korean speakers use phonomimes and phenomimes, and possibly to a similar degree?
2. Is the use of mimetics related to L2 speakers' proficiency?
 - ▶ Considering Iwasaki's (2008) and Yoshioka's (2017) findings, English speakers, who have lower proficiency in Japanese may use more phonomimes—because they are using mimetics without prior 'training' of when/how to use mimetics.

Predictions and Research Questions (2): **Mimetics and Gesture**

1. Does L2 speakers' L1 affect their use of gesture when speaking Japanese as L2?
 - ▶ Given the similarity between Japanese and Korean, Korean speakers may use gesture more similarly to the Japanese patterns (Kita 1997).
2. Do those who tend to use mimetics also use gesture?
3. Being L2 speakers, does their use of gesture differ from L1 Japanese speakers (e.g. Gullberg 1998, Yoshioka 2005)?
 - ▶ L2 Japanese speakers may use gesture as compensatory tool.
4. If L2 speakers use both phonomimes and phenomimes, how does the gesture for phonomime depicts the sound?

Methods: Stimuli used in data collection

- ▶ 4 video clips:
 - ▶ 2 40-sec Looney Tune cartoon clips ('Bowling', 'Seesaw')
 - ▶ 2 10-sec disaster clips (earthquake, hurricane)
- ▶ 19 pictures targeting mimetic words
 - ▶ 6 manners of laughing/smiling
 - ▶ 5 manners of walking
 - ▶ 4 pains
 - ▶ 4 emotions
- ▶ 20 audio files
 - ▶ Animals (5), object noises (10), water (2), laughter (2), slurp (1)

L1 Japanese speakers' mimetic use: Rolling down

- ▶ (*Neko jitai-ga sita-no bubun ga tama mitai ni natte*)

gorogoro gorogoto korogat-te it-te

MIM MIM roll-GER go-GER

“(The cat himself, his lower body turned ball-like, and) he continued to roll *gorogoro*”

Mimetics used:

gorogoro, (4), *korokoro* (3),
guruguru (2), *kurukuru*(1),
tekuteku (1), *goo* (2),
waaQ (2), *gaaQ*, *pyuu*,
byu, *baaQ*, *aaaa*, *oQtoQto*,



L1 Japanese speakers' mimetic use: Flying up

- ▶ *Omori-o* ***ban-tte*** *nokkete* ***pyuu-tte*** *agaru.*
weight-ACC bang-QUO put-GER whoosh-QUO rise-NONPAST

“(He) puts a heavy weight with a loud bang (on the plank) and jumps up swiftly through the air.”

Mimetics used:

pyu: (2), *pooN* (3),

baaN (2), *pyooN* (2),

byuu, *hyu*, *byuuN*,

buuN, *dooN*, *paN*



Earthquake

- ▶ *Tana-ga* **baaQ**te *kuzurete, ironna* *mono-ga kuzurete,*
shelf-NOM MIM QUO fall.down-GER various thing-NOM fell.down
oku-no-hoo de **yusayusa** *ironna mono-ga ugoite iru kanji de.*
back-toward LOC MIM various thing-NOM moving was feeling COP

‘A shelf fell down and various things fell down. In the back, it was like various things were moving **yusayusa**.’

- ▶ Mimetics used:
gatagata, baNbaN, gaa, bataN,
gasyaaN, uwaaQ,



Hurricane

- ▶ *Yashino ki-ga koo tatte, basaaQte nat-te,*
palm tree-NOM this.way standing MIM QUO become-GER

‘A palm tree was standing like this and it became **basaaQ**.’

- ▶ Mimetics used:

zaaQ, baaQ, waaQ, buwaaQ gaaQ

basabasa, hatahata,

byuoo, byuuN, pyuuQ



Methods: Participants and tasks

- ▶ 24 Korean speakers residing in Seoul
- ▶ 16 females, 8 males, average age 24.4 ranging from 19-29
- ▶ 14 English speakers residing in London (→ later one was excluded)
 - ▶ 7 females, 7 males, average age 21.5 ranging from 19-33
- ▶ 21 L1 Japanese speakers residing in Tokyo
 - ▶ 10 females, 11 males, average age 20.6 ranging from 18-23
- ▶ Tasks
 1. OPIs (Oral Proficiency Interviews),
 2. Describe 4 video clips both in their L1 and in L2 Japanese
 3. Produce mimetic words for 19 pictorial stimuli
 4. Produce mimetic words for 20 audio clips
 5. Interview on their views on mimetics.

Participants' proficiency

OPI Ratings	L1 Korean	L1 English
NH	1 (1)	–
IL	1 (1)	4
IM	6 (6)	5
IH	3 (2)	1
AL	2 (2)	1
AM	3 (2)	2
AH	3	–
Superior	1	–

For the **analysis of gesture**, a smaller set of participants' data (in parenthesis) were examined.

- The first author (certified OPI tester at the time of data collection) conducted OPI and sent the recording to Language Testing International (ACTFL) for official rating.

Methods: Procedure for video narratives

- ▶ Varied ordering of the video clips and language.
 - ▶ Two orders for clips
 - (1) Bowling, Earthquake, Seesaw, Hurricane
 - (2) See-saw, Hurricane, Bowling, Earthquake
 - ▶ Two orders for language
 - (a) L1, L1, L2, L2, L2, L2, L1, L1
 - (b) L2, L2, L1, L1, L1, L1, L2, L2
- e.g., The ordering (1) + (a)
 - Bowling (L1), earthquake (L1) followed by L2,
Seesaw (L2), hurricane (L2), followed by L1
- ▶ The participants were asked to narrate the scenes to native speakers who had not viewed the video clips.
- ▶ The native-speaker interlocutors were 24-26 years old.

Method of analyses: types of mimetics

- ▶ All narratives were transcribed
- ▶ The use of mimetics were identified and coded for the types in **all narratives**:
 - ▶ phonomimes,
 - ▶ Phenomimes,
 - ▶ Both: those that are used to refer to both manner and sound (manner that emits sound).
 - ▶ Interrater reliability was 95.1%.

Method of analyses: gesture

- ▶ The use of gesture stroke (iconic gesture) was identified for clauses containing mimetics and those that contain verbs in the descriptions of **3 events** (rolling, earthquake, and hurricane).
- ▶ The rates of gesture accompaniment (gesture stroke accompanying mimetic expression vs. verbs) (cf. Kita, 1997) were computed.
- ▶ Gesture accompanying phonomimes (vs. phenomimes) were qualitatively examined.

Results RQ1: Frequencies and types

English speakers' use of mimetics (Mean: 4)

	OPI	Token	Type	Phono	Pheno	Both
E01	IL	1	1			1
E07	IL	0	0			
E08	IL	0	0			
E12	IL	0	0			
E02	IM	2	1	2		
E04	IM	0	0			
E09	IM	9	6	2	4	3
E10	IM	6	6	4		2
E11	IM	5	3	4		1
E06	IH	6	2		6	
E03	AL	14	9	3	11	
E05	AM	7	6	2	2	3
E13	AM	2	2	2		
		52	36	19	23	10

Results RQ1: Frequencies and types Korean speakers' use of mimetics (1)

	OPI	Token	Type	Phono	Pheno	Both
K04	NH	(1)	(1)		(1)	
K07	IL	2	1		2	
K01	IM	4	2		4	
K02	IM	7	4		7	
K05	IM	3	2		3	
K08	IM	6	2		6	
K09	IM	2	2		2	
K10	IM	2	2		2	
K24	IM	8	3		7	1
K03	IH	7	5		7	
K06	IH	13	8		6	7
K23	IH	6	3			

Korean speakers' use of mimetics (2)

	OPI	Token	Type	Phono	Pheno	
K11	AL	4	3		4	
K13	AL	2	2		2	
K22	AL	5	2		5	
K12	AM	29	3		29	
K14	AM	9	5		9	
K16	AM	0	0			
K17	AM	2	2		2	
K18	AM	5	4	2	3	
K19	AH	1	1		1	
K20	AH	0	0			
K21	AH	4	3		4	
K15	S	0	0			
		121	59	2	105	8

Results RQ1: Frequencies and types

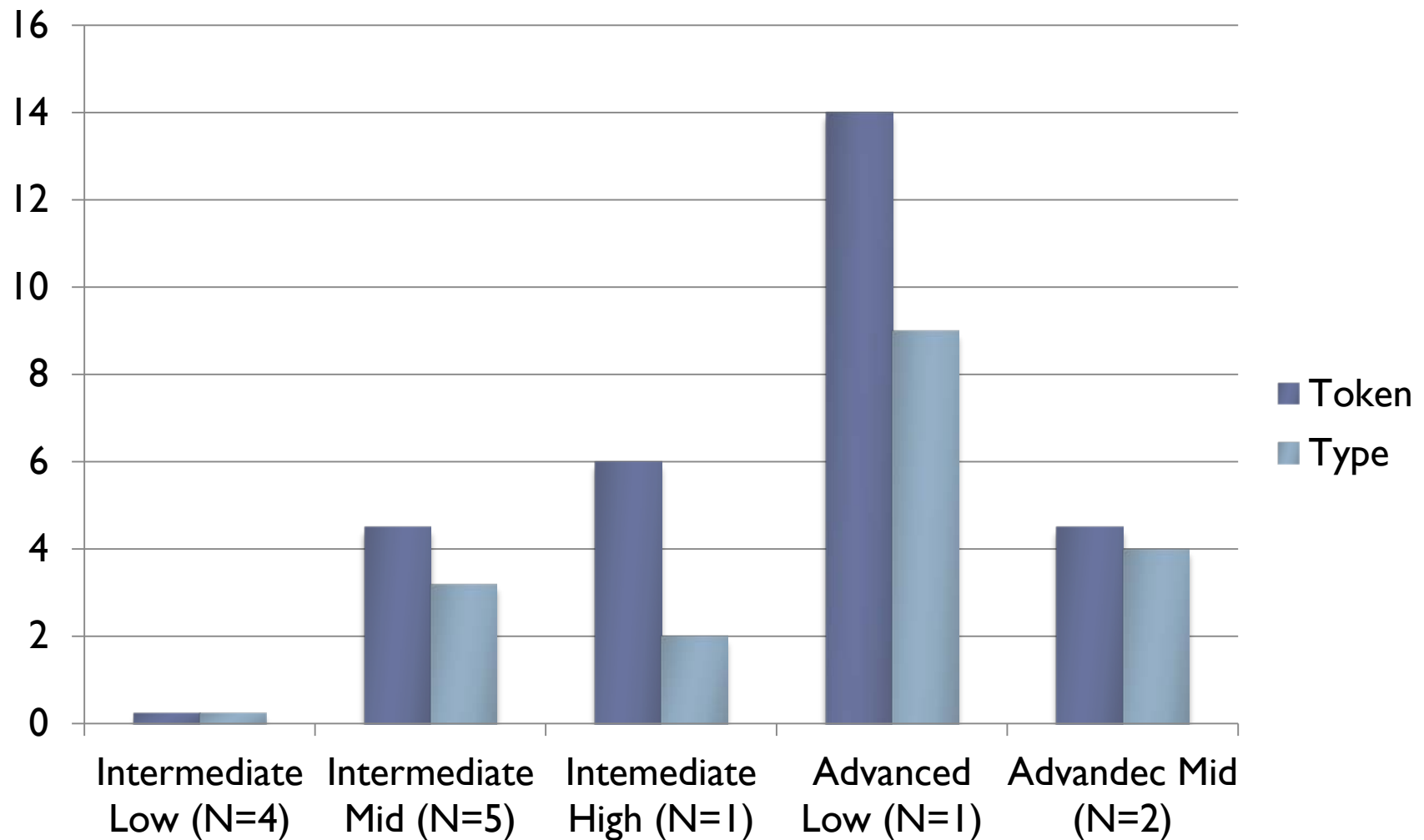
Korean speakers' use of mimetics (2) mean: 4

	OPI	Token	Type	Phono	Pheno	Both
K11	AL	4	3		4	
K13	AL	2	2		2	
K22	AL	5	2		5	
K14	AM	9	5		9	
K16	AM	0	0			
K17	AM	2	2		2	
K18	AM	5	4	2	3	
K19	AH	1	1		1	
K20	AH	0	0			
K21	AH	4	3		4	
K15	S	0	0			
		92	56	2	105	8

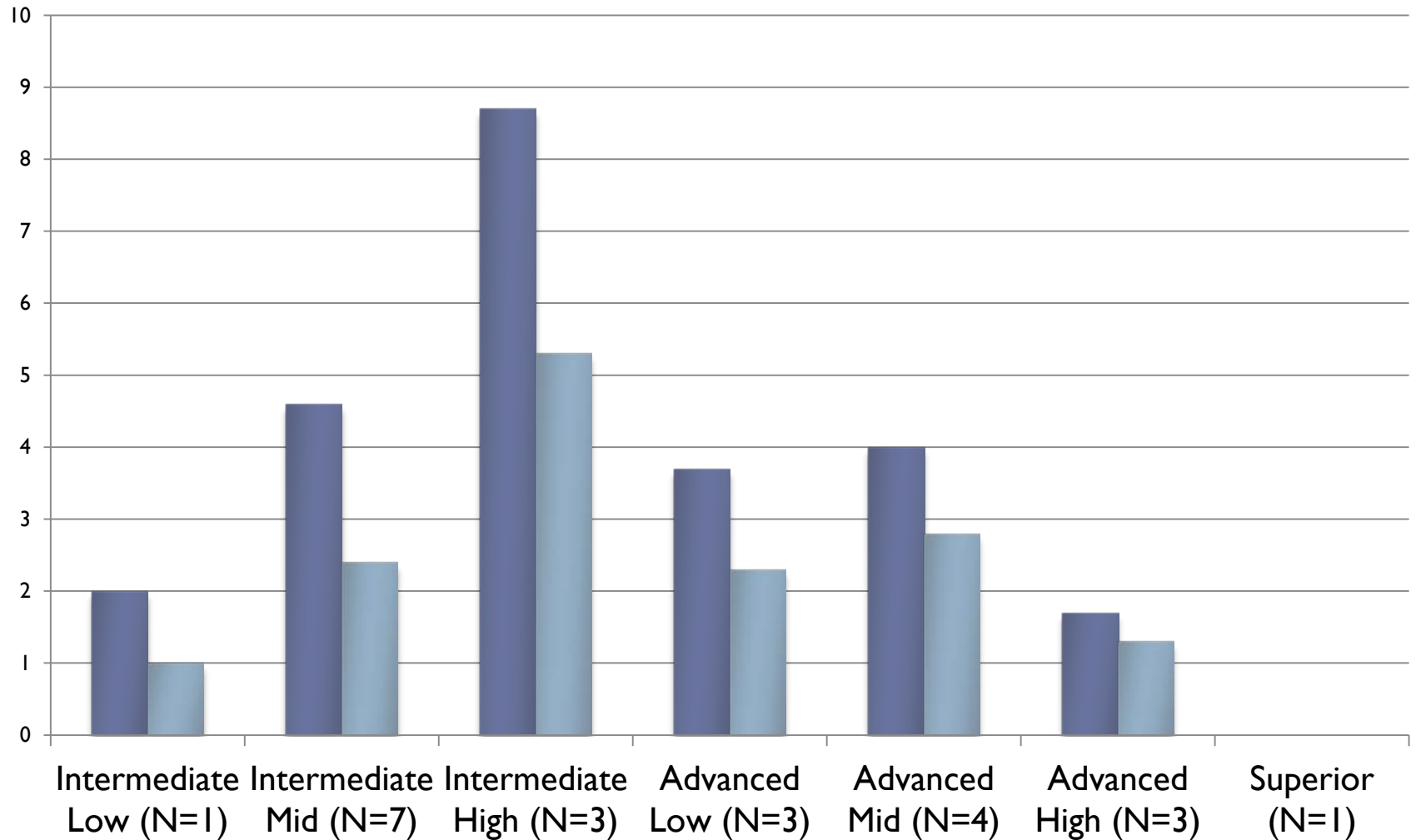
But English speakers needed more encouragement to elaborate

		phono	pheno	Both	Total	mean
English	First description	8	13	4	25	1.9
N=13	Elaboration	5	6	2	13	
	Further elaboration	6	4	4	14	
	Total	19	23	10	52	4
Korean	First description	2	55	8	65	2.8
N=23	Elaboration	0	15	0	15	
	Further elaboration	0	12	0	12	
	Total	2	83	8	92	4

RQ1: English speakers' use of mimetics by proficiency

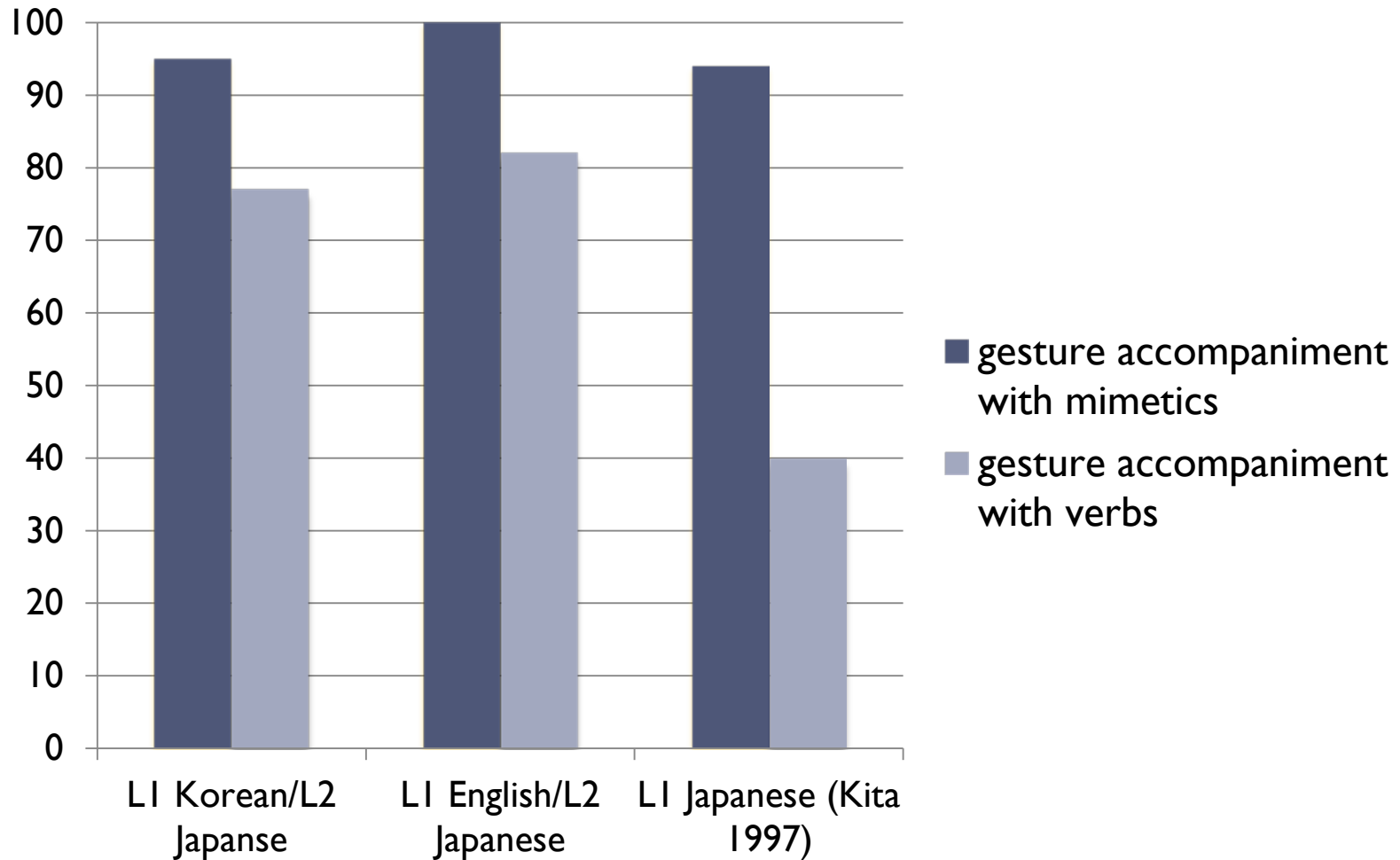


RQ1: Korean speakers' use of mimetics by proficiency

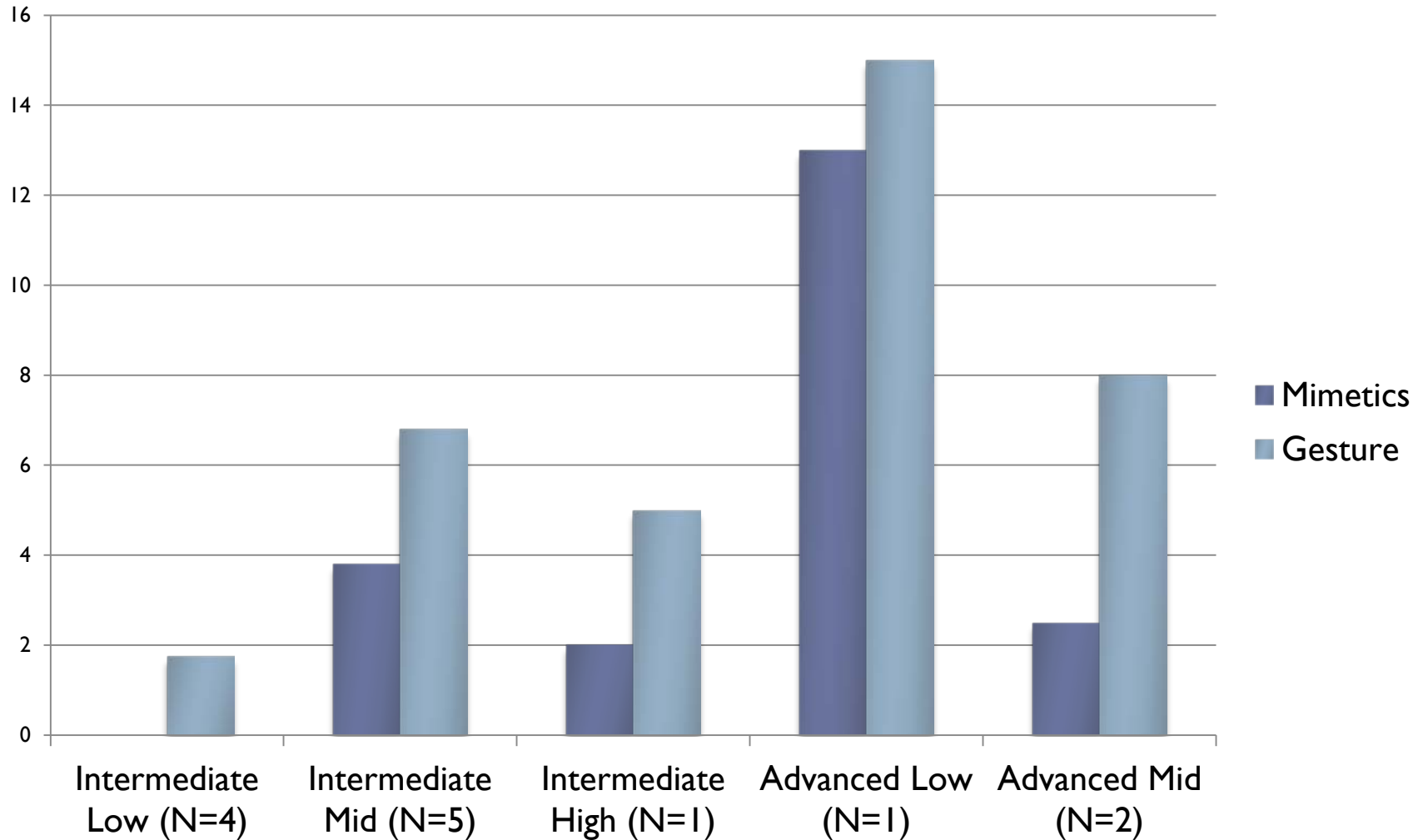


RQ 2(1)(2): **Gesture accompaniment**

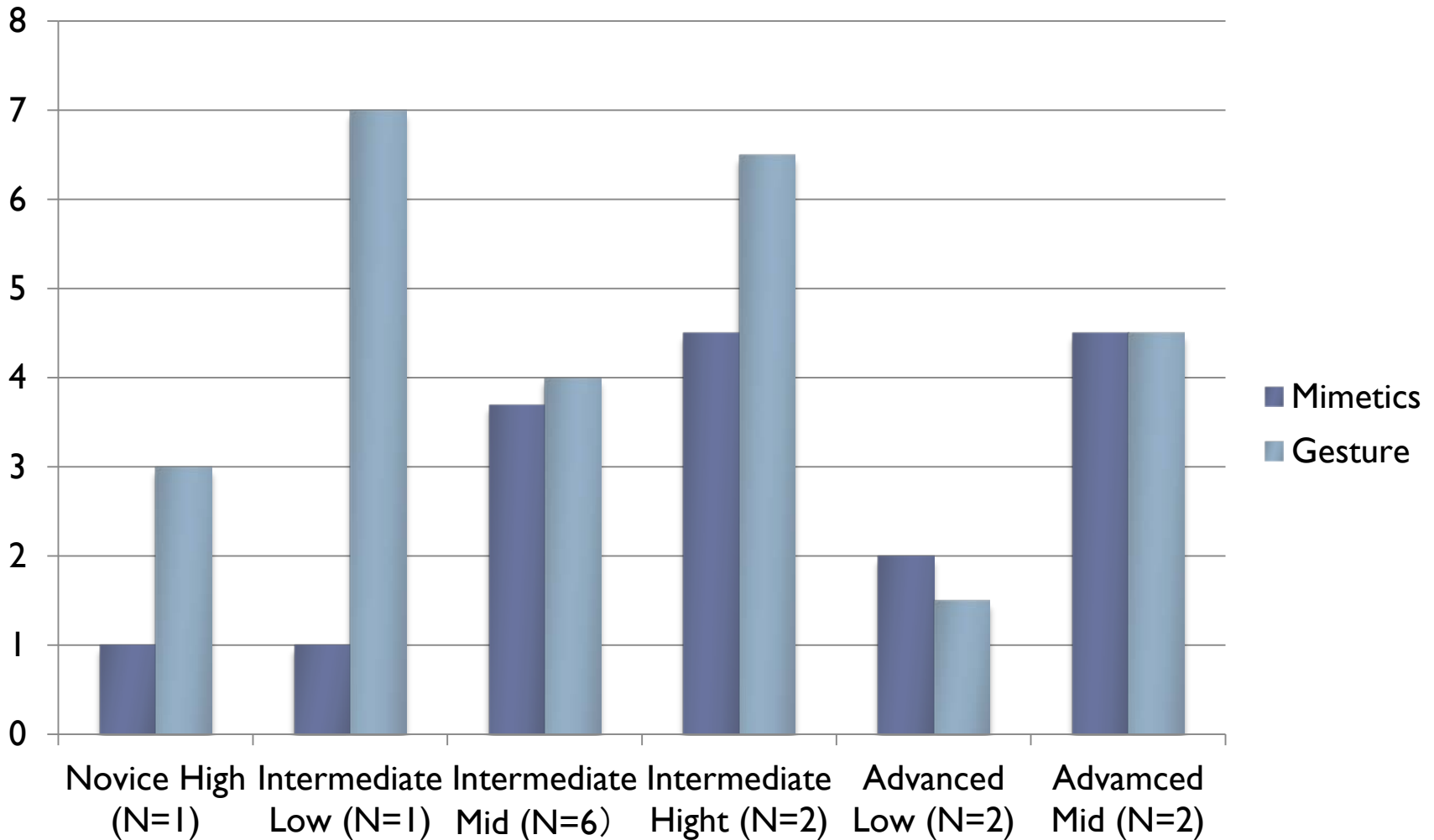
(stroke synchronizes with clauses containing mimetic expressions or verbs)



RQ2(1): Mimetics & Gesture by proficiency: L1 English



RQ2(1): Mimetics & Gesture by proficiency: L1 Korean



Q2(3): gesture accompanying phonomimes

- ▶ Phonomimes: L2 speakers describe the phenomenon/action that emit the sound (e.g., “rain falls *zaa zaa*”) or depict the image of the sound emitting (example below).

- ▶ Example:

De [neko-ga booringujo ni] [koroN shite] [doon]. Ijoo desu. [DooN][doon].
then cat-NOM bowling.alley to MIM do-GER MIM end COP.NONPAST MIM MIM
“Then the cat did koron (roll) and doon (hitting sound). That’s it. Doon doon”

Two handed symmetrical gesture moving away from the centre
gesture space: the use of eye-catching space

Summary of Results

▶ Frequency and Mimetic Types

- ▶ Korean speakers used more mimetics without requests for elaboration but the most proficient speakers rarely used mimetics.
- ▶ Korean speakers primarily used phenomimes, but English speakers used both phenomimes and phonemimes.
- ▶ Some of the lower proficiency English speakers only used phenomimes.

▶ Mimetics and gesture

- ▶ The gesture synchronised with mimetics most of the time - both among English speakers and Korean speakers.
- ▶ The L2 speakers' use of gesture and mimetics did not depend on their proficiency once they are Intermediate Mid or above. Individuals greatly differ in the use of mimetics and gesture.

Discussion & Conclusion

- ▶ Korean speakers with high Japanese proficiency did not use mimetics often. This may be due to their prior knowledge with regard to the subtlety of the use of mimetics in Korean: e.g. desire to use mimetics **accurately** (precise meanings) and **appropriately** (possibly only appropriate informal contexts).
- ▶ Lower proficiency English speakers' use of phonomimes is compatible with L1 children's development patterns.
- ▶ Regardless of L1, co-speech gesture accompany mimetics, suggesting possibly the salient feature of mimetics (reflecting affecto-imagistic representations).
- ▶ Like the use of other expressive or affective vocabulary, L2 use of mimetics does not really depend on their proficiency; instead it appears to be related to other factors (e.g. preference for expressivity)

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