Seeing, hearing, and feeling L2 sounds through metaphoric gestures

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https://doi.org/10.36505/TheLinguisticProceedings/2025/16/01/014/000674

Abstract

This paper presents an embodied approach to L2 pronunciation instruction using metaphoric gestures. Drawing on multimodal communication and embodied cognition, it argues that mapping physical actions onto abstract phonological concepts makes L2 sounds more accessible, tangible, and memorable. A pedagogical framework is introduced featuring thirteen metaphoric gestures designed to address segmental and suprasegmental challenges faced by Japanese EFL learners, such as /r/-/l/ distinction and English rhythm. These techniques foster visualization, self-monitoring, and multisensory engagement. Student feedback and high evaluations over seven years indicate the method's effectiveness and appeal. The paper concludes with cultural and pedagogical considerations and calls for further empirical research.

Keywords: pronunciation, metaphoric gesture, embodied cognition, Japanese EFL

Introduction and theoretical framework

Gesture studies have long established an intrinsic link between speech and gesture (McNeil 2005). Research in educational contexts suggests that animated teaching enhances engagement and effectiveness (Richmond 1996, 2002). In pronunciation pedagogy, kinesthetic or embodied approaches are not new (Acton 1984), but the systematic use of gestures as a core instructional strategy remains underexplored. This study introduces a structured framework of metaphoric gestures to address persistent perceptual and articulatory challenges, with a focus on Japanese EFL learners. Metaphoric gestures, which map physical actions onto abstract concepts (Cienki, Müller 2008), draw on theories of multimodal communication and research on embodied cognition (Glenberg, Kaschak 2002, Morett 2019). By engaging visual, auditory, and tactile modalities, such gestures can make pronunciation more accessible, tangible and memorable. This study demonstrates how these gestures can improve learners' accuracy and intelligibility while creating an engaging classroom environment.

Purpose and methodology

The purpose of the study is to demonstrate a practical framework for using metaphoric gestures to address persistent segmental and suprasegmental challenges for Japanese EFL learners. The techniques were developed and

refined over seven years in a 15-week undergraduate pronunciation course (N=40-60 per class). Each lesson dedicated 10-15 minutes to introducing one or two gestures, involving teacher modelling, chorus repetition, and individual practice. These gestures were then consistently integrated into subsequent lessons as "catchments" (McNeill 2005) for review and corrective feedback. Findings and reflections reported here are based on qualitative data from course evaluations and student feedback.

Gestural framework

The framework consists of 13 catchments designed to be reiterative and metaphoric. They target specific challenges, often leveraging cultural familiarity (e.g., the Japanese "*yubikiri*" for liaison) and providing contrast with L1 phonemes to prevent negative transfer. These techniques enhance visualization, self-monitoring, and retention by activating multiple senses simultaneously (Macedonia & von Kriegstein 2012).

Table 1: Summary of Selected Gesture Catchments

Catchment	Target Feature	Key Gesture Description
#1 Trapped Honeybee	Voiced fricative /z/	😬 Tense smile, feel throat vibration, avoid tongue contact.
#5 Angry Dog	Approximant /ɹ/	😠 Growl with rounded lips, tongue elevated but not touching.
#8 Returning Boomerang	Rhotic vowels (e.g., /ɪɚ/)	↩️ Arm extends for vowel, retracts for /ɹ/ sound.
#11 Knock, Knock	Word Stress & Rhythm	👊 Hard/slow knock on stressed syllables, soft/fast on unstressed.
#12 Pinky Swear (*yubikiri*)	Liaison	🤙 Hook pinkies to link words (e.g., "find‿out")

Detailed examples

Catchment #1: Trapped Honeybee (/z/)

Students imagine a bee buzzing in their mouth. They maintain a tense smile, focus on vocal cord vibration, and consciously avoid the tongue-tip contact that produces the affricate /ʣ/ (common in Japanese). Practice: *zip, zebra, prize*.

Catchment #5: Angry Dog (/ɹ/)

Students create a growling sound with rounded lips, keeping the tongue tip from touching the alveolar ridge. This contrasts explicitly with the Japanese flap /ɾ/, which involves a quick tap. Practice: *red, river, right*.

Catchment #11: Knock, Knock (Stress and Rhythm)

Students knock on a desk, varying force and speed to physically manifest English stress-timing (e.g., *PHO-to-graph* vs. *pho-TO-gra-phy*), contrasting it with Japanese mora-timing. Practice: *AC-ti-vate* vs. *ac-ti-VA-tion*, *NA-tio-nal* vs. *na-tio-NA-li-ty*.

Student feedback and conclusion

Course evaluations from 2018–2024 consistently showed high satisfaction, with mean scores of 4.4–4.9 (out of 5), surpassing university averages by 0.4–0.8 points. Student comments emphasized the clarity, memorability, and enjoyability of gestures—for example, the "Angry Dog" helping distinguish /ɾ/ from /ɹ/. While findings suggest strong engagement and perceived learning, they rely on qualitative feedback. Further empirical research with controlled testing is needed to measure pronunciation gains objectively and assess long-term, cross-linguistic applicability. Teachers must also consider cultural sensitivity, learner age, and proficiency, as gestures carry different meanings across contexts (Kita 2009, Tellier 2008). Gestures should complement rather than replace auditory and analytic instruction.

This study highlights the pedagogical potential of metaphoric gestures in making abstract phonological concepts more concrete and accessible, supporting awareness, monitoring, and retention in L2 pronunciation.

References

Acton, W. 1984. Changing fossilized pronunciation. TESOL Quarterly, 18(1), 71–85.

Cienki, A., Müller, C. 2008. Metaphor, gesture, and thought. In Gibbs, R. W. Jr. (ed.), The Cambridge Handbook of Metaphor and Thought, 483–501. New York, Cambridge University Press.

Glenberg, A.M., Kaschak, M.P. 2002. Grounding language in action. Psychonomic Bulletin & Review, 9(3), 558–565.

Kita, S. 2009. Cross-cultural variation of speech-accompanying gesture: A review. Language and Cognitive Processes, 24(2), 145–167.

Macedonia, M., von Kriegstein, K. 2012. Gestures enhance foreign language learning. Biolinguistics, 6(3–4), 393–416.

McNeill, D. 2005. Gesture and Thought. Chicago, University of Chicago Press.

Morett, L.M. 2019. When hands speak louder than words: The role of gesture in the communication, encoding, and recall of words in a novel second language. The Modern Language Journal, 103(3), 640–655.

Richmond, V.P. 1996. Nonverbal communication in the classroom. Acton, Tapestry Press.

Richmond, V.P. 2002. Socio-communicative style and orientation in instruction. In Chesebro, J.L., McCroskey, J.C. (eds.), Communication for Teachers, 104–115. Boston, Allyn and Bacon.

Tellier, M. 2008. The effect of gestures on second language memorisation by young children. Gesture, 8(2), 219-235.