USING ENGLISH-JAPANESE COGNATES TO ENHANCE PRONUNCIATION OF SEGMENTS, LONG VOWELS/CONSONANTS, PHONOTACTICS, PITCH ACCENT, AND PHONOLOGICAL PROCESSES IN JAPANESE AS AN ADDITIONAL LANGUAGE

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> Cognates are ideal in teaching second language (L2) pronunciation. Cognates may lower cognitive load, jolting L2 learners to become aware of and focus on the features and rules of Japanese pronunciation: mora timing (consonant/vowel length), special moras, pitch accent, phonotactics, phonological processes, and regional/social accents.

> Comparing English-Japanese cognates through early exposure provides the opportunity for L2 learners to discover pronunciation differences and patterns. For instance, [su-Ji] *sushi* demonstrates differing vowel quality and devoiced [u]. [sa-n-do-i-t-tJi] *sandwich* reveals Japanese mora-based phonotactics. [i-n-ta-a-ne-t-to] LHHH<u>H</u>LL *internet* shows that Japanese accent generally falls on antepenultimate moras in loanwords, not necessarily reflecting the original English stress. [ko-m-bi-ni] *convenience store* demonstrates the phonological process of place assimilation: phoneme [ŋ] becomes [m] ("original" Japanese [ko-ŋ-bi-ni]). This teaching tip uses cognates to help learners discover Japanese pronunciation features. Learners read/hear sample cognates, describe the features and then apply.

features. Learners read/hear sample cognates, describe the features and then apply them. Learners reinforce pronunciation through pronunciation-focused task-based activities scaffolded by exercises integrated into other language skill lessons.

INTRODUCTION

Cognates from English (i.e., loanwords) abound in Japanese. "In fact, loanwords have become such an indispensable part of today's Japanese vocabulary that we would find it extremely inconvenient, if not impossible, to carry on even a simple daily conversation if their use were totally forbidden." (Miura, 1979, p. 3). As such, learners of Japanese as an additional language (JAL) who have a certain level of proficiency in English potentially possess access to a large cache of instant vocabulary in Japanese from day one of learning Japanese. However, English-to-Japanese loanwords may be so filtered through Japanese phonology to be "phonologically warped" such that English speakers may not recognize the cognate. Nor might Japanese speakers understand JAL learners' attempts to pronounce the cognate as filtered through their first language (L1) phonological system (cf. phonological similarity of cognates speeds up word processing, e.g., comprehension and production, Allen & Conklin, 2013). Conversely, this perceptual opacity and articulatory distortion of Englishto-Japanese cognates can be harnessed to train JAL learners on the phonology of Japanese. Additionally, as cognates are conventionally written in katakana, one of two moraic scripts (mora is equal to or smaller than a syllable) in Japanese, cognates can be used early on to teach the katakana script. Moreover, cognates can be used to teach basic grammar, allowing learners to potentially focus more of their attention on grammatical structures and less on

 Schaefer, V., Hsu, C., & Zhang, A. (2024). Using English-Japanese Cognates to Enhance Pronunciation of Segments, Long Vowels/Consonants, Phonotactics, Pitch Accent, and Phonological Processes in Japanese as an Additional Language. In D. J. Olson, J. L. Sturm, O. Dmitrieva, & J. M. Levis (eds). *Proceedings of 14th Pronunciation in Second Language Learning and Teaching Conference*, (pp. 1-12) Purdue University, September 2023. https://doi.org/10.31274/psllt.17245 vocabulary. Consequently, this teaching tip advocates using cognates from day one of learning Japanese (or even other languages) to practice pronunciation or to possibly more effectively concentrate on other language skills when cognates are integrated into lessons. The following teaching tip supports instructors and learners of Japanese as an additional or second language in using cognates by discussing the following:

- 1) Features of Japanese cognates
- 2) Cognates in second language (L2) phonology
- 3) Pedagogical framework for using cognates to teach pronunciation and other language skills

COGNATES IN JAPANESE

Cognates or loanwords (*gairaigo*) exist in Japanese across many areas as can be seen in Table 1: food, technology, place names, and more.

Table 1

Sample of common cognates shared between English and Japanese

English-to-Japanese cognates

drive, get, computer, television, internet, donut(s), pizza, hamburger, ice cream, tomato, shake, juice, spaghetti, radio, microphone, camera, basketball, soccer, fork, spoon, glass, t-shirt, jeans, table, bag, banana, contacts, chocolate, coffee, apartment, supermarket, department store, hotel, restaurant, bar, building, elevator, shopping, makeup, business, diamond, air conditioning, kiss, type, rule, bargain, New York, London, and more

Japanese-to-English cognates

samurai, origami, bonsai, tsunami, ninja, anime, manga, ramen, sudoku, futon, teriyaki, emoji, wasabi, karate, judo, karaoke, sushi, tofu, matcha, edamame, zen, kimono, cosplay, Godzilla, tempura, sukosh, honcho, rickshaw, kudzu, tycoon, ginkgo, shiatsu, haiku, koi, sensei, sumo, sake, Tokyo, Kyoto, Hiroshima, sayonara, domo arigato (Mr. Roboto), kamikaze, hibachi, and more

English-Japanese cognates may differ phonologically, as noted in Table 2. They can differ by segments with [u] versus [u] as in *sushi* [su-ʃi] (hyphens separate moras). Cognates can vary by phonotactics where Japanese generally has a CV structure as witnessed in the word *sandwich* as [sa-n-do-i-t-t͡ʃi]. Cognates from English have also introduced new phonotactic possibilities into Japanese such as [ti] rather than [t͡ʃi] in [pa-a-ti-i] *party* as well as potentially new segments such as [v] in [va-a-dʒo-ŋ] versus normally [ba-a-dʒo-ŋ] *version*. Cognates may place accent on different syllables as in *internet* where the first syllable has the primary stress in English while the antepenultimate mora has the pitch accent in [i-n-ta-a-**ne**-t-to] (LHHH**H**LL where L = low pitch, H = high pitch, and bolded, underlined font indicates accent). Cognates may undergo phonological processes such as assimilation of [ŋ] to [m] because of the following [b] and shortening where *convenience store* becomes [ko-m-bi-ni] (from the "original" Japanese [ko-ŋ-bi-ni]) or shortening+combining as in [po-te-sa-ra] *potato salad or* [su-ma-ho] *smart phone*. Additionally, cognates my vary by dialect as in [ma-k-kul] or [ma-ku-do] for *McDonald's* or [te-re-bi] with HLL versus LHL pitch pattern for *television* where the first examples are Tokyo dialect and the second are Osaka dialect.

Table 2

Phonological area	Example		
Segments – segmental	sui-fi HL sushi		
inventory, devoicing			
Phonotactics $- CV(N)$,	sa-n-do-i-t-fji LHHHLL sandw	vich	
CV(Q), mora-based	Including new phonotactic p	ossibilities: <u>wi</u> -i-n <i>Vienna,</i> pa-a-	
	ti-i party, ba-h-ha Bach (under	lined, bolded)	
Suprasegmentals - pitch	i-n-t <u>a-a</u> -ne- <u>t-t</u> o (LHHHHLL) <i>internet</i>		
accent, segmental length			
Phonological processes	ko- <u>m</u> -bi-ni LHHH convenience store ("original" Japanese [ko-		
– nasal assimilation,	ŋ-bi-ni])		
pitch accent changes	po-te-sa-ra LHHH from po-te-to HLL and sa-ra-da HLL potato		
	salad		
Phonological variation	Kantoo (Tokyo area)	<u>Kansai (Osaka, Kyoto area)</u>	
	ma-k-kuu (HLL) McDonald's	ma-kui-do (LHL) McDonald's	
	te-re-bi (HLL) television	te-re-bi (LHL) television	
	se-bui-ŋ (HLL) Seven Eleven	se-bu-i-re (LHLL or LHHL)	
		Seven Eleven	

Cognates and pronunciation in Japanese

Note: CV(N) is a consonant + vowel + (nasal) while CV(Q) is a consonant + vowel + (first consonant of a double consonant).

Japanese speakers may also adapt English words which are likely not established cognates to Japanese phonology because they are speaking Japanese or wish to show modesty about their English proficiency among other possible reasons: [sa-ŋ-ku-su-gi-bi-ŋ-gu] *Thanksgiving* or [e-ru-e-i] *LA* (versus [ro-su] *LA*). Also, cognates may have different semantic nuances: [ra-i-su] as [ka-re-e-ra-i-su] *curry rice* or [o-mu-ra-i-su] *omelet rice* where the cognate for *rice* means *rice generally on a plate* while the native word *gohan* may more commonly signify *plain rice in a bowl*.

Additionally, cognates present an opportunity to practice sounds that present a challenge to JAL learners with English as their L1. These sounds include long segments (vowels, consonants), moraic nasals, palatalized sounds, devoiced sounds, and more as seen in Table 3.

Table 3

Special mora type	Example
Long vowels	to-o-fu LHH unaccented tofu
Long consonants (geminates)	ma-t-tfa LHH unaccented matcha (tea)
Moraic nasal	ma-ŋ-ga LHH unaccented manga (comics)
Palatalized sounds	kja-m-pa-sui HLLL <i>campus</i>
Devoiced vowels	su-ta-a-ba-k-ku-su LHHHLLL Starbucks

Note: Open circles indicate devoiced vowels.

Some of these sounds relate to the concept of special mora in Japanese. Japanese phonotactics is based on mora counting, where moras are timing units with equal duration. For example, a word like *Starbucks* consists of two syllables in English with primary stress on the first syllable while its Japanese counterpart consists of seven moras with pitch accent on the preantepenultimate mora, as shown in Table 4. Each syllable usually consists of a single mora, but additional, special moras create bimoraic syllables. These special moras are long vowels, long consonants, and moraic (syllable-final) nasals.

Table 4

Suprasegmentals – mora timing (vs stress timing)

Timing	Cognate	Length
Stress timing	Star.bucks	••
Mora timing	sụı-ta-a-ba-k-kụı-sụ	• • • <u>•</u> • • •

Note: Periods separate syllables while hyphens separate moras. Moras are the same length as syllables or shorter than syllables.

We might also note that there are some potential issues that may impact learning second language pronunciation of cognates in Japanese. Japanese has a few cognates which differ slightly in pronunciation: [su-to-ra-i-ki] *factory worker strike* versus [su-to-ra-i-ku] *baseball strike*, [ga-ra-su] *glass (material)* versus [gu-ra-su] *glass cup*, [ku-ra-bu] LHH *(night) club (once known as a disco)* versus [ku-ra-bu] HLL *club (for school activities)*, [konja-k-ku] *cognac* versus [ko-n-nja-ku] *konjac corm (considered similar to a yam)* versus [ko-n-ja-ku] *(marital) engagement*, or *no difference in pronunciation as in* [ba-su] *for bus* versus *bath* versus *bass (fish, e.g., blackbass)* versus *bass (music)*.

LEARNING COGNATES IN A SECOND LANGUAGE

Cognates are generally considered easier to learn than non-cognates and seem to be easier to learn as written words in the L1 than as pictures (Tonzar et al., 2009). One recent study by Marecka et al. (2021) inspires our use of cognates as a teaching technique for learning not only cognates as "instant vocabulary" but also Japanese pronunciation in the early stages of exposure. This study examined the influence of L1-L2 form overlap, form-meaning overlap, and/or interference in the learning of cognates, false cognates, and non-cognates. The study looked at the recognition (matching written L2 word to picture) and production (typing the L2 word to match a picture) by L2 learners (L1 Polish, L2 constructed language of target words only) after a word learning task consisting of training (display of L2 word and picture). recognition task, and production task. Results demonstrated that both L1-L2 form overlap and form-meaning overlap facilitate the learning of L2 cognates, suggesting that the L1 and L2 share representation of both word forms and meaning, i.e., lexical and semantic representations. Somewhat unexpectedly but fortunately for language learners, L1-L2 form overlap facilitates the learning of false cognates in contrast to research findings showing interference in bilingual word processing. [See overview of learning cognates and false cognates within various L2 word learning models in Marecka et al. (2021)].

However, Japanese-English cognates differ in at least one significant way from those in the study by Marecka et al. (2021). The orthography of Japanese and English are different unlike the use of the Roman alphabet for Polish and the target constructed language. However,

despite differing L1-L2 orthographies the learning of cognates is still generally easier than learning non-cognates (Allen & Conklin, 2013).

TEACHING GUIDELINES

Pronunciation is key to accessing cognates. In turn, cognates may be key to practicing pronunciation as they highlight to learners the phonological differences between Japanese and English pronunciation. Cognates can boost pronunciation awareness through both inductive and deductive learning. Using cognates potentially lowers cognitive load, enabling learners to focus on pronunciation. JAL learners can concentrate on segments not present in English: [u], [r] (hereafter [r]). They can work on suprasegmentals such as pitch accent and mora timing, including special moras, as well as segmental length (i.e., vowel and consonant length). They can adapt their pronunciation to the phonotactic system of Japanese which intersects with suprasegmentals, in particular mora timing. JAL learners can also work on phonological processes. Additionally, learners can notice and learn regional and social accents. Moreover, through pronunciation-focused task-based learning, cognates can be integrated into potentially learning other language skills more effectively.

JAL learners can also increase the number of words they know with "instant" vocabulary through recognizing cognates. Learners usually know, for example, semantic concepts but not the lexical form of targeted vocabulary while in the case of cognates they know both the semantic concept and to some extent the lexical form notwithstanding modifications (e.g., phonotactic repairs and sound substitution). For example, JAL learners know what a *strawberry shake* is but at first encounter might be taken aback by its pronunciation as [suto-ro-be-ri-i-fe-e-ku]. Cognates may help learners to move more quickly toward gaining the approximately 3,000 most frequent words which cover 95% of spoken and written texts (cf., L2 Spanish, Robles-García, 2022) or the approximately 5,000 words needed to attain CEFR C1 level/ACTFL Superior/ILR 3+ professional proficiency level (Tschirner et al., 2018). Integrating cognates as instant vocabulary into lessons may allow learners to focus on grammar and thereby, possibly aid learners in mastering Japanese more quickly and effectively. As such, the 88 weeks or 2200 hours required to learn Japanese as a Category V language (i.e., the most difficult level, Foreign Service Institute, n.d.) to a professional proficiency level might possibly be able to be reduced.

Lastly, given that English is learned by practically all Japanese, the use of cognates along with modifying non-cognates to Japanese phonotactics may allow learners to translanguage in interactions both within and outside the classroom and more fully express themselves. That is, learners can strategically use all their linguistic resources [L2(s) **and** L1(s)] to more effectively communicate in the JAL classroom (i.e., translanguaging, García & Wei, 2014). For example, students could focus on using newly learned Japanese grammar but less so on lexicon if they use cognates.

Pedagogical Framework

Cognates are utilized within the following pronunciation pedagogical framework. Five-stage pronunciation teaching is adopted: description and analysis, listening discrimination, and controlled to guided to communicative practice moving on a continuum from greater focuson-form (e.g., articulatory practice) to greater focus-on-meaning (Celce-Murcia et al., 2010). During practice, learners should focus simultaneously on both form and meaning to automatize pronunciation (Segalowitz & Hulstijn, 2005) with a goal of intelligible (understanding the message) and comprehensible speech (ease of understanding) rather than native-level speech (Munro & Derwing, 1995) and a focus on functional load or the degree to which a sound might impede understanding. However, a social load or accents that bias listeners (i.e., accents they find unpleasant) should likely be considered when intelligibility of pronunciation is determined subjectively, as bias might affect interaction with others and thereby, impede L2 pronunciation practice and thus, acquisition. Task-based communicative activities used in the practice phases of the 5-stage pronunciation teaching framework enhance the development of pronunciation (Gordon, 2021), fulfilling the need for repetition with meaning to successfully accomplish tasks (Gatbonton & Segalowitz, 1988). Accordingly, pronunciation-focused task-based learning enables pronunciation practice to be integrated into other language skill practice (grammar, reading, orthography, etc.), which in turn provides more time dedicated to pronunciation and learning in general. Moreover, along with context (e.g., spontaneous speech, reading a passage/word list/minimal pairs, Labov, 1972) and multiple voices (cf. high variability phonetic training (Logan et al., 1991; which potentially promotes diversity, equity, and inclusion, e.g., regional dialects, sociolects), pronunciation-focused task-based learning in the L2 classroom should reflect the reality of pronunciation perception, production, and acquisition. That is, it should facilitate similar cognitive L2 speech processes as those outside the classroom in the L2 environment. Lastly, pronunciation should likely be targeted in the first year of learning to boost development (Flege, 1988).

Furthermore, explicit instruction facilitates language learning (Ellis & Shintani, 2015) and can utilize both inductive (learners analyze examples and come up with the rules or characteristics) and/or deductive learning (learners are given the rules or characteristics and then apply them) as adults can learn language rules and patterns using analytical skills (Snow & Hoefnagel-Hoehle, 1982). Explicit instruction as scaffolding to pronunciation focused task-based learning (description and analysis in 5-stage pronunciation teaching) among many methods (e.g., form-focused activities, feedback) can make learners notice and acquire awareness of pronunciation features and thereby, encourage acquisition (Schmidt, 1990; Venkatagiri & Levis, 2007).

Instructors should also use measurable student learning outcomes (SLOs) to guide their teaching and students' learning. Learners should know concretely what they will or should learn. A sample of SLOs might be the following:

- By the end of the course, students will be able to:
- 1) Count moras
- 2) Pronounce high and low pitch
- *3) State rules for pitch accent placement*
- 4) Mark words for accent placement

Lastly, cognates can build a foundation for noticing and comprehending diverse Japanese accents (e.g., regional; sociolects of gender, sexuality, register; context-shaped accents when speaking, reading; see Table 2 for phonological variation). Cognates can then facilitate adopting accents reflective of learner identities or social situations as part of communicative competence and linguistic repertoires.

Sample Lesson on Pitch Accent and Moras Using Cognates

We now introduce a lesson on teaching pitch accent to JAL learners using cognates which

utilizes explicit instruction, noticing, and limited listening. Instructors can first show learners cognates and read their pronunciation aloud as seen in Table 5. Learners note the pattern: the accent is generally on the antepenultimate mora (third mora counting from the end of the word).

Table 5

ba-na-na	HLL	banana	tjo-ko- <u>re</u> -e-to	LH H LL	chocolate
to-ma-to	HLL	tomato	su-pa- <u>ge</u> -t-ti	LH <u>H</u> LL	spaghetti
<u>te</u> -re-bi	HLL	televi(sion)	i-n-ta-a- <u>ne</u> -t-to	LHHH <u>H</u> LL	internet
a-i-sɯ-kɯ- <u>ri</u> -i-	LHHH <u>H</u> LL	ice cream	a- <u>pa</u> -a-to	L <u>H</u> LL	apart(ment)
mu					

English-to-Japanese cognates generally accented on the antepenultimate mora

Note: There are exceptions to the rule, e.g., su.pa.<u>GE</u>.t.ti vs su.pa.<u>GE</u>.ti LHHL (the second version of the word appears to be a more recent pronunciation of this cognate)

Additionally, JAL learners should notice the possible clash or mismatch between English stress placement and Japanese pitch accent placement in the corresponding cognates. For example, as seen in Table 5 *banana* is pronounced as [ba.na.na] with accent on the first mora for a HLL pitch pattern while in English the stress is placed on the second syllable [bə'næ.nə] as is the case for other words like *tomato* etc. Other issues may be L1 interference in pronouncing vowel or consonant length, isolating Japanese pitch fall from English stress correlates (e.g., length), possibly downstepping in pitch (i.e., relative height of strings of high-pitched mora gradually become lower in pitch), and more.

Second, instructors show and read aloud the cognates in Table 6. Learners note the pattern: the accent is on the preantepenultimate mora. Learners then note that when the antepenultimate mora is a special mora, the accent moves back one more mora, i.e., to the preantepenultimate mora. Special moras include the second part of a long vowel, first part of a long consonant (i.e., geminate), or moraic nasal. As such, placement of pitch accent interacts with special moras and so, learners must be aware of moras and mora timing.

Table 6

ha-m- <u>ba</u> -a-ga-a	LH <u>H</u> LLL	hamburger	dī3a-n-pa-a	HLLL	jumper (sweater)
ko-m- pjuu -uu-ta-a	LH <u>H</u> LLL	computer	<u>a</u> -p-pш-rш	<u>H</u> LLL	Apple
<u>sm</u> -ш-ра-а	HLLL	super(market)	tsuu- <u>i</u> -t-ta-a	L <u>H</u> LLL	Twitter
<u>еш</u> -ш-дш-гш	HLLL	Google	<u>ma</u> -n-∫o-n	HLLL	apartment complex (from mansion)
ri- <u>ra</u> -k-kш-sш	L <u>H</u> LLL	relax	<u>gja</u> -m-bu-ru	<u>H</u> LLL	gamble
<u>ro</u> -k-ka-a	<u>H</u> LLL	locker			

English-to-Japanese cognates accented on the preantepenultimate mora

Instructors might next introduce compound words as in Table 7 where the same accent rules apply as in Tables 5 and 6:

Table 7

Compounds and pitch accent

tomato soup	$[to-ma-to] \underline{H}LL + [su-u-pu] \underline{H}LL =$
	[to-ma-to-sш-ш-рш] LHH <u>H</u> LL
chocolate cake	$[t]o-ko-re-e-to]LH\underline{H}LL + [ke-e-ki\underline{H}LL] =$
	[t͡ʃo-ko-re-e-to-ke-e-ki] LHHHH H LL
cheeseburger	$[\mathbf{t}]\mathbf{\tilde{i}}-\mathbf{i}-\mathbf{z}\mathbf{w}] \mathbf{\underline{H}}LL + [ba-a-ga-a] \mathbf{\underline{H}}LLL =$
	[t͡ʃi-i-zɯ-ba-a-ga-a] LHH <u>H</u> LLL

Thus, learners realize that accent placement is not static but moves. Thus, learners need to know patterns/rules for **both** word accent placement and pitch accent changes when combining words (e.g., compounds, phrases, etc.).

Third, students should learn the features of accent and rules for assigning low and high pitch in a word. The accented mora always has a high pitch. Once a learner knows where the accented mora should be placed in a word, they then need to know a few rules as shown in Table 8. Basically, in standard Japanese the moras preceding the accented mora are all high pitched while the moras following the accented mora are all low. However, the first mora is low to contrast it with the second mora which should be high unless the first mora of a word is accented, i.e., high. Yet, when the first and second mora form one syllable, then, the first mora might be pronounced high as in [ko-o-ko-o] HHHH *high school* rather than LHHH.

Table 8

Rules for determining pitch on each mora of a word

RULES	EXEMPLIFICATION
Each mora features either a LOW or HIGH pitch.	[ba-ni-ra-∫e-e-kɯ]
	0-0-0-0-0
	vanilla shake
One mora in a word may be accented with a HIGH pitch.	[ba-ni-ra-∫e-e-kɯ]
In cognates, the antepenultimate mora usually bears the	•-• <u>H</u> -•-•
accent.	
Accent is marked by a fall from HIGH to LOW pitch.	
After the fall in pitch, pitch may not rise again to a HIGH	
pitch.	
Moras after the accented mora all have LOW pitch.	[ba-ni-ra-∫e-e-kɯ]
	•-•-•- <u>H</u> -L-L
If the first mora is not accented, it has a LOW pitch.	[ba-ni-ra-∫e-e-kɯ]

L <u>H</u> -L-L
[ba-ni-ra-∫e-e-kɯ]
L-H <u>H</u> -L-L
[ba-ni-ra-∫e-e-kɯ]
L-H-H- <u>H</u> -L-L

Source: Schaefer & Darcy, 2019, pp. 131-132.

Japanese-to-English cognates (i.e., native Japanese words) differ from English-to-Japanese cognates in the general rules for accent placement. Japanese-to-English cognates, however, have some tendencies as seen in Table 9, allowing learners to make educated guesses about how to pronounce cognates such as *sushi*, *matcha*, *tempura*, *tofu*, *manga*, *anime*, etc. in Japanese.

Table 9

Pitch accent pattern tendencies of native Japanese words (including Chinese loanwords or coined words): Japanese-to-English cognates

Word length by mora	Pitch accent pattern tendency
Two-mora words	Approx. 65% initial accented HL(L)
Three-mora words	Approx. 50% unaccented LHH(H)
	40% initial accented HLL(L)
Four-mora words	70% unaccented LHHH(H)

Based on Tanaka & Kubozono, 2012, pp. 58-59. The pitch level in parentheses indicates the pitch of a grammatical particle if one should follow the word.

If native Japanese words are accented, then, the accent generally falls on the antepenultimate mora (Kawahara, 2015) similar to cognates from western languages. However, more native Japanese and words borrowed from Chinese or coined using Chinese characters tend to not have any accent [i.e., unaccented = LH(HH...)]. Adding a grammatical particle (e.g., subject *ga*, object *o*) can differentiate unaccented words and accented words that have similar patterns: [ha.na] LH can mean *nose* or *flower*, but when you add the subject particle *ga*, the pronunciation will differentiate the meaning: [ha-na-ga] LHH *nose* (unaccented word) versus LHL *flower* (final-accented word) because an accent features a fall from the accent to the following low-pitched mora.

Scaffolding Reinforcement Activities

These scaffolding activities to the noticing/explicit instruction lesson above run through the stages of the 5-stage pronunciation learning framework:

- Learners might use *Prosody Tutor Suzuki-kun* (Minematsu Laboratory & Saito Laboratory, n.d.) and type in cognates, cognates + particles (i.e., ga, o), compound cognate words (e.g., cheese, burger, cheeseburger), phrases, and more to see the pitch accent pattern and become aware of pitch accent early on as well.
- Instructors might use various resources such as *YouGlish Japanese* to find videos with particular cognates.
- Instructors might use *Kahoot!* to do fun class practice: test metalinguistic awareness of features and rules, quiz on recognizing cognates, practice turning English words into existing Japanese cognates, and more.
- Instructors can create online perception tasks using cognates, such as determining if two

cognates are the same or different (e.g., [sut-to-ra-i-ki] "(to go on a work) strike"/[sut-to-ra-i-ku] "strike (in baseball)"), matching cognates (what the instructor says to *katakana* spelling), dictations, etc.

- Instructors might give learners magazines and articles on various topics and see how many cognates they can find, pronounce correctly, and state the probable meaning.
- Instructors can teach *katakana* and pronunciation simultaneously by having learners read and then, write cognates (and their names).
- Instructors might use wordplay and make cognate activities such as word searches, spelling bees, wordles, crossword puzzles, hangman, bingo, go fish, information gaps, extensive skills (reading, listening), etc. (cf., Schaefer & Darcy, 2019).
- Instructors have learners record reading cognates or spontaneous speech using cognates. Both instructors and learners then evaluate the pronunciation.
- Instructors integrate cognates into grammar learning. For example, when teaching "This is X" or "I like X," cognates can be incorporated: *What is this? This is (not) a hamburger. What do you like? I (do not) like computers.*
- Instructors might make pronunciation-focused task-based activities.

Small groups or pairs of students can plan a trip to visit several cities in various European countries. Students must decide where to go and why and come to a unanimous decision and then present to the entire class their travel agenda. The entire class decides on the best travel plan. Students practice the names of countries, cities, sights, etc. that are often cognates, (e.g., France, Italy, New York, London, Tokyo Tower).

The same type of task can be done for deciding what to eat at a fast-food restaurant or other contexts where cognates are common in Japanese.

CONCLUSION

We hope JAL instructors will consider the benefits of using cognates at an early stage (i.e., first year and beyond) as a gateway tool to fostering awareness of Japanese phonology among JAL learners and to potentially enhance the efficacy of teaching not only pronunciation but also other languages skills through task-based integration into lessons on grammar, *katakana*, and more. Given that many JAL learners in English-medium universities, particularly in English-speaking nations, are international students from East Asia or heritage learners of East Asian languages, instructors might consider harnessing Sinitic vocabulary shared by many East Asian languages as well as the shared English loanwords in these languages and the students' English proficiency to teach pronunciation and other language skills. Additionally, using cognates to teach pronunciation can naturally be applied to the learning of other languages.

Furthermore, instructors might build on the idea of using cognates and basic lessons on pronunciation, in particular those on pitch accent, to teach more advanced lessons on pronunciation or other language skills. For example, instructors might consider lessons on pitch accent when combining word + particle (unaccented words), word + word (compounds), words + words (phrases), phrase + phrase (discourse), etc. as well as more complex phonological processes (e.g., assimilation, voicing). Instructors might then build on basic pronunciation lessons to address language variation in accents (e.g., regional dialects, sociolects, registers, *kyarago*), Lastly, we hope instructors will reflect on their teaching and carry out more classroom-based action research on using cognates to teach pronunciation and integrating cognates and pronunciation into other language skills such as grammar, speaking, reading, listening, learning orthography, and more.

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