Helping Japanese learners with pronunciation: tackling epenthesis and paragoge.

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Abstract

This paper describes how Japanese learners tend to use epenthesis and paragoge when attempting to produce consonant clusters and consonants in word final position. It opposes the position that epenthesis and paragoge enhance comprehensibility, suggesting that in many cases it can impede communication. The paper argues that this area is worthy of attention and outlines a comprehensive approach to helping students produce these forms.

1   INTRODUCTION

One aspect of English phonology that many Japanese students have problems with is that English does not follow the CV (consonant + vowel) pattern of Japanese but contains consonant clusters and has consonants in word final positions. They use epenthesis and paragoge as a way of coping. Epenthesis is the addition of vowel sounds between consonants in consonant clusters, such as [ˌtoˈriː] for tree /triː/. Paragoge is the addition of a vowel sound after a word final consonant, such as [ˈmaɪto] for 'might' / maɪt/. The interesting thing about this 'problem' is that recent literature states that this type of pronunciation actually aids understanding, particularly in non-native speaker (NNS) to NNS interaction. Jenkins (2000) cites research showing that it increases intelligibility for native speaker listeners (Suenobo *et al.* 1992). She also makes a case from her own research that the 'strategy' of using schwa paragoge and epenthesis is a 'positive' characteristic of learner speech (2000:66). First, then, I will outline why this aspect of phonology is still worthy of attention. Secondly, I will identify the reasons for this problem. The last section will examine ways to approach this problem, both on a targeted and global level, highlighting techniques that have been successful with my classes in university settings.

2   PROBLEMS WITH WORD FINAL CONSONANTS AND CONSONANT CLUSTERS

2.1   Rationale for addressing epenthesis and paragoge

The use of epenthesis and paragoge may at times aid listeners since it both aids recoverability and slows speech down, creating more process time for the listener. However, when the added sound is stressed by mistake, such as [ˈʃɪˌtjɯ] for 'stew', the word becomes unrecognisable. Even Jenkins (2000:142) admits it can be a problem in this situation. It can still be a problem when the main stress is correctly placed. Since Japanese does not have (orthographically) a schwa sound, there is a tendency to add full vowel sounds, which can make these syllables sound like they carry secondary stress. The typical pronunciation of the word 'next' as [ˈneˌkiːsto] is an example. The number of syllables has also increased to three, which is another cause of unintelligibility since native speakers of English (at least) store words according to their stress pattern:

> English words have a basic rhythm of alternating strong and weak syllables, and this must be specified in the mental lexicon.
>
> (Aitchison 2003:142)

This radical altering of the stress pattern can make the word difficult to identify, since we are looking in the wrong place internally. It also means that words tend to be stored in the learners' lexicons as having more syllables than they really do and this can interfere with recognition.

This multiplying of the number of syllables in a word causes more problems for the learner, making the choice not just of word stress but nuclear stress difficult. I have found that students can listen to a passage and mark with slashes where each chunk ends. They can then read this aloud, and with just the slashes as prompts, surprisingly accurately reproduce the intonation patterns. When looking at a piece of text, such as a speech that they have personally written, I've noticed that my students often know where the slash marks ought to go. They then follow this up by adding extra slashes, breaking the tone units up into smaller chunks, thus adding extra nuclear stresses and changing the intonation pattern, giving the reason that there are just too many syllables in the unit to pronounce. I've found when helping students prepare to read their work aloud it helps to work on consonant clusters and vowel final consonants in the speech to reduce the number of syllables in a unit so it can be chunked more naturally - and comprehensibly.

Finally, there are simply some students who aspire to a very high level of fluency, and, in some cases, native-like pronunciation. For these reasons the area of English consonant

patterns deserves some attention and Japanese learners find it a challenge. The following section will show in more detail why this is the case.

2.2 Reasons Japanese students have difficulties with consonant patterns

The main reason that Japanese students struggle with this aspect of English phonology is that in their L1, orthographically, the nasalized /N/ is the only word final consonant. In speech, the high vowels /i/ and /ɯ/ are sometimes devoiced in a voiceless environment, and, in つ(tsu) and す(su), can be lost altogether, so that the verb 'desu' (be) is usually pronounced as [des]. Beyond this, most words end with a vowel sound, and most syllables have a simple V or CV pattern (Roach, 2001).

If we accept the description of Japanese syllable structure presented by Shibatani (1990:159) the CVC pattern is possible, with the nasalized /N/, in such words as the two syllable *shin.bun* which the Japanese will further subdivide into four *mora* - /ʃi/, /N/, /bɯ/, and /N/. The *mora* coresponds to one letter of the Japanese alphabet (or *kana*) and represents one beat in Japanese poetry. This CVC pattern creates a limited number of consonant clusters, such as the [mb] in the word above, *shinbun*, realised [ʃimbɯN]. Other clusters that exist in Japanese are the consonants followed by y*a*, *yo* and *yu*, as in *gyuu* (beef). Since the English language can contain syllables as complex as CCCVCCCC, there are many alien combinations of sounds to deal with.

Though we would expect the nasal /N/ to be helpful to the learner, since it is one consonant that appears in word final position and clusters in Japanese, it can often be a source of negative transfer. In less careful speech this sound is often realised by nasalizing the preceding or following sound, as in *sen* [sẽẽ] (thousand) and *hon* [hõõ](book). Learners often carry this pattern over to English words, especially those with *-tion* endings.

Another factor contributing to Japanese students' problems in this area is the focus in their schools on the written word. The main method of teaching has been the grammar translation method (Torikai, 2000) and though things are slowly changing, most language is still presented in its written form. Listening is only just beginning to appear in university entrance exams and speaking not at all, leading to these skills being neglected. In an analysis of the six most popular high school textbooks Gorsuch noted that in all 'any speaking done by students is highly scripted' (1999:9). Looking at the written form while

speaking tends to lead to over-articulation of consonants with epenthesis. Moreover, the most popular technique for recording pronunciation is to use *kana* rather than phonetic symbols. This distorts the English words.

A particular cause of interference is the large number of English loan words in Japanese. These seem to present a block for learners. Students who have mastered word final /*t*/ still tend to pronounce the word 'pet' as [`petto`] because that is how it is articulated in Japanese. Certainly we need to make students aware that there are phonological (and often semantic) differences between these loan words and English words. An approach to teaching must help the student both notice and record pronunciation forms in addition to helping and encouraging them to produce them.

3   TEACHING APPROACHES
3.1   Global approaches

We can approach this problem globally, harnessing the natural and unconscious processes that occur in communication. Roach illustrates the process of convergence when he writes that:

> … people […] find that in speaking to someone with a different accent their pronunciation gets progressively more like that of the person who they are speaking to, like a chameleon adapting its colour to its environment.   (2000:211)

Though here he attributes this to a minority with a special aptitude, accommodation theory suggests that any speaker may make some adjustments if there is a desire to be either liked or understood, and, in cases of two non-fluent English speakers with different L1s, this normally manifests itself as both speakers converging towards a common pronunciation core, rather than adopting each other's errors (Jenkins, 2001). We can see this may have an effect on epenthesis in extracts from Jenkins' research, in which the Japanese speaker produces two instances of epenthesis in her dialogue with another Japanese student, but none when paired with a Swiss-German. While Jenkins does not regard epenthesis as a danger to intelligibility it is interesting to see here that mixed L1 pairing may create conditions for more successful articulation of consonant patterns.

Teachers will wish to exploit the beneficial effects of mixed L1 pairings, but this seems impossible in a monolingual setting. A solution is to encourage students to use free Internet telephone providers such as 'Skype' to converse with conversational partners from a variety of countries. Certainly, the Internet creates possibilities for teachers of monolingual classes to set up mixed L1 pair activities, with the resulting pronunciation gains.

Another factor to take into account in a global approach is that of processing load. Research suggests that learners tend to process sounds automatically because the higher-order task of putting together utterances in the second language requires controlled processing (Celce-Murcia *et al.*, 1996). This suggests that develop pronunciation we need to reduce the processing load, for example by having learners repeat a task, such as telling an anecdote, changing partners. Each time they repeat the activity less attention is required for the grammar and lexis and more can be given to fluency and pronunciation. Learners can even be directed to aim for their best pronunciation, or better yet, we can harness the unconscious process that comes with public performance, a natural code-switching to an upgraded form of speech. One way of doing this is to record the students:

> It is a real boost for the students to hear themselves (or even better, see themselves on video) and notice the improvements in their performance the second time round. (Kay 2001:10)

This clearly has an additional effect on motivation.

Neuro-Linguistic Programming (NLP) offers other ways to help students with pronunciation. A core concept of NLP is modelling; that is, we can model another person to achieve what they are achieving. There are various ways to go about this regarding pronunciation work. One is to shadow or mirror a speaker, repeating internally or aloud their words, with or without their body movements. The students can try to feel how it feels to be this person. These techniques are widely used in drama approaches to teaching EFL (Celce-Murcia *et al.*, 1996). Another is for the teacher to guide the student through a visualisation, such as the one detailed in *Teaching Pronunciation* (Celce-Murcia *et al.*, 1996:307).   The student creates a sensory rich image of themselves as a speaker of English with just the kind of pronunciation they want. I ask students to visualise themselves with these qualities,

and have the image step into their real body, bringing that skill and ability with it. Accompanied with hypnosis techniques this has been successful in helping students with consonant clusters, leading to increased speed and confidence, but is more applicable to one-on-one sessions than to classroom teaching.

3.2   Explicit focus teaching

NLP also offers an approach to effective focus teaching of sound combinations in its emphasis on appealing to visual, auditory and kinaesthetic learning preferences. Multi-sensory teaching is also important in the Silent Way technique and widely recognised (Ehrman, 1996, Underhill, 1994, Celce-Murcia *et al.*, 1996). Examples of this are using circles on the whiteboard to represent word stress visually and using a hand gesture with the fingers closing to represent a non-released consonant at the end of a word.

Since we know that transcribing in *kana* distorts the consonant patterns of English we can teach the phonetic alphabet. Some teachers feel that this is too much to expect of the students, since they have already learned four scripts in order to be literate in Japanese. However, if phonetic symbols are introduced as a tool, rather than another script to be memorized, it can be very helpful. A chart displayed on the wall can be utilized for presentation and feedback, and is particularly useful to visually oriented learners.

When we focus on pronunciation at word level we can draw students' attention to acceptable avoidance strategies used by native speakers, such as deletion of the middle of three consonants in a word final cluster, or the substitution of [w] for /l/ in words like 'milk'. The resulting one syllable [mɪwk] is more easily recognisable than the three syllable [mɪɾɯkɯ]. This can reduce the commonly held perception that this aspect of English phonology is difficult, and also highlight where deletion is not acceptable, such as word final /n/.

When focused teaching is integrated with class-work there is greater chance of it being taken seriously. Recordings can be used for self- and peer-evaluation, increasing students' motivation and their perception of the importance of pronunciation. With this groundwork we make it possible for the global approach outlined above to generate success with this area of phonology.

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