

# A tool for minimizing L1 interference in pronunciation in the Japanese EFL classroom

Najma Janjua

Kagawa Prefectural College  
of Health Sciences

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L1 interference is a significant problem in L2 oral performance by Japanese learners of English. This paper describes the main features of a Pronunciation Practice Guide (PPG) devised by the author specifically for use in the Japanese EFL classroom and the results of its test trial. The PPG comprises eight sets of English words that commonly show L1 interference in their pronunciation by Japanese learners of English. The PPG uses a unique way of overcoming the interference by comparing the English way of pronunciation (EWP) of English words with their Japanese way of pronunciation (JWP). Results of the trial show that the PPG is effective, easy to use, and favored by the students. The PPG offers a new tool to minimize L1 interference in pronunciation in the Japanese EFL classroom.

日本人の英語学習者にとって、L2の発音に対して、L1の影響は重要な問題を引起す。この論文は、特に日本人のEFL教室で使用するために著者によって作製された、発音訓練用のガイド(PPG)の主な特徴と、そのテストトライアルについて述べたものである。PPGは、日本人の英語学習者が発音する際に、一般的にL1が影響を及ぼす8セットの英単語から構成されている。PPGは、日本語らしい発音 (JWP) と英語らしい発音 (EWP) を比較することによって、日本語から英語への影響を排除するユニークな方法を使っている。BPPGを使用した結果、とても有効であり、使いやすことが判明した。PPGは、日本人のEFL教室において、英語の発音に対するL1の影響を最小限にする新しいツールを提供するものである。

**L**1 INTERFERENCE presents as a major obstacle in L2 oral performance by Japanese learners of English (see Ohata, 2004; Shimo, 2002; Wells, 2000). A large part of this interference originates from the *katakana* portion of the Japanese language. Katakana is the syllabic part of the Japanese writing system used largely for writing foreign words (Kawai, Miura, & Suzuki, 1987). According to the rules of *katakana*, most foreign words when borrowed into the Japanese language are transformed in a manner that makes them lose the pronunciation of their original language and instead acquire a uniquely Japanese way of pronunciation. Some examples of such transformations of foreign words into the Japanese language are: /hanbaagaa/ for hamburger; /teiburu/ for table; /waarudo/ for world; /kaaten/ for curtain; and /sutoppu/ for stop. (See Kawai, et al., 1987 for a more detailed account of *katakana* and its rules for transforming foreign words into the Japanese language.)

These days most foreign words in the Japanese language come from English. Therefore, most *katakana* words are English words that have lost their original pronunciation and taken



on a unique Japanese pronunciation. As a result of this, when Japanese speak English, they experience L1 interference and tend to pronounce these English words in a Japanese way. Furthermore, since in most cases the Japanese pronunciations of the transformed English words are markedly different from their original English pronunciations, Japanese speakers of English very often have difficulty making themselves understood by non-Japanese English speakers (Shimo, 2002; Smith 1997).

While considerable literature exists on how L1 may interfere with L2 acquisition at various levels in Japanese EFL learners (see Bada, 2001; Daulton, 2007; Miura, 2007; Uchida, 2007; Wells, 2000), little information is available on how the interference may be dealt with or managed in the classroom, especially in the oral performance of L2. Smith (1997) describes teaching the English pronunciations of katakana words for a few minutes at the beginning of each class whereas Wells (2000) suggests the use of minimal-pair drills where the confusing sounds are compared and contrasted. However, there are no data on the systematic use or effectiveness of these or any other approaches aimed at dealing with L1 interference in pronunciation in Japanese learners of English. Given the magnitude of the problem and the multiplicity of interference points, a cohesive and consolidated approach is required that can guide the Japanese learners of English to deal with the interference of their L1.

This paper describes the main features of a Pronunciation Practice Guide (PPG) devised by the author specifically for use in the Japanese EFL classroom to manage L1 interference at the speaking level, as well as a test trial of the PPG. The PPG employs a method of minimizing the interference by comparing the English way of pronunciation (EWP) of English words with their Japanese way of pronunciation (JWP). Using the PPG, learners can acquire the ability to distinguish between the Japanese and the English pronunciations of individual English words. This in turn enables them to pronounce the English

words more legibly. The PPG is effective, simple to use, and is liked by the students.

## History of guide development

The need for a tool that could tackle L1 interference in Japanese learners of English at the speaking level was realized by the author first upon observations of a marked katakana pronunciation by the Japanese students in the EFL classroom that made their English speech difficult to understand. Further indications of this need came from observations outside the classroom of difficulties faced by the Japanese when communicating in spoken English in both academic and nonacademic settings and a ubiquitous presence of katakana pronunciation in the media and the Japanese society at large.

Development of the PPG itself was a gradual process that was in fact facilitated by the prevalent use of katakana by the Japanese in speaking English both inside and outside the EFL classroom as it presented the author with countless examples of words and phrases whose pronunciations were showing interference by the speakers' L1. Thus, upon hearing an English word being pronounced in a katakana way, the author would simply jot it down together with its katakana equivalent. Living in Japan and working as a foreign teacher of English at a Japanese university, the author found such opportunities plentiful both in the EFL classroom as well as outside while interacting with Japanese colleagues and other staff members and students on the campus, friends and acquaintances off campus, and in the media on radio and television. Before long, there were too many jotted down words, at which point it became necessary to list them in some kind of order to use for practice in the classroom. In due course, it became apparent that the words could be divided into distinct groups according to their peculiar patterns of pronunciation by the Japanese. This led to organizing the words in the form of columns. In its earlier stages, the PPG con-

sisted of fewer columns, which then grew in number as more categories emerged, leading to the current eight-column PPG.

With respect to the selection of specific words, earlier forms of the PPG contained only nouns. This was based on the premise that an overwhelming use of katakana in the Japanese language is for writing foreign nouns (Kawai et al., 1987). However, continued observation showed that the pronunciations of not only the nouns but also other grammatical elements of the English lexicon were being affected. In particular, words such as *and*, *all*, *almost*, *this*, *then*, and *that*, were found to be manifesting a strong L1 interference since katakana by its very nature has the ability to transform every single word of the English lexicon into Japanese thereby giving it a Japanese pronunciation (Kawai et al., 1987). Thus, theoretically every word of English could qualify to be on the list of words in the proposed PPG. In actual practice, however, the words included in the PPG are mostly those that the author collected.

### Main features of the PPG

The PPG (Pronunciation Practice Guide) devised by the author is shown in its current form in Appendix 1. It is comprised of eight columns titled C1-C8. They represent eight sets of English words that can be pronounced in both EWP and JWP and that commonly show L1 interference in Japanese learners of English. The letters below the column titles (*a*, *au*, *o*, *r*, *r/l*, *s/sh*, *th*, *v*) indicate the primary focal points of interference in the words of the respective sets.

In each set there are 14 words, making the PPG a 14 × 8 matrix with 14 lines and 8 columns. The number 14 for the lines was chosen simply to correspond to the 15 weeks of lessons in a typical one-semester university class at most colleges and universities in Japan. The objective in doing so was to have the students work on at least one line per week, after an introduc-

tion in the first week. In practice, however, the PPG can contain any number of lines and any number of lines or columns may be used for study and practice in a given lesson.

Based on the structure and composition of the PPG, it appears logical to work across from left to right in the beginning when using it for pronunciation practice in the classroom. At later stages, after the students have become accustomed to the use of the PPG, depending on student level of ability and individual need to focus on pronunciation of certain words, practice may be done from top to bottom by working on a few or all words in a given column.

Although the PPG itself is written only in English and does not contain any Japanese words, at least some knowledge of the Japanese language system, especially the katakana portion, is essential for the teacher to use the PPG successfully in the classroom. This would be relevant in the execution of steps 3, 6, 7, and 8 of the *Instructions for the teachers* (see Appendix 2).

### Testing the PPG in the classroom

#### Students

The PPG was tested on 51 Japanese university students. They comprised 43 sophomores (4 males, 39 females) and 8 juniors (2 males, 6 females). All were in a 4-year health sciences program leading to Nursing or Medical Technology degrees. The PPG was tested during a spring semester elective course in EFL. Prior to taking the course, all students had completed the equivalent of two one-semester compulsory EFL courses during their 1st year of college as a part of the Liberal Arts credit requirement of the Japanese college system. Both of those courses were taught by native Japanese teachers and had not included any specific training in pronunciation.

## Methods

Students were tested for their pronunciation of the words in the PPG at the start and the end of the semester during which they did weekly pronunciation practice using the PPG according to the instructions described below for using the PPG.

For the test before the use of the PPG, administered at the start of the semester, each student was asked to read aloud all eight words in a given row, without any prior knowledge or explanation of the PPG. Students read the words into a microphone and data were recorded manually as EWP or JWP depending on whether the student pronounced the words in an English way or Japanese way, respectively.

Administration of the PPG test, including the ascertainment of EWP and JWP, was done by the author, a nonnative but fluent speaker of the Japanese language with native-like proficiency. It is important to point out here that the PPG, by virtue of its very character and that of the Japanese language, can be tested only by an EFL teacher who has sufficient knowledge of the Japanese language system to be able to distinguish between the Japanese and English ways of pronunciation of English words.

For the purpose of recording the data, JWP was taken as the reference point and any other way of pronunciation that was distinct from it was considered as EWP. No particular emphasis was placed on determining whether the EWP was American English, British English, or any other variety of the language. The main objective of the PPG is to attain a legible pronunciation and in the author's experience, as long as the Japanese speakers of English do not pronounce English words in a Japanese way, their speech is legible regardless of the particular variety of English their pronunciation might fall into.

After the first test, the PPG was systematically introduced to the students with a detailed explanation of its use. (See Appendix 2 for step-by-step instructions for using the PPG both for the

teacher and the students. A more elaborate description of each step can be found in Janjua, 2007.)

Following its introduction and detailed explanation, the PPG was used to practice pronunciation each week in addition to a regular lesson that involved reading, writing, listening, and speaking activities. Out of the total class time of 90 minutes per week, the time spent on pronunciation practice using the PPG ranged from 10-15 minutes.

At the end of the semester, each student was asked to read aloud the same line of the PPG that he or she had read at the start and again data were recorded as EWP or JWP in the same manner and using the same criteria as in the first testing.

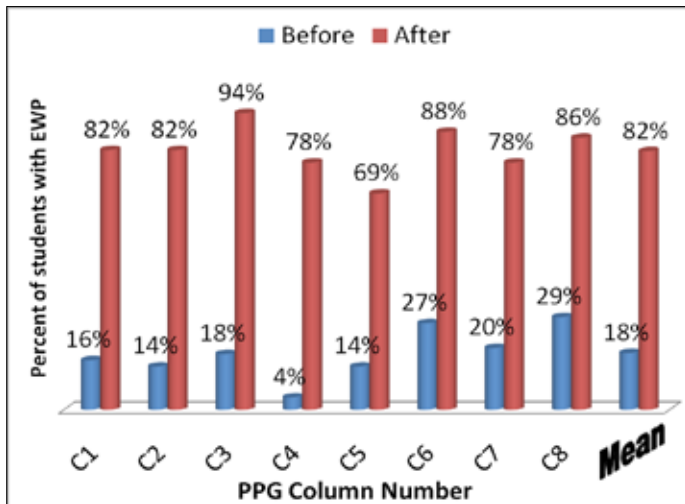
No particular problems were encountered in administering either the first or the second test. In a few sporadic instances where the students did not read the words loud enough for their pronunciation to be ascertained, they were asked to repeat the words.

## Data analysis

The recorded data included 51 values before and 51 after the practice period for each of the eight columns of the PPG. The values were represented as percent frequencies of EWP and JWP for each column as well as means of all eight columns, before and after the use of the PPG. Differences in before and after frequencies were analyzed by chi-square test using Microsoft's Excel software (CHITEST, Microsoft Office Excel for Windows, 2003 version). For graphic representation of the data, Chart Tools function of the same software's 2007 version was employed.

## Results

Figure 1 shows the percent frequencies of EWP in 51 Japanese university students before and after use of the PPG. There was a highly significant increase in the frequency of EWP for each



**Figure 1. Frequencies of EWP in 51 Japanese university students before and after the use of PPG**  
(EWP = English way of pronunciation; PPG = Pronunciation Practice Guide)

column and also in the mean of all eight columns ( $p < 0.00001$ ). The increase was the greatest for column 4 where only 4% (2/51) of the students could pronounce the words correctly before using the PPG as compared to 78% (40/51) after. Although the increase in EWP frequency was the lowest for column 8 with before and after values of 29% (15/51) and 86% (44/51), respectively, nevertheless, the change was still highly significant ( $p < 0.00001$ ).

### Survey of student preferences and views

A survey of student preferences and views about the PPG was carried out in four Japanese university freshmen classes where

the PPG was used over a period of one semester. In all four classes, the students did the following three sets of activities:

#### 1) Practicing writing, reading, listening, and speaking

In this set of activities, students wrote a short passage on a given topic using a template as a model, practiced reading the passage aloud, wrote answers to a list of questions about the content of the passage, practiced asking and answering the questions with their classmates, and practiced answering the teacher's questions as a part of listening and speaking routine and during oral class tests. The time spent on these tasks ranged from 60-70 minutes per class.

#### 2) Practicing pronunciation using the PPG

This activity was done for 10-15 minutes per class as described above under Methods and in Appendix 2.

#### 3) Making sentences using the words in the PPG

This activity involved making sentences using the words in the PPG and writing them down. As a rule, each sentence had to include the target word at least once and contain a minimum of 10 words in total. The task involved making at least one sentence per word of the PPG and generally all eight words in one line of the PPG were used to make sentences in a given session. After writing the sentences, students were asked to practice reading them aloud. The time spent on this activity ranged from 10-15 minutes per class.

At the end of the semester, students were asked through a questionnaire to rank the three sets of activities on a scale of 1 (most preferred) – 3 (least preferred) and to give reasons for their preference for the activity that they ranked 1. The specific questionnaire items that the students were asked to respond to are given in Appendix 3. They were a part of a broader course evaluation survey that included items about other aspects of the course as well. The questionnaire items were all written in English as were all responses given by the students.

Table 1 shows the results of student ranking of the use of the PPG. Out of a total of 146 students who completed the survey questionnaire, the number of those who ranked the pronunciation practice activity using the PPG as 1 was the highest at 85 (58%) and of those who ranked it 3 the lowest at 20 (14%).

**Table 1. Ranking for the use of the PPG by Japanese university students**

Ranking for PPG	No. of responses	% of total
1	85	58%
2	41	28%
3	20	14%
Total	146	100%

Twenty typical reasons given for their preference of the PPG by the students who ranked it 1 are listed in Appendix 4. The responses listed are unedited and were chosen randomly from those that were clearly written and had few or no grammatical errors. The reasons given by the students ranged from the simple fact that they could learn the correct pronunciation to becoming aware of the importance of pronunciation in learning English and of the practical significance of the PPG. One student (No. 20) even went as far as to write the following: "The Pronunciation Practice Guide is very intelligible and practical. I will keep the PPG for a long time." Particularly noteworthy also were comments that reflected students' feelings about improvement in their pronunciation such as: "I felt that my pronunciation skill became better and better. I got a confidence by pronouncing many times"; and "I felt my pronunciation got well and it made me happy" (Nos. 4 & 14, respectively).

## Discussion

Results of the test trial of the PPG described in this paper provide strong evidence for its effectiveness in minimizing L1 interference in the pronunciation of individual words by Japanese learners of English. Increase in the EWP frequency in the students after the use of the PPG for only one semester is striking. Data suggest that it is critical for the learners to recognize the differences and be able to distinguish between the JWP and EWP of the English words in order to minimize interference from their L1. Once the students could do that through the use of the PPG, they showed a remarkable improvement in their pronunciation.

Second language learners need both grammatical and communicative competence and pronunciation problems resulting from L1 interference can interfere with their communicative intelligibility (Williams, 2001). However, little emphasis is placed on teaching pronunciation in the EFL classroom (Dalton, 1997). Teachers often give different reasons for not including pronunciation in their lessons such as: "It takes too long" and "They do pronunciation at home," to quote two examples from Hughes (2006). In the author's own teaching experience, there have been multiple instances of teachers expressing reluctance and fear that employing pronunciation practice in their classes will inhibit students from speaking.

The findings reported in the present paper regarding student preferences for the use of the PPG do not support the above mentioned perception among EFL teachers that teaching pronunciation can be difficult or inhibiting for the learners. Instead, the present data indicate that teaching of pronunciation can be an interesting, enjoyable, and motivating activity that can in fact build confidence in EFL learners and help them overcome their inhibitions in speaking the language. Students who used the PPG in the present study clearly showed their preference for practicing pronunciation in the classroom as compared to doing

other non-pronunciation activities. Furthermore, individual student responses giving reasons for their preferences highlight the need and importance of teaching pronunciation in the Japanese EFL classroom.

Taken together, the data on effectiveness of the PPG in terms of the actual improvement in EWP frequencies and the findings on student preferences for the pronunciation activity using the PPG provide convincing evidence that this simple tool can be beneficial in tackling the problem of L1 interference in the Japanese EFL classroom. The high frequencies of EWP in the students after using the PPG for a period of only one semester suggest that the goal of minimizing L1 interference in oral performance by the Japanese learners of English is attainable. Although it remains to be seen how much longer beyond the period of one semester the students can retain their EWP abilities, the findings clearly indicate that the students can indeed learn to reduce the interference of their L1. Further studies need to be carried out to assess the long-term acquisition of EWP by the students as well as their retention of this skill when pronouncing the English words as a part of an entire text.

## Conclusions

The PPG described in this paper is simple and easy to use both by the teachers and the learners and offers a new tool to cope with and manage L1 interference in the Japanese EFL classroom. Incorporation of pronunciation practice in the regular lesson plan using the PPG can help minimize interference by their mother tongue in Japanese learners of English and give them confidence and communicative power.

## Bio data

**Najma Janjua** is a professor in the Department of Liberal Arts and Sciences of Kagawa Prefectural College of Health Sciences. Her research interests in language education focus on ESP in medicine and health sciences, language transfer in Japanese learners of English, and comparative studies of EFL education in nonnative English-speaking countries. <janjua@chs.pref.kagawa.jp>

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## Appendix I

### A Pronunciation Practice Guide (PPG) for use in the Japanese EFL classroom

C1 <i>a</i>	C2 <i>au</i>	C3 <i>o</i>	C4 <i>r</i>	C5 <i>r/l</i>	C6 <i>s/sh</i>	C7 <i>th</i>	C8 <i>v</i>
1. apple	1. all	1. on	1. first	1. cloud	1. see	1. this	1. very
2. address	2. almost	2. off	2. burst	2. crowd	2. she	2. that	2. vote
3. access	3. alter	3. hot	3. teacher	3. clown	3. seat	3. there	3. voice
4. action	4. august	4. pot	4. leader	4. crown	4. sheet	4. these	4. vocal
5. and	5. autumn	5. lot	5. summer	5. clash	5. sell	5. those	5. video
6. family	6. Australia	6. box	6. winter	6. crash	6. shell	6. mother	6. version
7. happy	7. audition	7. rod	7. super	7. right	7. city	7. father	7. vacation
8. Harry	8. audience	8. nod	8. slipper	8. light	8. scene	8. brother	8. vanilla
9. man	9. author	9. mop	9. better	9. file	9. seam	9. thanks	9. Victoria
10. Africa	10. audit	10. sock	10. butter	10. fire	10. seem	10. health	10. victory
11. Canada	11. auditor	11. rob	11. batter	11. tile	11. sore	11. healthy	11. volunteer
12. attack	12. auction	12. dot	12. pitcher	12. tire	12. shore	12. then	12. Vancouver
13. bad	13. aurora	13. soft	13. singer	13. lift	13. silver	13. than	13. volleyball
14. land	14. authentic	14. shot	14. sister	14. rift	14. senior	14. three	14. universal



## Appendix 2

### Instructions for using the PPG

The following sections outline the main steps for both the teachers and the students, for the use of the PPG in the Japanese EFL classroom. For a more detailed description of each step, see Janjua, 2007.

#### 1. Instructions for the teachers

1. Introduce the activity by writing on the board a few sample words from the PPG.
2. Ask the students to read the words aloud.
3. Explain that English and *katakana* are not the same.\*
4. Hand out the PPG.
5. Read aloud the words and have students repeat after you.
6. Explain differences between EWP and JWP.\*
7. Check student comprehension by pronouncing the words in both EWP and JWP and asking the students to differentiate between them.\*
8. Explain to the students how to ascertain the EWP of the word by comparing it with its JWP.\*
9. Tell students to make sentences using words from the PPG and then practice by reading aloud the entire sentences.
10. Assign, for homework, one or more lines for pronunciation practice together with sentence making practice and reading aloud practice of the entire sentences.

\*For steps 3, 6, 7 and 8, some knowledge of the Japanese language, at least of the *katakana* system, is essential for the teacher in order to use the PPG successfully in the classroom.

#### 2. Instructions for the students

1. Practice by reading aloud each word as instructed by the teacher.
2. Check the EWP of the word by comparing it with its JWP.
3. If you think that you are pronouncing the word in a JWP, then it will mean that you are not pronouncing it correctly in English.
4. Make sentences using each word and then practice by reading the sentences aloud.

#### 3. A note for teachers and students

When using the PPG, it is recommended, at least in the beginning, to work horizontally, that is, to practice all 8 words in a given row. Subsequently, depending on student level of ability and individual need to focus on pronunciation of certain words, practice may be done vertically by working on a few or all words in a given column.

### Appendix 3

#### *The questionnaire items used for the survey of student preferences and views about the PPG*

A. In this class, you did the three types of activities listed below. Rank them in the order of your preference by writing numbers 1-3 in the circles.

(1= most preferred; 3= least preferred)

- Practicing writing, reading, listening and speaking
- Doing pronunciation practice using the PPG
- Making sentences using the words from the PPG

B. Give at least 2 reasons for your preference of the activity you ranked 1.

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### Appendix 4

#### *Twenty typical reasons given by the students for their preference of the PPG*

1. I could learn correct pronunciation.
2. I wasn't confident in my English pronunciation before. So, PPG helped me to improve my English pronunciation.
3. I can notice that my pronunciation is not correct, and know the importance of English pronunciation.
4. I felt that my pronunciation skill became better and better. I got a confidence by pronouncing many times.
5. I didn't practice pronunciation when I was a high school student.
6. Japanese people are not good at pronunciation English. So, PPG is very important.
7. When we study English, we should practice pronunciation.
8. Pronunciation practice is very fun.
9. PPG is easy to use when I want to practice pronunciation.
10. I have been able to pronounce English better than ever.
11. Practicing pronunciation was the best. Pronunciation skill is very important.
12. I think PPG is very very useful and it makes my pronunciation better and better.
13. I like to do pronunciation practice using the PPG.
14. I felt my pronunciation got well and it made me happy.
15. I can't hear English very well. I think that pronunciation of English is very important when I hear English.
16. I knew the difference between Japanese pronunciation and English pronunciation.
17. I like to pronounce English in the correct way that is different from Japanese way.

18. I could speak English more fluently than before the class.
19. Japanese English teachers teach pronunciation little. So this type is very valuable for Japanese students.
20. The Pronunciation Practice Guide is very intelligible and practical. I will keep the PPG for a long time.