Does Accentuation of L1 Transfer to L2 prosody?—A preliminary study on Osaka and Tokyo dialect speakers' pronunciation of English

Hiroko Saito, Tokyo University of Foreign Studies Isao Ueda, Osaka University of Foreign Studies

1 Introduction It has been observed that a Japanese learner's pronunciation of certain syntactic categories in English, e.g. interrogatives, attributive adjectives or negative particles, is realized with high pitch and therefore it not only differs from the native English speakers' pronunciation but also gives the impression that the wrong word had been emphasized.

This phenomenon has been explained as negative transfer from L1 in Watanabe (1994:14), Mori (2005), Saito (2006) and Wells (2006:13), where the type of pitch accent on the corresponding words in Japanese was suggested to be affecting the placement of sentence accent in English:

LH HLL LH HL

(1) kan.ga.e.te. i.ma.sen \rightarrow i `HAVEN'T thought about it

(think have not)

Saito (2006:135)

However, it must be noted that Japanese has many regional dialects, which differ in pronunciation mainly by the patterning of word pitch accent. Among such dialects, Osaka and Tokyo (standard) speech show contrasting patterns of word and phrase accentuation.

For example, between the two types of dialect, combinations of Interrogative + Noun or Adjective + Noun show different pitch patterns:

(2)	dono hon (which book?)			ii hito (good person)
	Osaka:	HH	HL	LL HL
	Tokyo:	HL	LL	HL LL

If the Japanese HL pitch pattern is transferred to English and a high pitch is applied to the corresponding word in the sentence, the high pitch would make that word sound prominent in English. If speakers of different dialects were to transfer the pitch patterns of their own native dialects, then logically, the above instances would be realized as:

(3)	Osaka:	which `BOOK	good `PERson
-----	--------	-------------	--------------

(4) Tokyo: *`WHICH book *`GOOD person

As a result, it would make the Osaka dialect speakers 'better' at placing English sentence stress, compared to the Tokyo speakers, at least in cases where the accent patterns coincide.

An experiment was carried out in order to see if this was the case.

2 The Data

- 2.1 The following sentences were considered for this study:
 - 1. Which class did you attend today?
 - 2. Which book did you borrow?
 - 3. Which period are you thinking about?
 - 4. Which word was in the blue book?
 - 5. There was an interesting book at the shop.
 - 6. What's that white bird in the tree?
 - 7. A <u>nice person</u> is more easily fooled.
 - 8. <u>Good wine</u> is, after all, expensive.
 - 9. Which word was in the <u>blue book</u>?
 - 10. There was a large box in the middle of the room.

These are translations from the Japanese sentences that contain the Interrogative + Noun or Adjective + Noun sequences with the kind of pitch accent pattern mentioned in section 1 above.

2.2 Nineteen Osaka dialect speakers and the same number of Tokyo dialect speakers were chosen for our experiment. (Here, the term 'Osaka' is used broadly to include other nearby cities such as Kyoto and Kobe, as long as the speaker showed the same word pitch accent patterns for Japanese. 'Tokyo' has also been extended in this paper to surrounding prefectures of Kanagawa, Saitama, and Chiba, if the speaker had the same pitch accent for the Japanese phrases tested.)

The subjects were university students aged between 18 and 30 (one subject), mostly 19 year-olds. The Osaka subjects had always lived in the Kansai Region (i.e. Osaka, Kyoto and Kobe), and all were undergraduate students at the Osaka University of Foreign Studies, majoring in foreign languages.

The subjects recorded in Tokyo were all students of the Tokyo University of Foreign Studies, who were also studying one foreign language or other as the major subject. All had lived in and around Tokyo, or in Kanagawa, Saitama and Chiba Prefectures, up to the time of recording.

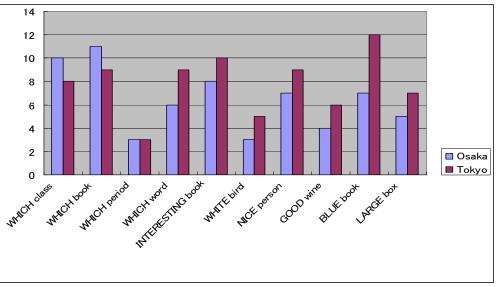
Both groups consisted of subjects whose level of English could be considered to be higher than the national average: this factor was important, because lower-level learners tend to read English word by word, placing equal emphasis on most or all the words, or to read the whole sentence in one breath at level pitch. We needed the subjects to be able to understand the meaning of the sentences as they read them, so that if there were to be any transfer at the word level, the subjects had to be conscious of what Japanese word corresponded to the English word they were reading.

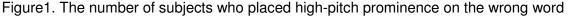
2.3 In Osaka, the students made their recordings in the university's language laboratory classroom, at their desks, using tape recorders with headsets. The Tokyo students' readings were recorded on audio cassette tapes in the recording studio of the university.

The subjects read 15 sentences in Japanese, then the 15 English sentences, at their own pace.

All subjects completed a questionnaire which asked them their age, where they had lived, and for how long. The subjects for this study were chosen according to the information on this questionnaire as well as their readings of the sentences in Japanese, to make certain that they were genuine speakers of the dialects concerned. Those who had lived abroad were excluded from the study.

3 Results The number of subjects who pronounced the interrogative or the adjective with higher pitch than the subsequent noun was counted (Figure 1).





The results show that for seven items out of ten, the Osaka students placed high pitch on the wrong words less often, compared to their Tokyo counterparts. The Tokyo subjects did better on two items only. This means that the Osaka dialect speakers' realization of prominence in English sentences, as far as pitch was concerned, fared better than those of the Tokyo dialect speakers. This, at first sight, appears to support our working hypothesis that because of the transfer of the pitch-accent patterns of the native dialect, Osaka subjects would do better where their accent pattern coincided with the pattern in English.

However, when the T-test was applied to the above data, it turned out that the difference between the two groups was not statistically significant.

4 Conclusion and Discussion It could not be proven statistically that the difference in pitch accent patterns between Osaka and Tokyo speech had any effect on the pitch prominence of English spoken by the two dialect speakers. This could mean that it is too early to assert that when learners of English (or other languages) place pitch prominence incorrectly, the error is caused by negative transfer of their L1 pitch pattern.

However, the graph in Figure1 does make one wonder whether the difference between interrogatives and adjectives had any effect on the results, or if the degree of familiarity

with the words and phrases presented to the subjects might have influenced their pronunciation. Or, it may simply be that the number of subjects was too small to prove anything.

It is a fact that Japanese learners of English do, on the whole, produce English sentences with noticeably high pitch on certain words in certain syntactic positions, and if the pitch pattern of their L1 is not the factor that is causing this, we need to find out what *is*.

5 References

- Fujisaki, Hiroya et al. (1982) Word Accent and Sentence Intonation in Foreign Language Learning *Proceedings of the XIIIth International Congress of Linguists*, Tokyo, pp.1312-13.
- Mori, Yoko (2005) The Initial High Pitch in English Sentences Produced by Japanese Speakers *English Linguistics,* vol. 22, pp.23-55.
- Saito, Hiroko (2006) Nuclear-stress Placement by Japanese Learners of English: Transfer from Japanese, in Kawaguchi et al. eds: *Prosody and Syntax*, Amsterdam: John Benjamins, pp.125-139.
- Sugito, Miyoko (1996) *Nihonjin no Eigo* [*The English of the Japanese*], Osaka: Izumi Shoin.
- Watanabe, Kazuyuki (1994) *Eigo no Rizumu Intoneeshon no Shidoo* [*Teaching English Rhythm and Intonation*], Tokyo: Taishukan Shoten.
- Wells, John C. (2006) *English Intonation: An introduction,* Cambridge: Cambridge University Press.

Acknowledgements

We would like to thank Professor Shiro Kori of Osaka University of Foreign Studies for his valuable suggestions on the accentuation of Japanese, and also Mr Antonio Smith of the same university for listening to and helping to assess the recorded data. We are grateful to our students for their cooperation in the experiments.