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研究課題名(和文) The effect of explicit instruction on the listening comprehension of learners from a mora-timed L1 background
研究課題名(英文) The effect of explicit instruction on the listening comprehension of learners from a mora-timed L1 background
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研究成果の概要(和文):学生へのアンケート及び質的調査によると、学生が英語学習において成果を上げるに は、音韻的障害こそが克服すべき課題だということがわかってきたのである。ただ、この発見の信憑性を高める には、経験に基づく証拠が必要だ。だが、データ収集はいささか難しい。これを打開するために次の段階として 私が考えたのは、様々な異なる言語のネイティブスピーカーにとって既知である単語の聴解力を比較できるよう な、ウェブサイトを立ち上げてみようということである。私は、音節リズムの言語及びモーラリズムの言語の話 者は、既知の単語を理解する能力においては強勢リズムの言語の話者よりも点数が低く出るのではないかと思っ ている。

研究成果の概要(英文): The study elucidated the following. Student questionnaires and qualitative research suggests that there are in fact phonological obstacles that need to be overcome if students are to have success learning English. To add weight to this finding, empirical evidence is needed. However, data collection is somewhat problematic. To overcome this, my next step is to create a website where the aural comprehension of known words among speakers of various native languages can be compared. I suspect that speakers coming from syllable-timed and mora timed languages will score lower on the ability to comprehend known words than speakers coming from stress-timed languages. If this is proven to be true, it has enormous implications for what is being taught. It could suggest that more of a focus needs to be placed on helping students develop their listening skills.

研究分野: Applied Linguistics, Second Language Acquisition

キーワード: Listening mora-timed SLA education phonological obstacles comprehension

#### 1.研究開始当初の背景

Previous to this study, there has been very little research into how one's phonological background affects L2 language acquisition. Anecdotal evidence has suggested that learners coming from different phonological backgrounds can aurally comprehend spoken English with varying degrees of accuracy.

Broadly speaking languages can be divided up into three rhythm patterns: stress-timed languages, syllable-timed languages and mora-timed languages. English is a stress-timed language, whereas most Asian languages are syllable timed. Japanese is even one step further removed from English being mora timed. Given that Japanese phonology is vastly different from English phonology, most Japanese learners of English are unaware how English weakens and reduces in naturally connected speech. While theory suggests that one must be aware of something in order to learn it, many Japanese students of English remain largely unaware of the phonological features of the English sound system, which could impair the development of their listening comprehension skills.

## 2.研究の目的

The purpose of the research was to elucidate if there are phonological obstacles to aurally comprehending naturally enunciated English and secondly, to explore if the explicit teaching of the phonological features of naturally enunciated English results in improved listening comprehension abilities.

### 3.研究の方法

Research was carried out in two ways. Firstly, empirical data was collected, pre and post treatment, to ascertain if noticeable and significant gains in listening proficiency could be obtained through the explicit teaching of the phonological features of naturally enunciated English. Data from listening tests was collected, both pre and post treatment, from control groups, whose classes did not feature explicit instruction and compared with data from experimental groups, whose classes did feature such instruction.

Additionally, student questionnaires were administered to get student feedback about their listening abilities, and their reactions to this explicit teaching.

#### 4.研究成果

In the first year of the study, students in the experimental group were given explicit instruction on the stress-timed nature of naturally enunciated English. Questionnaires were also administered to get student feedback about this style of instruction. A majority of students felt that explicit instruction helped them to improve their listening abilities, and secondly, that guidance was necessary. This suggests that there is a link between language instruction and language performance, and furthermore that guidance helps students to notice these phonological features. As students from mora-timed languages are wholly unaccustomed to many of the phonological tendencies of English, they fail to notice these features unless they are explicitly pointed out.

In the second year of the study, empirical data was collected. Students from control groups and students from experimental groups were given listening tests at the beginning and the end of their respective courses. All students in both the control and experimental groups were from the same department, and the same faculty of the same university, and were therefore similar. This was done with three different groups of students.

The results of the pre-treatment tests showed that the control groups and the experimental groups were in fact very similar. The results of the post-treatment tests showed that students in the experimental group outperformed the students in the control group. This suggests that there is a link between the explicit teaching of phonological features and listening comprehension. However, the results were, while noticeable and consistent, not significant.

While we failed to find empirical support for our hypothesis, the qualitative data from the questionnaires that were administered showed that students found explicit instruction of the phonological features to be helpful. The majority felt that such instruction helped them to improve their listening abilities. Furthermore, the majority of students mentioned that guidance from teachers is helpful. This suggests that this area of research holds much promise.

The third year of the study was spent gathering data from questionnaires and student feedback. This data again showed that a majority of students felt that explicit instruction leads to increased performance, and that teacher guidance and instruction were very much needed. This data tentatively shows that teacher materials need to be adjusted to match the phonological background of the student. Here in Japan, teaching materials need to be made that clearly address the needs of our mora-timed L1 students.

Additionally, in future experiments, we feel that we will be able to elucidate significant differences in such a controlled experiment. An analysis of our data showed that many of the listening problems in both the pre-treatment and post-treatment were too difficult for the students to understand. Since the students were unable to comprehend many of the sentences, many answers were random. Too many random answers made it difficult to get significant results.

More empirical data needs to be collected with greater attention paid to the difficulty of the listening tests. The testing instruments need to be adjusted to finely match the current listening abilities of the students.

In the next stage of this research, we will be creating more finely tuned testing instruments using a "talk aloud protocol" with similar groups of students. Such a protocol should allow us to create a testing instrument that exactly matches the level of the students.

Once we have refined our testing instrument, we can move forward on a variety of research projects. First of all, we need to replicate the pre-treatment/post treatment measurements between control and experimental groups of English learners from mora-timed backgrounds to empirically verify the effectiveness of instruction on listening comprehension.

Secondly, we need to compare how one's L1 phonological background affects listening comprehension by administering these tests with groups of learners from stress-timed languages, groups of learners from syllable-timed languages and groups of learners from mora-timed languages. To verify if phonological obstacles exist, we need to compare the aural comprehension levels of known words by different groups of learners. That is, the vocabulary should be simple, but the phonology somewhat natural. We should compare if there are any differences in aurally comprehending naturally enunciated simple sentences between similar groups of students from Denmark, with a stressed-timed L1 background and Japanese students of English who come from a mora-timed L1 background. This work is ongoing and will continue.

The next step in this study will be to put the testing instruments online, with a built in LMS (Learner Management System) to better collect and track data. This will also make it easier to collect data from a variety of different learners.

Lastly, if the listening skills of Japanese students of English are underdeveloped, what affect does this have on our students' motivation to do self-study? If students find it difficult to aurally comprehend naturally enunciated English, are they more likely to not pursue many of the self-study techniques that students coming from stressed-timed L1 do? So many students around the world pick up English from movies, TV and Youtube, and yet here in Japan students struggle with this. If there are phonological obstacles, teaching materials need to be adjusted to help students overcome these obstacles.

# 5.主な発表論文等 (研究代表者、研究分担者及び連携研究者 には下線)

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