The Effect Of L1 On The Pronunciation Of /Θ/ Sound In English

Anadilin İngilizce'deki /0/ Sesinin Telefuzu Üzerindeki Etkisi

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ABSTRACT

It is important to answer the question of whether the first language has an effect on the second language being learned. The aim of the study is to research the effect of one's native language on the production of / Θ / sound in English. Participants coming from a variety of different L1 backgrounds -Norwegian, Greek, Hungarian, Spanish, Italian, Turkish, and German- were asked to read a list of words containing the sound in question in word initial, medial and final position. Among the seven participants only Spanish and Greek speakers had / Θ / sound in their native language. This gave the researcher the chance to compare the accuracy percent of these speakers with the speakers who did not have this sound in their native language. The results of the study reveal that L1 did not have an overall effect on the production of this sound.

Keywords: Phonetics, L1 Effect, Pronunciation

ÖZET

Anadilin öğrenilen ikinci dil üzerinde olumlu yada olumsuz etkisi olup olmadığı ikinci dil edinimi için oldukça önemli bir sorudur. Bu yüzdendir ki, bu çalışma farklı anadillerden gelen ve İngilizceyi ikinci dil olarak kullanan katılımcıların / Θ / sesini üretme başarılarını test ederek, anadilin bu sesin üretiminde bir etken olup olmadığını bulmayı amaçlamaktadır. Norveççe, Yunanca, Macarca, İspanyolca, İtalyanca, Türkçe ve Almanca anadilli yedi katılımcıya hedef sesin hecebaşı, ortası ve sonunda olduğu bir kelime listesi okutulmuş ve anadili İngilizce olan kişiler tarafından doğruluk oranları değerlendirilmiştir. Çalışmaya katılan katılımcılar arasında sadece İspanyol ve Yunan dilinde hedef ses bulunmaktadır. Bu da araştımacıya bir kıyaslama yapabilme şansı vermiştir. Çalışma sonuçlarına göre anadil hedef sesin üretiminde bir etken değildir.

Anahtar Kelimeler: Sesbilim, Anadil Etkisi, Telaffuz.

1. INTRODUCTION

Even though different researchers have come up with different lists, the list below illustrates the main (or mostly studied) factors that can affect the process of learning a second language (Larsen-Freeman & Long, 1991).

- Intelligence
- Aptitude
- Personality
- Motivation and attitudes
- Learner preferences
- Learner beliefs
- Age of acquisition

L1 is also accepted to have an effect on the acquisition of a second language (Ellis, 2000). defines L1 transfer as the influence that the learner's L1 exerts over the acquisition of an L2. When the learner's L1 is the sources of error in learner's language, this influence is thought to be "negative transfer". On the other hand, there are occasions when the learner's L1 can facilitate the L2 acquisition. This is called "negative transfer". The work of Tucker (1999) provides clear evidence that a child who acquires basic literacy or numeracy concepts in one language can transfer these concepts and knowledge easily to a second or third or other later required languages. Brown (2000) states the effect of L1 on a second language as follows:

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"One such factor that distinguishes second language acquisition from first language acquisition is the fact that the second language learner comes to the task of acquisition already knowing a language. Most current theories of second language acquisition do, in fact, assume that the native language of the learner plays a role in acquisition. Although researchers generally agree that the learner's existing linguistic knowledge exerts some influence on the acquisition process, there is considerable debate as to precisely what role the native language plays. Moreover, existing research suggests that the influence of the native grammar is not absolute: some aspects of the L1 seem to prevent successful acquisition of particular L2 structures, whereas other properties of the L2 are acquired with little or no interference from the native grammar (Schwartz, in press). The challenge for second language theory now is to provide a principled explanation for the presence or absence of L1 influence, that is, what determines "partial influence"(p. 5).

Akamatsu (2003) investigated the effects of first language orthographic features on second language reading. Three groups of fluent L2 readers with a variety of L1 backgrounds (i.e., Chinese, Japanese, and Persian) were provided with English passages printed in either alternated case or a normal manner and asked to read them for comprehension. Results showed that the Chinese and Japanese (nonalphabetic L1 groups) were more adversely affected by case alternation than was the Persian group (an alphabetic L1 group), in terms of reading speed. This suggests that, because of L1 effects on basic processing in L2 reading, L2 readers with a nonalphabetic L1 background were less efficient in processing English words than those with an alphabetic L1 background.

Above, we have summarized some of the factors that have effect on the acquisition of a second language. Next, we will deal with the factors affecting degree of foreign accent. Even though the factors that have been listed in Lightbown and Spada's (1999) list are the common ones in foreign language accent, our concern will be mainly L1 effect from now on.

1. 1. L1 Effect on Foreign Accent in an L2

A great many recent studies have shown that adults who learn a second language are apt to produce and perceive L2 phonetic segments differently than do individuals who are monolingual native speakers of the target language (McAllister, Flege & Pikse, 2002).

In a study conducted by Piske et al. (2001), the influence of Italian-English bilinguals' age of L2 learning, length of residence in an L2-speaking environment (Canada), gender, amount of continued L1 (Italian) use and self-estimated L1 ability on degree of foreign accent. Results reveal that both age of L2 learning and amount of continued L1 use were found to affect the degree of foreign accent. Gender, length of residence in an L2-speaking country and self-estimated L1 ability, on the other hand, were not found to have a significant, independent effect on overall L2 pronunciation accuracy.

In order to observe the circumstances under which native language influence is positive and/or negative, Bada (2001) has conducted a study in English phonology. The study describes the phonological analysis of Japanese speakers learning English as a foreign language. The study was carried out at a phonemic level, and reflected learners' performance in the target language at a specific stage of interlanguage. A non-comprehensive comparison between the English and the Japanese sound systems was made and the "so-called" problem causing sounds were diagnosed. These problematic sounds, then, were employed in texts and presented to learners for reading. Results obtained from this study suggest that while some sounds were found to pose some difficulty of production, and that the difficulty was attributable to native language, others were produced with much less difficulty due to the already-present native language system of phonology.

1. 2. Statement of the Problem

For most of the researchers, who did studies on the effect of the first language on the second language, the degree of the effect is important. The question whether this effect is positive or negative is a crucial one to answer. As teachers working in the field of English language teaching, we should be aware of this issue.

Most of the time, there are some aspects of the second language which are difficult for our students. It is therefore possible for an English

language teacher, to be curious about why the students cannot pronounce a specific sound in the target language. In our situation, the sound chosen for the study is / Θ / sound, which can relatively be hard for Turkish students to articulate.

In the light of the literature stated above, the researcher has decided to research the effect of native language on the production of / Θ / sound in English. The participants, from a variety of different L1 backgrounds, were asked to read a list of words containing the sound in question in word initial, medial and final position. Among the seven participants only Spanish and Greek speakers had / Θ / sound in their native language. This gave the researcher the chance to compare the accuracy percent of these speakers with the speakers who did not have this sound in their native language. The results of the study reveal that L1 did not have an overall effect on the production of this sound.

1. 3. Statement of the Research Question

In the light of the statements above, this study will try to find out whether L1 has an effect on the pronunciation of / Θ / sound in English. In other words, this study will attempt to answer the basic research question stated below:

1. Does L1 have an effect on the pronunciation of / Θ / sound in English?

2. METHODOLOGY

2. 1. Selection of Participants

The participants who participated in the study were all English second language speakers. The native languages of the participants were; Norwegian, Greek, Hungarian, Spanish, Italian, Turkish, and German. All seven subjects were working at the NATO base in Eskişehir, Turkey as a representative of their home country. The age of the participants varied from 35 to 48 and all of them were male.

In order to work in NATO, a soldier has to pass a set of three tests on English proficiency. The test includes a proficiency test on English grammar, an oral test and a written test. The mean score is calculated and if it is 3, the applicant is accepted to work there. As all the seven participants took the same test and had the right to work there, it is assumed that the proficiency level of the subjects were comparable.

Since the aim of the study was to search for the effect of the native language on the production of / Θ / sound in English, participants were chosen from different language backgrounds. Among the participants, only Spanish and Greek speakers had this sound in their native language; whereas, the other speakers did not have the / Θ / sound in their native language (Zengin, 1999, Katerinov & Katerinov, 2000).

2. 2. Instruments / Materials

In order to collect data a number of techniques have been used by the researchers. In some cases the subjects were asked to read sentences, paragraphs, or individual words (Hansen, 2001).

Another technique to collect data has been to ask subjects to repeat speech materials after hearing a native speaker model or to talk freely on a given topic. However, Piske et al. (2001) suggest that more reliable measures of degree of L2 foreign accent may be obtained if raters evaluate a fixed set of materials (e.g., sentences) that were elicited by using a delayed repetition technique.

The researcher decided to use a fix set of material to elicit data from the participants because of the reasons stated above. The list in Table-1 is the word list that has been used to elicit data. The list was developed by the researcher for this study. The words on the list were chosen randomly from The New Lexicon Webster's Dictionary. On the list there were 10 word initial, 10 word medial and 10 word final words containing the sound in different linguistic environments (See Table-1).

Table-1 Word List Used for the Study

WORD INITIAL	WORD MEDIAL	WORD FINAL
Thin	Lethal	Length
Thick	Athlete	Truth
Theory	Author	Death
Thieve	Menthol	Both
Think	Atheism	Birth
Thirsty	Monotheism	Bath
Three	Diphtheria	Health
Throat	Breathless	Depth
Through	Mathematical	Fifth
Thunder	Strengthen	Beneath

2. 3. Data Collection

The subjects were first asked whether they would like to participate in a study conducted on English Language. None of the subjects were told about the main focus of the study, as it might affect them. The subjects and the researcher decided on a suitable time, and the researcher visited the subjects in NATO base. The tape recording was done in a room which was suggested by the commander. Each participant was interviewed alone. It took five minutes for each participant to read the list and to answer the questions asked by the researcher.

After audio-taping the participants, the researcher asked the participants about their English Language education. Also, they were asked if they had worked in a country where the English language was spoken. Even though two of the participants stated that they had been to an English speaking country, none had lived in a country where English was spoken more than a year.

2. 4. Data Analysis

The data were analyzed by 80 per cent criterion method (Hansen, 2001). In this method, if the participants use a certain structure correctly 80 per cent of the time, it is considered to be acquired. Correct usage was calculated as the number of correct attempts over the total number of attempts.

Two native speakers of English decided on the accuracy of the pronunciation of the words. One of the native speakers was a British English speaker; whereas, the other was an American English speaker. Both natives were English Language teachers at Anadolu University, School of Foreign Languages. Both were male.

3. RESULTS

The table below (Table-2) shows the percentages of the accurate pronunciations graded by two native speakers. When carefully analyzed, it is possible to see that among the seven participants, only 3 scored higher than 80 %. According to the 80 per cent criterion method, only these three speakers were successful at pronouncing the sound in question.

Table-2 The Percentages of the Accurate Pronunciations

Native Language	Grader 1	Grader 2	Mean
Norwegian	76 %	80 %	78 %
Greek	86.6 %	86.6 %	86.6 %
Hungarian	86.6 %	66.6 %	76.6 %
Spanish	93.3 %	86.6 %	89.95 %
Italian	70 %	83.3 %	76.65 %
Turkish	53 %	70 %	61.5 %
German	86.6 %	90 %	88.3 %

When we rank order these three speakers we see that the order is as follows;

1. Spanish   89.95 %
2. German   88.3 %
3. Greek   86.6 %

The Spanish speaker was found to be the most successful among the seven by the two graders. The mean score of his correct utterances was found to be 89.95 %. The second successful speaker is the German speaker with a percent of 88.3. The Greek speaker, with a 86.6 %, was the third successful speaker among the seven speakers.

Thus, in general it is possible to say that the speakers who have / Θ / sound in their native language were successful in producing the sound than the speakers who did not. Even though the German speaker was the second in the list stated above, it is a fact that the speakers were influenced from their native languages in producing / Θ / sound. However, according to the results of the analyses, it is still not possible to say that L1 had a direct effect on the acquisition of / Θ / sound.

An explanation for the German speaker's success could be that, when the participants were asked about their native language background, the German speaker stated that he had been to the USA before and had lived there for a couple of months.

The results of the 80 per cent criterion method reveal that three speakers were successful and had acquired the pronunciation of / Θ / sound. What is interesting about the results is that the two speakers who had this sound in their native language were relatively successful in the pronunciation of / Θ / sound.

Another important result of the study to discuss here is the percentage of the correct utterances done by the Turkish native speaker. When Table 2 is analyzed, it is possible to see that the Turkish native speaker was the least successful among the participants. The mean score of this speaker was only 61.5 %, the lowest of all. The reason of this situation cannot be answered with the effect of L1, as all the other five speakers also did not have / Θ / sound in their native language. An explanation of this could be one of the factors stated in the Introduction part of the study.

4. CONCLUSION

The study presented here aimed at answering the question whether L1 had an effect on the production of / Θ / sound. Trying to reach the aim, speakers coming form a variety of languages were asked to read a list of words containing / Θ / sound. Even though the results reveal that L1 did not have an overall effect on the accurate pronunciation of this sound, it is worth considering that the most two successful speakers had this sound in their native language.

It is also important to state the limitations of the study here. For the study only seven subjects were used in order to answer the research question. However, the results could have been different if the number of the participants had been more than seven. If there were more speakers from each language, the personal differences which might have affected the results could have been overcome.

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