The Impacts of Phonemic Awareness upon Less Proficient English Learners’ Listening and Reading Comprehension

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Abstract

This research paper lays its focus on the phonemic awareness in less proficient English language learners’ discoursal processing, especially in their listening and reading responses. The test participants are sampled from one southern university of technology in Taiwan. Their aural and reading performances are further computed by Paired-sample t-test and Pearson coefficient values. The research results reveal that the phonemic awareness fail to exert its expected influences upon the discoursal processing. What counts most lies in the overall textual organization, background information, and the topic familiarity.

I. INTRODUCTION

This research paper purports to delve into the extent of less proficient English learners’ phonemic awareness in decoding the aural and reading stimuli at the discoursal level. Here, on the consideration of the discoursal structures (Brown, 1995; Tauroza & Allison, 1994), the highly comprehensible conversation is exclusively employed to explore this issue. It is empirically evident that the complex discursual structures will impede English learners’ overall textual comprehension (Brown, 1995; Tauroza & Allison, 1994). Since this research paper lays the overt emphasis on less proficient English learners’ phonemic awareness through the aural and reading stimuli, the complexity of discoursal structures should be well-controlled prior to the formal experimental implementation.

As the previous research studies have revealed, the phonological awareness is touted as the building block in the foreign language acquisition/learning. The less sensitivity to the phonological awareness would in turn hamper the development of lexical spelling (Buck, 2001). This paper, setting aside the suprasegmental features, narrows down the research scope to the phonemic awareness. In so doing, less
proficient learners are tailored to perceive different types of similar-sounding lexicons (e.g. minimal pairs) at the discoursal level. Here, the similar-sounding lexicons are further dichotomized into the following five types: (1) homophones (e.g. no vs. know), (2) minimal pair (e.g. night vs. light), (3) near minimal pairs (e.g. switch vs. witch), (4) alliteration (bug v. bunny), and (5) partially-similar sounds (e.g. airport vs. port). Based on these five categories of similar-sounding lexicons, this research paper is intended to conduct an in-depth study, detecting which types of similar-sounding lexicons are greatly affective to less proficient English learners’ aural and reading comprehension.

Virtually, the issue phonemic awareness or phonological awareness has been explored in the combination with varying professional fields as follows: (1) the perception of phonemic awareness in the vocabulary learning (Chen Hsin-yi, 2012; Chen Yi-chun, 2011; Huang Ting-yi, 2012; Ko Cun-ing, 2012; Ko Ya-cheng, 2011; Lin-Yi-ling, 2011; Mai Yu-feng, 2012; Tu Huei-ling, 2011), (2) the analysis of English listening comprehension (Liu Pei-chi, 2012), (2) the analysis of English oral and reading proficiency (Hsu Yen-ni, 2011; Ko Ming-yi, 2011; Lin Yu-wen, 2011). These previous research contributions embrace the common trait in highly controlling the contextual variable. For example, in order to detect the lexical spelling performances by young kids with problems in reading and writing, the researcher has to control the difficulty levels of provided texts and lexicons. Apart from the contextual variable, these research studies mostly invite young kids (in the preoperational period or concrete operation period) or adolescents as the major test participants. Only a handful of research study delve into the phonemic awareness of young adults (e.g. university students) (Lin Hsiu-chih etc., 2001; Huang Chin-cheng, 2004). In fact, the phonemic awareness is touted as the building block to the language development. Distinct from the previous research studies, this present research paper purports to investigate types of phonemic awareness alleviating or impeding young adults’ English language learning, especially in their decoding the aural and written stimuli.

II. LITERATURE REVIEW

This research paper primarily explores the impacts of phonemic awareness upon university non-English majors’ discoursal perception. Here, the discoursal perception is specifically referred to the listening and reading comprehension. These two receptive skills are evidently interwoven with the phonemic awareness to varying extents (Kintsch & van Dijk, 1978). The language learners per se, together with the provided learning tasks, is surmised to the degrees of phonemic awareness in decoding the aural and written stimuli. Generally speaking, on the discoursal level,
the following three major elements outweigh the comprehension of individual sentences or lexicons: (1) background knowledge, (2) the structure of the whole text, and (3) cohesion and coherence (Dunkel & Davis, 1994). The phonemic awareness, truly, is greatly affective to language learners’ aural or written comprehension. Yet, on the disoursal level, the following three elements are credited to further English language learners’ listening or reading comprehension: (1) appropriate structuring, (2) organizing cues, and (3) redundancy. Apart from those three major elements, the phonological awareness or phonemic awareness is vital to the listening or reading comprehension. For less proficient English learners, the phonological awareness or phonemic awareness acts as the building block for their accuracy of lexical spellings. In so doing, learners are able to deal with the discoursal information (e.g. conversations or short talks). Here, there raises a problem: Which types of phonological awareness or phonemic awareness predominate over less proficient English learners’ linguistic information processing? Mai Yu-fen (2012), the Taiwanese researcher, explored types of phonological awareness to impede the development of young kids’ English reading and writing. The following three major elements empirically hampered young kids’ development in their reading and writing proficiency: the recognition of intonation, the dichotomy of syllables, and the perception of phoneme-to-grapheme skills. The research findings of Mai (2012) are limited to young kids. Here, this research paper explores the similar issue, but the test participants are exclusively sampled from young adults (i.e. the non-English university majors). Distinct from young children, our invited university freshmen (i.e. the less proficient English learners) have been learning English for years. Yet, their overall English language proficiency is still in the process of fossilization. Here, this research paper is intended to explore how phonemic awareness exerts its influences on less proficient English learners’ performances in the provided listening and reading tasks.

In addition to the impacts of the phonemic awareness, another breakthrough in this research paper is to explore the extent of phonemic awareness on the discoursal level. The reason why the researcher of this paper is intrigued to focus solely on the discoursal level mainly lies in foreign language learners’ employment of compensatory strategies for their lack of linguistic knowledge, the familiarity of the topics, and the identification of the speakers (Buck, 2001: 50). Comparatively, the phonemic awareness is not the vital element in the information processing. In order to realize the extent of phonemic awareness on the discoursal level (i.e. conversations), this researcher conduct this research study to clear to doubts.
III. METHODOLOGY

Test Participants for This Research Paper

Here, the less proficient English learners (non-English majors) are primarily sampled from one southern university of technology in Taiwan. They are arranged to the Group B of General English Education (N= 55). The General English Language Proficiency Test, administered by the Center of Foreign Language Learning in our sampled university, establishes itself as the major criterion for non-English majors’ English language proficiency levels. All of the test participants in our research paper consent to collaborate on our research experiments prior to their formal classroom instruction in the beginning of the new term (i.e. the mid-September in the year of 2015).

The Self-designed Conversations for Measurement

Here, two self-designed conversations are administered for this preliminary research paper. They are presented as follows:

【Conversation 1】
Listening Script
How (1) march is that coat?
The (2) blue one?
It’s a hundred and eighty-six (3) collars.
How much was your (4) bar?
It was (5) quiet expensive.
It costs (6) fourteen thousand eight hundred and fifty-seven dollars.

Reading Comprehension Check
7. The blue coat costs a hundred and eighty-six dollars.
8. The car is quite expensive.
9. The car costs forty thousand eight hundred and fifty-seven dollars.

【Conversation B】
Listening Script
Receptionist: Good morning. Brahma & Co. May I help you?
Sarah: Good morning. It’s Sarah Nexon from Carrington Industries.
I’d like to (10) speed to Patricia Goldman, please.
Receptionist: Please hold, and I’ll put you (11) thorough.
Patricia: Patricia Goldman speaking. How can I (12) help you?
Sarah: Good morning, Miss Goldman. It’s Sarah Nexon from Carrington Industries.

Reading Comprehension Check
13. Sarah is speeding her car to her company.
14. The receptionist is thoroughly checking the paper.
15. Patricia helped Sarah to hold.

Apparently, several of the measured lexicons purported to interfere with test participants’ overall discoursal listening comprehension, such as how march (correct: much), eighty-six collars (correct: dollars), and so forth. The major purpose of this research design, as having been stated in the beginning section of this paper, is to measure the extent of phonemic awareness that less proficient non-English majors have activated during the overall discoursal listening and reading comprehension.

*The Statistical Instruments*

**Paired-Sample T-test**

The Paired-sample t-test is primarily utilized to test participants’ listening performances in the provided conversations, further delving into the extent of the phonemic awareness in the discoursal level.

**Pearson Correlation Coefficient**

Another statistical instrument, *Pearson Correlation Coefficient*, is exclusively employed to detect test takers’ performances in two receptive language skills. The higher correlation coefficient values imply the wielding powers of phonemic awareness in students’ receptive skill performances. Otherwise, the phonemic interference may be free from test takers’ overall discoursal comprehension.

**IV RESULTS AND DISCUSSION**

*The Extent of Phonemic Awareness in Slow Learners’ Listening Conversation*

This subsection purports to delve into the impacts of phonemic interference upon slow learners’ discorsal-level listening performances. Prior to the numerical analysis, we replicate the measured conversation in the following:

(1)

How (1) march is that coat?
The (2) blue one?
It’s a hundred and eighty-six (3) collars.
How much was your (4) bar?
I It was (5) quiet expensive.
It costs (6) fourteen thousand eight hundred and fifty-seven dollars.

As the conversation in (1) presents, the sampled test takers have to be wary of the following lexicons which hamper the overall textual comprehension: (1) march (correct: much), (2) collars (correct: dollars), and (5) quiet (correct: quite). How are test participants’ performances in their phonemic awareness in relation to the context? Table 1 reveals the results in the following:

Table 1  The perception of phonemic awareness by less proficient learners

<table>
<thead>
<tr>
<th>Conversation</th>
<th>Average Scores</th>
<th>Standard Deviation</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conversation 1</td>
<td>60.00</td>
<td>14.56</td>
<td>55</td>
</tr>
<tr>
<td>Conversation 2</td>
<td>51.52</td>
<td>22.06</td>
<td>66</td>
</tr>
</tbody>
</table>

On the grounds of Table 1, our invited test takers have grasped 50 percent to 60 percent of accuracy in the provided conversational listening evaluation. Yet, possibly owing to the textual length in the second conversation, slow learners’ fail to detect the phonemic accuracy in the measured lexicons. That is to say, the longer the text becomes, the less phonemic awareness the selected less proficient learners have achieved. Thus, in the discoursal level, the textual meaning rather than the phonemic accuracy predominates over test participants’ listening performances. This statement will be further explored through test takers’ textual reading comprehension in concert with their listening perception.

The Extent of Phonemic Interference in Slow Learners’ Textual Reading Comprehension

This issue adheres to the previous statement in which the discoursal organization of provided conversations rather than phonemic awareness has become the juggernaut in the textual comprehension. Here, we switched our focus on the extent of phonemic awareness in less proficient learners’ textual comprehension. Table 2 presents the results in the following.
Table 2  The extent of phonemic interference in slow learners’ listening and reading performances in conversation 1

(A) | Average | Standard Deviation | Number |
--- | --- | --- | --- |
Listening 1 | 60.00 | 14.56 | 55 |
Reading 1 | 78.18 | 25.83 | 55 |

(B) | Listening 2 | Conversation 2 |
--- | --- | --- |
Listening 1 | Pearson Coefficient: 1 | -.038 |
Significance (2-tailed): .781 | .781 |
Number: 55 | 55 |
reading 1 | Pearson Coefficient: -.038 | .781 |
Significance (2-tailed): | .781 |
Number: 55 | 55 |

As seen in Table 2 (A), our invited test participants outperform in their reading comprehension test, reaching 78.18 in the average scores. Despite the reading average value fails to manifest the statistically significant difference with its listening counterpart (p>.05, p = .781), the soaring reading average scores rebuff the negative impacts of phonemic interference upon less proficient learners’ textual reading comprehension. This is further evidenced by the negative Pearson coefficient value -.038, implying the limited interference of the similar-sounding lexicons in sampled test takers’ overall textual comprehension.

What follows, we utilize the second self-designed conversation to further examine the validity of the results in Table 2. Prior to the analysis of less proficient learners’ performances, the full conversation 2 is replicated in the following:

(2)
Receptionist: Good morning. Brahma & Co. May I help you?
Sarah: Good morning. It’s Sarah Nexon from Carrington Industries.
I’d like to (10) speed to Patricia Goldman, please.
Receptionist: Please hold, and I’ll put you (11) thorough.
Patricia: Patricia Goldman speaking. How can I (12) help you?
Sarah: Good morning, Miss Goldman. It’s Sarah Nexon from Carrington Industries.

Comparatively, the lengths of each sentence in (2) is longer than the previous conversation in (1), posing the challenge in slow learners’ listening comprehension. Virtually, the purpose of the conversation in (2) is to explore another variable the
discoursal meanings in relation to the phonemic awareness. To put it alternatively, do the total amounts of discoursal meanings alleviate or hamper less proficient learners’ phonemic awareness? The results are tabulated in the following:

Table 2  Slow learners’ phonemic awareness in the conversation 2

(A)

<table>
<thead>
<tr>
<th></th>
<th>Average</th>
<th>Standard Deviation</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Listening 1</td>
<td>51.52</td>
<td>22.06</td>
<td>55</td>
</tr>
<tr>
<td>Reading 1</td>
<td>54.24</td>
<td>27.45</td>
<td>55</td>
</tr>
</tbody>
</table>

(B)

<table>
<thead>
<tr>
<th></th>
<th>Listening 2</th>
<th>Conversation 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Listening 1</td>
<td>Pearson Coefficient</td>
<td>1 .244</td>
</tr>
<tr>
<td></td>
<td>Significance (2-tailed)</td>
<td>.072</td>
</tr>
<tr>
<td></td>
<td>Number</td>
<td>55 55</td>
</tr>
<tr>
<td>reading 1</td>
<td>Pearson Coefficient</td>
<td>.244</td>
</tr>
<tr>
<td></td>
<td>Significance (2-tailed)</td>
<td>.072</td>
</tr>
<tr>
<td></td>
<td>Number</td>
<td>55 55</td>
</tr>
</tbody>
</table>

As Table 2 demonstrates, slow learners indeed present the downward performances in their overall listening comprehension in the conversation 2, yielding the nearly 10 score gap in comparison with their listening achievement in the conversation 1 (See Table 1). Such a score discrepancy leads to the statistical significance, confirming the negative impacts of the increasing discoursal meanings upon slow learners’ phonemic awareness as well as their textual comprehension. The increasing discoursal meanings, similarly, impede our invited test participants’ reading achievements, raising the 25-point gap between these two experimental performances (See Table 1 and Table 2). Surely, the statistical significance is projected, and the increasing discoursal meanings play havoc with slow learners’ reading comprehension, let alone their phonemic awareness in the course of the reading comprehension. Nevertheless, slow learners still outperform in their reading scores in spite of the razor-thin discrepancy with their listening achievement (See Table 2). Thus, the phonemic interference is evidently not the hampering variable for slow learners’ overall conversational listening performances. The discoursal organization, together with the familiarity of the background information, primarily elicit test participants’ listening and reading comprehension. The phonemic awareness, relatively, fails to act as the predominating variable in test takers’ receptive-skill comprehension. Pedagogically implied, the overt emphasis on the
phonemic accuracy is less instrumental to young adults’ (especially slow learners’) textual comprehension, further making students demotivated in their EFL study. Thus, the bolts-and-nuts (i.e. the linguistic elements) are surmised not to occupy young adults’ EFL learning. The textual meanings become the primacy in the young adults’ EFL learning.

V. CONCLUSION

Based on the research findings described above, the phonemic awareness fails to exert the expected influences upon the information processing. This is evidenced by less proficient English learners’ high accuracy rates in their listening and reading task responses. Truly, the longer the provided conversation is, the less accuracy rates the test participants have achieved in the experimental tasks. Yet, the accuracy rates are statistically irrelevant to the phonemic awareness. Additionally, in view of test takers’ aural and reading responses, the discoursal organization (i.e. the textual meanings) outweighs the linguistic processing. To put it alternatively, test takers possibly reach the reading achievements despite they may be somewhat distorted by the provided similar-sounding lexicons (e.g. dollar vs. collar). Pedagogically implied, the phonemic awareness may be the important variable in guiding less proficient English learners to perceive the forthcoming aural and written stimuli. Yet, on the discoursal level, the textual organization predominates over the accuracy of linguistic elements. Thus, in the classroom instruction, the lecturer are advised not to dwell much on the accuracy of linguistic elements in the poor English learners’ general English course. What counts most is the fluency in conveying the well-organized information.

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二、英文書目


