Interactive and Non-Interactive Modifications to Input in Listening Comprehension

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Abstract

There are different views on the role of input in acquisition. One interesting point to researchers in this regard has been the nature of input modifications that aid comprehension. Some researchers posit that the input which is adjusted to the level of learner’s competence is the best type of input helping comprehension (for example, Krashen 1981; 1985; 1989). Krashen believes that learning occurs as a result of understanding comprehensible input. Accordingly, input can be made comprehensible by making it simpler and more redundant. Long (1983) stresses the importance of interactional modifications on comprehension. Interactional modification is when learners hear the unmodified input but enjoy the right to seek clarification. The present study sought to investigate the possible effects of interactive and non-interactive modifications to the input on the listening comprehension of a group of Iranian English Students. The study showed that lower rate of input (as one way of non-interactive modification) does not have a significant effect on student’s comprehension. That’s while the interactive modification of input helped significantly to their comprehension level.

Keywords: Input, Interactive modification, Non-interactive modification, Listening comprehension
Input is defined as “the language that is addressed to the L2 learner either by a native speaker or by another L2 learner and his interlocutor” (Ellis, 1985, p. 127), and comprehension involves extracting meaning from the input (VanPatten & Benati 2010). When we listen, the text is presented to us dynamically: it happens. Spoken language represents phenomena as processes, as opposed to written language which represents language as products (Halliday 1990). Communication entails engaging in active cognitive processes of producing and receiving messages using the relevant shared world knowledge. The listening comprehension process is internal and thus not subject to direct, external observation, examination, and correction. Therefore, language teachers and students tend to overlook its prerequisite importance in language learning (Chastain 1988). Teachers often do not have much experience to provide conditions to help students better comprehend listening activities.

There are different ways to make oral input more readily comprehensible, without tampering with its syntactic or semantic structure (i.e. pre-modified or simplified input). One way is which Long (1983) believes can be helpful in comprehension, namely, presenting the context within which the listening is going to take place; or by giving the learner a chance to seek clarification (and not repetition). Another way is to modify input by reducing the rate at which it is presented to the learner.

**Review of the Related Literature**

**Interactionally and non-interactionally modified input**

Krashen believes that input becomes comprehensible as a result of simplification and contextual and extralinguistic clues. This is what Pica, Young, and Doughty (1978) call pre-modified input, which incorporates much redundancy. Krashen’s Input Hypothesis, however, has been challenged on that comprehension does not necessarily lead to learning (Rost, 1990; White, 1987). Acquisition is not the target of the present study though, as it focuses on the effect of different modifications to the listening material on comprehension. Long (1983) admits that simplified input and context play a role in making input comprehensible, but he emphasizes the importance of the *interactional modifications* that occur in the form of negotiating the meaning and asking for repetition and clarification. He believes that interactive input is more important than non-interactive input.
Pica, Young, and Doughty (1978) compared the effect of three types of input on the comprehension of oral instructions. These three types included 1) unmodified input (of the kind native speakers use when addressing each other), 2) premodified input (simplified input which is more redundant), and 3) interactionally modified input (unmodified input in which the learners had the opportunity to seek clarification). They concluded that the interactionally modified input resulted in the highest levels of comprehension. Other studies by Loschky (1989), and Ellis, Tanaka, and Yamazaki (1994) confirmed these findings.

Speech rate

One type of non-interactive adjustment concerns speech rate (Ellis, 1994). Initially, when listening to a foreign language, the learner has little or no idea of where the word breaks are. The learner must divide up the speech stream into words and morphemes before these can be further categorized (White 2003). Some studies suggest that slower speech rate help comprehension (Long 1985, Mannon 1986). However, these studies were reported to have investigated speech rate along with other variables. Conrad (1989) in a study with native and non-native speakers examined the recall of some English sentences, which were played five times at different speeds. The native speakers could almost completely recall all sentences at the second time, but the non-native speakers had difficulty remembering the sentences even after the fifth time. Griffiths (1990) examined the effect of varying speech rates on the comprehension of a group of lower intermediate level students. The speech rate varied from 94-107 wpm (slow) to 143-154 (medium) and 191-206 (fast). The subjects manifested significantly reduced comprehension at fast rates, but there was no difference between the normal and slow rates.

Research Questions

1. Does the interactionally modified input help significantly to their listening comprehension?

2. Does the rate of presenting the input help significantly to their listening comprehension?

Based on these questions, which are the main targets of this study, the following hypotheses are formulated:
Research Hypotheses

NH 1: Interactionally modified input has no significant effect on their listening comprehension?

NH 2: Slower rate of presenting the input has no significant effect on their listening comprehension.

Design

There are two independent variables, namely, interactionally modified input and the low rate of input. And there is one dependent variable, listening comprehension. The researcher used a t-test to compare the means of the two IM (Interactionally modified input) and SL (Slow rate input) groups against the NR (Normal input) group.

The participants were selected on the basis of their performance on a short IELTS listening test, which will be elaborated on in the following sections. Also, there were three listening comprehension paper tests, in which the same oral material was presented intact for the NR group, with slower rate for the SL group, and intact but giving the students an opportunity to ask questions for clarification for the IM group. Both the former listening for selection and the latter listening tracks mentioned were selected from IELTS listening tasks.

Participants

The participants were 24 English Sophomores at the PNU University of Chenaran, Iran, 15 female and 9 male students. They were the students of an Oral Translation class with 29 students. To find out about the specifications of the class, as mentioned above, an IELTS listening test was given. They listened for the audio file and answered 20 multiple choice items based on this listening test. The total score of the test was in the scale of 20, one point for each item. The mean score of the group turned out to be 14.68, and the standard deviation 2.98. To have a homogeneous group, 5 of the learners’ scores were not taken into account in the study as their scores on this test were more than 1 SD above or below the mean score of the class. But they were not informed about this and were present in the class. This was part of a measure to have sample as homogeneous as possible.
Table 1 Descriptive statistics of the sample

<table>
<thead>
<tr>
<th>Total No. of Students</th>
<th>Sample</th>
<th>Female</th>
<th>Male</th>
<th>Mean</th>
<th>SD</th>
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</thead>
<tbody>
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<td>24</td>
<td>15</td>
<td>9</td>
<td>14.68</td>
<td>2.98</td>
</tr>
</tbody>
</table>

Data Collection and Analysis

Each group would separately listen to a unit of two listening tasks. The topics of the listening tasks, which were two listening tracks from the IELTS listening test, were Ecotourism and Global Warming, with duration of about six minutes. Each track was played two times for each group separately. The first group of students who were going to respond to interactionally modified input (IM group) was told beforehand that they could ask for clarification whenever needed. However, the clarification was to be concise, so as to keep the chance of getting extra input and repetition as low as possible, and in a way to avoid repeating the same constituents, as Ellis (1994) points out that in such studies the opportunity for negotiation may lead to much repetition and it remains unclear whether the advantage reported for interactionally modified input has been a result of quantity or quality of input.

Here is an example of the interactional modification during the second time of the listening:

Input: ...; this is why alternative forms of tourism are becoming more popular...

S: “...what forms of tourism?”

T: “Alternative forms; it means: other forms.”

In this case, the asking student seemingly knew the meaning of the word alternative, and had it in her visual lexicon, but she apparently had had difficult time just hearing the word, i.e. the word was not present in her aural lexicon, and this is often the case with many Iranian English learners, as EFL learners. This often happens when the students have learned the word by reading and seeing it, but rarely or never heard its pronunciation.

The second group would receive the same listening tracks, but with a lower speech rate (SL group). The average speech of the normal tracks used in this study is about 150 words per
minute. Compared to the study done by Griffiths (1990) mentioned above, this rate of speech is somewhere between medium and fast. The speech rate of the tracks assigned for this group was manipulated in a way to result in a rate of about 120 wpm (using Adobe Audition® CS5.5 software).

Finally, the third group would listen to the same audio texts with the normal rate of 150 wpm (NR group). This group would function as a group against which the performance of the other two groups would be analyzed using the $t$ test.

Based on these input tracks, there was a comprehension test with multiple choice and true/false items. This test was the same for the three groups and comprised 20 items, 10 question items based on each track.

**Results**

It was hypothesized that the difference between the mean score of the group receiving the listening input with the normal speech rate would be no different from those of the groups receiving the interactionally modified and slower rate input. The testing session started with each group entering the class separately and taking the test.

Each group consisted of eight students. The mean score of each group was separately compared to that of the NR group mean score. To do this, the $t$-test was used (Hatch & Farhady, 1981). The mean score of the NR group on the normal rate test turned out to be 14, with an SD of 2.29. The IM group on the interactionally modified test had a mean score of 17.5, and an SD of 2.07. And finally, the SL group on the slow rate test with a mean score of 15.87 and a SD of 2.29. We will judge the SL and IM groups as compared to the NR group.

The first comparison will be between the NR group and the IM group. For a d.f. of 14, the observed $t$ is 2.941. The observed $t$ is beyond the critical value of $t$, which is 2.145; $t_{\text{obs}} > 2.145$. This is to say, the interactionally modified input has helped comprehension to a significant level and the first hypothesis is rejected. This is in line with the major part of studies in this regard (like Pica et al, 1978).

Now the SL group is judged against the NR group. For a d.f. of 14, the observed $t$ is 1.64. The amplitude of the $t$ value for this distribution is not high enough to be significant; $t_{\text{obs}} < $
2.245. Although the mean score of the SL group is a little higher than that of the NR group, it is not high enough to be justified.

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>df</th>
<th>t_{critical}</th>
<th>t_{obs}</th>
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<td>14</td>
<td>2.29</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>IM Group</td>
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<td>2.07</td>
<td>14</td>
<td>2.145</td>
<td>2.941</td>
</tr>
<tr>
<td>SL Group</td>
<td>8</td>
<td>15.87</td>
<td>2.29</td>
<td>14</td>
<td>2.145</td>
<td>1.64</td>
</tr>
</tbody>
</table>

Discussion

The present study is a replication of studies by Ellis, Tanaka, and Yamazaki (1994) and other similar studies. However, much effort and rigor has been practiced to keep the chance of receiving extra input as low as possible by the time the students sought clarification. Further, to measure the effect of slower rate of presentation of input, only the speed was manipulated and the pause duration between each sentence was left intact, as this is another variable reported in listening comprehension (Ellis, 1994).

The researcher’s purpose was to see if the same results would be achieved by Iranian learners, trying to avoid the possible pitfalls of the previous studies. One of the limitations of this study is the small size of the samples. Each of the three groups comprised of only eight students. So it is not easy to generalize the results to similar contexts. However, the main finding of this study, namely, the effectiveness of the interaction process is in line with the findings by the same studies.

This study was an attempt to investigate the effect of two kinds of modification of input on listening comprehension. As Rost (1990) in a statement about the shortcoming of Krashen’s Input Hypothesis (1985) points out, being able to understand the meaning of input is not equal to its acquisition because one may have no idea of the forms inside the sentence, as
one’s comprehension is well ahead of their production (to take production as an index of acquisition).

Conclusion

There are different ways to help learners better understand listening comprehension. Warm up or raising the relevant schemata is one way teachers usually make use of. Or playing and pausing several times during a listening task. However, input modification (as opposed to modifying input, in terms of grammar and vocabulary) is another option which is at their disposal. The present study showed that there are more to interactionally modified input than just the added comprehension. It helps to make student’s vocabulary active in listening and raises the consciousness that knowing a word also means to know its pronunciation, which is an issue in EFL contexts like that of Iran.

The present study did not find speech rate manipulation to be highly and significantly effective in comprehension, but still some students favor this kind of modification. Maybe this way would be best fitted to the needs of less advanced learners.
References


