

The Effect of Gesture during the e-Learning Class on Cross-cultural Learners

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Abstract

In this paper, the authors reflect on how a lecturer's cross-cultural gestures affect learners from across cultures online and in the field teaching sessions for improving the service when to build an e-Learning system. The study extends to survey the way learners feel about cultural differences during a presentation from the research based on sociolinguistics research. Before starting a full-scale research, a preliminary study has been conducted to base the initial experiment, and analysis these result for main research.

1. Introduce

As the globalization of companies and companies overseas keep growing because of globalization, the variety of nationalities of workers and employees increases, sometimes rising troubles due to cultural differences. Also, the globalization of companies, many companies are increasingly offering private education and technical training services which are conducted remotely using e-Learning systems on the network. In such cases, the education through the video or website may lead to some misinterpretations due to the cultural differences between learners and lecturers.

In sociolinguistics filed, research on cross-cultural communication has been carried out from long ago, and various approaches have been conducted. In particular, two fields of sociolinguistics produced exciting research. These two fields are: "behaviors in intercultural communication" [1][2] and "behaviors in psychology" [3][4]. However, the research in the context of video learning or remote learning on the web, or research during a presentation is yet to be explored.

In this research, we study how many factors related to the lecturer's language gesture affect the learning process of learners from different cultures, in the context of an e-Learning system. Our study focused on the type and importance of influence that the gesture during the conversation in an e-Learning system (or in situ) has on learners coming from cross-cultures.

2. Experiment in the field

Our research started with the small preliminary experiment before the main full-scale experiment was conducted for verifying our prerequisite "the difference in intercultural behavior influences learners".

2.1. Prepare for the experiment

We selected gestures that focus on different usage frequency and meaning by Korea and Japan based on the sociolinguistics research results reviewed beforehand [5][6].

Figure 1 shows one example gesture that has different meanings in different countries (Korea and Japan) and Table 1 shows in what percentage people from various nations associate the same meaning to this gesture on the

sociolinguistics research results by the sociolinguistics research [6].



(Fig. 1) The gesture of turning finger around the temple

<Table 1> different meanings by country about Figure 1

Country	Meaning (%)						
	spirit is abnormal	fool	thinking	think twice	can't accept	other	
Korea	73.5	19.8	2.3	0.3	2.1	2.1	
Japan	41.4	35.6	11.5	2.9	6.8	1.7	
China	19.8	3.0	42.5	27.2	5.6	1.9	
America	74.8	14.8	7.2	0.6	0.9	1.6	

Among the gestures observed by sociolinguistics researchers, we selected some gestures that:

1. have different meanings between Japan and Korea such as thumbs-up sign, crook the fingertips of a forefinger
2. have similar purposes such as using the little finger, action of making horns using fingers, etc.

We then made a presentation that naturally included these gestures during the speech.

After that, we carried out a 10-minute presentation in Korean (spoken language) for 15 Korean students (1st and 2nd-grade students) in a Korean university by a Japanese lecturer who can speak Korean and a Korean lecturer.

After the presentations, we surveyed to find out if the learners noticed the different meanings or felt the different points between both countries' gestures during our performances.

2.2. The flow of experiment

The contents of our presentation are as follows. We had presentations in the Korean language for 15 Korean students

(from now on called “listener”) at the university.

1. Eleven characteristics of Korean dramas perceived by Japanese people (presented by Japanese lecturer)
2. Life of studying abroad in Japan (presented by Korean lecturer)

Our presentations were delivered as follows:

1. Presentation from a remote place (Japan) through a live Skype video call (by Japanese lecturer)
2. Previously prepared presentation delivered as a recorded video (by Japanese lecturer)
3. Presentation in the field (by Korean lecturer)

We asked the listeners to complete the questionnaire shown in Table 2 (the original questionnaire is the Korean language) after presentations or during the presentations.

<Table 2> Questionnaire

Q1: What is the outline of this presentation? Please write in about 200 characters.

Q2: Please tell us your impressions about our presentation.

Q3: Have you noticed any expression or action that you think are different from the expressions you use? Please fill up the table below if you noticed any.

· Which expression or behavior did you think were different?

Expressions or actions	Reason why you felt that it was different (if any)

Q4: Have you noticed any expressions or actions that you were not able to understand? Please fill in the table below if you noticed any.

· Which expression or behavior were you not able to understand?

Expressions or actions	Reason why you could not understand it (if any)

Q5: Do you think that it will affect learning outcomes if a lecturer does expressions or behaviors unfamiliar to your culture? If you think so, please explain why.

3. Analysis of experiment

The experiment of teaching from a remote place (from Japan) through Skype encountered some troubles in the network connection.

Thus, in this experiment, we analyze the pre-recorded presentation by a Japanese lecturer and the in the field

presentation by a Korean lecturer.

3.1. Presentation by the Japanese lecturer

From the survey results, we observed that listeners felt different about all the gestures that we expected them to perceive differently.

See the survey results from the presentation by Japanese lecturer, we observed that listeners felt different about all the gestures that we expected them to perceive differently.

Also, many listeners answered that unfamiliar expressions and actions would affect the understanding of the course contents on the questionnaire.

From these answers, we became aware that our hypothesis wherein we think that gestures in e-Learning lecture affect listeners is correct.

In list follow, we present notable answers to question Q2 for the presentation by a Japanese lecturer. Q2 is listening to the overall impression of the presentation.

- It was hard to listen because it is very speedily speech therefore hard to understand
- Because intonation and pronunciation are awkward (to talk) it was hard to concentrate
- To some extent, I agreed on the contents of the presenter, gestures that got a bit unfamiliar to some extent came out, thinking now, I missed the contents for a while. Because I saw a lot of Japanese dramas, there was no refusal in expression.
- It seems that Korean was doing quite well. The analysis is also entirely accurate, but the drama also took on the times, and it also came to occur that it is not the feature that she talked about (departing from Korean drama pattern so far).
- I felt that the characteristics of Korean drama Japanese people saw were the same as those of Koreans. I do not have likes and dislikes.
- Describing general scenarios of romantic comedy and the relationship between men and women, I could not catch Korean enough.
- For the time being, I understood it as a story, but there were plenty of difficult things.
- I was perplexed when I learned that our drama was not written as a realistic material in the eyes of foreigners and did an action we could not understand.

In Table 3, we present notable answers to question Q3 for the presentation by a Japanese lecturer.

Looking at the responses, the listeners identified the following expressions to mean differently in Korean: ‘action to count numbers,’ ‘action to express themselves,’ and ‘irritated feelings.’ This result agrees with the results of sociolinguistics research, which points out that the meanings of these gestures differ by a high percentage among countries.

Table 4 summarizes answers to question Q4 for the presentation by Japanese lecturer. For the behavior of placing hands on the chest, it is said that sociolinguistics has almost the same percentage and has the same meaning (Fig. 2) [6].

However, for the action of lifting hands when annoyed by something, many listeners responded that they did not understand the behavior when done in the presentation. We believe that this misunderstanding is caused by cultural


differences.

<Table 3> Part of the answer to Q3

Expressions or actions	Reason why you felt that it was different (if any)
An action of adding a number on the palm of the hand when indicating the number 6 or more	Generally, we just show both hands to everyone to show numbers
A promise	Expression that combines both hands with each other
Put palms on the chest (when annoyed by someone or something)	Korean will do it when some idea comes out
When I express myself, I point my nose	Put I hand points my chest (open my hands)
Meaning that finger V is lucky	Korea is the winning V
The fingers of when being annoyed by something	Suddenly fold hand when speaker express that being annoyed by something

<Table 4> Part of the answer to Q4

Expressions and actions	Reason why you were not able to understand it (if any)
The action of lifting hands when being annoyed by something	Because I think that there is no correlation to the movement of lift hands with when they say being annoyed by something
Points to the nose	The speaker suddenly pointed her nose at the moments she was explaining
Representation of the eighth	I understood, but I could not understand for a moment with a gesture to see for the first time



Meaning Country	myself	relieved	oath	Worry(or when annoyed by someone or something)	Other
Korea	12.8	24.8	26.4	27.2	8.8
Japan	16.4	30.7	14.6	29.2	9.1
China	18.5	29.0	10.5	34.5	7.6
America	7.8	9.8	76.1	2.3	3.9

(Fig. 2) Comparison of different meanings by country (%)

3.2. Presentation by the Korean lecturer

During this presentation, the listeners reacted more promptly compared to when the presentation was given by the Japanese lecturer. We guess the reason must be found in the fact that listeners are more likely inclined to follow the speech of the instructor in their mother tongue rather than the instructor speaking in his second language.

The listener accepted the speaker's actions and expressions more naturally because of him speaking their mother tongue. Therefore, the environment becomes more


natural and comfortable. However, unfortunately, the listener could not concentrate on gestures.

However, about some gestures, listeners answered they felt strongly different and they were puzzled about the reason why the lecturer would make such gestures, compared with Japanese lecturers. This issue should be considered in future research.

<Table 5> Part of the answer to Q4

Expressions and actions	Reason why you were not able to understand it (if any)
An action of adding a number on the palm of the hand when indicating the number 6 or more	In Korea use both hands to show numbers
When I express myself, I point my nose	I felt strange when I first saw it
Meaning that finger V is lucky	Korea is the winning V but Japan is different

As for gestures such as thumbs up, which has a high percentage of difference in meaning in Japan and Korea according to sociolinguistics research (Fig. 3) [6], listeners perceived it to be different in the presentation of Korean lecturer.



Meaning Country	OK	The best	Good	Well done	Other
Korea	2.4	52.4	27.2	16.1	1.9
Japan	1.5	25.1	28.1	40.4	4.8
China	41.5	18.6	23.9	8.0	8.0
America	21.4	1.8	24.6	50.7	1.5

(Fig. 3) Comparison of different meanings by country (%)

Experiments showed lower result percentages than “sociolinguistics studies” on “expression and behavior” which are like Japan and Korea.

For “expressions and actions” that have slightly different meanings, the listeners asserted that “they felt different expressions compared to their national expression.”

According to the results of this experiment, when “expression or movement” is performed at the same time with words, the percentage of the listeners felt “different” from their expression is low compared with sociolinguistic research result. However, depending on the particular “expression and behavior,” we got the result that the listeners still felt the “behaviors” were different from their expression.

4. Conclusion

From our experiments result, we can judge that the learner will be affected by different gestures caused by various cultures.

Based on our experiments, we validated that our

experimental premise of “the difference in intercultural behavior influences learners” is correct.

The gesture improves the understanding of the trust and content of the lecture when appropriately used, but when misused, the confidence of students on the lecturer decreases. Nevertheless, to obtain statistics quantitatively, we found that we should consider more extensive data collection and quantitative statistical questions.

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