Analysis of Multimodality on L2 Learners as Reflected in Their CAF of the Spoken Performance

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Abstract

Exposing learners more to second language than first language in studying a foreign language extremely improve learners' Second Language Acquisition. Listening and reading activity is pertaining to the use of multimodality through watching English videos with L1, L2, and without subtitles. This paper presents a result of study on the analysis of multimodality on L2 learners as reflected in their CAF (Complexity, Accuracy, and Fluency) of the spoken performance. An experiment is conducted to provide learners' understanding with different results from English videos which are presented to three groups of Indonesian undergraduate students (N=30). Group 1 is exposed to videos with L1 subtitles, group 2 is exposed to videos with L2 subtitles, and group 3 is exposed to videos without subtitles. Students are expected to record their spoken performance by telling the story and giving opinion right after watching the videos. CAF is measured and ANOVA is used to analyze the data obtained from the spoken performance of each group. The results show that the use of multimodality including sound, image, and L2 subtiles is more superior than those L1 subtiles and without subtiles. Therefore, it is expected that this study is beneficial for learners, teachers, and curriculum designers.

Keywords: *Multimodality, L2 learners, CAF (Complexity, Accuracy, and Fluency), Spoken Performance.*

INTRODUCTION

Speaking is one of the skills to convey message, give comments, accept and refuse opinion, conduct a question and answer in oral communication. This mastery of English can be used to communicate in all contexts including in daily use of English. Therefore, teachers need to find out a suitable technique applied in teaching and learning process. One of the best ways to learn English is to use this language as many as possible in all contexts so that they have much opportunities to practice. In this case, exposing learners more to target language will be advantageous to them. According to Krashen (1985) learners can learn a large amount of language unconsciously through ample comprehensible input. The use of the target language in real communicative environment and the stress on rich comprehensible input by exposing the learners to the target language in the classroom, facilitate their language acquisition. The target language can be practiced through multimodality.

Multimodality describes communication practices in terms of the textual, aural, and visual resources–or modes–used to compose messages. So, mode of sound, picture, and texts are used at the same time in order to create meaning. Activities of listening and reading simultaneously are related to the use of multimodality through watching TV, film, videos, slides, and so forth and that meaning is communicated through synchronisation of modes. EFL learners take advantages of exposing text with different kinds of modes–multimodality–to improve comprehension, but L2 subtitling is more beneficial than L1 because it causes less lexical interference (Guichon & McLornan, 2008). The information from subtitles is so beneficial for leaners since this valuable information is concerning the

consistency of viewing behavior (Wagner, 2007) and it is in line with Grgurović & Hegelheimer (2007) who claim that participants interacted with the subtitles more frequently and for longer periods of time than with the transcript. Therefore, Captioning was more effective than no captioning and captioning during the first showing of the videos was more effective for performance on aural vocabulary tests (Winke & Gass & Sydorenko, 2010) supporting to have speech performance.

Related to spoken performance–Complexity, Accuracy, and Fluency (CAF)–that become the target of the study belong to three dimensions of a language. Skehan (1998) states that language production is distinguished by three dimensions; that is, fluency, accuracy, and complexity. In cognitive approach, Skehan (1998) distinguishes between exemplar-based and a rule-based system. The exemplar-based system includes discrete lexical items as well as ready-made formulaic chunks of language, while the rule-based system is made up of abstract representations of the underlying pattern of the language. If language users, for example, focus on producing a more fluent language and drawing on their exemplar-based system, their production will be less accurate and less complex. Therefore, they must prioritize where to allocate their attention; fluency, or accuracy and complexity.

The definitions of fluency, accuracy, and complexity can be elaborated as follows. *Fluency* is defined as the capacity to use language in real time, to emphasize meanings, possibly drawing on more lexicalized systems. *Accuracy* is the ability to avoid error in performance, possibly reflecting higher levels of control in the language as well as a conservative orientation, that is, avoidance of challenging structures that might provoke error. *Complexity* is defined as the capacity to use more advanced language, with the possibility that such language may not be controlled so effectively. This may also involve a greater willingness to take risks, and use fewer controlled language subsystems. This area is also taken to correlate with a greater likelihood of restructuring, that is, change and development in the inter-language system (Skehan & Foster, 1999).

Different from Skehan, Robinson (2001) drawing on more work in psychology concluded that human attention is not limited, and that learners are able to attend to more than one aspect of language simultaneously. According to this point of view, the structural and functional complexities are connected rather than compeeting with each other. Therefore, fluency, accuracy, and complexity may go along with each other without being compeeted and they have not to be prioritized.

In general, the present research objective is to investigate the use of multimodality toward ELF learners' spoken performance and the problem is stated as follows:

"Does the use of multimodality by exposing image+L2 sound+L2 texts enable EFL learners' spoken performance more than those of image+L2 sound+L1 texts, and image+L2 sound without texts?"

Based on the backround stated in the introduction of this paper, I assume that the use of L2 sound with L2 text can improve EFL learners' spoken performance and therefore, theoretically the hypothesis is stated that the use of multimodality by exposing image+L2 sound+L2 texts enable EFL learners' spoken performance more than those of exposing image+L2 sound+L1 texts, and image+L2 sound without texts

METHOD

This is an experimental study to measure EFL learners' spoken performance by means of measuring their CAF (Complexity, Accuracy, Fluency) after experiencing three different treatments from different groups. CAF is measured by using *F-test* and One-Way ANOVA is used to analize the data. Participants in this study are obtained from 200 population of EFL learners taking Speaking 3 Class at Kanjuruhan university of Malang. Next, 30 out of 200 participants are selected after knowing that they are homogenous in terms

of language performance. They are assigned randomly to three different groups; namely, Group 1 uses multimodality which is exposed to image+L2 sound+L1 texts, Group 2 is exposed to image+L2 sound+L2 texts, and Group 3 is exposed to image+L2 sound+No texts.

Spoken performance task is a task that should be done by learners to produce utterances after watching movie so that the researcher can see the effect of subtitles/texts shown in the movie. The titles of the movies are (1) Elysium, (2) Dreamhouse, and (3) Kick Ass 2. The first movie, *Elysium* tells us about two classes of people exist: the very wealthy, who live on a pristine man-made space station called Elysium, and the rest, who live on an overpopulated, ruined Earth in the year 2154. The second movie, *Dreamhouse* tells us about A family unknowingly moves into a home where several grisly murders were committed. And the last movie, *Kick Ass 2* tell us about the costumed high-school hero. Kick-Ass joins with a group of normal citizens who have been inspired to fight crime in costume. These three movies are shown only about 6 minutes and learners describe what the movie is about and give opinion about it right after watching the movie.

The data were collected during the experimental session using the following procedures: (1) explaining the goal of the experiment; (2) watching the movie; (3) note-taking for 3 minutes; (3) watching the movie again while note-taking; (4) note-taking again for 6 minutes; (5) producing spoken performance while being recorded using their own cellphone by telling what the movie is about and giving comment and opinion about the movie.

The data of CAF are taken from the recorded speech production of the participant. *Complexity* (Lexical Density) was measured by using Rahimpour's (2008) way; that is, the number of lexical, or 'open class', words in a text (full verbs, nouns, adjectives and adverbs ending in –ly) devided by total words multiplied by 100. *Accuracy* was measured by using the number of error-free T-unit which is divided by the total number of T-unit (Arent, 2003 & Storch, 2009). All the main clauses plus subordinated clauses attached to or embended in them were counted as T-units. Only those T-units that contain no grammatical error, syntactic, lexical, or spelling errors were counted as error-free T-unit. *Fluency* was measured by using Skehan and Foster' (1999) way by calculating the number of words per minute.

FINDINGS

After measuring complexity, accuracy, and fluency of the learners' spoken performance, the raw score of the participants were analyzed by using the computer software (SPSS Version 22). Afterwards, One-Way ANOVA for descriptive and inferential statistics was used to measure complexity, accuracy, and fluency of the learners' spoken performance.

Based on the overall spoken performance test among all the means of L1 Subtitles, L2 Subtitles, and No Subtitles are significant at .05 level. For *complexiy,* it revealed that the coefficient correlation among L1 Subtitles, L2 Subtitles, and No Subtitles were statistically significant at .05 significant level or 95% confidence (.000 <.05) and the mean of L2 Subtitles is is greater than the mean of L1 and No Subtitles (32.6370 > 24.1000; and 32.6370 > 30.3230) which means that the use of L2 subtitles before doing the task lead the EFL learners to produce more complex speech then the use of L1 subtitles and without subtitles. In this case, the use of L2 subtitles had a beneficial effect on recalling learners' memory to what they saw while producing their speech.

For *accuracy,* it revealed that the coefficient correlation among L1 Subtitles, L2 Subtitles, and No Subtitles were statistically significant at .05 significant level or 95% confidence (.000 <.05) and the mean of L2 Subtitles is greater than the mean of L1 and No Subtitles (.8350 > .8140 > .7700) which means that the use of L2 subtitles before doing the task lead the EFL learners to produce more accurate speech then the use of L1 subtitles and without subtitles. In this case, the use of L2 subtitles had a beneficial effect on recalling learners' memory to what they saw while producing their speech.

For *fluency*, it revealed that the coefficient correlation among L1 Subtitles, L2 Subtitles, and No Subtitles were statistically significant at .05 significant level or 95% confidence (.000 <.05) and the mean of L2 Subtitles is greater than the mean of L1 and No Subtitles (174.0480 > 140.7290 > 141.8850) which means that the use of L2 subtitles before doing the task lead the EFL learners to produce more fluent spoken performance then the use of L1 subtitles and without subtitles. In this case, EFL learners could recall their memory while producing speech sounds not only from the sequence of the story exposed in the movie but the use of movie with L2 subtitles which had a beneficial effect on thier remembering as well.

Having known the result of the overall test, the researcher continued to analyze the post-hoc multiple comparison among all the means by using Bonferroni multiple comparison in order to get to know which pair of the mean is significant. In fact, all pairs (1-2, 1-3, 2-1, 2-3, 3-1, 3-2) are significant for complexity and accuracy, and pair 1-3, 3-1 for fluency are not significant.

DISCUSSION

All measures of complexity, accuracy, and fluency for EFL learners spoken performance were statistically significant at .05 level of significance. They produced more complex spoken performance (32.6370 > 24.100, 32.6370 > 30.3230), more accurate performancee (.8350 > .8140, .8350 > .7700), and more fluent performance (174.0480 > 140.7290, 174.0480 > 141.8850). In other words, the use of L2 Subtitles outperformed 8.537 greater than L1 Subtitles, and 2.314 greater than No Subtitles in terms of complexity. Also, the use of L2 Subtitles outperformed 0.021 greater than L1 Subtitles and 0.065 greater than No Subtitles in terms of Accuracy. Next, the use of L2 Subtitles outperformed 33.319 greater than L1 Subtiles, and 32.163 greater than No Subtiltes in terms of Fluency. It was indicated that the help of L2 subtitle (English) makes learners produce their English spoken performance not only faster but more accurate and more complex as well. This is in line with Robinson (2001) stating that human attention is not limited, and that learners are able to attend to more than one aspect of language simultaneously. Therefore, fluency, accuracy, and complexity may go along with each other without being compeeted and they have not to be prioritized.

Even though all the groups are significantly different in all three aspects of language production (complexity, accuracy, and fluency), EFL learners still could not produce more complex sentences and more lexical items and they still made some mistakes in choosing words, verb, adjectives, and noun phrases. For example, learners' mistakes in choosing appropriate verbs in sentences like "Mac and Frey **have decide** to live there.", "And **it tell** us ......", ".... because **he was want** to spend his time with his family." "I will **tell to you.**" "But actually **he haven't** superpower ." etc. "EFL learners, in this case, made mistakes to choose these correct verbs since they had to perform their speech in a limited time; that is, 2 to 3 minutes task accomplishment, or they did not remember the pattern of irregular verbs.

Based on post hoc multiple comparison using Bonferroni, it was found that the difference between using L2 Subtitles (Group 2) and L1 Subtitles (Group 1) was significant at the 0.05 level since the Sig. (.000) for complexity and the Sig. (0.034) for accuracy were lower than the significance level set by the researcher (0.05) and therefore the researcher can discuss further by looking at the descriptive statistic in order to know which group perform better. In fact, Group 2 (L2 Subtitles) performed better than Group 1 (L1 Subtitles) and Group 3 (No Subtitles) in terms of complexity, accuracy, and fluency. And yet, the difference between Group 1 and Group 3 was not significant at the 0.05 level in terms of fluency since the Sig. (.547) is greater than the significance level set by the researcher (0.05) and therefore

the researcher cannot discuss further by looking at the descriptive statistic in order to know which group performs better because the exact probability that the difference due to sampling errors (.547) is greater than 0.05.

CONCLUSION

The result of EFL learners using L2 Subtitles compared to those using L1 Subtitles and without using Subtiles was significant at the 0.05 level in terms of complexity, accuracy, and fluency, it can be concluded that they do not need to prioritize the language dimension to produce their spoken performance and learners are able to attend to more than one aspect of language simultaneously (Robinson, 2001). So, the structural and functional complexities are connected rather than seperating with each other and fluency, accuracy, and complexity may go along with each other without being seperated. Hopefully, the result of this study is beneficial to learners, teachers, and curriculum designers as a supplementary material.

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