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An Analysis of Indonesian EFL Pre-Service Teachers' L2 Speech Production

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Abstract
A number of studies have investigated the EFL students' speaking performance, however, little is known about the mental processes behind the L2 speech production, meanwhile understanding their route of thought could be instrumental in comprehending key factors of their success as well as their failure. The study is expected to reveal some information about the thinking process undertaken by the EFL learners' oral performance in various social settings. The participants of the study were the first-year pre-service students from a state university in Indonesia. Data of the study were elicited through retrospective verbal reports, interviews, and questionnaires based on the role-play of eight scenarios of complaining performance. Through qualitative data analysis, a framework by Levelt (1999) was used to guide the analysis of speech production. The findings revealed that L2 speech production follow several phases, namely, macroplanning, microplanning, grammatical encoding, morphophonological encoding, phonetic encoding, articulation, and monitoring. It seems that L2 speech production is similar to L2 speech production. In addition, it was revealed that the flow of speech processing was not determined by the level of proficiency alone, as a formal speech situation was reported took more thoughtful consideration than a casual one which could likely run fast and automatically.

Keywords: thinking process, L2 speech production, speech retrieval

Introduction

Speaking appropriately in different contexts is not easy, particularly, in L2. For example, the speaker has to consider the social and cultural appropriacy of a speech plan, how to transfer the plan into suitable expressions, how to meet accurate grammar, clear pronunciation, a polite tone, as well as monitoring errors. Speaking appropriately also means that the speaker must consider the consequences of his speech to the interlocutor. He may try to select the best expressions from the available words he knows. He may want to avoid the potential face-threats caused by the speech he utters.

In the L2 speaking practice, many learners are reported not to have sufficient awareness of the use of appropriate language for different situations. Language learners are reported to make offensive expressions to the interlocutors without knowing they sound rude (Wijayanto et al., 2013, 2017). In fact, there are many kinds of challenges that EFL learners may encounter in their mind (Segalowitz, 2010). According to Levelt's (1989) model of speech production in L1, there are four big stages of speech production that people normally do, they are, conceptualization, formulation, articulation, and monitoring. The stages can be divided into some more sub stages. For example, conceptualization can be divided into macroplanning and microplanning. Formulation can be about grammatical and morphological assembling. Articulation can be about retrieving knowledge of diverse sounds and moving the speech apparatus to make accurate pronunciation It means, producing a speech is not a simple thinking process however, the speaker only has some seconds to figure

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out everything. Due to the intricacies, speaking in L2 may become troublesome to many EFL learners, including for those in the advanced level.

To date, some research have been conducted to reveal the mental process of L2 speech production. The researchers report that the EFL learners face some difficulty, such as, formulating the ideas, recalling the lexical and grammar, and making correct pronunciation. Higher proficiency level learners were found to use multiple strategies that contribute to their successful L2 speech performance as compared to the lower levels (Dornyei and Kormos, 1998). Some other studies on EFL learners' strategies seek to solve the speaking challenges (Poulisse, 1993, Dornyei, 1995, Dornyei and Kormos, 1998).

Meanwhile the information has been useful, studies on knowing what is in the mind of L2 speakers when they produce a speech is still scarce. Given the necessity to understand how language learners produce their L2 speech, thus we need to understand their thinking process (Nunan and Bailey, 2009, Cohen and Olshtain, 1993; Cohen, 1996). In that way, the complexity of speaking performance can be more comprehensively described (Cohen and Olshtain, 1993).

The L2 preservice teachers has been an interest of the education stakeholders. The output of the research may impact the current education practice or policy. Therefore, the present paper aims to analyze the L2 preservice teachers' speech production.

The cognitive view of second language acquisition

Studies under different fields of knowledge have reported about different processes in cognitive level in second language acquisition (i.e., psychology, linguistics, neuroscience) by numerous scholars (e.g., Bialystok, 1994; Doughty, 2001; Ellis, 2002; Schmidt, 1990; Robinson, 2003; Pienemann, 2003; Krol and Sunderman, 2003). The reports seek to provide some explanation on what, why, and how we acquire a language. For instance, Chomsky (1959) argue that our ability to speak is as nature's gift through an innate endowment in our brain, so-called the language acquisition device (LAD). Meaning, we can learn a language(s) because there is a natural ability in our brain which allows us to acquire the language elements as a specific-human ability. The researchers argue that the underlying processes of L1 and L2 acquisition are not much different (see de Bot, 1992, Kormos, 2006, Segalowitz, 2010, Sevgi, 2016). The children's developmental steps to learn L1 are assumed to resemble the steps of L2 learning, as reflected in the analyses of patterns of beginning acquisition and the patterns of mistakes made by L2 learners (Zdorenko & Paradis, 2012). Young learners are assumed to acquire the L2 better than of adult learners due to their brain's plasticity to absorb information exposed to them (Birdsong, 2018). However, adult learners have some strong points that young learners lack, such as the communicative skills developed in L1 which are transferred positively into L2 (Antoniou & Taguchi, 2019).

In contrast to Chomsky's idea of LAD existence, the cognitivists argue that language processing proceeds as other cognitive processings that humans normally use, such as, riding a bike (Anderson, 1982). The amount and length of exposure and practices will determine the learner's automaticity in using the language (Bialystok, 1981). The learners should move from one by one construction processing (controlled) into one step processing (automatic) (Segalowitz & Hulstijn, 2005). In this way, the learners will spontaneously retrieve what has been remembered in their memory and be freed to construct one by one construction which is efforful to the working memory. Children develop their proficiency by improving their knowledge of L1 gradually little by little (Bialystok, 1993). Meanwhile, L2 learners can learn much knowledge but lack adequate practice to automatize speech expressions (Koike, 1989). Furthermore, the degree of purpose and motivation will determine the commitment to study

in long term. As some learners aim to achieve a high/nativelike proficiency, some others might learn the language for a limited interaction, such as work-related L2 alone (O'Brien, 2014). In the paper, the cognitive view of speech production is followed by adopting Levelt's model as the framework of analysis.

Levelt's theories of speech production

To date, Levelt's (1999) model namely, *Blueprint of the Speaker,* is the most well-received model to explain the underlying processes of speaking performance. The model assumes six sub-processes work together, namely, (1) conceptualization, which consists of macroplanning and microplanning, (2) grammatical encoding, (3) morphophonological encoding, (4) phonetic encoding, (5) articulation, and (6) monitoring. Each step is assumed to work incrementally, meaning little input is sufficient to trigger the subsequent processing. In other words, the processing mechanism does not wait until one process is finished for the following process to start. As a result, speech production works in a fast processing mechanism. It will be interrupted if there are interruption. For example, the speaker could not retrieve one word, thus he/she would pause awhile to recall the intended word or its synonym.

Initial studies of experimental and observational methods of L1 language dysfluency have led to uncovering some knowledge behind speech production (Kormos, 2006). In the L2 context, dysfluency problems seem to be one of the triggers to understand L2 speech production as well. Research in L1 become the baseline in conducting the same topics in L2, and both seem to use the same processing route (see Kormos, 2006). Given the dysfluencies encountered by L2 learners during L2 speech production, Kormos (2006) assumes that different memory stores feed the speech processing. On the other hand, Segalowitzs (2010) argues that dysfluencies originated from imbalanced L2 knowledge, which will naturally interupts speech processing flow. Furthermore, he argues there are seven points of potential dysfluencies that relate to insufficient L2 knowledge during the speech processing, namely, at microplanning process, the L2 learners still have limited range of L2 lexical selection to convert the concept of pre-verbal speech into verbal representation automatically; at grammatical encoding process, the L2 learners do not have enough grammar knowledge in command to set the surface structure; at accessing mental lexicon process, the L1 words are more dominantly activated than the L2 words, thus the L2 words take more time to retrieve; at morphophonological encoding process, the L2 learners still have limited knowledge of L2 morpheme which might take some time to construct in the fast construction mechanism; at phonetic encoding process, the L1 sound system still heavily interfere the production of L2 sounds, both segmentally and suprasegmentally; at the articulation process, the L2 speech apparatus muscles are not sufficiently trained to utter L2 distinct sounds automatically; and at monitoring process, the L2 learners' ability to judge what is correct and wrong in L2 is not sufficiently established yet. In short, dysfluency can be caused by the limited competence and or mechanical factors. Furthermore, automatic speech processing is believed to use memory-based retrieval, meaning the speaker will utilize a shortcut system to access the memory bank which enable him/her to retrieve some set of words of specific discourse that have been repeatedly used (Wray, 2002). One of the ways native speakers reach fast speaking ability is from utilizing the memory-based retrieval mechanism (Wray, 1999). In other words, the individuals' speech patterns remain typical across time until they make some conscious efforts to change the memory bank

Method

Research design

Method of the study was qualitative research with a case study design. Qualitative research is characterized by a rich description, natural and holistic representation, few participants, emic

perspective, and open-ended process (Mackey and Gass, 2015). Among the different types of qualitative research, case study design is a type of qualitative research that is suitable to understand in depth the complexity of a program, event, activity, process and so on rather than people's experiences (Creswell, 2014). Thus, the study sought to understand the complex process of L2 speech production through a small number of the EFL learners' recruitment.

Site and participants

The research was conducted at a public university in Indonesia. Participants of the present study were selected on a voluntary basis. The total of participants was twenty EFL students in the first year. Out of twenty participants, four were male and sixteen were females. Their speaking was between B1-C1 levels. Furthermore, data of the three students were taken as focus of analysis in the present paper. When the data were taken, the participants were admitted as pre-service EFL students of the second semester at a public state university in Indonesia. Their age ranged between 18-19 years old. They had been studying English from elementary school in Indonesia. None of them had been living abroad.

Instruments

Data of the research were collected through two main instruments, namely, (1) retrospective of verbal report plus interview which were conducted immediately after performing a role-play complaint, (2) a set of open-ended questionnaires which was filled in after the whole set of role-play and retrospective verbal report completed. The retrospective verbal report was intended to describe the route of thinking process in different speech situation, as shown below. Specifically, the study employed seven scenarios of complaint which had been piloted earlier, which is different in term of P, D and I.

1. P-, D-, I- (Your classmate promised to return a book he/she borrowed from you. However, he/she seems to forget the promise. You talk to him/her.)
2. P+D-, I- (Your grandfather promised to quit smoking. But just now, you caught him smoking meanwhile he is not very healthy. You complain to him)
3. P+,D-,I+ (Your mom accidentally dropped your phone. It was broken beyond repair. You ask her a new one)
4. P-, D+, I- (You ate at a restaurant with some friends. However, you received a wrong bill. You talk to the waitress/cashier)
5. P-,D+,I+ (You paid for the fastest delivery service for an important package. The price was quite expensive. Unfortunately, it was mistakenly sent to a wrong address. You are very dissappointed. You complain to the customer service)
6. P+, D+, I- (Your lecturer promised to return the students' paper today. But he/she seems that he forgot the promise. You ask him/her)
7. P+, D+,I+ (You got an E for your writing class. You want to complain to your lecturer. However, he is not a very friendly person.)

The second instrument, that is the questionnaires, was administered after the role-play and retrospective verbal report finished. It aimed to collect data about the thinking process which were experienced during the role-play as well. The participants were allowed to give answers either in L2 or L1 to ensure their experience could be told clearly. Thus, before the data elicitation began, the participants were informed in advance about the purpose of the data collection as well as the procedure of completing each instrument.

The participants were instructed in the beginning to give the verbal report in any language they like, but it was found that at most of the time they deliver the report in English. The role-play and the retrospective verbal report plus interview were recorded with a recorder. Last but not the least, they were instructed to make complaints as natural as possible.

In addition, there was no limit of time to complete answers in interview and questionnaire as they were asked to reflect carefully on observing their thinking route.

Data analysis

In total, 139 sets of conversation were recorded, analyzed and encoded which were used to reveal the thinking process behind L2 speech production. Furthermore, the data obtained from the verbal report and transcript of role-play were analyzed by using content analysis (Nunan and Bailey, 2009). The steps were as follows: (1) comparing data from the verbal report and the transcript of the role-play; (2) by using Levelt's (1999) framework of speech production, the data were categorized into respective themes, namely macroplanning, microplanning, grammatical encoding, morphophonological encoding, phonological encoding, articulation, and monitoring; (3) developing patterns and findings, (4) discussing of the findings by consulting the literature review.

FINDINGS AND DISCUSSION

The purpose of the article is to analyze the L2 speech production through collecting data of the thinking process based on the role-play of eight scenarios of complaints. In so doing, Levelt's (1999) framework of speech production is followed. Levelt argues that speech production follows four macro steps, conceptualization, formulation, articulation, and monitoring. He furthers claims that within these four steps, seven micro activities are taking place, they are, macroplanning, microplanning, grammatical encoding, morphophonological encoding, phonetic encoding, articulation, and monitoring. In the article, the analysis of L2 speech production is directed to describe the micro activities.

Macroplanning

Macroplanning is the initial stage of speech production. In the present study, all participants demonstrated that they did not immediately produce a speech plan, but the speech plan would occur after conducting a series of assessment toward the complexity of variables involved within the context of the speech situation.

In general, four patterns of assessment were identified in the macroplanning process, namely, (1) to assess first impression, (2) to assess the background of the speech situation, (3) to consider the P, D, and I, (4) individual differences factors. Assessment of first impression in speech production is in line with theories by Gilbert et al (1988) whereas speakers will create first impressions (characterization and correction) about people/situations that they newly the meet. Similar findings about first impressions are reported by Uleman & Kressel, 2012), Nordstrom et al, (1998), Gilron & Gutchess, (2012). For example, P12 reported that the first thought about scenario 1 was to talk nicely to the interlocutor. Through verbal report, he explained that the incident must have happened for a cause, which he assumes whether the book was missing or simply his friend had forgotten to return the book as promised (characterization). However, responding to his own assumption, he did not follow any of them, but to find out directly from the interlocutor (correction). The excerpt is presented as follows.

I : What came to your mind in the first place?

P12 : Talk nicely.

I : What else?

P12 : Find out why he did not return it yet. Whether he forgot it or the book was missing...". (P12)

In the questionnaire, P12 reported some more information which clarified why he would talk nicely to the interlocutor. He avoided saying a direct complaint because in his evaluation, a direct complaint would probably reach the interlocutor as an attack to his positive face. He said that had he been in the interlocutor's shoes, he would be somewhat hurt, therefore he was finding a way to mitigate the delivery of complaint to became much softer. The excerpt is depicted as follows. It seems that first impressions were related to previous knowledge as well as one's personal trait (Cemalcilar et al., 2018).

I put my self in hearer's shoes. I dont want to hurt (him). I am learning the social context to get better comprehension. (P12)

Secondly, the second pattern identified in macroplanning is to assess the background of the speech situation. Understanding the situational factors of the scenario has been in agreement with a report by Ecomidou-Kogetsidis (2010), whereas she argues that P, D, and I are not the only factors that are considered by the language learners in selecting their L2 utterances. Some other similar studies have been reported by Kaharuddin & Hasyim (2020) and Tracy & Tracy, (1998) that L2 language learners gave importance to other aspects, like one's rights to make complaints. These research report challenge the long established Brown & Levinson's (1978, 1987) theories that the language learners will mostly think about P, D and I. Some other examples of assessment of the speech situation were given by P4 as shown below. She said that the assessment focused on the fact that the interlocutor had promised earlier to give the book back; thus, in her opinion the interlocutor had obligation to keep the promise. Rights and obligations was reported by Economidou-Kogetsidis (2010) as one of the main consideration to decide a speech concept. P4 regarded that the interlocutor was inconsiderate for not keeping the promise intact as shown as follows.

One thing I was thinking about when people borrow my book but then I need it at that time and he or she has already promised she or he will give it back so I'm a bit kind of insisting them to give the book back because I really need it at that time so I said that. (P4)

Thirdly, the participants reported that they also assessed the P, D, I of the speech situation in the scenario. The most widely accepted theory concerning P, D, I's assessment is the theory by Brown & Levinson's (1978, 1987). Many studies have shown support to the theory (i.e. Felix-Brasdefer, 2005, Spencer-Oatey, 2002) as well as those which challenge the claims (i.e. (Matsumoto, 1988; Gu, 1990; Economidou-Kogetsidis, 2010) that the theory is not generally applicable as the local culture and beliefs give strong influences on the speech concepts (Economidou-Kogetsidis, 2010). In the findings, the participants said that talking to the high-status, like to the lecturer, would be completely different from talking to the low-distance interlocutor, like to their friends, as shown below.

How to speak politely to the lecturer is different from talking to your friend. When you want to ask something to the lecturer, it is like you cannot make them feel that they are guilty. You have to make them feel it is our fault. (P12)

It seems that to high-status, using higher politeness were considered as a must by the participants to achieve the intention across. As well, some future negative consequences might be waiting for them, if they fail to meet the conventional politeness, Thus, in the thinking process, the participants were aware of the power that lecturers have over students and they wanted to stay in the safe side of the lecturer by preventing potential problems. The finding agrree with the report by Kwong & Inn (2010)

that the learners are afraid to directly confront their lecturers and would rather spreading bad word of mouth when dissatisfaction occurs.

> *This (scenario) should be polite because we talk to a lecturer. The lecturer issues our score. If we are not polite, it will impact our score. (P19)*

The findings of the macroplanning are in line with Levelt's (1989, 1999) ideas of speech production in L1 that at the very first stage, the speaker forms the message. However, the message itself also counts his awareness of the social and cultural situation (aka politeness). Some other researchers which have reported similar results are Segalowitz (2010), Kormos, (2006).

The findings of macroplanning also lend support to a study by Westra & Carruthers (2017) whereas in order to speak appropriately in different social settings, the participants must have developed some pragmatic competence in formulating a speech concept. The participants of the present study would consider aspects such as the background of the situation, the status of power, distance and imposition, as well as their personal traits before generating certain speech plan (see Economidou-Kogetsidis, 2010). The findings seem to challenge the theory of politeness by Brown & Levinson, 1978, 1987) whereas many factors are contributing equally to the speech concept of language learners, not P, D, and I factors alone.

Microplanning

Microplanning is the next stage after macroplanning. It receives input from macroplanning and converts the non-verbal concepts into equal verbal expressions. In the findings, some microplanning were running automatically (scenario 1- 6) and the other one was somewhat under controlled (scenario 6, 7). Automatically means the participants reported that they would select expressions which fit the intention fast. Under controlled means the participants would select expressions which fit the intention rather carefully. The participants reported that the fast retrieval in microplanning were usually contributed by familiarity with discourses. Meaning, they did not need to think much for the words to come out. The participants said that they could retrieve verbal expressions immediately for familiar speech discourse. as shown by P12 in verbal report and questionnaire below.

I : Did you think of the vocab?
P12 : No. It is like automatically coming out"

> *I can speak faster if I know the situation I have experienced. I speak slower if I have no experience before. (P12)*

The findings seem to match the theories by Roelofs, (1992) whereas words that are used all the time would occur faster in the lexicon. The participants seem have done suffcient practice and exposure which allows the activation ability of L2 words becomes more robust, thus when the words are in need, they can be easily retrieved. In addition, the participants seem to have accustomed to think in L2 which facilitates the speed of retrieval. The result is supported by a study by Ma, Chen, Guo, & Kroll (2017) who reported that automaticity of L2 retrieval improves over time. In other word, a high frequency of use will result in effortless speech retrieval (Conklin & Schmitt, 2012). When the same cognitive activities have been done many times, its cognitive processing move from the declarative memory into the procedural memory (De Ruiter, 2007). The procedural memory requires less attentional capacity in the processing; therefore, it can work in the background with much less conscious operation of executive function (Cohen & Bacdayan, 1994). The microplanning process to friends and family was perceived easier have been reported by other researchers (see Maclntyre, Burns, & Jessome, 2011, Cohen & Bacdayan, 1994). Besides, friends and family are psychologically closer to the speaker (see

Ullman, 2016). Thus, he/she is willing to be vulnerable in front of them with little or no reserved feeling of exposing weaknesses in the language competence. The willingness to be vulnerable to bring positive effects to the speaking fluency whereas the language learners could speak their mind more directly and be less hesitant about errors (Levetown, 2008).

In contrast, the microplanning encoding could be not going automatically when the discourse was unfamiliar, For example, in complaining to a lecturer in a formal setting, a more formal expression is considered more suitable than the casual form. As shown below, P12 and P19 demonstrated their thinking process in selecting different vocabulary for different interlocutors.

> *I thought about the proper vocabulary for lecturer. For example, to my friend I say 'hey did you remember'. But that the lecturer is very confronting, so I have to pick the other way (expressions). (P12)*

Furthermore, findings of controlled microplanning thinking process are in agreement with theories by Slobin's (2003) in his publication that a lot of considerations are conducted in the speech selection. The task difficulty is more visible in a controlled stage of speech production, i.e., for less-familiar-speech discourse in which the words or phrases or expressions were less used (Wray, 1999, Poulisse & Bongaerts, 1994).

In controlled processing, at times, the participants found that they had no ideas to find an equal expression of particular intention. When it happened, the participants reported that they would think in L1. Thinking in L1 helped them to escape from the thinking pressure which overwhelmed their mind as reported by P19 as follows. As reported by P12, the participants seemed to have realized that L2 construction was better done in English not via translation.

> *Bahasa Indonesia occurs at times when I cannot think of words in English. It helps me to construct my answers. (P19)*

> I did use bahasa Indonesia but not much. Because we need to construct the sentence better. (P12)

The findings seem to agree with the arguments by Macaro (2005) that the use of L1 lighten the cognitive load of working memory. In a similar vein, Cook (2010) regards that some people are plurilinguals who have competence in multi languages. The findings challenge theories of Direct Method (see Bruen & Kelly, 2017) whereas L1 is regarded as an inhibiting of L2 learning.

Grammatical encoding

Grammatical encoding is the subsequent process of microplanning. Here, the surface structure of the expressions is set up by activating the string of syntactical slots which would be filled in by suitable words. When the language learners are still beginners, they might do not have clear ideas of the grammatical order yet. When they gain more proficiency, the syntactical slot becomes more visible. In the findings, not much data was given regarding grammatical encoding because the participants said that mostly the thinking process of grammatical encoding went on automatically, as they did not think hard about building up the surface structure of their speech. The excerpt from P4 is presented as follows.

> *I don't spend time for grammar and vocabulary. (P4)*

Similar findings have been reported by McLaughlin et al. (2010) and Clahsen & Felser (2006), namely, with increased proficiency, the grammar has woven automatically with the flow of thoughts during the role-play performance. Increased proficiency seems to grow the confidence which had helped them to perform grammatical encoding effortlessly (Robinson, 2007). In other words, the participants had had sufficient grammar knowledge which gave them no troubles of grammatical encoding. The

grammar competence seemed to allow them to proceed faster. However, the participants said that they also made inaccurate grammar. P19 and P4 reported in following exceprt.

In spontaneous speech people will just nodding. (P19)

I just use what is available on my mind without much thinking about grammar stuff. But some other time bad grammar (happens). (P4)

The findings are in line with the studies by Sun & Zhang (2020) that in the fast flow of speech construction, the language learners tolerate minor grammatical mistakes which contribute to fluency. It seems to support Wray's study (1999) that fast retrieval is running on memory-based retrieval which receive less of control.

Morphophonological encoding

There are two processes which take place in morphophonological encoding. The first one is the morphological assembling of the surface structure and the second one is the syllabification of the surface structure (phonological encoding). Morphological assembling is the last operation of the grammatical encoding which completes the construction of a surface structure. Furthermore, the syllables of surface structure will be spelt out into a string of continuous syllabic sounds (Levelt, 1999). In the findings, the data on morphological construction was not much reported as well as the participants revealed that they mostly relied on their memory to retrieve the expressions and did not think of the grammar rules during the speech production.

Meanwhile, for the second part, namely, the phonological encoding, some reports were given which indicate that the participants gave attention to how they uttered the surface structure. The participants revealed that they pay attention to their pronunciation which indicate that pronunciation was a prioritized attention.

I really monitor my pronunciation and accent. (P19)

The findings of phonological attention give support to a study conducted by Gilakjani (2012) whereas the language learners were reported to put more priorities to modify good pronunciation more than grammar accuracy as poor pronunciation might be judged as an incompetent sign. Pronunciation itself require some hardwork of specific training thus the participants might take pride in having a good pronunciation. For non-native learners, pronunciation takes time to develop as in the beginning stage, the L1's pronunciation will heavily influence their L2's sound system (Pennington & Richards, 1986).

Phonetic encoding

Phonetic encoding is a next phonological process which send direction to the motor apparatus on what and how the speech sounds will be made as enabled by the syllabary (a separate memory store of syllable-based sounds) (see Levelt, 1989, 1999). In the study, the participant did not give much data of phonetic encoding. In the role-play, they could speak fluently and the utterances flew smoothly. The participants reported that they pay attention to their tone and intonation to deliver meaning to the interlocutor. As follows, P19 and P4 shown that they had intentionally used appropriate tone and intonation besides appropriate words.

I do give attention to my tone, like to be persuasive, insisting, pressing, etc. (P19)

I do pay attention to my pronunciation. I also try to sound polite even though I do not use very formal words making the right intonation. (P4)

The findings lend support to proposal by Levelt (1989, 2000) whereas phonetic encoding involve segmental and suprasegmental features to deliver meaning. Therefore, the L2 expressions will naturally be given suitable tone and intonation. Fast phonetic encoding seems to confim the arguments by Laganaro (2019) whereas the fast speed phonetic encoding is largely relied on memory retrieval from the syllabary rather than on controlled processing. The syllabary is a sound memory store that contain multi-language syllables to make-up sounds (Levelt, 1999). L1 and L2 are assumed to use the same memory store (de Bot, 1992), which explains why the L2 beginning learners' pronunciation is almost identical to their L1 pronunciation. The syllabary's work is assumed to resemble the lexicon. It will update itself as the L2 learners improve the L2 phonetics knowledge.

In addition, the language learners also have used manipulated tone to express different feelings, i.e., politeness, annoyance, sincerity. This support argumentation by Clennell (1997) and Ramirez Verdugo (2006) that intonation is a part of message delivery thus language learners need explicit training in intonation. A different finding has reported by Tsurutan (2018) that native speakers of English give higher appreciation to appropriate linguistic expressions than to a polite tone in delivering plain linguistic expressions.

Articulation

Articulation is the process of articulating the speech plan into verbal form (Levelt, 1999). It modifies the air released from the lungs up to the vocal cord and to the speech apparatus to create the intended string of sounds; we call it the utterance. The articulation will involve the muscles. If the motor apparatus muscles have been familiar to produce particular sounds, the sounds will come out naturally and clearly; on the other hand, if the muscles are not trained well yet, the sounds are likely to carry a foreign accent. Discussion of overt speech is beyond the focus of the present study as it does not concern thinking process.

Monitoring

Monitoring in the Levelt's (1999) model take place at three places, namely (1) message conceptualization process, (2) the speech form construction (phonological encoding), and (3) spoken utterances (the overt speech). Two of them are conducted while the speech is still in the mental construction, and the other one takes place after the speech is articulated. In the findings, the participants said that they could produce and monitor their speech production simultaneously in fast speech production. Monitoring ability is reported not yet developed among low level language learners. However, even though the participants could monitor their construction process, but they did not always interrupt themselves to improve minor grammatical mistakes. P4's and P19's reports are shown as follows.

> *Yes I did some monitoring before and after. I did monitor the use of my grammar before speaking when I talk to strangers and lecturers. I did that while giving responses. Sometimes I make corrections. Sometimes not. (P4).*

> *I do monitoring after speaking. Sometimes I improve sometimes not. (P19)*

The finding is in agreement with Kormos (2000) who argued that advanced language learners have an ability to monitor the speech production simultaneously with other cognitive processing. Nevertheless, the participants did not choose to focus on grammar accuracy because they thought that pragmatic accuracy was more critical.

In the questionnaire, the participants revealed that the focus of monitoring aimed to understand the scenario and to construct a better way to deliver the complaints. Grammatical errors were considered would not lessen the communication process. They might imply that appropriate word selection and delivery are more essential in spoken communication.

> *I spend time to plan best things to say actually. I don't spend time for grammar and vocabulary because people can still understand what I say. (P12*)

Findings are in agreement with the findings by Kormos (2000) that advanced language learners would consider discourse appropriacy is more urgent than grammar's accuracy. The findings support a study by Pratiwi (2013) whereas she found that the language learners' monitoring focused to meet politeness during speech act of complaints. With regard to monitoring process, high level language learners demonstrated that they have better advantage in monitoring what will be more important to address in the speech production.

Overall, the findings of the present research confirm the proposal by deBot (1992), Kormos, (2006), and Segalowitz (2010) that L1 and L2 speech production are relatively similar.

Conclusion

The L2 speech production seem to be in line with the model of L1 speech production by Levelt (1999). Similar stages were identified, namely, macroplanning, microplanning, morphophonological encoding, phonetic encoding, articulation, and monitoring. In addition, it was revealed that the flow of speech processing was not determined by the level of proficiency alone, as a formal speech situation was reported took more thoughtful consideration than a casual one which could run fast and automatically. The findings also challenge the theory of Brown & Levinson (1978,1987) that is some cultural and individual differences factors were assumed to equally play determining role in the participants' choices of speech plan, as well as the social variables (P, D, I).

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