

Oral Fluency and Complexity in AH and a Non-target Language SA Context

A Comparison of Chinese Students in Learning English in China and Spain

Xuanchu Zai

College of Eurasian Languages
Xi'an Fanyi University
Xi'an, China

Abstract—The present study investigates the differential effects of two language learning conditions, foreign language learning at home and at a non-English speaking country on the oral skills of two advanced Chinese learners of English. The participants' English oral competence is assessed through quantitative measures of Fluency and Complexity. The results reveal that cross-linguistic influence (CLI) hinders SA learner's oral fluency compared to AH learner, while maintain complexity. These findings provide evidence for CLI on the dimension of oral production.

Keywords—oral fluency; complexity; AH context; non-target language SA; Chinese English learners

I. INTRODUCTION

Most studies on learning context are usually focused on the effect of study abroad (SA) opposed to staying at home (AH). And also many studies have proved that SA periods yield much more linguistic gains in learners' oral production than AH (Collentine & Freed, 2004; Freed, 1998). SA condition is generally viewed as learning a language in a country of the target language (Mora & Valls, 2007). Nevertheless, what will happen if learner stays in a non-target language speaking country? Will learner maintain his oral skills in target language? Compared to the foreign language learner staying at home, who has a more advanced speech competence? I hypothesized that (1) L2 will influence learner's oral fluency in English due to the lack of enough exposure in TL and L2 interference and (2) Oral complexity will be maintained in a non-English speaking foreign context.

II. THEORETICAL BACKGROUNDS

Traditional researchers in cognitive approach, such as Peter Skehan (1997), are less concerned with interactional features and more interested in the cognitive demands that different tasks provide, the way they lead learners to attend to certain aspects of language performance. They also devoted to the effects of different conditions. Such research approaches emphasize the three performance areas of complexity, accuracy, and fluency.

A. Accuracy Complexity and Fluency

Accuracy relates to learner's belief in norms, and to performance which is native-like through its rule-governed

nature (Skehan, 1997). It is connected to a learner's capacity to manage whatever level of interlanguage complexity he or she has currently possessed. How well is language produced in relation to the grammar of the target language? Focus on accuracy implies more controls more in communications in which the learner possibly avoids more demanding language forms in order to commit fewer errors.

Complexity and its attendant process of restructuring, relates to the stage and elaboration of the underlying interlanguage system (Skehan, 1997). How ambitious is the language which is produced? What range of language knowledge does the learner master? Focus on complexity implies the learner's capacity to use more appropriate words and structures and to try to use the target language in the most advanced way.

Fluency concerns the learner's capacity to mobilize an interlanguage system to communicate meanings in real-time (Skehan, 1997). What language can the learner produce in real time without hesitation and reformulation? According to the author, since the pressures of real-time speech production are met only by avoiding excessive rule-based computation, it relies upon more lexicalized modes of communication. That is, focus on fluency implies the learner's capacity to engage in real-time processing and to produce language at a speed and with a flow more similar to that of a native speaker in order to gain a native-like communication skill.

According to Peter Shehan (1997), the three performance areas are then taken to have developmental implications, in that new language, development, and interlanguage restructuring is associated with greater complexity, and the two other areas reflect how new language is brought under greater degrees of control, first with an avoidance of error, and second, more demandingly, with the capacity to use language in real-time.

B. Study Abroad (SA) Condition

The nature of L2 learners' speech output is largely the consequence of the language processing difficulties underlying speech production and is usually characterized in terms of the three mentioned dimensions. Higher performance in L2 speech production requires declaratively routine linguistic knowledge (Towell et al., 1996) which can

be automatized in a fast errorless production of L2 speech through practice. Foreign language learners through study abroad, gain opportunities of such automatization usually in meaningful interactions with native speakers and massive exposure to L2 input (DeKeyser, 2007; Segalowitz & Freed, 2004).

III. METHODOLOGY

A. Description of Two Subjects

Both Subject 1(S1) and Subject 2(S2) come from China. They are English-major graduates who have already obtained a bachelor's degree in a Chinese university. Depending on Chinese Education Policy, English was an obligatory course since the 4th grade in primary school. And also four years of professional investigation and training on English Language and Literature made them a relatively high level of proficiency. But they never have been in an English-speaking country, which made their English a Foreign Language status. The present two subjects have passed a TEM-8(Test for English Majors-Band 8) test in their university, which certifies that they have achieved an advanced level of English.

The difference between the two participants lies in that S1 stayed in China and found a job related to English after graduation, while S2 resolved to go to Spain for further training, where he received formal Spanish instruction for entire one year. Thanks to his previous language knowledge and L2 status of his Spanish, he gained a very high level competence in Spanish in a very short time. As a result, S2's English, especially the oral dimension, has been fully interfered by Spanish. However, S1 maintain her advanced level of English competence. During the time of data collection, S1 lived in China while S2 still in Spain.

This study was carried out in accordance with the recommendations from the Committees on Human Research Protection of Xi'an Fanyi University (China) and University of Alcalá (Spain). The protocol was adopted by both universities. All subjects gave written informed consent in accordance with the Declaration of Helsinki. Subjects were provided sufficient information to make a voluntary decision, regarding their participation. For this purpose, subjects were kept informed of the following. They were briefed on the study's purpose, procedures, and participation alternatives. Risks and benefits of the study were also disclosed to the subject. Subjects were informed of the duration of the study, and were offered emergency contact information. Finally, they were offered statements affirming the study was voluntary and refusal to participate would not incur consequences. Finally, subjects were provided a right to confidentiality statement.

B. Procedure

The participants in the present study firstly were asked to fill in three brief questionnaires according to their (a) linguistic background, (b) learners' motivation in learning English and other languages, and (c) the SA conditions. The instrument employed in the data collection was from the topic part of IELTS Test. The chosen topic is "The City". It requires:

"Describe a famous city in china. You should say: where the city is? Why it is important? Whether you visited it before and explain whether you think it will be better in the future."

The task was time-controlled. (8 minutes). First they acquired a 5 minutes preparation. The participants were not permitted to ask questions related to the vocabulary, neither use dictionary, textbook or other reference tools. Then they will be given a maximum of three minutes to present the topic. The speech samples will be recorded and transcribed.

C. Transcriptions

Subject 1: As to the most famous city in china, I think it would be definitely hmm@p Beijing, the capital; it located in the northeast of china. If we hmm@p compare the territory of china as the [/] a cockrooster, Beijing would be right in the heart place. The city is important not only because the two thousand eight Olympic games, but also for ancient significant. As we may know that, Beijing is the capital of china since about eight hundred years ago, hmm@p the Yuan dynasty. As that time, it is the political center, economic center and education center for the whole country, and it <play an> [/] played a very important role for the development of the ancient china. I have been to Beijing twice. The first time is when I was twelve years old and the latest time is two years ago. hmm@p I like to walk along the ancient red walls.hmm@p because I think hmm@p it just like draw me back to the real history. Of course, Beijing will be better in the future. It is the largest city in china.

TABLE I. FLUENCY ANALYSIS OF S1

Syllables	Rate
As to the most famous city in china, I think it would be definitely hmm@p Beijing, the capital, it	28/28
located in the northeast of china. If we hmm@p compare the territory of china as the [/] a	24/25
cockrooster, Beijing would be right in the heart place. The city is important not only because the	25/25
two thousand eight olympic games, but also for ancient significant. As we may know that, Beijing	25/25
is the capital of china since about eight hundred years ago, hmm@p the Yuan dynasty. As that time,	25/25
it is the political center, economic center and education center for the whole country, and it <play	29/30
An>[/] played an very important role for the development of the ancient china. I have been to	25/26
Beijing twice. The first time is when I was twelve years old and the latest time is two years ago.	23/23
hmm@p I like to walk along the ancient red walls. hmm@p Because I think hmm@p it just like	18/18
draw me back to the real history. Of course, Beijing will be better in the future. It is the largest	26/26
city in china.	5/5
Total syllables (Rate B/Rate A)	253/256

^a. Transcription conventions: @p = pause

^b. Transcription conventions: [/] = repetition

Subject 2: hmm@p I'm a travel-fanatic hmm@p and I've been to hmm@p many cities in China. Today I'd like to hmm@p tell you about Dalian, hmm@p a small city with international@s style. Dalian is located in the north [/] hmm@p northeast of China. hmm@p Surrounded by hmm@p seas on three sides and one side by hmm@p mountains@s, hmm@p Dalian is one of the [/] hmm@p one of the most beautiful cities in the whole of China. hmm@p I first came to Dalian in the summer hmm@p, the año@s two thousand five. hmm@p The building so [//] hmm@p was so modern that I am impressed by their architectural design <for a> [/] hmm@p <for a> [/] for a quite a long time. Some were also extremely exótico@s. hmm@p All of these features were so hmm@p so im [/] impressive. hmm@p What's more,

hmm@p <the city> [/] hmm@p the city's uniqueness <does not> [/] hmm@p does not only lie in its [/] its physical beauty, but also in its dy [/] dynamicos@s. hmm@p Dalian <is the> [//] is one of the fastest developing cities hmm@p in China. hmm@p It is full of work opportunities to find trabajo@s and there are hmm@p many foreign [/] foreigners settling in Dalian right now. hmm@p Today hmm@p it is becoming a hmm@p regional centre for hmm@p cultura@s and economy. hmm@p In the last few years, it has achieved a stable economic growth and still hmm@p maintained un@s balance between hmm@p industrialization and environment protection. In a word, I believe that hmm@p Dalian can [/] can be compared to any

TABLE II. FLUENCY ANALYSIS OF S2

Syllables	Rate
hmm@p I'm a travel-fanatic hmm@p and I've been to hmm@p many cities in China. Today I'd	21/21
like to hmm@p tell you about Dalian, hmm@p a small city with international@s style.	14/19
Dalian is located in the north [/] hmm@p northeast of China. hmm@p Surrounded by hmm@p	17/18
seas on three sides and one side by hmm@p mountains@s, hmm@p Dalian is one of the[/]	14/17
hmm@p one of the most beautiful cities in the whole of China. hmm@p I first came to Dalian in	22/22
the summer hmm@p, the año@s two thousand five. hmm@p The building so[//] hmm@p was so	13/16
Modern that I am impressed by their architectural design <for a> [/] hmm@p <for a> [/] for a	19/23
quite a long time. Some were also extremely exótico@s. hmm@p All of these features were so	18/22
hmm@p so im [/] impressive. hmm@p What's more, hmm@p <the city> [/] hmm@p the city's	9/13
uniqueness <does not> [/] hmm@p does not only lie in its[/] its physical beauty, but also in its dy[/]	20/24
dynamicos@s. hmm@p Dalian <is the> [//] is one of the fastest developing cities hmm@p in	15/21
China. hmm@p It is full of work opportunities to find trabajo@s and there are hmm@p many	19/22
foreign [/] foreigners settling in Dalian right now. hmm@p Today hmm@p it is becoming a	18/20
hmm@p regional centre for hmm@p cultura@s and economy. hmm@p In the last few years, it	18/21
has achieved a stable economic growth and still hmm@p maintained un@s balance between	21/22
hmm@p industrialization and environment protection.	14/14
In a word, I believe that hmm@p Dalian can [/] can be compared to any international cities like	24/25
Los Angeles@s, or Singapore, hmm@p small but hmm@p really with a style.	11/15
Total syllables (Rate B /Rate A)	307/355

a. Transcription conventions: @p = pause
 b. Transcription conventions: @s = Spanish phrase
 c. Transcription conventions: [/]= repetition
 d. [//]= rephrasing (repetition of main idea with some changes)

D. Measures of Fluency and Complexity

To assess oral fluency, I used speech rate, which has been proved to be a reliable predictor in many studies, as the measure (Kormos & Dénes, 2004; Towell, 2002), even worked in the case of relatively less fluent non-native speech produced by low proficiency speakers (Mora, 2006). I calculated two subjects' Rate A and Rate B of speech rate in syllables, as well as speech rate in words as shown in "Table I" and "Table II". Lexical complexity was assessed through Guiraud's Index of Lexical Richness (e.g. Gilabert, 2007) as an alternative to Type-Token Ratio (TTR; e.g. Norris, 1996; Ortega, 1999). Sentence Nodes per AS-unit is applied to measure the structural complexity of the participants.

IV. RESULTS AND DISCUSSIONS

In order to examine the first hypothesis and whether cross-linguistic influence will affect oral fluency, the speech rate in syllables and in words were compared between the two subjects.

The results in "Table III" indicate that in the field of syllables rate and words rate, S1 has outperformed. It also can be observed that S2's rate A is better than rate B, which means that S2's oral fluency has been influenced by repetition. We can conclude that S1 has kept a relatively high level in her oral fluency, while S2 has lost his fluency in English production. The reason lies in many aspects, such as recency (Cenoz, 2001), L2 interference and mental process.

The results in “Table IV” indicate that S2 has acquired a higher rate in Guiraud’s Index of Lexical Richness than S1. In respect of structural complexity, S1 and S2 nearly do the same job (S1=1.4; S2=1.2). As a result, we may infer that learners may maintain or even enhance their oral complexity in a non-English speaking foreign context. The reason could be that (a) learner has acquired some words in his L2 (Spanish) and has applied it to the TL (English). Another possibility is that interlanguage transfer (De Angelis & Selinker, 2001) leads to, positively a lexical growth in S2’s English and negatively a merged structure due to the attempt on translating from Chinese into both languages (Zai, 2018)

Another interesting phenomenon can be observed from the S2’s transcription. S2 used some Spanish words or English words with Spanish pronunciation in his oral production. This is proof that S2’s oral fluency is just temporally interfered, but not perpetually lost.

TABLE III. ORAL FLUENCY OF THE TWO SUBJECTS

Fluency	Subject – S1	Subject – S2
Speech rate in syllables A	2.98 (256/86s)	2.47 (355/144s)
Speech rate in syllables B	2.94 (253/86s)	2.13 (307/144s)
speech rate in words	2.01 (173/86s)	1.44 (108/144s)

TABLE IV. ORAL COMPLEXITY OF THE TWO SUBJECTS

Complexity	Subject – S1	Subject – S2
Guiraud	6.99 (tokens:173; Types:92)	8.14 (tokens: 210; types: 118)
Sentence Nodes per AS-unit	1.4 (As unit=15; S-node=21)	1.2 (As unit= 19 S-node=23)

V. CONCLUSION

Study abroad populations constitute an extremely interesting domain of inquiry for SLA research, providing many insights into the process of acquiring a foreign language. In conclusion, the results of this study revealed that a non-target language SA context may hamper one’s oral fluency in TL but not complexity. These findings provide evidence for oral competence in different language learning context as well as cross-linguistic influence (CLI) on oral production.

ACKNOWLEDGMENT

I would like to give my sincere gratitude to the teachers and students who provide ideas, passions and all the needs for my research, from the Department of Eurasian Languages and Cultures of Xi’an Fanyi University.

REFERENCES

[1] B. F. Freed, An overview of issues and research in language learning in a study abroad setting. *Frontiers*, 4, 31-60, 1998. <http://www.frontiersjournal.com/>

[2] G. De Angelis and L. Selinker. “Interlanguage Transfer and Competing Linguistic Systems in the Multilingual Mind.” *Cross-linguistic Influence in Third Language Acquisition: Psycholinguistic Perspectives*. Ed. Jasone Cenoz, Britta Hufeisen, and Ulrike Jessner. Clevedon: Multilingual Matters, 42–68. 2001.

[3] J. Cenoz, “The Effect of Linguistic Distance, L2 Status and Age on the Cross-Linguistic Influence on Third Language Acquisition”, in Jasone Cenoz, Britta Hufeisen, and Ulrike Jessner (eds.), *Cross-Linguistic Influence in Third Language Acquisition (Multilingual Matters)*, pp. 8–20, 2001.

[4] J. C. Mora, “Age effects on oral fluency development”. In C. Muñoz (Ed.), *Age and the Rate of Foreign Language Learning* (pp. 65-88). Clevedon: Multilingual Matters, 2006.

[5] J. C. Mora, and M. Valls, Oral fluency and accuracy in formal instruction and stay-abroad learning contexts. Paper presented at the 17th EUROSLLA Conference, Newcastle, 2007.

[6] J. Collentine and B. F. Freed, Learning contexts and its effects on second language acquisition: Introduction. *Studies in Second Language Acquisition*, 26, 153–171, 2004.

[7] J. M. Norris, A validation study of the ACTFL Guidelines and the German Speaking Test (Unpublished master’s thesis). Honolulu, HI: University of Hawaii, 1996.

[8] J. Kormos and M. Dénes, Exploring measures and perceptions of fluency in the speech of second language learners. *System*, 32, 145-164, 2004.

[9] L. Ortega, Planning and focus on form in L2 oral performance. *Studies in Second Language Acquisition*, 21, 109-48,1999.

[10] N. Segalowitz, and B. F. Freed, Context, contact, and cognition in oral fluency acquisition: learning Spanish in at home and study abroad contexts. *Studies in Second Language Acquisition*, 26, 173–199, 2004.

[11] P. Skehan, *A cognitive approach to language learning*. Oxford: OUP & from Peter Skehan’s contribution to TABASCO. 2003. *Whose learning is it anyway*. Antwerpen: Garant, 1997.

[12] R. DeKeyser, “Study abroad as foreign language practice”. In R. DeKeyser (Ed.), *Practicing in a second language: Perspectives from applied linguistics and cognitive psychology* (pp. 208-226). New York: Cambridge University Press, 2007.

[13] R. Gilabert, Effects of manipulating task complexity on self-repairs during L2 oral production. *International Review of Applied Linguistics in Language Teaching*, 45, 215-240, 2007.

[14] R. Towell, R. Hawkins, and N. Bazergui, The development of fluency in advanced learners of French. *Applied Linguistics*, 17 (1), 84-119, 1996.

[15] R. Towell, Relative degrees of fluency: A comparative case study of advanced learners of French. *International Review of Applied Linguistics*, 40, 117-150, 2002.

[16] X. C. Zai, *English as facilitator in Spanish-Chinese translations*, New West, 23, 158, 2018.