

## Study on the English Learning from the Perspective of Cognitive Psychology

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**Abstract:** For a long time, syntactic system has been portrayed as fundamental and pervasive in language learning. But there is an alternative perspective in recent years, which suggests that language is much more lexical than usually accepted, particularly when real-time processing is concerned. Based on a research on a story-reproduction task among sophomores which is designed and conducted by the author, this paper intends to prove that an analytic system is often bypassed and the pressures of real-time communication are relied on during rapid communication and on large chunks of memorized language.

### 1. Introduction

Linguistic research has been the basis of second language acquisition and second language teaching, which is affected by the structure of language knowledge. The language structure is considered to be the process of learning two different languages (including listening, reading, writing,) in the most basic link. But in recent years, some people began to study the second language acquisition process from the perspective of cognitive psychology, and find that in the process of oral communication, whether native or second language learners' brain language processing mechanism are more dependent on the lexicalized sentence rather than grammar knowledge. The vocabulary of the sentence is some fixed phrases, stylized expression, sentence structure commonly used. Structured memory is like memorizing words. people use them without speaking, and help them to improve their fluency in spoken English.

In a typical linguistic model of information processing system, the rules of grammar is the basis of language, the process of language output rely on the rules of grammar, place the appropriate position in the sentences with proper words, language processing mechanism of the brain work of language processing in the whole process are take it leisurely and unimpressively, everything is in good order and well arranged. The actual implementation of the language processing is very fruitful, the demand in a general way, the ability to use language is a direct manifestation of language knowledge. The linguistic information processing mode, like people speak to plan and organize to constitute decide what kind of sentence structure. Express what you are trying to say, and have time to choose between a large number of ingredients, and then put the most appropriate ingredients into the right place for the sentence.

However, we know that in the actual oral communication, people didn't have time to think about grammar rules, no time to form a sentence structure, no time to analyze our expression with the grammar, the language skills are often not fully reflect the language knowledge. Therefore, it can be say that the linguistic model has some shortcomings, because it ignores the very important point in oral communication, which is in the actual process of language output, the information processing mechanism of the brain language has very short period of time. And the two models of information processing linguistics can not be confirmed. Such an information processing system is not only fast,

easy, but will be very laborious, need to spend a lot of effort and mental resources, so it can not meet the needs of real-time language processing. Also, there is no reason why people are stored in the memory system can be used effectively at any time.

## 2. Experiment

### 2.1 Preparation of the Experiment

It is suggested that most of the real-time language output is largely dependent on memory systems, and that by using fixed expressions, speakers often avoid sentence analysis that has to be carried out. Based on a survey conducted in the design, through the study of university English majors in the second grade of story retelling, This paper mainly focus on Chinese students' oral English to understand the structure of language knowledge, play the role, habits of expression have much effect, the language processing mechanism is based on the grammatical rules the fixed format of the word memory.

### 2.2 Retelling story and Experiment analysis

Through retelling task from the fluency, accuracy and complexity of the cognitive process of students' language output, the purpose of the experiment is to test students' language output from the grammatical rules and fixed memory. Based on acceptance of the experiment, there are 60 people to learn English of sophomore, they have at least 8 years learning experience. (three years of junior high and high school for three years, the University, these students after two years) and have very good grasp of English grammar knowledge. From what they say in English we can see that their language output whether reflect their knowledge of English, how much grammatical knowledge and idiomatic structure vary in their oral expressions.

The 60 students were divided into three groups of experiments, who were carried out in three listening classroom, each classroom is a group of 20 students, the first group unified with the tape to listen to the story, then according to each different preparation time, the students operate the machine to repeat and record the time. After listening to recordings immediately, the first group heard the story, no time to plan to consider sentence structure; the second group is given five minutes to get ready, and the third groups is given ten minutes to retell this story.

The story retelling task, partly because of the difficulty of the task is completed with sophomore, which should be professional at this stage, on the other hand, provide a story, there is a consistent input, you can compare the input and output, but also makes the difference between the output of the a unified reference. Another story is a familiar theme in the students, that do not need to play, imagination and logical reasoning to illustrate something, and do not need to fight to maintain a moral code. The discussion of the subject matter or the requirements of the second grade students' oral English is too high.

Table 1.

Percentage (%)	Preparation time (0)	Minutes to prepare (5)	Minutes to prepare (10)	Influence
Pause time (during all the time of completing the task)	58.2	33.6	27.1	0>5,10
Error rate per hundred words	38	19	15	0>5,10
Usage rate of complex sentences	25.6	30.2	36.8	0,5<10

From the table 1. There are three pauses, the rate of errors per word and the use of complex sentences to test the fluency, accuracy and complexity of students' oral fluency. From this table it can be seen that, with increasing preparation time, the pause time would be reduced, the fluency will be improved, but no time to prepare and the other two cases showed a sharp contrast. Display per hundred word error rate statistics, zero time to the highest error rate is 58.2%. 5 minutes, 10 minutes preparation time and preparation time is no big difference in the rate of error is 33.6% and

27.1%. respectively and the use of a complex sentence shows a completely different situation, for zero time and 5 minute preparation time there is no big difference in the use of complex sentences, respectively 33.6% and 27.1%, 10 minutes of preparation time, the use ratio of complex sentences is much greater than the first two cases, 36.8%.

The results show that the attention resources of the sophomore are limited in the language output, coupled with the time limit, so attention is placed on first language fluency, followed by accuracy, and will strive to improve the complexity of sentence structure. Especially in the zero preparation conditions, in order to ensure a good degree, they are familiar with the words, phrases or sentences, without time to think about the expression is correct or not. because of language, they also can not completely control the complex sentence, no time to consider the wrong circumstances, try to use them more confident of the simple sentence, And avoid the use of complex sentences.

Our daily oral communication is basically unprepared, so the language features of students under zero preparation can reflect their everyday spoken English. So the following use specific examples to illustrate some of the common mistakes students in story retelling under three different preparation times.

1) The error rate of pronoun “people” is shown in table 2.

Table 2.

0 preparation time	5 minutes	10 minutes	Three groups
65%	42%	30%	0>5,10

“People” is a word the using rate is very high in the story, from the first to third groups, due to different time ratio, the wrong “people” is decreased. general explanation is: first, under the influence of the Chinese language, Chinese pronunciation, the third singular person and the third person singular women without distinction, so China students often have no conscious to distinction, especially in spoken English; second, students often give the “he” more attention including listening, say, read, write in English teaching. For these reasons, the automation of he higher, so the students in spoken English, often without thinking, without distinction in the use of people.

2) The error rate of noun “child” is shown in table 3.

Table 3.

0 Preparation time	5 minutes	10 minutes	Three groups
62%	28%	16%	0>5,10

Baby is another commonly used in the wrong words. We can see that with the more decrease in preparation time, students are more likely to say that child's place in the children. said this first because there is no plural morpheme in Chinese, learning and mastering the complex deformation for learning English, it is never an easy thing; otherwise no time to think, in the circumstances, students are more likely to make children the plural form of child, is the most likely cause of children as an irregular noun plurals. Another reason is that in a variety of English language, the frequency of children is higher than that of child, so that in the process of learning English students are easy to contact the chance of children. so the word children memory is more deeply, the experimental results show that the degree of automation of the output of the word children is higher.

Another notable finding is that there is a remarkable similarity between the three groups of students in retelling the story. More and more structure has a high rate of correcting use.

Table 4.

First group	Second groups	Third groups	Differences between the three groups
86%	88%	90%	0

In the structure of students repeat, there has a high rate of correct usage. The students showed a high degree of automation in the more and more structure, almost without thinking if it is accurately. The reasons may be in the following, firstly, it has the similar structure in Chinese. Like “We are more and more...” Two, the structure does not require much change for cognitive processing; three, in teaching, this structure has been more attention, so it left a deep impression on Students.

### 3. Conclusion and Discussion

#### 3.1 Conclusion

The experimental results show that the language can not fully reflect the language knowledge, if the preparation time is longer, the language ability is close to the level of language knowledge, but cannot reflect the language knowledge; and the preparation time is short, the language competence and language knowledge distance are more far.

From this experiment, it can be confirmed, in the actual process of oral communication, because of time pressure, the parsing process tends to be squeezed out, the students are often no time in the expression of the correct expression and error analysis, they mainly rely more on some of their common memory, more profound, the degree of automation high, they often use some expression without thinking, although some structure or expression is wrong.

We rely on these pieces of language to reduce the pressure of language processing, thereby gaining time to plan not just the language form, but what we are going to say.

Therefore, fluency, accuracy and complexity are the three mark of quality for the second language students, in the actual language communication, the attention of students is limited, this limitation has a far-reaching influence on two language processing and use. In the actual communication structure, because the structure of the model can reduce the fluency, accuracy and complexity of competition for attention. A lot of mistakes are happened under time pressure, they can not be fluency, accuracy and complexity because of the limited attention.

#### 3.2 Discussion

Therefore, in foreign language teaching, teachers should not only help students to grasp the grammar rules, but also help them to deepen their understanding of the common words of memory, so that to improve the automation of language expression or fluency, which is a necessary factor in communicative activities. From the understanding of a word phrase or sentence structure, and to skillfully use, is a highly complex development process. English teaching has an important role in the students study, as a foreign language learning environment, classroom teaching plays a very important role, which requires teachers to be able to fully understand the students, understand the acquisition of language skills, reasonable arrangement of teaching activities.

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