

# The Role of Universal Grammar in Second Language Acquisition

Yunshan Chi\*, Mengyao Li

Hebei University of Science & Technology, Shijiazhuang, Hebei Province, China

\*Corresponding Author

**Keywords:** Universal grammar, Parameter, L1, L2

**Abstract:** This paper focuses on the influence of universal grammar(UG) on second language acquisition. This study reviews the current research asserting that UG affects second language acquisition and compares the differences in UG between native language learners and second language learners by analyzing the specific parameters. In the context of the second language, recognizing the impact of UG can broaden the perspective of second language learners and teachers on interlanguage use. The research on the effects of UG can provide pedagogical insights for second language teachers and learners as well.

## 1. Introduction

The role of Universal Grammar in Second Language Acquisition is a long-debated problem. The argument is based on the fact that adult native language (L1) speakers know that they cannot learn from the speeches they have heard. Since the knowledge is not based on their experience, then it must be from an inbuilt property inside the speaker's mind. For example, a child whose native language is English can quickly point out an ungrammatical sentence even though he has not encountered the phrase in real life (Doughty 2008) [1]. The rule also applies to other languages. The judgment by the child is based on something rather than his experience. The only possibility is that humans share some property of the mind that enables them to identify ungrammatical sentences despite the language. This feature that is inbuilt into the human brain is what is referred to as Universal Grammar (UG). As a result, this paper will discuss the significant role UG plays in Second Language Acquisition.

## 2. The Definition of Universal Grammar

Universal Grammar does not comprise of a particular grammar or particular rule. Instead, it is a series of general rules that apply to all grammars, and that can leave specific parameters open (Chomsky 1982)[2]. The pro-drop is one of the parameters left open in UG, and this parameter is concerned with the relationship between subjects and verbs within a sentence (Phinney 1987)[3]. In the English language, pro-drop is not acceptable since a subject is required in every sentence, and the subject cannot be interchanged with the verb in the declarative sentences. The Spanish language, on the other hand, allows for pro-drop since they can form sentences with empty subjects. What is more, inversion of the subject is permitted and is also compulsory in certain sentence structures. According to this definition, a specific language or grammar is, therefore, a sum of the particular rules it selects from all the possibilities contained in Universal Grammar. In other words, the syntax inherent in different languages is made up of a specific set of rules. In turn, the overall system of rules, parameters and principles make up Universal Grammar.

Universal Grammar can also be visualized as a part of the brain. Consequently, language should be described as a mental organ and hence "learning" is not the right word to describe language acquisition. Take the example of a cell that grows into a lung or a plant bulb that becomes a flower. In both cases, it cannot say that the cell learns to become a lung or that the bulb learns to become a flower. On the other hand, it should say that the cell and bulb grow. This growth can be described as a realization of inbuilt potential to grow considering environmental triggers such as water and nutrition. Similarly, it should not say that a child learns a language but rather the language grows.

Universal Grammar is already present in the child's brain, and it grows into adult language following environmental triggers (Chomsky 1982)[4]. It should be noted that the first language (L1) is not learned the same way as learning riding a bicycle. L1 is acquired through the growth of the mental organ of language.

### 3. Data Analysis of Universal Grammar in L2

As one of the main components of verb grammatical rules, subject-verb agreement plays an important role in the use of language. How to properly use agreement becomes a parameter to measure the interlanguage proficiency of English as a Foreign Language learners (EFL). The qualitative method is applied to analyze the data in Table 1 toward the errors of subject-verb agreement made by L2.

This study divides the errors into three main kinds of quantity difference of subject-verb agreement, and their statistic results are in Table 1.

Table 1 Combined Statistical Table.

Error types	Counts	Proportion
Breaking grammatical agreement	25	80.6%
Breaking notional agreement	3	9.6%
Breaking Proximity	3	9.6%
Total	31	100%

Agreement refers to the requirement that the forms of two or more words which stand in specific syntactic relationship with one another should be characterized by the same paradigmatically marked category. The syntactic relationship includes a pronoun agreeing with its antecedent, a verb agreeing with its subject, etc. On the other hand, actually in Chinese the rules are different from those in English. Therefore, some Chinese learners often simplify the rules, and usually make mistakes in this aspect. Some examples are selected from the selected text as follows.

(1) Breaking grammatical agreement: *Geylang Methodist School is called.*

Correct form: It was called Geylang Methodist.

(2) Breaking notional agreement: *I go to Chinese Church when I was small. Hm. English I go now.*

Correct form: I went to Chinese Church when I was a child. Hm. I go to English Church now.

(3) Breaking proximity: *There's number of schools there. There's also got churches there.*

Correct form: There is a number of schools. There are also many churches.

Based on the errors of subject-verb agreement identified from the three aspects, the verbs commit errors can be mainly divided into lexical and copular verb. Furthermore, the most of errors about subject-verb agreement occur in the breaking of grammatical agreement, which accounts for over 80%. According to English grammar, verbs should have inflectional changes (plus -s) when a nominal subject is singular and remain its original form when the nominal subject is plural. Generally speaking, the errors that the Chinese-English learners tend to use the original form of lexical verb instead of using its singular form accordingly are caused by the negative effect of mother tongue since there is no inflectional verb change in Chinese language. From subject perspective, much emphasis has been put on the verb of error in the subject-verb agreement. However, the role of a subject played in the choice of the proper verb form should never be ignored. The main reason for the fact that Chinese learners are more aware of the singular and plural forms of pronouns than those of general nouns lies in the complexity of the rule of the target language. The rule of nouns, including general, abstract, countable nouns and so on is more complex than the rule of pronouns. As a result, L2 is more prone to make errors to use original forms to replace plural nouns and third person singular than to replace past tense.

### 4. The Role of Universal Grammar in Second Language Acquisition

A child not only needs UG but also evidence of a specific language to acquire language. The child needs to listen to sentences in a particular language to know how to fix the rules of subject,

verb and object. Evidence received by a child can either be positive or negative. Positive evidence is where the child hears actual sentences and learns the subject, verb and object order (White 1991)[5]. Negative evidence, on the other hand, is divided into two, direct and indirect negative evidence. Direct evidence is where the child is corrected on his mistakes by an adult. Indirect evidence is where a child fails to hear something in the language. The non-occurrence of a specific order of parameters is negative evidence that the order of parameters in question should not be used in that language. The acquisition of L1 mainly relies on positive evidence since children receive little negative evidence in the form of corrections from adults.

As a result, if UG is a present from the beginning of life, then all human's languages should follow the principles of language. Grammar is a representation of the linguistic knowledge a person has regardless if the person is three years or thirty years old (White 2003)[6]. Following this assumption, despite many principles being absent from interim grammar, the rules present do not break the principles. Therefore, by using the same principles of language, a Spanish child will construct grammar in Spanish while an English child will form English grammar. These two grammars represent different choices all of which are under the guidelines of UG. In other words, it is a different application of similar principles of linguistics but in response to the different environments in which the children were raised (Phinney 1987)[3].

UG plays a major role in learning a second language. First, it should be noted that experience is an essential requirement for learners to fix the parameters of grammar. However, the learner also has to learn the peripheral aspects of the language that do not align with UG. Nonetheless, most minds prefer to follow rules that are based on what the learner already knows (Chomsky 1982)[4]. Following the rules that are already provided is the easiest way out for the learner since learning only needs to be triggered. For example, when the learner listens to people speaking the new language around him, he will immediately know how to fix the subject, verb and object parameters into a sentence. In summary, the learner's mind fails to adopt peripheral solutions since they fall outside the already in-built instructions.

The situations of L1 and L2 learning are very much similar, which highlights the fact that UG has a significant role in second language acquisition. On the other hand, the minds and situations of L1 and L2 learners have a variety of properties. One of the most obvious differences is that L2 learners already acquire the grammar of the first language which follows the principles of UG, while it has a specific series of values for its parameters (Ellis 1994)[7]. Because of this reason, L2 learning should take two possibilities into consideration. One is about the learner using direct access to UG, the other about indirect access through the first language. However, the research has shown that L2 learners still have access to the principles of UG since they can correctly judge grammatical errors without prior exposure to such sentences (Cook 1991)[2].

Parameter-fixing can be used to describe the relationship between L1 and L2 acquisition. For instance, if a L2 learner has direct access to UG, then English learners of Spanish should not have learning problems despite the fact that the pro-drop parameter of the two languages is fixed differently. Instead, the learner only requires the right trigger to adjust the parameters afresh (Chomsky 1982)[4]. However, some people have argued that a person is usually cut out from UG at a certain age. An argument, therefore, arises as to how UG helps a person acquire a second language. This discussion is salvaged by arguing L1 acts as a mediator between UG and L2. Without direct access to UG, a person has no option but to use L1, which is the reason why a 40 years old person can still learn a new language (Flege 1999)[8]. The assumption is that the brain already equipped itself for language learning during childhood. Furthermore, since languages tend to be similar in several aspects, the UG skills are still present during adulthood. As a result, if the learner does not have direct access to UG, he can approach Spanish using parameters set in English.

Other critics have made an argument that L1 mediation is only possible when two languages have similar parameters. Therefore, it is hard to determine how a second language learner can retrieve UG parameters and fix them differently in a new language. But this argument actually has not been acknowledged since evidence from studies conducted on adult learners shows that they still have access to some of the principles of UG (Cook 1991)[2]<sup>[2]</sup>. For instance, L2 learners know

things that they could not have learned in class or from peers. What is more, L2 learners will encounter different types of evidence depending on the type of situation in which they are. An immigrant, for example, will rely on positive evidence since they use the language for everyday purposes while a learner in a classroom will encounter negative evidence from corrections made by the teacher (White 1991)[5].

## 5. Conclusion

Universal grammar plays a significant role in the acquisition of second language. All humans are born with an innate ability to learn a language, which helps children acquire their first language. This ability is also responsible for second language acquisition. Humans require some environmental triggers using the new language, which include classroom lectures and listening to their peers communicate, which will activate the innate ability to learn a new language.

## References

- [1] Doughty, C.J. and Long, M.H. eds. 2008. The handbook of second language acquisition (Vol. 27). John Wiley & Sons Press.
- [2] Cook, V.J. 1991. The poverty-of-the-stimulus argument and multicompetence. *Interlanguage studies bulletin (Utrecht)*, 7(2), pp.103-117.
- [3] Phinney, M. 1987. The pro-drop parameter in second language acquisition. *Parameter setting*, pp.221-238.
- [4] Chomsky, N. 1982. Some concepts and consequences of the theory of government and binding (Vol. 6). MIT press.
- [5] White, L. 1991. Adverb placement in second language acquisition: Some effects of positive and negative evidence in the classroom. *Interlanguage studies bulletin (Utrecht)*, 7(2), pp.133-161.
- [6] White, L. 2003. *Second language acquisition and universal grammar*. Cambridge University Press.
- [7] Ellis, R. 1994. *The study of second language acquisition*. Oxford University.
- [8] Flege, J.E. 1999. Age constraints on second-language acquisition. *Journal of memory and language*, 41(1), pp.78-104.