

# IS A COMMON PERSPECTIVE OF LANGUAGE AS HUMAN INNATE NATURE WORKABLE IN EDUCATION? UG PERSPECTIVES AND ROLE OF INSTRUCTION IN SLA

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## ABSTRACT

In SL/FL education, Universal grammar (UG) and the critical period hypotheses have some recognition as a part of common sense. This paper, therefore, reviews the concept of UG and surrounding research history and debate, including a position of the language myth, briefly, and considers how this concept is applied for more effective learning. This paper shows discussions on a possibility of UG existence, UG Accessibility Hypothesis, and its application in SLA instruction.

**Keyword:** universal grammar, accessibility hypothesis, SLA, instruction

## INTRODUCTION

In SLA, some believe that human have the innate ability to acquire languages, and those who especially believe that human beings have a special mechanism for language learning independently, which is embodied in the concept of Universal Grammar (UG) hypothesis, are called special nativists (Gass & Selinker, 2001). UG is innate biological properties that possess a set of language principles (White, 1998). In real practice, whether English educators or even learners know the technical words of UG or relating terms such as the critical period hypotheses, many have some sense on such intuition of language learning, as the widespread of a story of Amala and Kamala as an example case of critical period (but, as you know, this story is not a true, refer to Aroles, 2007). Therefore, it will be meaningful to review how this concept defines and applied in SLA field.

The term *Universal Grammar* was proposed by Chomsky (year) in answer to “‘Plato’s problem’ – ‘How do we come to have such rich and specific knowledge, or such intricate systems of belief and understanding, while the evidence available to us is so meagre?’” (Cook, 1988, p.57). Chomsky’s answer to ‘Plato’s problem’ is that human have the innate ability to learn language instinctively. This concept provided an answers as to children can learn language even if they are exposed to only a limited input by environment (Cook, 1988). At first, the interest of UG was only for first language acquisition as Chomsky tried to answer ‘Plato’s problem’; however, in the 1980s, when the interest in UG was extended towards SLA, the application of UG in SLA became a controversial issue among researchers (Eubank, 1991).

As time flies and technologies have been dramatically developed, various innovation methods have challenged for this question. For example, the enhancement of PC can process a man-machine interaction as virtually simultaneous exchanges and such quick response of PC relating system can save a short time human response relating innate human mechanism considered in cognitive psychology. For language acquisition, psycholinguistics are blessed and researchers have studied language processing how human response to language inputs particularly when the inputs are not natural in terms of daily language use, with a software (e.g. Linger (Rodhe, 2001)) that can record the timing when people read a word in a sentence.

For instance, Hofmeister and Sag (2010) examines the island structure and cognitive process, and suggested that sentence structure with process difficulty increases unacceptability of given phrases. In other words, people need significantly different time to understand too complex language structures compared with the language structures that are common in their language uses.

As an another viewpoint, biology has been a central focus of language acquisition in order to understand nature of language since 1950’s (which leads to a conceptualization of UG and its relating concepts, such as generative syntax), and advancement of biology has stimulated the approach of language as a human innate system, such as minimalist program (Chomsky, 2007). Furthermore, a growing enhancement in biotechnology, such as genetics and neurobiology, opens a new endeavour to approach this fundamental question on relationship between human and language (Benítez-Burraco & Boeckx, 2014). Such biolinguistic approaches are applied as a tool to explain the difference between child and adult language acquisition (e.g., Craina, Koringb, & Thorntona, 2016) today and it seems language as a part of human instinct, namely UG, is worthwhile to deepen the complex system of language and its acquisition.

This paper discusses UG perspectives on SLA and how these perspectives affect a role of instruction in SLA. Firstly the rationality of UG in language learning is discussed, then the issue of UG accessibility hypothesis is analysed, and finally the UG perspectives for a role of instruction is discussed based on the status of UG that is going to be determined in the two sections preceding it.

## UG EXISTENCE

The first question regarding UG hypothesis is whether UG exists or not, and as an answer, UG can be regarded as an existing function in human's innate systems. Several evidences presented by researchers indicate UG's existence. Bickerton (1984) mentioned that a unique neurobiological system controls human language is the most probable answer for the question why language universal exists, and there are several evidences which show it is likely that a human have biological language learning systems. He calls this system as *bioprogram hypothesis*. The first evidence that supports his bioprogram hypothesis is Creoles. Creoles are created from immigrant languages. Analysing these new languages, Creoles have close grammatical structures. He argues that it cannot be explained by traditional frameworks but can be explained by bioprogram hypothesis. This means, as he said, that bioprogram makes it possible that children analyse grammars and they can choose appropriate set of rules with limited available input.

Another evidence was the process of first language acquisition by Bickerton (1984). As mentioned previously, it is the question as to why children can acquire language very quickly even if they only came into contact with a limited input. Bickerton explained it is because of the existence of bioprogram. Like Bickerton, Cook (1988) explained the fact that children are able to learn a language despite the complexity of it. Therefore, if children do not have enough data to create language knowledge from surrounding environment, they must have sources within their mind. Other UG proponents support this fact as a proof of UG existence.

The arguments shown above are a pioneering stage of UG study which widely recognized, refereed standardly as an orthodox understanding of UG to wide range of SLA specialists. Until that time, there have been thousands of studies and the debate by pros and cons are still in a hot stage: some completely deny the system of UG and recognizes language variety as a combination of other previously known human systems (e.g., Evans and Levinson, 2009), or even language acquisition is not an instinctive ability (Evans, 2014). In detail, Dąbrowska (2015) summarised the arguments surrounding UG as follows:

- (1) Language Universals: (All) human languages share certain properties.
  - (2) Convergence: Children are exposed to different input yet converge on the same grammar.
  - (3) Poverty of the Stimulus: Children acquire knowledge for which there is no evidence in the input.
  - (4) No Negative Evidence: Children know which structures are ungrammatical and do not acquire overgeneral grammars in spite of the fact that they are not exposed to negative evidence.
  - (5) Species Specificity: We are the only species that has language.
  - (6) Ease and Speed of Child Language Acquisition: Children learn language quickly and effortlessly, on minimal exposure.
  - (7) Uniformity: All children acquiring language go through the same stages in the same order.
  - (8) Maturation Effects: Language acquisition is very sensitive to maturational factors and relatively insensitive to environmental factors.
  - (9) Dissociations between Language and Cognition: Some clinical populations have (relatively) normal language and impaired cognition; some have impaired cognition and (relatively) normal language.
  - (10) Neurological Separation: Different brain circuits are responsible for representing/processing linguistic and non-linguistic information.
- (pp. 2-3)

The position to doubt UG is called *The language myth (TLM)* and this trend seems to be one of the major stands on the relationship between human and language. For example, Evans and Levinson (2009) reasons language diversity occurs because of cultural-historical events and entailed cognitive processes by human – UG is no longer a superior explanation for human language acquisition. Or even more moderate, UG would exist, but the effect of such language acquisition system is quite limited that is within the error compared with other language learning mechanisms (Dąbrowska, 2015).

On the other hand, others develop the theory of SL/FA learning under the premise of UG existence as a basic part of human ability. For instance, Goldberg (2016) argues that the popular idea of TLM has not been given a sufficient evidence that persuade as a counterargumentation against the long history of UG by mentioning

research studies dated from an early stage from present (Goldberg mentions: Ambridge et al. 2014, Christiansen & Chater 2008, Elman et al. 1996, Evans & Levinson 2009, Everett 2012, Goldberg 2013, 2016, Hurford 2012, Newmeyer 2016, Sampson 2005, Tomasello 1995). There are much firm studies to indicate the existence of UG and TLM oversimplify the facts reported in this regards.

From the discussions presented above, even though there are some doubt, it is still a reasonable possibility that UG exists innately in the human system (even though Bickerton used a term different to UG, the concept can be regarded as UG)- at least UG or another instinctive language acquisition system is not a stage of total denial which can be totally through away and forgotten – so the following argument is going to be discussed as the premise of UG existence in human mind.

### **UG ACCESSIBILITY HYPOTHESIS**

After UG existence is reasoned, the next question is the relation between adult learners and UG, since UG was proven to exist in children's first language acquisition in the previous section. Among the hypotheses, one of the possible answer is adult L2 learner can access UG partially and they are also affected by language transfer in a certain level – partial access and partial transfer.

In terms of the issue of L2 UG access, White (2000) introduced the UG accessibility hypothesis with five possible cases. The first case is full transfer/partial (or no) access. This means adult L2 learners cannot access UG directly, and their major source of language acquisition is L1 grammar. The second case is no transfer/full access. In this situation, L2 learners can learn a language in the same way as child how children acquire their first language. The third is full transfer/full access. Similar to the first case, L2 learners acquire a language by L1 grammar basis, but they also have fully UG access just like in the second case. The fourth case is partial transfer/full access. In this situation, L2 learners can use L1 grammar and UG at the same time, and the final state of acquisition is complete L2 grammar. The final possible situation is partial transfer/partial access. This means L2 learners can access UG partially and they are also influenced by L1 grammar. This position supports that L2 learners cannot acquire complete L2 grammar. In the following section, the five cases will be analysed to determine which one most supports L2 learners' UG accessibility.

Regarding UG accessibility, some researchers argue that adult L2 learner cannot access UG at all. For example, Bley-Vroman (1989) argued that L2 learner can fail to acquire a language even after a long period of study; therefore, they must not be able to access UG at all. In addition, Felix (1991) mentioned studies (he introduces Clahsen, 1988; Felix, 1985; Zobl, 1986) show second language learners' acquisitional behaviours are different from first language acquisition. For example, Clahsen and Muysken (1986) shows adult L2 learners have difficulty to grasp the SOV word order in German while first language learners can grasp this rule effortlessly. However, there are also several evidences that indicate there were UG accesses by L2 learners. Felix (1991) mentions that numerous studies (he picks up Felix, 1988; Flynn, 1988; Haegem, 1988; White, 1985, 1988) shows that L2 adult learners demonstrate the possession of abstract grammatical properties that is not taught, or is not similar to first language. This indicates L2 learners can access UG at a certain level. From previous discussions, Felix (1991) concludes partial access is the most probable condition in terms of L2 access and it seems to be the most rational alternative compared to the full/no access hypothesis.

In terms of language transfer, Odlin (1989) defined language transfer as “the influence resulting from similarities and differences between the target language and any other language that has been previously (and perhaps imperfectly) acquired” (p. 27). According to Odlin (1989), there are two types of transfers: negative transfer and positive transfer. Negative transfer is interference by native language. Schachter (1974) shows, on the one hand, Chinese and Japanese students tend not to use relative clauses because their native languages do not have a syntactic system of relative clauses. In addition, Japanese students use too many simple sentences to avoid using relative clauses. These are examples of negative transfer. On the other hand, positive transfer comes from similarities of native and target language and it makes learners' language acquisition effective and easy. For example, similar vocabularies, similar vowel and consonant sounds, or similar syntactic structures between languages can lead to positive transfer.

In addition, other than structural factors, non-structural factors also affect language transfer. For example, a learner's personality affects language transfer. Odlin (1989) mentioned anxiety and empathy affects transfer because these reflect on the attitude for language such as reluctance of using unfamiliar structure as Japanese students do not use relative clause in sentences. Taylor (1975) pointed to another factor – learner's proficiency. He mentioned advanced learners rely on language transfer much less than non-advanced learner because they

have knowledge about the target language and ability to construct analogies. This indicates the ratio of language transfer is not static, but changeable based on structural/non structural factors. As a result, it is partial transfer in L2 learning. From this discussion, it is most possible that adult L2 learners can access UG partially and they are partially influenced by language transfer.

Similar experiments have been tested. For example, Kong (2005) investigates L2 English speakers who are L1 Chinese speaker through measure how they accept English null subjects. The conclusion is not support full access position and old L2 learners do not reset but adjust their pre acquired parameters which help to understand the structure only in the target language. Partial access/partial transfer seems a priority position. However, the conclusive result has not been gained. Farahani, Mehrded, and Ahghar (2014) discussed UG accessibility in adult SLA learners, and suggested that all of no/partial/full UG access position faced confrontation for their arguments. Therefore, since they are some evidence which shows access could not be null nor full, still partial access can be a reasonable prediction that can be applied to SLA activities as a useful framework.

### **UG PERSPECTIVES AND ROLE OF INSTRUCTION IN SLA**

Basically, instruction is regarded as having a weak effect in language acquisition by UG perspectives (Cook, 1988). However, UG perspectives can be applied for effective instruction of SLA. Schachter (1984) discusses importance of input in language learning and he also mentioned input provides partial views of UG properties. In addition, appropriate place of communicative input stimulate language acquisition. To adopt his viewpoint, it is predicted that instruction can make learners notice UG properties and it stimulates language acquisition as instruction can be regarded as a certain type of input and it provides rules which correspond with the rule on UG. Moreover, Kirkwold (2005) suggested in regards to this “frequency factor”, teachers need to familiar with what rules are taught implicitly or explicitly.

From another point of view, it was also indicated that educators can improve learners L2 proficiency only through limitation of instruction. As shown by previous studies, UG makes it possible to learn language from only limited input because a human have innate set of rules on languages. Under an instructive environment, the method instruction only provided a limited time that an educator can a teach language to learners, and it is impossible to discern complete possible grammatical structures in this time. However, UG access stimulates learners’ language acquisition even if they only receive a limited amount of information from the educator. In other words, educators can be sure that they can improve learner’s proficiency even when they interact with the learners for a short period of time.

Since L2 learners can access UG partially and they are influenced by transfer, they may not improve their language proficiency with the same accuracy as children, but UG ensures L2 learners can achieve a certain level of proficiency based on their condition. In this sense, if instructors can provide accurate information instead of language input randomly provided by inaccurate sources, learners might not spend needless time on rejecting unnecessary rules, and accurate input directly can set some rules that are component of possible grammatical structures.

In addition, previous studies indicated that UG gives limitation on possible infinite structures by L2 learner. Combination of rules makes it possible to create infinite set of sentences by people. However, because of UG restriction, it puts a limit on people’s creation and it makes it possible for educators to guess learners’ errors. Under that condition, instructors can teach for and make an effort to correct the limited possibility of errors and it can make learners reject inappropriate rules one by one. Because of language transfer, some errors cannot be rejected easily. However, it is possible for learners to decrease their errors to a minimal level as their possible creations of errors are also restricted by UG influence.

If L2 learner cannot access UG at all, the method instruction may not be able to work because this indicates learners can create only the limited sentences that they have learned – this means they cannot adopt many situations in terms of language use, or teaching new rules makes learners create much more numerous amount of incorrect structures based on the combination of rules, if it is not restricted by UG. On the other hand, instruction can be regarded as essential states in SLA because of UG. Since not only can instruction be positive evidence as an input, but also L2 learners are also influenced by language transfer. If learners do not receive instruction, it needs much time to choose, adopt, and reject the rules by input from their surrounding. Instruction makes language acquisition more efficient and accurate.

## CONCLUSION

In conclusion, this paper discussed the UG perspectives and the role of instruction in SLA. UG is a set of innate language rules in the brain and the evidences – the case study of Creole and child first language acquisition – are an indicator that shows the existence of UG. Moreover whether L2 learner can access UG is controversial, UG would be still a useful understanding of language acquisition and an improvement of language learning. At the same time, some researchers deny it because L2 language acquisitional behaviour is different from L1 of it. However, other evidences indicate that it is likely that L2 learner can access UG partially. Language transfer also needs to be considered and it is possible that language transfer has arisen based on structural/non-structural factors. Therefore, L2 learners may be affected by partial language transfer. From these discussions, the most rational option is to adopt partial access/partial transfer in UG accessibility hypothesis. Generally UG perspectives regard the method of instruction as inadequate, capable of limited influence only. However, instruction can be regarded as essential. One thing is that input is important in UG perspectives and the learners acquire language through the process of judging, and adapting or rejecting certain rules with UG access. Instruction is regarded as input that corresponds with the rule in UG and it might make learning faster and more accurate.

Moreover, UG restricts infinite possibility of sentence creations by learners. This means interpreted that instructors can guess the types of errors that learners create because of UG restriction and instruction decrease the number of errors because the number of error is limited by UG, even if it takes time since language transfer is not ignorable factors. Therefore, the method of instruction can still be effective to improve learners' language proficiency.

From the above discussions, UG is an area under research that could increase the effectiveness of language learning, and it can also provide people with the same ability to learn language to a certain level of highly proficiency despite the fact that second language acquisition is a challenging task.

### Biodata

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