

The Challenges of Logical Problem in SLA: A Critical Response Paper

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Abstract: *Second language acquisition (SLA), the process by which people learn a second language, belongs to the second half of twenty century. Outstandingly, it has been a great boom since 1960s. Nevertheless, the controversial question of possible similarities between the processes and problems of first and second language acquisition has left rather in a fuzzy shadow. Accordingly, the current critical paper is specifically based on the logical problem of SLA so as to clarify and analyze this challenging problem. To illustrate, Universal Grammar (UG) is called the so-called logical problem of language acquisition in generative theory. The nature of the problem becomes apparent when we take into account the end product of the acquisition process and compare this to the input data, which do not seem sufficiently rich or precise to allow the learner to work out all the complexities of the adult grammar, unless one assumes the availability of certain innate principles (UG). All in all, it can vaguely be mentioned that the term no access to UG in SLA is a misnomer. Thus, it is assumed that second language learners have partial or indirect access to UG. At the same time, second language acquisition is, to some extent, like first language acquisition, and the same theoretical constructs can be invoked to explain both. Developmental L2 errors which rather mirror those committed by the L1 learners can readily prove this claim as well.*

Keywords: *Second Language Acquisition; SLA Problem; Universal Grammar*

1. Introduction

Second language acquisition has become a field in its own right since 1960s. Amazingly, nowadays the field of SLA is in a boom along with enormous scope and depth both in terms of the variety of topics under investigations and the research approaches used to investigate. Nevertheless, the controversial question of possible similarities between the process of first and second language acquisition has left rather unanswered. In linguistic field Chomsky's theories on language learning are widely discussed. This critical paper exclusively tends to analyze and criticize more recently arguments on SLA challenging problems; namely, application of UG in SLA. More recently controversies about the application of UG in SLA sound to be in a favorite position; however, Chomsky does not extend this theory into SLA. Therefore, individual interpretations of the theory on SLA seem essential. Three specific hypotheses under the framework of UG are addressed from this perspective and review with supporting evidence,

along with this major criticisms that UG faces with in the field of SLA are investigated. Accordingly, in the current paper, the author would purposefully like to consider the potential role for L2 acquisition and the logical problem of SLA and outline what Universal Grammar (UG) attempts to explain and what it does not explain. According to White (1991), arguments for the existence of UG are motivated by a consideration of the so-called "logical problem" of first language acquisition. It is vastly noted that second language learners are faced with the similar problems, consequently, it is worth investigating whether or not the same kinds of problems and solutions to the problems (i.e. the assumed innateness of UG) are available or not. In other words, does UG exist in SLA process?

2. Approaches and Roles of UG Access in SLA

Regarding Universal Grammar (UG), Chomsky's approach provides a genetic blueprint, determining in advance what grammars can or cannot be used in specific context. In other words, UG places requirements on the form of grammars, providing an inventory of possible grammatical categories and features in the broadest sense; namely, syntactic, morphological, phonological and semantic. Besides, it constrains the functioning of grammars, by determining the nature of the computational system, including the kinds of operation that can take place as well as principles that grammars are subject to. UG includes invariant principles, that is, principles that are generally true across languages, as well as parameters which allow for variation from language to language. Simply put, UG has been considered as a system of principles and parameters which provide constraints on grammars in the course of L1 acquisition, as well as on adult native-speaker grammars. Similarly but oddly enough, L2 learners face a task parallel to that of L1 acquirers, namely the need to arrive at a linguistic system which accounts for the L2 input and allows the learner to understand and speak the second language. Given this apparent similarity, the question of whether UG also mediates L2 acquisition, and to what extent, has been investigated and debated since the early 1980s. The first decade of research on UG in L2 acquisition concentrated largely on the so-called *access* issue, that is to say, whether or not UG remains available in non-primary acquisition.

3. Various Positions about the Accessibility of UG in SLA

1- No access position: The crucial claim is that there is no such thing as UG. All the linguistic mechanisms available to the L1 acquirer are no longer available to the L2 learners. In support, advocates of this position tried to show that learners are 'stuck' with principles and parameter settings exemplified in the L1 (e.g. Carroll, 1989) or that their grammars show no evidence for UG constraints at all (e.g. Clahsen & Muysken, 1986). In SLA context some properties cannot be found elsewhere in natural languages, hence indirectly casting doubt on involvement of UG.

2- *Direct or full access position*: Second language learners have full access to UG. For some scholars (Epstein, Flynn & Martohardjono, 1996) UG access in SLA is restricted to the position that UG operates independently of the L1 representation, whereas for other scholars (e.g. Schwartz & Sprouse, 1996; White 1996) it means access via L1 but not restricted to L1. According to this view, there is no 'critical period'. Furthermore, full target competence is possible.

3- *Indirect or partial access position*: UG exists, but second language learners only have indirect or partial access to it. Indirect access or partial access to UG was used to refer to access via the L1, some researchers using it to mean access only via the L1 (e.g. Cook, 1988), while others took this to mean access via L1 initially followed by parameter resetting.

4. Two Opposing Solutions to the Logical Problem of SLA

1-The 'Fundamental Difference Hypothesis' by Bley-Veroman (1989)

According to 'Fundamental Difference Hypothesis' the nature of the process involved in second language acquisition is radically different from primary language acquisition. Whereas the former process involves a language-specific faculty or language acquisition device (LAD), the latter observes a more general problem-solving skill, also typical of adult learning in various fields other than language. On the other sense, child L1 and adult L2 acquisition are different in major respects. Proponents claim that adult L2 acquisition is not constrained by UG, or that it is only constrained by UG insofar as universal properties can be accessed via the L1 grammar.

2-The 'Fundamental Identity Hypothesis' by Schwartz (1997)

As for the 'Fundamental Identity Hypothesis', the idea that the same language-specific mechanism guiding L1 acquisition may be involved in L2 acquisition is true. Although very seldom, some adult second language learners achieve native-speaker competence, and this fact requires an explanation. It might well be that the LAD is available to second language learners well beyond the critical period.

5. Analyzing Bley (1989) and Schwartz (1997) Opposing Views

All the above mentioned points regarding UG accessibilities and different views about it are supposedly problematic. As for The Fundamental Difference Hypothesis, Bley-Veroman (1989) believed that the function of the domain specific acquisition system is filled in adults (though indirectly and imperfectly) by the native language knowledge and by general abstract problem-solving system. Nevertheless, Ellis (1994) have noted that second language acquisition is, in

crucial respects, like first language acquisition, and the same theoretical constructs can be invoked to explain both.

Personally speaking, Ellis' claim sounds logical and can be proved by developmental L2 errors. In essence, L2 errors tend to mimic those committed by the L1 learners; furthermore, with respect to the morpheme studies, the order of acquisition of certain morpheme in L2 mirrors that in L1. Thus, in this sense, it can be correct. However, L2 morpheme acquisition studies are not unproblematic, they resulted in the new points about L2 acquisition; namely, UG might not shut off at puberty. At the same time, evidence was brought up that an L2 learner's grammar, far from being a mere mishmash of deviant forms, obeys the crucial properties of naturally occurring human languages, subject to the same principles of organization and constraints (Ellis, 2003). What is more, the application of the transformational generative grammar theory to second language acquisition can prove the similarity between first and second language learning.

Additionally, according to the markedness theory in second language learning, the order of acquisition reflects "accessibility hierarchy". Second language learners firstly learn some unmarked aspects of grammar, those that are directly related to UG and form the "core" grammar, such as adding "ed" to verbs when transferred into past tense. Amazingly, learners acquire marked aspects which are less directly related to UG and form "peripheral" grammar, such as "hit, forgot, came", the abnormal past tense of verbs. Besides, inter-language can put forward some reasons against Fundamental Difference Hypothesis. Firstly, second language learners produce a language which is dissimilar to their first language and second language. Thus, learners might violate a universal form not because of the non-availability of UG, but because the structure in question is beyond their current capacity, and they are just stringing words together in an arbitrary fashion.

On the other hand, Schwartz (1997) also presented evidence against Fundamental Difference Hypothesis. In practice, Schwartz's 'Fundamental Identity Hypothesis' is based upon the idea that the same language-specific mechanism guiding L1 acquisition may be involved in L2 acquisition as well. In practice, Schwartz compared the acquisition sequences of child and adult second language learners who share a similar language background. Schwartz's comparison between the developmental sequences of adult and child L2 lend support to the hypothesis that linguistic-specific mechanisms drive nonnative grammar construction as well.

Personally, I would say, owing to the assumption that UG is at least partially implicated via the L1, the term no access is a misnomer; hence, this view can be renamed as partial access. Interestingly enough, the crucial claim is that all the linguistic mechanisms available to the L1 acquirer are no longer available to the L2 learner. On the other side of the debate is the position that L2 learners indeed have access to UG. In other words, inter-language grammars show evidence of being constrained by UG principles; at the same time, inter-language grammars

show evidence of parameter settings rather than those of the L1. Some proponents of the UG access position argued that at no stage would the inter-language grammar actually exemplify L1 parameter settings (e.g. Flynn 1987). In other words, L2 learners arrive at relevant properties of the L2 independent from the L1 grammar. Hence, this position was often referred to as direct access (e.g. by Cook 1988). To the author view, in favor of Schwartz notion it can be mentioned that implicit assumption in the parameter-setting view of SLA is that UG principles and presumably parameters are still the active forces, though reduced, in second language grammar construction.

6. Conclusion

It is widely said that UG is a theory which provides constraints on linguistic representation. This paper went through the issue of whether inter-language (IL) representation is constrained by UG or not. Simply put, UG is part of an innate biologically endowed language faculty. It places limitations on grammar, constrains their forms (the inventory of possible grammatical categories, in the broadest sense, i.e., syntactic, semantic, phonological), as well as how they operate the computational system and principles that the grammar is subject to. It is widely noted that an alternative kind of account recognized the role of both the L1 and UG. In fact, L2 learners are indeed assumed to have access to principles and parameters of UG. However, initially at least, access would be via the L1 grammar, with the possibility of subsequent grammar restructuring and parameter resetting, in the light of exposure to L2 input. This position is sometimes referred to as indirect access (e.g. by Cook 1988). However, it can be considered just as appropriate to characterize this perspective as involving direct access, since the learner is not restricted to UG principles and parameter settings exemplified in the L1 grammar.

Academically speaking, although UG contributes to an explanation of how languages are acquired, this is in the sense of how that learner comes to know properties that go far beyond input, how the learner knows that certain things are not possible, why grammars are of one sort rather than another, etc. It is claimed that these properties do not have to be learned. It is the claim that, at least in the case of first languages, there is a logical problem of language acquisition, a mismatch between what goes in (namely, the primary linguistic data) and what comes out (a grammar). In other words, the input underdetermines the output.

Besides, it can be concluded that since the L1 is a natural language, there is not a prior justification for assuming that a representation based on the L2 implies lack of UG constraints, or restricted access to UG. As hypotheses about UG access developed, interest began to shift from overarching questions like 'Is UG available?' or 'What kind of UG access is there in L2?' to a closer examination of the nature of the inter-language grammar, with particular focus on whether inter-language grammars exhibit characteristic of natural language.

To sum up, the accessibility of UG in SLA is an “Empirical problem”. To elaborate, empirical problems are solved or actual problems which have been explained by one or more theories; also, problems which have solved by rival theories. Thus, it can be noted that due to the assumption that UG is at least partially implicated via the L1, the term no access is a misnomer; hence, this view can be renamed as partial access. Interestingly enough, the crucial claim is that all the linguistic mechanisms available to the L1 acquirer are no longer available to the L2 learner. On the other side of the debate is the position that L2 learners indeed have access to UG. In other words, inter-language grammars show evidence of being constrained by UG principles; at the same time, inter-language grammars show evidence of parameter settings other than those of the L1. All in all, markedness theory, transformational generative grammar, inter-language, filter hypothesis, developmental errors, structure dependency can easily prove the existence of UG in SLA and shed doubt on fundamental difference hypothesis.

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