A Critical Evaluation of the Theory of Universal Grammar and its Contribution to Second Language Learning and Teaching

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ABSTRACT

Many hypotheses on how a language learner gathers or acquires a second language have been produced during the last 50 years. Many linguists and scholars have presented their thoughts and assumptions in their discussions of how to teach and learn a second language. The current review article gives a basic definition of universal grammar, which then critically examines the arguments in favour of and against it to respond thoroughly to the question. The study examines developmental data showing that learners employ hierarchically built structures at all levels of language organization. The use of probabilistic processes and inductive learning mechanisms appropriate for the psychological restrictions on language acquisition is suggested by longitudinal trajectories of development, which demonstrate sensitivity to the amount of specific patterns in the input. This review article assesses the Universal Grammar theory's impact on second language learning and instruction. However, it has been widely adopted over the last several decades by American linguist Noam Chomsky and its many adherents.

Keywords: *Universal Grammar theory, Second Language, Language Acquisition*

INTRODUCTION

It is often said that Universal Grammar theory has become, so far, the most influential theory in the history of linguistics – based on Chomsky, Gallego, and Ott, (2019)'s claim that certain principles form the basis on which knowledge of language develops. The Universal Grammar model of principles refers to the basic properties all languages share, and parameters refer to the properties that vary between languages. This is it which has been the basis for much second language research. From the perspective of Universal Grammar theory, a second language needs to be set up with the correct parameters to learn a second language's grammar (Kim, 2018). It is a matter of taking the pro-drop parameter that provides the information on whether or not sentences must have a subject to be grammatically correct. There may have two values of this parameter – positive and negative. In positive value, sentences do not necessarily need a subject; in negative value, issues must be present. An illustration of this is that if a German speaker wants to learn Italian as his second language, he needs to set his pro-drop parameter for Italian accordingly. In other words, it is a grammatically correct sentence to say "*Er spricht*" (he speaks) in German, but "*Spricht*" (Speaks) is not a grammatically correct sentence.

On the other hand, there is no problem grammatically to utter *"Parla"* (Speaks) in Italian. Therefore, the German speaker learning Italian as his second language would only need to set his pro-drop parameter that subjects are optional from the language he hears. What is more, if a Spanish language learner of English as a second language makes a mistake "Is raining" instead of "It is raining" has not yet set his pro-drop parameter correctly, and he is still using the same setting in Spanish.

More importantly, Universal Grammar theory is only concerned with whether parameters are set, not with how they are placed (Broad, 2020).

UNIVERSAL GRAMMAR AND SECOND LANGUAGE ACQUISITION

It is generally assumed in Universal Grammar theory that the universal principles shared by languages may be applied with different parameters in different languages; when learners of a second language ignore these variations and apply the principles in the same way in both first and second languages, mistakes or errors or fossilization may result in second language acquisition (Huth, 2020). The learners of a second language will need to make their goal in second language acquisition to become aware of these variations and make their necessary adjustments. However, some claim that it is not as simple as that since an adult second language (L2) learner already has his internalized first language grammar and has already set its parameters at the appropriate values for the first language (L1). Suppose the language learners face these variations in L2, according to consensus in L2 acquisition studies. In that case, they will notice some of these variations early and adjust quickly to the rest of them being late and difficult.

Consequently, it has resulted in the postulation of several conflicting proposals. O'Grady, (1996) observes that one group of researchers adopts the position that UG may be accessible only through L1 and the adult L2 learner rather employs the use of other learning devices; another group of researchers claims that the availability and accessibility of UG in L2 acquisition through the degree of accessibility varies from one researcher to another ; some other researchers of L2 acquisition acknowledge the availability and accessibility of UG to adult L2 learners but suggest that UG and other cognitive learning devices may share the task of acquisition (Chater & Christiansen, 2018; Öner Özçelik, 2018). In almost the same way as Lin (2019) points out, proposals vary as to whether L2 learners have "no access/ partial access", "direct/ full access" or "indirect/ partial access" to Universal Grammar; "no/partial access" position of the debate claims that L2 acquisition is not constrained by UG or only constrained by UG in so far as universal properties can be accessed via the L1 grammar; whereas "direct/full access" position argues that L2 learners arrive at relevant properties of the L2 independently of the L1 grammar, "indirect/partial access" position assumes that initially, L2 learners have access via the L1 grammar with the possibility of subsequent grammar restructuring and parameter resetting in the light of exposure to L2 input (White, 2020).

Different theoretical perspectives should try to reconcile some empirically inconsistent findings regarding learning a second language (Boussaid, 2022; Ö Özçelik, 2018). For instance, it seems that learners do not develop "wild" grammar that is not restricted by Universal Grammar. In this light, (Teimouri, Plonsky, & Tabandeh, 2022) questions if this implies that second language learners at least have access to UG concepts. According to the "no access" theory, UG is no longer accessible to L2 learners because of a "critical moment" in young children's development. These learners must turn to other learning strategies. Researchers that take this stance often focus on the distinctions between L1 and L2 acquisition and the variations in acquisition process outcomes (Boussaid, 2022; Kimura, 2022; O'Grady, 1996; Öner Özçelik, 2018). In the "full access" theory, proponents of this view vehemently reject the notion of a "critical time" beyond which UG fails to function and insist that UG still serves as the foundation for second language acquisition. The "partial access" theory contends that L2 learners can only acquire UG via their L1, which is the foundation for their L2 development since L2 learners have previously accessed the range of principles about their L1 and set parameters to the L1 values (Getz, 2019; Kimura, 2022; White, 2003).

The Critical Period Hypothesis, according to the researchers like Broad (2020), consists of two opposing views: The Fundamental Difference Hypothesis and the Fundamental Identity Hypothesis. The Fundamental Difference Hypothesis refers that the L2 acquisition process involves a language-specific faculty, the LAD and L1 acquisition process observes a more general problem-solving skill. As Bley-Vroman and Masterson, (1989) proposes,

> "that the function of the domain-specific acquisition system is filled in adults (though indirectly and imperfectly) by this native language knowledge and by general abstract problem-solving system. I shall call this proposal the Fundamental Difference Hypothesis".

To support his proposal, he mentions some areas of adult learning difficulties, such as lack of success, general failure, variation in success and fossilization. As Bley-Vroman & Masterson, (1989) in his Filter Hypothesis, one of the five hypotheses of his famous Monitor Model, states that the inability to acquire a second language precisely is because of the existence of an effective filter (aptitude, attitude, motivation, self-esteem) which hinders grammatical input from being processed. This way, the LAD is available to L" learners through an affective filter that prevents regular functioning. The Fundamental Identity Hypothesis suggests that although some adult L2 learners rarely achieve native-speaker competence, the same language-specific mechanism guiding L1 acquisition may also be involved in L2 acquisition (Krashen, 2020).

Few would disagree that the Universal Grammar idea primarily focuses on first language acquisition and that first language learners already possess Universal Grammar or linguistic knowledge before they begin the acquisition process (Abdullaev, 2021; Aljumah, 2020; Chater & Christiansen, 2018). "Universal Grammar is assumed to be the collection of features, circumstances, or whatever, that create the 'initial' state of the language learner; consequently, the substrate on which knowledge of language grows," articulated by Cowper and Hall (2022). Recent contributions by a number of second language academics have led to the application of Universal Grammar (UG) theory to this second language learning area. Most second-language scholars think that the principles and parameters of UG, which is the language faculty comprised of principles and parameters built into the human mind or brain, are still available to the adult language learner (Chomsky et al., 2019).

The Chomskyan position on second language acquisition considers a few issues that spur their interest in applying Universal Grammar (Chomsky et al., 2019; Song, 2020; White, 2003); they feel that a Sufficiently sophisticated linguistic theory is required to explain the complex features of interlanguages. According to UG theory proponents, UG offers a sophisticated and adequate linguistic framework to explain second language occurrences. According to those who follow Chomsky, the parameter theory enables a more accurate examination of language variation, including variance between first and second languages (White, 2020). They reject the notion that the language faculty, as defined by UG theory, inevitably deteriorates with age. They assert that adult second-language learners are sensitive to specific structural characteristics of the language they are learning, just like first-language learners, and that they utilize this sensitivity to develop the grammar of the language they are learning (Kachlicka, Saito, & Tierney, 2019; Krashen, 2020; Pullum, 2020) Researchers studying second languages have also looked at various acquisition issues using the concept of markedness (Huth, 2020; Kimura, 2022; O'Grady & Kim, 2020; Ö Özçelik, 2018). Core and peripheral grammar are distinguished according to the Universal Grammar idea. Peripheral grammar is the parts of a language that have arisen from the history of language and are not confined or bound by UG (Roberts, 2019). Core grammar is the language developed in a child's brain via the interaction of the UG with the environment, which is particularly significant to language learners. For Chomsky, the rules of the core grammar are unmarked, and the rules of the peripheral grammar are thought to be marked.

As Teimouri et al., (2022) state,

> *"In our idealized theory of language acquisition, we assume that the child approaches the task equipped with Universal Grammar and an associated theory of markedness that serves two functions: It imposes a preference structure on the parameters of Universal Grammar and it permits the extension of core grammar to a marked periphery".*

Additionally, some of the rules in the learner's interlanguage system may be the consequence of the use of language learning techniques "as a predisposition on the side of the learners to reduce the target language to a simpler system" (Chomsky et al., 2019). According to interlanguage theory, a second language learner's grammatical structure is systematic and distinct from both their native and target languages. Assuming that all grammars reflect the Universal Grammar's tenets, the UG theory contends that second-language grammar must be subject to the same restrictions as first-language grammar Interlanguage (Schachter, 1988), according to UG method proponents, reflects UG principles and universal rules limit the kinds of mistakes second language learners may make.

Similarly, second language researchers have applied UG theory to transfer problems. Mendívil-Giró (2018) for example, has extended the theory to the relative markedness of distinct settings of a parameter. In her opinion, the typical language acquisition starts its journey from unmarked to marked forms, which is sometimes not followed in the interlanguage of second language learners. She claims that second language learners at the beginning stages of acquisition may expose the effect of the first language parameter, and then marked forms are likely to show in their interlanguages before unmarked ones (White, 2003). As a result, UG theory postulates that second language learners learn their target language when they get more evidence from the second language and fix the parameters of the new grammar. At the beginning stages of language acquisition, it is possible for interlanguage to show the effect of the first language parameter. After these initial stages, marked forms may appear before unmarked ones. In the same way, if the evidence is inconsistent with core grammar at the periphery, it is also possible for the learner to depend on more marked solutions (Mitchell, Myles, & Marsden, 2019; White, 2003). The UG theory represents another contrastive analysis in that the theory postulates a set of deep principles common to all languages and basic to both first and second language acquisition (Pearl, 2021).

It is certainly the case that, the Universal Grammar theory keeps away linguistic competence from performance, language acquisition from development and the core from the periphery. As Ö Özçelik, (2018) asserts,

> *"To discover the properties of Universal Grammar and core grammar we must attempt to abstract away from complicating factors of various sorts, a course that has its hazards but is inescapable in serious inquiry…".*

It is now a more general issue, in this perspective, how researchers can connect from a linguistic theory of language competence to a theory of second language learning. Chomsky is not interested in writing in his writings with second language learning (Chomsky et al., 2019). The responsibility to make the connection from linguistic competence to second language learning and teaching depends on those researchers who find interest in the UG theory to second language learning. From this point of view, researchers have applied UG theory as a source of hypotheses about second language learning (Huth, 2020). Although this enterprise has gifted interesting information about interlanguage development, as Krashen (2020) comments, it has restricted attention to a relatively small set of syntactic phenomena.

If the Universal Grammar approach endeavours towards a more general theory of second language acquisition, it will have to expand the range of phenomena it can account for needs, and it should pay more attention to the question of what methodology should be employed to link a theory of competence to the actual performance of second language learners (Broad, 2020; Lin, 2019).

METHOD

Reviewing the 15 papers on the general context of UG theory, the study found little discussion on the overall Universal Grammar usages and its Contribution to Second Language Learning and Teaching. This is probably related to the fact that these papers are recent and the overall linguistic situation may have been well discussed in earlier publications. For recent discussions of the overall linguistic context in around the world, readers may refer to Getz (2019) and Akhmanova and Mikaeljan, (2021) as well as Cowper and Hall (2022) under the category of 'Universal Grammar' in this review.

DISCUSSION AND IMPLICATION OF UG THEORY

Using the UG theory to help adult second language learners acquire a second language successfully, similar to how first language learners do, is a topic of intense controversy. It has generated a lot of discussions, with often contradictory viewpoints adopted by scholars. According to UG theory, which mostly ignores the Critical Period Hypothesis afterwards, humans are born with an inbuilt principle responsible for language acquisition (Ishihara & Cohen, 2021). This hypothesis suggests that people are endowed with the potential to acquire any language at any age. The UG hypothesis seems to fall short when it comes to adult second language acquisition because of the way it directs the effective learning of the first language. Adult second language acquisition seldom leads to native-like ability, as with a child's first language learning (Kormos, 2019). Additionally, fossilization, a specific event in adult L2 acquisition, should be mentioned. Another issue is that second language learners' learning times and success rates vary significantly. This difference between child and adult language acquisition has caused several issues concerning the nature of adult L2 acquisition to be addressed from a UG viewpoint. First-language learning in children and second-language acquisition in adults vary significantly (Lin, 2019; Perkins & Zhang, 2022).

Based on these differences considering completeness, equipotentiality, previous knowledge and fossilization, O'Grady (1996) argues that they undermine the foundations for the assumption that the underlying process is the same in the two cases. The achievements of post-puberty second language learners are often quite different from those of the first. Even though many second language speakers can communicate effectively despite defective grammatical competence, an adult second language learner may not achieve the grammatical competence in a target language compared to that competence or mental state achieved by every normal native speaker of the target language (Mitchell et al., 2019; O'Grady, 1996; Skehan, 2018). Recent research in second language learning and teaching clearly indicates that the UG model as language teaching could be the most powerful account of L2 learning since the UG theory has brought to light a good number of apparently simple phenomena like the pro-drop parameter are relevant to L2 learning. In Ö Özçelik (2018) opinion, UG theory suggests that language teachers should concentrate on those aspects of syntax that will not be acquired automatically by the language learners though UG theory itself is not really concerned with what teachers might make of UG.

L2 researchers assume that teachers can provide them data which can be used to set the values of the parameters. Teachers can adopt classroom as a source of input for parameter setting. Deroo, Ponzio and De Costa, (2020) argues that as UG principles are not learnt and the parameter settings probably need little attention, teachers of L2 classroom need to include many aspects of language that UG does not cover. However, UG model of L2 teaching strongly reminds us that the learners do have minds and that the form which language knowledge takes in the human mind is very important. As Deroo et al., (2020) states, since the Universal Grammar approach shows its interest in the learner as the possessor of a mind that contains language and the UG theory assumes that all human beings are endowed with such minds, variations between individuals are of little concern to UG researchers though importance is very much on language as the object of study.

Recently, it has come to light that the Minimalist Program, a theory, is changing the basic assumptions of the UG model in L2 acquisition (Chomsky et al., 2019; Mitchell et al., 2019). According to this view, vocabulary acquisition now encompasses all language learning. Functional categories have been given priority as the site of parametric variation (Coon, 2020). The Minimalist Program has impacted significant disputes regarding whether young infants only have access to lexical categories and lack functional categories, which would explain the telegraphic form of their first utterances from the standpoint of L1 acquisition studies (Rauf, 2018). The Minimalist Program has implications for studies on second language acquisition related to vocabulary anchoring, and the major focus of this theory is on vocabulary for language instruction. Mitchell et al., (2019) points out Chomsky's theory of the Minimalist Program. To determine if language is the best tool for linking sounds and meanings in the human mind, Chomsky has developed a theory about the perfection of language.

In addition, Universal Grammar based approaches to second language acquisition have initially been almost exclusively concerned with syntax from the linguistic perspective. However, this approach recently shows interest in phonology, morphology and lexicon though it almost excludes semantics, pragmatics and discourse. In addition, the UG approach is concerned with the explanation and documentation of the L2 linguistic system, and it does not interpret very much the social and psychological variables that affect the rate of the learning process. Therefore, Chen (2022) feel a little doubt bearing the above in mind that the UG approach to research into L2 acquisition has been highly influential and fruitful and has produced enough research that has hugely increased the understanding of L2 morphosyntactic development, even then, UG approach has been essential as a tool for linguistic analysis enabling researchers to formulate well defined and focused hypotheses to be tested in empirical work.

CONCLUSION

In this brief account, this review paper has discussed the Universal Grammar theory and has taken a chance to focus on this theory's contribution to L2 learning and teaching. Researchers have adopted the Universal Grammar theory to produce many exciting hypotheses about second language learning. The theory of Universal Grammar has been highly influential in many areas of linguistic research, including the research of second language learning and teaching through empirical evidence has been restricted to the acquisition of a small set of syntactic phenomena.

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