Is Universal Grammar Available To L2 Learners?

YOUNESS BOUSSAID
Portsmouth University
youness.boussaid@edu.uiz.ac.ma

Abstract

Nativist argues that Universal Grammar is the genetic component of the language faculty. This theoretical concept is controversial in many aspects. The lack of strong empirical evidence has rendered some language researchers and teachers troubled about what Universal Grammar is and whether L2 learners have access to UG. Understanding the different aspects of UG would assist teachers in approaching teaching L2 learners in the light of UG theory. The present review paper provides a brief account of what UG is and critically investigates the hypotheses and arguments for and against UG to give a comprehensive answer to the question: is universal grammar available to L2 learners? A myriad of hypotheses have been put forward to answer this question. These range from those that suggest that L2 learners have full access to UG in that learners can reset their parameters to conform to L2 parameters to those that suggest that L2 learners only have partial access to UG. Apart from these accounts, others argue that learners acquire L2 using general domain skills rather than direct access to UG. Still, others assert that L2 learners only have access to UG via L1.

1. INTRODUCTION

As a study matter, language is controversial in many of its parts. A debatable aspect of speech is the question of how a language is acquired. Second language acquisition is the field concerned with studying how learners acquire a second language. In attempting to tackle the issue of how a language is acquired, many schools of thought have proposed theories accounting- and from different perspectives- for how children and adults develop languages. Two of the schools of thought that lay the foundations for second language acquisition are behaviorism and structuralism (Block 2003). With Skinner as its most influential figure, the school of behaviorism holds that children learn languages through imitation, wherein correct utterances are positively reinforced, and errors are negatively reinforced (Skinner 1957). Imitation, however, does not account for the novel utterances children produce (Chomsky 1959). Connectionism, another school of thought that seeks to explain the learning process, proports that learning occurs through association and the making of word resemblance patterns (Ellis & Wuff 2014). This school of thought also fails to account for the creativity and overregularization that children portray in their languages.

This review article will examine another school of thought's theory for language acquisition. This is innatism with its theory of Universal Grammar. Firstly, arguments for the

existence of UG will be outlined. Secondly, evidence for its availability to L2 learners will be provided, culminating with arguments against the availability of UG to L2 learners.

3. DOES UNIVERSAL GRAMMAR EXIST?

Human language has many design features such as productivity, duality, and learnability (Crystal 2008). This last feature refers to how any child can acquire a language despite its complexity. This complexity does not seem to hinder children from learning a certain language. Rather, children master languages effortlessly. Chomsky (1975: 61) stated that:

> a speaker of a language has observed a certain limited set of utterances in his language. Based on this finite linguistic experience, he can produce an indefinite number of new utterances which are immediately acceptable to other members of his speech community. He can also distinguish a certain set of 'grammatical' utterances among utterances that he has never heard and might never produce. He thus projects his past linguistic experience to include certain new strings while excluding others.

The above quote summarizes the 'argument from poverty of stimulus' (Chomsky, 1978), which states that children use language creatively and produce novel utterances of which they have never encountered before. Chomsky put forward the argument to advance his theory of Universal Grammar which asserts that children are born with an innate ability to acquire language. Arguing for the existence of UG, Chomsky (1971) used 'poverty of experience' to note that the language children encounter is degenerate in both scope and quality. First, children do not encounter all the possible structures in the language, which can provide them with the full grammatical rules. Second, children are exposed to all possible errors in the language. Despite this degeneracy, children eventually acquire full-fledged grammar knowledge. This, according to Chomsky (1971, 1978), can only lead to the conclusion that children are born with an inbuilt language faculty.

Other arguments for the existence of UG come from first language acquisition. Mitchell, Myles and Marsden (2013) stated that First Language Acquisition studies unanimously conform to the fact that children go through the same developmental stages, which are similar in other languages. They also said that children resist negative evidence and that their languages are systematic and rule-governed. For example, they have shown that children acquire the negative particle in the same order as in the following:

(1)   (a) No, I play.
      (b) I do not play.
      (c) I don't play.

Studies investigating Specific Language Impairment also claim that there is a kind of biologically triggered innate language faculty. For example, a case of an English-speaking family wherein 16 members out of 30 within three generations suffered from SLI (Gopnik & Crago 1991). This studied case suggests that SLI is an inheritable disorder and that certain language aspects may be genetically inherited. Vargha-Khadem and Liegeois (2007) reported that changes in the gene FOXP2 cause Specific Language Impairment. Moreover, some

language deficits are often linked to injuries in the brain's left hemisphere. For example, strokes above the left ear- where Broca's area is located- can result in Broca's aphasia. The person suffering from this aphasia, stated Mitchell et al. (2013), produces ungrammatically non-fluent and inarticulate speech characterized by the use of more nouns and fewer verbs. A stroke under the left ear results in what is known as Wernicke's aphasia (Mitchell et al., 2013). On the other hand, the sufferer produces grammatically correct and fluent speech but fails to grasp the meaning of content words. This evidence

4.   UNIVERSAL GRAMMAR AND SLA

The arguments presented above suggest an innate ability that is, at least to innatists, undoubtedly accessible to first language learners. Whether UG is accessible to second language learners or not is controversial. This section will outline some arguments for and against its availability to second language learners. Some argue that second language learners have full access to UG, while others posit that UG is inaccessible. Some researchers stand in the middle and argue that UG is partially accessible, and others assert that UG is accessible through transfer from L1.

4.1. Full access

As mentioned above, children produce novel utterances which they have never encountered before, and this is used as evidence for the existence and availability of UG to children. This argument of poverty of stimulus is still pertinent to 2L learners and is used as evidence for the availability of UG to 2L learners. Towell and Hawkins (1994) argue that PoS is compelling evidence that 2L learners continue to have access to UG. The similarity in order by which both L1 and L2 acquire certain linguistic aspects is also regarded as evidence that L2 learners have access to UG. For example, Mitchell et al. (2013) argued that both L1 and L2 learners acquire negation particle in the same order. Learners put 'no' at the beginning of the sentence, then to the middle, and then change the particle according to the morphosyntactic requirements as seen in the following utterances: *no I play* becomes *I not play,* and then *I don't play*.

   The following evidence suggests that 2L learners have access to UG in that they can reset their parameters to conform to those in L2. UG consists of principles and parameters. Principles are the invariants that universally exist in all languages, while parameters are the variants that differ from one language to another (White 2003). For instance, all languages of the world are made up of a noun and verb phrases (principle) but vary in the syntactic arrangement of nouns and verbs within a sentence (parameter) (Mitchell et al. 2013). Flynn (1996) has investigated the head parameter resetting in Japanese learners of English. Japanese is a head-last language, while English is a head-first language. Flynn argued that Japanese learners of English successfully reset this parameter and acquire the head-first value from the earliest stages of acquisition. Japanese L2 learners, therefore, have access to UG. Flynn (1996) also studied the Subjancency condition in Japanese learners of English. Japanese, unlike English, is a wh-in-situ language, as the following example from Guasti (2002: 190) shows:

(2)   (a) John-wa naze kubi-ni natta no?

       (b) John-TOPIC why was fired QUESTION MARKER

       (c) Why was John fired?

Flynn (1996) noted that Japanese L2 learners of English reset their wh-movement parameters to conform to the wh-movement constraints in English. Flynn (1996: 150-151) concluded that "UG constrains L2 acquisition; the essential language faculty involved in L1 acquisition is also involved in adult L2 acquisition".

Another parameter-resetting aspect that has been investigated is the verb-raising in Chinese. Yuan (2001) examined the acquisition of Chinese, which has weak inflection, by French and English L2 learners whose L1 languages have strong and weak inflections, respectively. Yuan concluded that L2 learners of Chinese could perfectly judge the ungrammaticality of verb-raising in Chinese. A conclusion would only mean that those L2 learners can reset their parameters and, this way, still have access to UG.

Pérez-Leroux and Glass (1999) studied the Overt Pronoun Constraint. They argued that this constraint could not be reset on the basis of input only because of the complexity of the constraint and its unavailability in L1. English is an overt pronoun language, that is, the pronouns are expressed in the sentences as shown in (a); while languages such as Japanese and Spanish are null pronoun languages, that is, the pronouns are not overtly expressed as shown in (b) and (c). (Japanese example is from Kanno (1997); the Spanish example is from Montalbetti (1984)):

(3)   (a) Kevin thinks that he is strong.

(b)Tanaka-san wa kaisya de itiban da to itte-iru. (Mr. Tanaka says that (he) is the best in the company).

(c) Juan cree que es inteligente. (John believes that (he) is intelligent).

Subject pronouns in English can have referential or quantified NPs as antecedents. On the other hand, in Japanese and Spanish, pronouns cannot take quantifiers or wh-phrases as antecedents. Furthermore, Pérez-Leroux and Glass (1999) carried out a task wherein L2 learners of Spanish had to translate from English to Spanish. The results showed that L2 learners could distinguish between referential and bound pronouns and produce sentences that conform to the Overt Pronoun principle in Spanish. Kanno (1997) replicated the same experiment with L2 learners of Japanese, and the results corroborate those of Pérez-Leroux and Glass (1999). These findings suggest that this language property could not be acquired through input only, but through accessing UG.

4.2. No access/ Partial access

On the other side of the debate, it is argued that L2 learners have no access to UG and that L2 learners resort to general cognitive skills to acquire a language. A strong proponent of this view is Bley-Vroman (1989), who claims that L2 learners have no direct access to UG. He has studied the L1 and L2 acquisition processes and identified 10 significant differences between L1 and L2 learners. His Fundamental Difference Hypothesis, which is the result of his study, asserts that L2 learners acquire languages by utilizing domain-general skills rather than domain-specific mechanisms which were available to them while acquiring their L1.

In addition, Hawkins and Chan (1997) proposed their Failed Functional Features Hypothesis, which propounds that L2 learners cannot acquire and modify functional features, or what Tsimpli and Dimitrakopoulou (2007) refer to as uninterpretable elements. Hawkins and Chan investigated the acquisition of restrictive relative clauses by Cantonese L2 learners of English. They detected that speakers of Cantonese (language without wh-movement) learning English (which allows for wh-movement) were unable to acquire and, therefore, reset this syntactic parameter which involves activity rather than pronominal binding. Likewise, Clahsen and Muysken (1989) researched the acquisition of German word order and reported that L1 Romance L2 learners produced an unnatural grammar that violated the UG principles. Still, they argued that UG plays a partial role in the acquisition of L2. These findings suggest that L2 might be partially UG-constrained and that the parameter resettings which are necessary for the acquisition of L2 are limited.

Other researchers such as Johnson and Newport (1989), DeKeyser (2000), and Patkowski (1980) approached UG from a Critical Period rather than from a parameter-resetting perspective. The existence of a critical period after which L2 learners do not achieve full proficiency amounts to the proposition that L2 learners have no access to UG after puberty. DeKeyser (2000) conducted a grammatical judgment task for which native speakers of Hungarian had to respond. The study showed a correlation between the age of arrival in the United States and native-like grammatical judgments. Similarly, Patkowski (1980) conducted a study with two groups in which speech was recorded and rated on a scale from 1 to 5. Group 1 started learning English before puberty, whereas group 2 started learning English after puberty. Patkowski concluded from the study that success in SLA was only inevitable before puberty. The success of SLA after puberty would be challenging to attain. The studies suggest that the younger the learners were on arrival, the more native-like they performed, and the older they were, the less native-like they performed on the test.

Johnson and Newport (1989) conducted a similar study to that of DeKeyser (2000) and found that the age of arrival does not correlate with the task scores. They, therefore, concluded that L2 learners achieve varying degrees of success after puberty. This result indicates that UG could partially be accessible after the critical period or that the L2 learners utilize general-domain skills to acquire a language. Rothman's critical studies of CPH (2008) suggested that CP does affect L2 grammar. However, it does not affect the L2 acquisition of syntax and semantics.

4.3. Universal grammar through transfer

Another alternative account of L2 acquisition identifies L1 as a vital element in the acquisition process. White (1989) stated that L2 learners have access to UG parameters, which will be initially accessed through L1 grammar. L2 grammar parameters would then get reconstructed by being exposed to L2 input. Vainikka & Young-Scholten (1996) proposed the Minimal Tree Hypothesis, which states that, at the onset of L2 acquisition, L2 learners' grammar lack functional categories and that only lexical ones are present via transfer from L1. L2 learners can later then reset their parameters to conform to L2 values. Eubank (1996), likewise, put forward the Valueless Features Hypothesis, which asserts that L2 learners' grammar lack both functional and lexical categories, two categories that are transferred from L1. However,

functional categories are assigned without their grammatical values, such as agreement and tense inflections. According to this hypothesis, L2 learners transfer the parameters from their L1 to subsequently reset their L2 parameters by testing their ideas when L2 does not conform to L1 parameters.

As a case in point, Ionin et al. (2008) carried out a study examining the acquisition of English articles by both Spanish and Russian L2 learners. They found that Spanish learners could transfer their L1 parameters due to the fact that their L1 has articles that express both definiteness and specificity as in English. On the other hand, Russian learners use the articles expressing definiteness and specificity interchangeably before coming to the correct parameter setting for English. Furthermore, Schachter (1990) conducted a grammaticality judgment task investigating the acquisition of wh-movement by Korean L2 learners of English. Schachter found that Korean learners fail to abide by the Subjacency principle of wh-movement which is not operative in Korean in contrast to English. This leads to the conclusion, according to Schachter, that L2 learners have access to UG and, therefore, achieve parameter resetting only if those parameters are already operative in their L1.

Similarly, Lee (1992) studied Korean-English bilinguals' acquisition of the Governing Category parameter, which constrains the reference of reflexives in a clause; English reflexives refer to subjects within the same clause, while Korean reflexives can have a distant reference subject. The study examined the acquisition of GC parameters by learners of varying ages. Lee showed that young learners who did not yet acquire the GC parameter in their L1 could not acquire the English GC parameter. On the other hand, older learners, who have already received the GC parameter in their L1, successfully learned the GC parameter in English. Schachter (1990) and Lee (1992) concluded that L2 learners could easily acquire L2 parameters if those parameters are already operative in their L1 grammar. Upholders of this position claim that L2 learners only have access to UG through their L1.

5. CONCLUSION

The arguments presented above suggest that there is an innate faculty that is, to innatists, undoubtedly accessible to first language learners. Whether UG is accessible to second language learners or not is debatable in many aspects. Some, like Flynn (1996) argue that 2L learners have access to UG in that they can reset their parameters to conform to those in L2. Others, such as Bley-Vroman (1989), claimed that L2 learners have no direct access to UG; instead, L2 learners use general domain skills in L2 acquisition. Clahsen and Muysken (1989), on the other hand, suggested that L2 learners have partial access to UG. Still, other researchers, such as Schachter (1990) and Lee (1992), concluded that L2 learners have access to UG via L1 only. Despite the differences in results among UG researchers, and even though some regard UG theory as unempirical (Sampson 2005), UG stands to be a significant theory constructed to unfathom the logical problem of language acquisition. It is also a significant, influential contribution to the field of second language acquisition that language researchers and teachers find enlightening.

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