Chapter-5

Principles and Parameters Theories

5.1 Introduction

There indeed happened a sort of revolution in the field of language acquisition with the advent of Noam Chomsky's cognitive theories which for pedagogy entailed rethinking of the prevalent methods and materials of learning. Chomsky in his *Aspects of the Theory of Syntax* (1965) proves that there are some essential similarities among languages which he calls linguistic universals. Chomsky classifies these linguistic universals as substantive universals and formal universals. He also gives a model of Grammar in his *Aspect* (1965) which predicts a very language specific learning procedure in which syntactic structures are translated into phonetic forms and meanings respectively. But Brown (1973) and Bowerma (1973) suggest that syntactic categories and rules of child grammar are distinct forms of the adult grammars. Therefore, syntactic theory in 1965 was further developed into Principles and Parameters Model which marks the gradual change and development from a rule-based grammar to a principle-based grammar. Chomsky’s *Government and Binding Theory* and *Barriers* (1986) realizes Principles and Parameters theory grounded in concerns about the logical problems of language
acquisition. This framework of generative linguistics offers a solution to the logical problem as to why is the competence and performance of a learner far more than his linguistic inputs? It also encapsulates the idea that syntactic knowledge of a person has two formal mechanisms:

1. There is a finite set of principles which is common to all languages e.g. a sentence cannot be considered without subject even if it is not overtly pronounced.

2. Syntactic variability amongst all languages is determined by a finite set of parameters e.g. binary parameter determines whether or not a subject must be overtly pronounced.

The theory, then, postulates that principles and parameters are parts of a genetically innate universal grammar which all human possess, irrespective of any genetic disorder. No principle or parameter can be learned by exposure to a language, rather exposure only triggers the parameters to adopt the correct settings not only to characterize native speakers’ linguistic competence but also to explain how such competence is actually possible. This chapter will throw light on how principals and parameters work in language acquisition. In all, the chapter has been divided into five parts. The first part of the chapter will through light on some important principles that can be pedagogically used in second language acquisition classrooms. A special focus will also be thrown on the availability of universal principles in during SLA. Similarly, the second part of this chapter (Parameters in SLA) will first explain some important
parameters of first language acquisition and then show how these parameters are transferred to create second language output. The third part will put these principles and parameters under some tests to check their roles in SLA. There are two major tests which clarify their role and availability in SLA. After this, come constraints of the Principles and Parameters theories have been discussed to show their actual position and to make the researchers and teachers aware of the pros and cons of these theoretical frameworks so that the process of SLA can be made easier than its availability. Finally, the chapter will be concluded with the fact whether these principals and parameters are shared by all human languages or not and how they operate the process of first and second language acquisition in the same way.

5.2 Principles in SLA

The comparative study of L1 and L2 acquisition has provided empirical documentation supporting the fact of superiority of the grammatical approach over the exclusive cognitive approach to the learning procedures of L2A. The UG principles that constrain grammars propose structure of linguistic knowledge in the human mind. The most interesting presence and application of structural principles for the theory of syntax is in the computer system which translates only one language into another. The knowledge of universal principles is very necessary for this system. A number of modules are added to the system to get unhindered performance. The lexical information and the
settings for each of the parameters of the core universal principles are the essential elements of the modules.

It is not possible that all the facts about all languages are stored in a few language modules to describe the language’s syntax. Therefore, the bare minimum of information which is genuinely specific to a language should be supplied to the modules.

Chomsky’s theory of *Universal Grammar* can be used to determine what information should be added to the system’s core which can serve as universal principles. Structural dependency and Subjacency are two of the UG principles that constrain grammars therefore, it is very necessary to discuss these principles to reach the core of the second language acquisition process and its operators.

### 5.2.1. Structural Dependency Principle

It is the basic characteristic of all human languages that the components of a sentence are structurally related as evidence are available:

The composition and production of utterances is not merely a question of stringing together sentences or words but that very sentence has an inaudible internal
structure which must be understood by the learner.

(Flynn and O’Neil, 1988:11)

Smith and Tsimpli argue that UG principles are constantly available to L2 learners although parameters cannot be changed. They describe UG principles as "a universal template on which any human language is based; they always constrain language acquisition, be it L1, L2 or Ln." (Smith and Tsimpli, 1995: p. 1-42)

Structural dependency of the sentence component is not merely the linear relationships which are apparent from the spoken or written form of the sentence as a sequence of sounds or words; rather it consists of a meaningful sequence. The following structures illustrate:

1. Prajna will do it tomorrow.
2. Will Prajna do it tomorrow?

Based on these two items the L2 learner may conclude that questions in English are framed by moving the second word to the front position. Such naive yet logical learning may lead to an erratic conclusion as the following will explain:

3. The storm will destroy this hut.
4. Storm the will destroy this hut?

Therefore, by inapt application of the rule simply derived by the learner to the example above actually breaks the sequence into a
meaningless group of words. The proposed rule does not work in case of structure 4. The correct sequence obviously is:

5. Will the storm destroy this hut?

Now the question arises how the L2 learner will know that the correct question in 2 will be after the movement of the second word and in 5 will be by fronting the third word. The simple answer to the question is that the knowledge of language is completely dependent upon the deep structure of the sentence and not merely upon the sequence of words. The L2ers can frame both the question 2 and 5 correctly only when they know that ‘Prajna’ in 1 and ‘The Storm’ in 3 are noun phrases which allow verb phrases to follow. This is called structural dependency.

Structural dependency, therefore, is one of the general principles which can be applicable across all human languages. The tree diagrams given below explicitly show the hidden structure and linear arrangement of the normal text in sentences 6 and 7.

6. Prajna will do it tomorrow.

7. The storm will destroy the hut.
The same tree can be drawn in case of a complex noun phrase. For example the tree diagram for the noun phrase ‘the thick book of English on the table’ will be as below:


This figure gives us the rule of Noun Phrase as-

9. $\rightarrow$NP D + (AP) + N + (PP) +...

However, the simplest principle of formation of noun phrase is:

10. $\rightarrow$NP Pre Det/Det + Noun
But the noun after determiner can be followed by some internal structure as shown in the diagram given below:

11. The thick book of Eng on the table

**Figure 5.4- Tree Diagram**

It is now clear from the deep structure tree that in English heads are placed to the left of the complements; similarly the specifiers are also placed to the left of the heads. But the problem is that this principle cannot be applied to all languages. In Hindi, for example, adjectives as specifier can be placed before nouns but cases are mostly placed to the right of the nouns:

12. Vo moti kitab.

D AP N


N PP
The solution to this problem is to set these orderings under one of the principles of universal grammar which characterizes each human language. X-bar theory may be an attempt to capture the similarities between these rules because it provides a set of rules not only for determining but also for unifying the common properties of NPs, VPs, APs and DPs. Researches in second language acquisition (Hulk, 1991; Schwartz, 1993 and White, 1990, 1991, 1992) have also proved that "the intermediate L2 grammars are UG possibilities." Researchers have also found that "optional verb-raising is allowed in the L2 grammar of English even though it is not predicted either by native or target language." (Eubank and Grace 1996)

5.2.2. Subjacency Principle

As a language teacher, it has become enough clear to me that language acquisition is governed by a number of universal constraints. Chomsky (1973) proposed one of such constraints to explain why certain correlations between a syntactic trace and its binder are impossible. This constraint became one of the principles and given a name as subjacency principle. The definition of subjacency in the *Handbook of Second Language Acquisition* is as below:

> It is a condition of movements that restricts the structural distance over which an element can be moved. More specifically, an element cannot be moved past more than one
bounding node where Bounding nodes vary across languages in accordance with the bounding node parameters. (Ritchie and Bhatia, 1996. p. 689-706.)

Pinker and Bloom (1990) find that subjacency is one of the classic examples of arbitrary linguistic constraint that make sense from a linguistic perspective. In SLA classrooms, I, as a teacher, have come across the problem of ungrammatical sentences because the learners place too many boundary nodes between interrogative pronouns and their respective gaps. Cross linguistic parametric variation in languages can be seen which exhibits Wh-movement as in the sentence given below:

13. (a) Do you want cameras work in darkness?
13. (b) Who do you want cameras that work in darkness?
13. (c) Do you know where he goes?
13. (d) What do you know where he goes?

One of the Characteristics of poverty of the stimulus in second language performance is that the notion of subjacency is not taught to the learners. The declarative sentence in 13(a) is absolutely grammatical where as the question in 13(b) is quite ungrammatical. In fact, the violation of subjacency can easily be noticed in 13(b) and 13(d). Many researchers and scholars have chosen it as a topic of L2 research. But, almost every finding by them reveals conflicting data and thereby their interpretations. Bley Vroman (1988:24) after administering a
test on subjacency to Korean L1 advanced learners of L2 English finds "over half of the non-native speakers typically exhibit the correct UG based judgments on any given UG effect." This finding prompted Clahsen and Muysken (1989:5) to proceed in this field. They comment, "That there is a good possibility that L2 learners can apply grammatical principles in making judgments about target language sentences..." simply because they are not taught subjacency principle at basic level. Their argument is a sort of evidence which backs the idea that L2ers can use principles which they are not taught because violations of subjacency and ungrammaticality are not a part of any obvious instruction or input data. Though the study by Bley Vroman has been criticized yet the critics never reject the availability of UG in L2A. Schachter (1996:175) finds Bley Vroman’s experiment design flawed as their study involves English L2ers whose L1 was Dutch, Chinese, Indonesian and Korean and whose L1 matches the English Subjacency setting. However, despite criticizing the previous findings, Schachter does accept that UG in only indirectly available through the L1 residue. Michelle R. Ellefson and Morten H. Christiansen (2000:98-101) have also found some evidences of subjacency from artificial language without universal grammar. In the conclusion of their article, they mention that subjacency principles are difficult to learn and make the whole language difficult. As they write:

The artificial language learning results show that not only are constructions involving subjacency violations hard to learn in and by themselves, but their presence also makes the language
as a whole harder to learn. The connectionist simulations further corroborated these results, emphasizing that the observed learning difficulties in relation to the UNNAT language arise from non-linguistic constraints on sequential learning. When language itself is viewed as a dynamic system sensitive to adaptive pressures, natural selection will favour combinations of linguistic constructions that can be acquired relatively easily given existing learning and processing mechanisms. Consequently, difficult to learn language fragments such as UNNAT will tend to disappear. In conclusion, rather than having an innate UG principle to rule out subjacency violations, we suggest that they may have been eliminated altogether through an evolutionary process of linguistic adaptation constrained by prior cognitive limitations on sequential learning and processing. (Ellefson and Morten H. Christiansen, 2000. p. 98-101)

5.3 Parameters in SLA

Besides the principles of structural dependency and subjacency, UG also contains parameters which determine a systematic cluster of differences among languages. The major part of language learners’ task is based on the input which is used to determine which of the values of the parameters are
valid for the language of the environment. A list of theorized parameters is given below:

1. Ergative case parameter- The parameter that classifies as normative-accusative which determines the position of noun as subject or object in a sentence.

2. Head Directionality Parameter- The parameter of UG that determines the range of possible basic word orders in the phrases of world languages.

3. Nominal Mapping Parameter- The semantic parameter that is to account for the cross-linguistic distribution of bare nominal.

4. Null Subject Parameter- The parameter that determines whether or not a sentence in a language may be grammatical without an overt subject.

5. Polysynthesis Parameter- The parameter that which is an investigation into the nature of polysynthesis within principles and parameters framework.

6. Pro-drop Parameter- The parameter that determines the property of a language that has finite sentences containing phonetically null subject.

7. Serial verb Parameter- "A serial verb construction is a sequence of verbs which act together as a single predicate, without any overt marker of coordination, subordination or syntactic dependency of any other sort. Serial verbs describe what can be conceptualized
as a single event. They are monoclausal; their intonational properties are those of a monoverbal clause, and they have just one tense, aspect and polarity value." (Aikhenvald 2003: 1).

8. Object Placement Parameter- The property of UG that determines the placement of object in a sentence.

9. Subject side Parameter- This parameter provides a choice for the place of subject in an NP where subject is placed before or after the head.

10. Verb Raising Parameter/Opacity Parameter- This parameter shows difference of movement of the verb between two languages determines whether a language exhibits Verb Movement or not.

Out of these ten parameters in the list, three major parameters have been extensively studied in terms of cross linguistic variation and acquisition. These are the Null-Subject Parameters, the Verb-Raising Parameters, and the V2 Parameter.

5.3.1 The Null-subject Parameter

Chomsky’s Government and Binding theory of syntax consists of a parameter of Universal Grammar which determines whether sentence in that language may be grammatical without an overt subject. For example, Spanish
is a Null-Subject language but English is not. Therefore, the phrase `Speaks English` is ungrammatical in English where as in some particular cases in Hindi, the same sentence is not ungrammatical-

14. (a) Angreji Bolta/ti Hai.
14. (b) Speaks English.

Case 14a may the answer to the question, Kya Bolta/ti hai? But case 14b can’t be the grammatical answer to the question what does s/he speak? The same case is found in Spanish which is also a Null Subject Parameter language which lacks overt Subjects-

15. Hable ingles (Spanish)

The Null Subject Parameter shows the presence of a strong Fn in Tense in English which forces raising of the overt subject and which simultaneously also shows a week Fn feature in Hindi, Spanish or Italian Tense usually not requiring raising-

   English-- Strong Fn in Tense-- Overt raising of subject DP to check off Fn.

   Spanish-- Weak Fn in Tense-- No overt raising of subject.

This discussion on null subject parameter unmasks the problem that the learner may use already existed parameter of L1 in L2 learning also. Therefore, the teachers of L2 should take this problem into account and make the learners aware of it in an indirect way so that imposition of rule may not hinder the
process of SLA. This parameter also marks the availability of UG in SLA at least at initial level.

### 5.3.2 Verb Raising Parameter

While talking about the movements in Government and Binding theory of Syntax, Chomsky also talks about the movement of a verb from its D-Structure§ in the verb phrase. This difference of movement of the verb between two languages determines whether a language exhibits Verb Movement or not. This was termed as Verb Movement or Verb-Raising Parameter. For example, in English, verb is placed after negatives (does not go) and almost the same case is found in Hindi (nahi jata hai).

Emonds, (1978) and Pallock (1989) find difference between English and French languages. They find that English and French behave differently in case of negative placement, question formation, adverb placement, and quantifier positions-

16. (a) Vous embrassez Marie.

16. (b) You kiss not Marie.

In English the verb is not raised before negatives, hence, this parameter is weak as given in 16b.
17. (a) Aime Vous Marie?
17. (b) Like you Marie?

The structure of the sentence in 17b should be like 17c below.
17. (c) Do you like Marie?

18. (a) Mes amis regarde souvemt La
18. (b) My friends watch after television.

19. (a) Mes amis aiment tous Marie.
19. (b) My friends like al

If we look at the case in Hindi, all the sentences given above should be
structured as below-

19. (c) Tum Marie ka chumban nahi lete ho.

In this sentence, we have SOV structure but the case of verb is
different. It has been first split into two and then the negative is inserted.
Therefore, it is neither the case of a strong verb-raising nor is it a weak verb-
raising. But if we observe the structure minutely, we find that the English verb
‘Kiss’ has ‘chumban lena’ as its Hindi equivalent. Furthermore, the verb in
Hindi is a combination of two words ‘chumban’ and ‘lena’ in which the later
word shows action. Hence, the placement of the negative before ‘lena’ is
similar to ‘does not kiss’ in English. This particular fact may be regarded as the
evidence of UG parameters common to both English and Hindi languages. This
analysis can be applied in SLA classrooms to speed up and correct the performance of the learners.

The case of question formation in Hindi is quite different from English as given below:

17. (d) Kya Aap Marie ko pasand karte hain?

A comparison of 17c and 17d will show different structures as given below:

(a) Aux. SVO?

(b) Interrogative Pronoun SOV?

Since there is no auxiliary verb in Hindi, questions are framed with the help of interrogative pronouns. In case of any inquiry or information demanded through a question, the interrogative pronoun is used just before the verb. The interrogative pronouns when used before the verbs in Hindi, they function as adverbs. The cases of adverb placement and quantifier are also different in Hindi. This difference is very important and useful in second language acquisition of adult learners. In my classes, I have noticed on several occasions that the students generally translate their mother tongue into English while asked to speak or write. This habit not only creates flawed performance but also forces the learners to impose the parameters of the mother tongue on almost all the languages learnt after L1. There are some strikingly similar cases of parametric synonymy like "kya hua?" in Hindi and its equivalent "What
happened?” in English but this cannot be generalized in case of "Kya khaya?", "kya gaya?" and so on and so forth.

5.3.3 V2 Parameter

This parameter describes the raising of verb forms I to C and the raising of maximal projection P to the Spec of C. It, therefore, has two kinds of movements-

a) Strong Fv in comp- Overt raising of lexical V to check off Fv
b) Strong F_top in Comp- Overt raising of X P_top to check off F_top.

In English, the V2 parameter is set negatively but German is a V2 language. Clahsen and Muysesken after using data from L1 and L2 acquisition of German Verb placement and morphology argue that “L1 and L2 acquisition follow different paths and that consequently UG is available to children and not adults”. Clahsen gives the following examples in support of his agreement.

20. (a) Adrian hat gerdte das Radio angestellt.
20. (b) Adrian has just the radio on turned.
20. (c) Andrian has just turned on the radio.
20. (d) Andrian ne abhi-abhi Rdio chalu kiya hai.

It is clear from 20a that the verb in German occurs in final position and a non-final position can be derived through verb-movement.
In 20 (d) the position of verb in Hindi is something similar to 20 (a). The only difference is that the verb occurs in the final position with Hindi tense indicative word ‘hai’. But this structure shows the availability of UG even to adults. That’s why du Plessis (1987), Tomaselli and Schwartz (1990) argue that adults have access to UG but they do not set parameters all at once. The intermediate grammar comes in the way of acquisition only through permission of UG.

5.4. Test of a Principal and Parameter in L2 Acquisition

5.4.1. The Subjacency Test

The mind of the adult L2 learners works like a computer which translates one language into another. It cannot do the job effectively unless some universal principles are present in the system. It has also been noticed that human mind goes even beyond this conception. In case of L1 acquisition, despite the finite input, the child manages to attain the full knowledge of the grammar of the language of his community or locality. This fact empowered the idea that a child L1 learner is equipotential for any natural language, and it is proved right when the children studying in English medium schools learn and perfect the English language without painstaking attention. In fact, they are
able to set parameters all at once for L2. The adult L2ers belong to the post-critical age of acquisition. Herschensohn’s model (1998) for the stages of constructionism which assumes that individual learners construct mental models of their choice to understand the world around them also assumes (as given below) that abstract morphological features are transferred from L1 to L2 in the initial stage of L2A.

1. Initial State:
   L1 values persist
2. Intermediate state:
   Under specification of (+ interpretable) features
   (a) L1 value is unset.
   (b) L2 constructions are progressively gained
   (c) (+ interpretable) morphology is gradually acquired.
3. Final expert state:
   L2 values for syntax and mastery of morpholexicon.

It is also clear from this model that it is virtually impossible to ignore the initial state of L2A which will later highlight the evidence of a principle and a parameter during testing.

5.4.2. The First Test

The test of a principle and a parameter implies what the L2 studies show about acquisition of a Subjacency Principle i.e. a universal constraint on movement, and the governing category parameter, possible governors for reflexives in languages in the world. Van, Riemsdijk and Williams, (1986)
Singh 158

consider subjacency a universal and innate principle of UG whose effect varies from language to language. In her experimental investigations Schachter (1989, 1990) found out that Korean and Chinese native speakers do not show evidence of Subjacency because they lack syntactic wh-movement whereas the Dutch L1ers learning English as L2 instantiate Subjacency. The test of a Subjacency principle shows that the movement rule cannot cross more than a single barrier i.e. NP and S (subject) in English.

For example-

21. (a) Sushila destroyed the clay-pot.

If we frame a question for 21(a) it will be:

21. (b) What did Sushila destroy?

The sentence 21(a) can be shown in the form of a tree diagram given below-

```
S
  /\        /
 NP  VP
  /   /
Sushila destroyed the clay pot
```

Figure 5.5- Tree Diagram

The word ‘what’ according to figure 5.5 must be the part of VP because it will inquire about the information given in the VP. Before the VP, the figure
5.5 also shows that there is only one element, hence, the wh-word will have to cross only one barrier created by the NP to acquire the front position in 21b, ‘What did Sushila destroy?’, but in case of 21c and 21d (given below) the Subjacency principle has been violated. This is here remarkable that 'wh-words' when used as relative pronouns or part of the nominal clauses behave differently. All interrogative pronouns are relative pronouns also. Therefore, while testing subjacency of such words, their nature and use should be taken into account.

21. (c) **Sushila destroyed the notes on History.**

   NP                        VP

21. (d) What did **Sushila destroy the notes on?**

   NP                        NP

In case of 21d, the wh-word has to cross two barriers created by two NPs ‘the notes’ as object and ‘Sushila’ as subject. Thus, it is ungrammatical. After experimenting on the specified learners, Schachter came to the conclusion that the Chinese and Indonesian L1ers learning English as second language accepted the grammatical sentences as grammatical but they had partial ability to reject the ungrammatical as ungrammatical. This test, therefore, gives enough evidence to prove that the adult Hindi L1ers also accept grammatical sentences as grammatical but they usually fail to recognize ungrammatical as ungrammatical. The Hindi L1ers learning English as L2
follow the subjacency principle at the initial stage and accept the ungrammatical sentence because of the full access to the principle of L1. Hence, the teachers and the trainers has to be very careful while teaching English to Hindi L1ers because the full access at the initial level may severely affect the performance of the learners. Having visited many English language teaching classes, I have come to know that many teacher use direct method to avoid full access to the mother tongue grammar which is also not the right way to teach a second language. The kind of errors they usually commit is as shown in the diagram below:

21. (e) Sushila ne mitti ka bartan nasht kiya.

![Tree Diagram](image-url)
Since the sentence 21e follows the structure NP+NP (NP+VP), it will be violation of the Subjacency principle to move the wh-word to front position because it will have to cross two barriers.

21. (f) What did Sushila destroy?
21. (g) Sushila what destroyed?

Sentence 21(g) will be the sentence that the learner will use at the initial stage. It, in fact, shows two very explicit results, i.e. transfer of principle from L1 and interference of the mother tongue. At the intermediate stage the learner accepts the ungrammaticality of the sentence and reframes the question in another ungrammatical structure as shown in 21h below:

21. (h) What Sushila destroyed?

During experimenting with test conducted on the students who were adult L2ers of English, it was noticed that the learners having studied English only as a core- subject up to graduation level committed such errors frequently at initial and intermediate stages but they managed to correct them at the final stage and are now able to produce correct sentences like 21b given below:

21. (b) What did Sushila destroy?

The study on Subjacency should be conducted very carefully. Both the structures- to which it is applied- and the wh- movement should be very clear to the investigators. For example, if a set of object is unable to see relative
clause as grammatical how it can be found out that the wh- movement results due to Subjacency rather than a rejection of complexity. The clear separation of wh-movement from which it is extracted tells what the subjects are responding to. Zero access to UG means a critical period for Subjacency because in this situation, it is very difficult for the teachers to tell the learners about the violation of subjacency though the present of subjacent structures also make language as a whole harder to the learners.

5.4.2.1. The Second Test

The second test of a principle and a parameter in adult L2 is regarding the selection of possible governors for reflexives in languages around the world. Wexler and Manzini (1987) proposed the governing category parameter to capture the commonalities and variations in binding of anaphors (including reflexives and pronouns) from language to language. They carried out an experiment on the Korean speakers of English because the contrast in parameter settings between Korean and English is quite evident. In English language, the reflexive must refer to the subject within its own clause, as given in the sentence 22 below:

22. He taught himself a lesson.

Lee (1992) adopted their model and further experimented on the Korean learners of English by administering a test of grammaticality judgment
and multiple-choice comprehensive task to Adult Korean speakers who migrated to the United States at different ages. Lee found that the early migrants who became bilinguals managed to detect grammatical and ungrammatical sentence in a grammaticality judgment task having sentence as given below:

22. (a) John remembered that Mary helped herself.
22. (b) John remembered that Mary helped himself.

The late migrant bilinguals performed well on grammatical and poorly on ungrammatical sentence whereas the adult migrant bilinguals performed poorly both on grammatical and ungrammatical sentence. The same situation occurred when questions were framed in the multiple-choice comprehension task. The experiment on the Hindi L1ers to check the subjacency in Hindi L1ers showed a different result with a new position of reflexive pronoun as given in 22d. To show the root of this error the Hindi translation of 22a is given below in 22c.

22. (c) John ko yaad tha ki Mary ne khud ki madad ki.

The movement of reflexive pronoun at the initial stage by the Hindi L1ers learning English as L2 is generally made in the following way.

22. (d) John remembered that Mary herself helped.
This sentence shows the movement of the reflexive pronoun from final position to the second last position in 22d. This test does not show ungrammaticality. No teacher can say that sentence 22d is ungrammatical, but the language teachers will certainly accept the fact that the meaning of 22d is different from 22a and 22c. The learners cannot understand this difference in meaning due to unfamiliar subjacency rules. But, if they are carefully taught the difference between emphasizing pronoun and reflexive pronoun, they can correct themselves on their own. The learners at initial level commit such errors more frequently than intermediate or advanced level just because of the different subjacency levels in their L1 and L2.

Therefore, the GCPs, as indicated after the experiment, are very well set in the early bilinguals and their linguistic competence for L2 is just like the Native Speakers. The late bilinguals are not very competent while the migrants learning/ acquiring L2 are unable to set GCPs. They always respond without following any grammatical rules.

5.5 Constraint in Principles and Parameters Approach

5.5.1 Many Constraints

Universal grammar is a theory of linguistic knowledge which, according to Chomsky, is available to the child innately. This knowledge
enables man to bring out early development while acquiring first or second language. But, in the course of development of second language, certain constraints are there which need to be clarified and explained so that the language acquisition theories in future can be effective and result oriented.

There are many constraints in the principles and parameters approach. Some of them are innateness hypothesis constraints, constraints on form, constraint on meaning, constraint on discourse, constraint on the poverty of stimulus, etc. These important constraints need an explicit explanation not only to understand the progress in SLA but also to make the path of acquisition easy. But the problem with the researchers and the scholars is that all the constraints cannot be discussed in one or two studies because of linguistic diversity and age of the learners. However, some important and relevant of these constraints are being necessarily discussed so that this study can be more useful to the language teachers and trainers who are trying to make the process of second language acquisition easier, better and result oriented.

5.5.2. Description of Constraints

As mentioned earlier, the principles and parameters approach was first developed by Chomsky but this approach could acquire a definite
shape only after it was kept under refinement throughout the 1980s by the scholars like Muysken (1986); L. White (1988, 1989); Bley-Vroman (1989) and Pollock (1989). All the refinements which have taken place so far can be concluded in the idea that the constraint should be as general as possible. Chomsky (1981) talks about constraints in the principles and the parameters approach in his *Government and Binding* theory also. Georgeon Muller worked on the principals and the parameters theory and found some constraints in this approach which are worth mentioning.

a) Local Derivational Constraints

Derivational constraints are found in various names as-

i. The Subjacency Condition- It controls the movement of the words.

ii. Complex NP Constraints- According to classical transformational grammar all the elements in a complex noun phrase are closely associated to one another and they cannot be extracted or moved. This creates problem in language acquisition when a learner moves some of the elements from the closed NP i.e. the sentence the assumption that he made it is absolutely wrong may be written or spoken as the assumption is absolutely wrong that he made it.

iii. Wh-Island Condition Effects- It is a kind of effect in which an element from certain wh-phrase constructions cannot be moved with the help of transformational rules.
iv. Left Branched Conditions Effects- There are certain phrases or construction whose complexity is represented on the left hand side of a tree diagram i.e. the phrase My father's aunt's home is the case of left branching. This phrase contrast with the right branching structure The home of the aunt of my father.

v. Coordinate Structure Effect- This effect asserts that no rule can affect a conjunct in a coordinate-structure.

vi. Sentential Subject Constraints- There are some occasions when a subject acts like the head of a complex noun phrase i.e. He loves strangers which amazes me. In this phrase the relative pronoun 'which' is not the qualifier of pronoun 'he' or noun 'stranger'. In fact, this is the qualifier of the whole sentence He loves strangers.

In NP constraints Movement crosses Tense Phrase and Determiner Phrase and creates ill-formedness which becomes more severe in relative clauses than in argument clauses. For example, in the sentence given below, the movement respects the subjacency conditions in 22e whereas it is violated in 22f.

22 (e) How did Aryan get the news that she sold her old car?
22 (f) Which car did Aryan get the news that she sold?

Wh-movement also violates Subjacency conditions which is generally created by the Complementizer element because ‘whether’ and
‘if’ in English do not have a question feature e.g. how do you feel whether I did it in one go? The levels of TP and DP are also crossed in left branch constraints because Wh- movement is not judged properly in the left branch of the sentence as shown by the sentence 22 below-

22. Whose did you borrow pencil?

Therefore, it is clear that subjacency conditions subject clauses in subjacency constraint effect are always embedded by DPs with implied D heads.

b) Local Representational Constraints

Empty category principle where every trace is marked, trace marking if it is properly governed, proper government, lexically governed constructions where L1 belongs to a lexical category, and domination of the same XPs in case of both L1 and L2 are some of the examples of representational constraints. If intermediate trace of arguments is deleted on the way to logical form, which is not possible in case of adjuncts, then there is no empty category parameter violation. In case of Superiority conditions effects, all ‘Wh-words’ in position of XPs move to a specific complementizer position in the logical form component. But even at this position Wh-movement will not be marked e.g.

23. (a) Who saw what?

23. (b) What did who see?
The ECP approach cannot cover all Superiority condition effects which is a great problem. e.g

24. (a) Whom did John persuade to visit whom?
24. (b) Whom did John persuade whom to visit?

SCE are not reducible to the ECP.

c) Global Constrains

The projection principle that Chomsky applies to pair of levels of representation is a global constraint. It shows that at D-structure, S-structure and logical forms, all projections of a given head are maintained.

d) Trans-derivational Constraints

Chomsky in 1981 proposed that trans-derivational constraint is a non-global Avoid Pronoun Principle which is genuinely grammatical constraint. One more assumption of this constraint is that all entries in the agreement structure of a predicate must be represented as agreements in the syntax. When two derivations are in the same reference set and use first derivation as a lexical pronoun and second as an empty pronoun, the first derivation preferred over the second.
5.5.3. Constraints on Form

Constraints on form suggest that there are certain occasions when a particular form of a word cannot be applied universally even in the use of the same language in which the word exists. There is no principle that can ensure the universality of the use of such form of words. For example, in English at certain occasions, the words ‘want’ and ‘to’ can be contracted as ‘wanna’ but this form cannot be applied universally even in English language.

25. (a) Who does Prajna wanna make tea for?

25. (b) Who does Prajna wanna make tea? (This is not a correct sentence.)

25. (c) Who does Prajna want to make tea?

Therefore, the learners are tempted to violate the constraints even while using the same language because following the constraints is not possible all the times. The learners may follow the rules that are having universal presence and violate the constraints. According to the theory of universal grammar such sentence are produced just because of the fact that the learners use grammatical rules strictly according to the performance system.
5.5.4. Constraints on Meaning

Sometimes, it is quite possible that a sentence is completely grammatical but there are constraints on the meanings. The spoken form of a language can be more confusing to the listener whose L1 is not the L1 of the speaker. For example, the following sentence can be misinterpreted by the listener.

26. (a) He read the paragraph While the Australian Kangaroo Danced.
26. (b) He read the paragraph while the Australian Kangaroo danced.

In sentence 26b, both underlined NPs cannot refer to the same thing. The interpretation of 26a is well formed but its meaning in 26b is quite different. In 26a, the NP 'the paragraph' is qualified by a co-referential phrase 'While the Australian Kangaroo Danced'. This indicates that the paragraph was written on the dance of the Australian Kangaroo. The principle of co-reference cannot be applied to 26b simply because the reader or the listener has misinterpreted the title of the paragraph and concluded that somebody read the paragraph when the Australian Kangaroo performed dance. This prohibits between a pronoun and a name in a certain structure relationship. Here, Principle C is a constraint which prohibits the co-reference, hence it is a constraint.
5.5.5. Constraints on Discourse

Constraints in the Principles and the Parameters theory are not limited to grammar only but are applied to discourse as well. For example, we have a grammatical principle that a similar noun is anaphorically related to a singular pronoun, but this principal cannot be applied universally:

27. (a) No colleague came to Harish’s party. He was upset.
27. (b) No colleague came to Harish’s party. He was upset.

Example 27a shows that negative quantificational NPs are subjected to the constraint in such a way that they cannot be anaphorically related to singular pronoun. It means the pronoun 'he' in 27a cannot refer to the colleagues of Harish. The right interpretation of this sentence is given in 27b. Pronoun 'he' in 27b refers to Harish which is anaphorically correct. The same quantification is also a constraint and cannot be followed by a singular pronoun as given below in 28a.

28. (a) Every colleague came to Harish’s party. He was upset.
28. (b) Every colleague came to Harish’s party. He was upset.

But, having looked at these examples, it should not be concluded that this is a universal constraint. The same constraint cannot be applied
to the negative universally quantified NPs if the NP and pronoun appear in the same sentence as in 29a below.

29. (a) No/Every colleague at Harish’s party said that he was upset.

In this sentence, the problem of ambiguity occurs. It is not clear whether Harish or his no/every colleague was/wasn’t upset. Secondly, like 27b and 28b, the second NP in 29b (Harish’s party) cannot be anaphorically related to the pronoun (He) in the second part of the sentence compounded by a conjunction.

5.6 Conclusion

To conclude, it is worth mentioning about the vastness of the principles and parameters theory that it is a set of universal principles which is shared by every human language. These principles, consciously or unconsciously, are known to all human beings. The principles are the invariants of all human languages whereas the parameters are the major points of cross linguistic variations. Although UG has already explained that both principles and parameters are innately determined biological characteristics of human brain yet this fact needs to be reemphasized that all human beings are born with some finite readymade principles which govern the process of language acquisition whether L1, L2, or Ln. The
whole chapter is reasserting the fact how and why they are beneficial for language acquisition.

******
References


Chapter 6

6.1 Conclusion

This study was designed to find empirical evidence for the role of Universal Grammar in second language acquisition specifically in case of the undergraduate students whose mother tongue is Hindi. Like other studies in the field of English Language Teaching, this study was also aimed to contribute in making second language teaching and learning easier and more productive in ELT classrooms of adult learners. Although it would be unrealistic and unsubstantial to suggest a few ways to find a solution to extremely diverse and dynamic problems of the ELT world yet a few observations, reviews, analyses, experiments, and long practical experience have certainly proved to be helpful in second language acquisition classrooms.

The review and analysis of several theories of language acquisition have been done not only to check the progress in the field of language teaching but also to frame a general conception for further development in this field strictly according to the requirement of the learners selected for this study. The theories which have been analysed and reviewed are behaviourist theory, mentalist theory, environmentalist theory, interactionist theory, communicative language teaching theory, awareness theory, learner's autonomy theory, etc. After this analysis, it was concluded that the adult
second language learners are having a very diverse and undeveloped thought about English language. Many of them who belonged to rural area were taught English through Grammar Translation method which had failed at least three decades back. It is very difficult to say what actually is being done with our students when they are taught English but the only thing that is quite clear is that they are not taught through a suitable method. During this study, it was noticed on many occasions that the method which was developed to study 'dead' language is still working to teach the languages which are very much alive.

History of ELT in India is more than 250 years old and the custodians of English language found Grammar Translation method the most suitable one as it used to be the conception of the teachers that translating words and structures of the source language into target language were helpful in teaching a foreign language. This trend continued in India till the end of 1960s. But later on, studies in semantic and structural linguistics around the world proved that language learning was not learning mere translation as each language has its distinct and unique structures. During the course of this study, this has been felt that language which varies from person to person cannot be learnt through word by word translation only. But it is not only a remarkable and regrettable fact that this method is still the principal method of English language teaching in most of the schools in rural area.
It was also seen that the students who came from convent schools or some good public schools were competent in English to certain extent, but the problem with such learners was that they had moved far away from the standard form of English language. Like their mother tongue, they had developed a habit of using a non-standard variety of English which is sometimes incorrect both semantically and syntactically. For example, the sentences given below had acquired a permanent place in their speech.

1. I know him for two years.
2. They will make fun of my family this summer.

In case of sentence 1, the root cause of error may be the interference of the mother tongue due to full access at initial stage because this sentence in Hindi is spoken as *Mein Use Do Sal Se Janta Hun*. But the second sentence was framed by some students who were asked to use the phrase "make fun of" in a sentence. The surprising element in both the cases is that 15 out of 20 students spoke and wrote about their friend as given in sentence 1, but only 10 students who belonged to rural area used the phrase "make fun of" either exactly like given in 2 or something similar to what was semantically incorrect. This particular evidence resulted in reaching the conclusion that flawed performance in the second language is not always due to full access to the mother tongue or the UG.
Now the questions which crop up in the mind regarding the selection and application of a language learning theory can be answered in the way that no single theory can be universally applied in the second language learning classrooms. Sometimes, it was noticed that, even in the same class, different theories worked on different students on different occasions.

On the role of grammar in second language teaching, this study has a lot to say. Having taken an overview of the brief history of grammar in language teaching, it was found that before 1980s (until the introduction of communicative approach), the teachers used to associate grammar and language teaching as they used to engage the learners in translating the mother tongue into the target language. But, at the very beginning of the last decade of the 20th century (Larsen and Freeman & Long, 1991), teaching grammar was found inappropriate. People started to believe that communicative approach alongwith audio-visual aid can serve the purpose. But in the field of SLA, Chomsky's influence continued to get momentum. Transformational Generative Theory of grammar emphasized on phrase structure to distinguish between surface and deep structures. But after liberalization and globalization in the developing countries like India, English language teaching had become a very desired and must-learn field. Despite the fact that Chomsky's theory of UG cannot be isolated from the field of language acquisition, the teachers and researchers in India adopted already developed humanistic approaches (Stevick, 1982) of language teaching. These approaches placed learner in the
centre and grammar at periphery and implicit position (Norris & Ortega, 2000). The problem that occurred with completely implicit teaching of grammar was that skills like speaking and writing could not be perfected without explicit teaching of grammar.

Therefore, this study completely favours different research findings (Poale, 2005; Seliner, 2008; Camhi & Ebsworth, 2008 and Ellis, 2008) that grammar in ELT classrooms should be taught both implicitly and explicitly and competent teacher can decide what, how and where to teach grammar? This approach paves way for focus on form because the contemporary adult learners of English are having at least basic knowledge of English in some form or the other. Therefore, this study reasserts that the teachers should find a flexible way of introducing grammar in ELT classrooms so that both meaning and form can be given equal importance. It must be noted by every teacher that both meaning and form are complementary to each other. Some of the adult undergraduate learners are not able to make a connection between form and meaning which keeps learning incomplete. This inference was drawn on the basis of writing samples, as given below, from the students who were in the final year of their graduation course.

3. The door was broken by the hammer.
4. The hut was destroyed by the storm.
The undergraduate learners of English commit such errors which are not rooted in the interference of the mother tongue but within the wrong generalization of grammatical rules. Both the sentences may be meaningfully correct but their form does not match with their meaning. When investigated, the learners told that they were taught active and passive voices in the same way from class six to twelve. This is one of the serious problems. Unconcerned system and commercialization of education without time-bound evaluation have led in producing incompetent teachers who have nothing to do with correct and qualitative teaching. Sentences 1 and 2 are having the error of using a wrong case for instrumental subjects. It should be explicitly taught to the learners that preposition 'by' cannot be used as a case in passive voice unless the subject in active voice is agentive and animate. Both the sentences should be written in the following form:

3a. The door was broken with the hammer.
4a. The hut was destroyed in the storm.

During the entire course of this study, it was strongly felt that in the age of cut throat competition, grammar teaching has become the need of the hour. Speaking which is considered to be an informal skill is not always informal. This study puts this general conception under doubt because like L1, speaking in second language is not something that will be mostly used to talk to the family members, relatives and friends. L2 is learned first as a foreign language for specific purposes like study, business, etc. and then its frequent
use in social circle gives it the status of a second language. Therefore, the language which is learned for specific purposes cannot be learnt in its non-standard, incorrect form. During a job interview, how fatal it will be if the interviewee speaks English informally incorrect. Grammar makes language perfect and it should be the integral part of ELT classrooms both in explicit and inexplicit forms.

Language acquisition theories have been the necessary elements of research and teaching of a second language. This study has a few very important and necessarily applicable findings on the role and application of language learning theories. It has already been recommended that no single theory can work properly in SLA classrooms. After this, the focus of this study (which was on theories, approaches, methods, and the role of grammar in language teaching) was been shifted to the role of Universal Grammar in SLA. This study affirms that language is not learnt as behaviour and to substantiate the argument the process of acquiring the mother tongue so quickly can be taken as example. A three year old child starts giving adult like linguistic performance without formal teaching and guidance. This shows the presence of linguistic knowledge (competence) that governs both normal and abnormal performances.

Chomsky's Transformational and Generative theory, when applied to some finite structures in Hindi gives evidence of partial transfer of L1 pattern
to L2. The rule of transformation from active to passive voice has been taken as instance and it was found that both the languages share the same pattern i.e. object of active voice structure as subject in the passive structure. Therefore, this study reaffirms Chomsky's claim of availability of UG in SLA in the form of some principles and parameters. The transfer of UG in SLA is not actually the transfer of information from the mother tongue to the target language but it is a process of restructuring of certain patterns where a few elements maintain their position and thereby prepare evidential basis for the presence of UG in SLA.

Besides this, this study also reevaluated theories of Universal Grammar to check and clarify its role in SLA. X-bar Theory, Theta Theory and Movement and Case Theory were reevaluated and found the claim of these theories true that UG has a role to play in SLA. The X-bar Theory when applied to the phrases in Hindi was found true to its claim that there is a head element in all the phrases of almost all languages. The phrase 'Meri Kitab' in Hindi, 'Mam Pustakaha' in Sanskrit, and 'my book' in English are producing clear evidence in favour of the claim of the X-bar Theory. Similarly, the Theta-Theory which is concerned of role relationship was also found applicable to Hindi language as the verb element, irrespective of its position, makes a relation between the two elements of a sentence. After the application of both the theories, it was found that the full transfer of L1 pattern to L2 does not help in acquiring correct, unflawed patterns of L2. The examples which
instanced the claim are *Vaha Patra Likhta Hai* in Hindi and its word by word translation as *He letters write* in English. Full access as shown in sentence *He letters write* cannot be syntactically correct.

The study of UG theories in this part of the thesis gives a clear picture of the amount of UG available to second language learners. On the basis of this analysis, the following observations have been made.

I. Certain patterns of UG are available to the Hindi L1ers learning English as L2.

II. At the initial level of L2 acquisition, the adult Hindi L1ers may have full access to the pattern of their mother tongue.

III. Full access does not help in acquiring correct and unflawed L2.

IV. As the process of acquisition progresses the access to the mother tongue is reduced but it cannot be finished.

V. No Access Hypothesis does not work in case of Hindi L1ers learning English as L2.

VI. UG and its properties are common to all humans. These properties are just like the shirts which always remain shirts irrespective of their colour and design. The owner of these shirts will decide which shirt should be used on a particular occasion.

On Logical and Developmental Problems, this study not only reviewed the previous findings but also checked whether the problems are
similar to Hindi L1ers or not. First of all, the present study focused particularly on two problems:

I. How linguistic input and output mismatch.

II. Why languages are acquired in the way they are.

In the process of first language acquisition, the deficiency of input data is obvious still the child manages to have mastery over complex grammatical structures. But in case of second language acquisition, the amount and nature of input to the adult learners are quite different from that of the L1 input. The data input to the adult L2ers is formed mostly by grammatical and partly by ungrammatical sentences. Still it was noticed that the L2ers sometimes perform far better than the input they were exposed to which reaffirms that the L2 learners' grammar may be highly complex and sophisticated that mismatches with the input data.

The important and remarkable thing to mention about this study is that despite using the same module for acquiring the L2, the Logical Problem varies from learner to learner. The reason for this variation which were noticed during this study are:

1. The adult learners belong to diverse socio-economic background.

2. Unlike the young children, the adult learners already have conscious knowledge of the grammar of their mother tongue.

3. After globalization, multilingual culture has developed rapidly which has created a base for variation in linguistic competence.
4. Revolutionary developments in the field of information and communication technology have shortened the gap between the mother tongue and English language. Nowadays most of the work on computers and on smart phones is done in English language which has consciously or unconsciously provided the adult learners a base for competence building in English language.

Despite the facts given above, it is further remarkable that the problems in language acquisition are still found in ELT classrooms. It has been felt time and again that being the teacher of English language, it cannot taken for granted that these revolutionary developments will simplify the problems in second language teaching and learning classrooms. It must be taken into account that the need and L2 competence level required today is entirely different from what was needed twenty to thirty years back. Today, besides correct pronunciation, a good knowledge of grammar is a must for English L2ers. This study, on the basis of empirical evidence and teaching experience in ELT classrooms has come out with the following suggestions to improve the quality and also to make teaching of English compatible to the need of the hour:

1. Logical problem is not a problem of language acquisition. It is the problem that deals with the presence and access of UG in SLA. It deals with the problem why output is far better than the input. It has nothing
to do with why the students can't maintain uniformity in L2 acquisition despite the uniform instructions.

2. Logical problem can be treated as a positive and encouraging factor in the ELT classrooms because the extraordinary output by a few learners can make the other learners follow the same patterns, but to make it productive and encouraging the teachers will have to recognize and give due importance to such output.

3. Listening comprehension is very important for second language acquisition. The teaching implications of listening have been discussed time and again and it was suggested (Kemp, 2010) that listening should be cumulative as is learnt cannot be evident after one listening event.

4. Like the other scholars (Kurita, 2012) this study also found that restructuring linguistic knowledge and creating a new schemata on an unfamiliar culture through cumulative listening experience is a logical problem.

5. Input becomes extra important when the learners feel that it is something new and necessary for them. In this regard, this study supports J. C Richards and reaffirms that the learners should keep trying newly noticed language forms so that they can be incorporated into their linguistic ability.

6. Today's adult learner really need a very correct, advanced and impressive knowledge of English because of very difficult competitive scenario. Their linguistic empowerment should also be autonomous.
7. Listening to listen and listening to learn should not be mixed. The teachers must allow the learners to learn through listening. Understanding the speech only should not be the goal of teaching and learning.

8. Meta-cognitive listening prepares a very strong base for the other skills. The teachers should design listening activities according to the need and the goal of teaching English to the adult learners of this highly multilingual and competitive era.

Another problem that has been taken up well at length in this study is the Developmental Problem of second language acquisition which deals with the issue how language proceeds. This problem also inquires why languages are acquired in the way they are structured. Many linguists (Krashen, 1981; White, 1995) have already discussed this problem but Developmental Conformity Hypothesis (Sharwood Smith, 1998) has really taken up this problem seriously. According to this hypothesis all stages in the development of a target language grammar conform to UG. In fact, during this study, it was noticed that interlanguage grammar hardly achieves a mature state because some external forces partially or totally suppress the acquisitional processes. The second thought (by White, 1989a) in this regard was also reviewed which says that despite several differences, interlanguage grammar has conformity to UG.
It is undoubtedly true that interlanguage grammar do not conform to UG completely yet there is a tendency that interlanguage grammar move inclined to UG conformity. The Full Access Hypothesis shows that the pattern of L1 are transferred to L2 acquisition but as it was studied in case of Hindi L1ers learning English as L2, that full access is possible only at the initial stage. This should not be taken as fossilization of L1 rules for learning L2. It is the natural tendency of the students that they take help of their L1 grammar while learning L2 which is a sort of conformity to UG.

The theoretical criterion of SLA may be confined to UG conformity but the fact is that the adult L2ers from rural area do not have access to one particular theory to develop L2 competence in them. This is partly because of their interest and motivation levels and mostly because of the curriculum, teaching methods, competence of the teacher and the educational reform policies of the Government. Chart 4.1 tell the whole story to make it clear that despite receiving formal instructions of at least 6-12 years, most of the students could not write even 10 sentences syntactically and semantically correct. This problem compels to ponder over this issue and finally the conclusion that follows on the basis of their present position is that both the system and the teacher are mostly responsible for this problem of L2 acquisition.
The sequence of development which is another significant part of SLA has been given important and equal place with the other similar problems. To explain and understand this problem, this study has referred to the myth of Abhimanyu in *The Mahabharata* and related it with the present theories by keeping some adult learners into centre. It was found that the developmental sequence is mostly controlled by innate unconscious linguistic input, subconscious input till the age of three, and also on the conscious input at school and college. This confirms the access to innate and L1 linguistic competence which thereby shows the availability of UG. The two problems that this study found are translation of the mother tongue and the crucial role of the environment. On the basis of the teaching experience with the specified adult learners, the following observations have been made.

1. It is just because of the interference of the mother tongue that the L2ers translate the Hindi word *pakadna* as 'catch' into English. Therefore, the teachers in the ELT classrooms will have to be very conscious not only to take this factor into account but also to correct the learners immediately.

2. The second important thing to do is that the learners should be taught practical usage of L2. The efforts should be made in the direction that the words like 'catch' cannot be used with the action word 'speed' (*Gati* in Hindi).

3. The Grammar Translation Method which is being still used upsets the sequence of learning in SLA. But it should not be considered that this
method is obsolete and useless. Rather, a judicious use of this method can be helpful both to the learners and the teachers.

4. Like children, the adult also acquire simple pattern of L2 sooner and better than the complex ones. The sentence pattern $S+be-verb+complement/adverb$ is acquired earlier than $SVO$ pattern but the problem is that this pattern is fossilized very soon and the learners keep committing errors like I am agree.

5. This fossilization affects the development of SLA and the teachers or the trainers should ensure that all the necessary patterns should be introduced in a balanced way so that SLA can proceed on the desired way.

6. Fossilization of the patterns and their reflection in SLA performance indicate the mimicry of L1 patterns at the early stage of L2 performance. This is not always a bad signal because the availability of UG enables the learners to use the already existed similar patterns. It is the duty of the teachers to transform the fossilized pattern into a correct and useful one so that the learners may not translate the Hindi phrase Jata Hun as 'am go' into English.

7. There is a developmental relation between perception and production. The learners always perceive L1 patterns to develop their L2. This shows that the native language influence cannot be subsided as UG plays its role in adult L2A also.
8. Like formula in mathematics, the mechanism of SLA works but it should be ensured that the right mechanism should be introduced at the right place. For example, formula of past tense can be applied on all regular verbs as irregular verbs do not allow change in form like the regular verbs.

There is no doubt that the Universal Principles of UG operate the process of SLA though the operation may vary from language to language. This study also proves that the undergraduate students of English whose mother tongue is Hindi follow UG constraints in L2A because Principles and Parameters are the parts of genetically innate grammar that everyone possesses by birth. But inapt application of rules may create problems because rules differ in several respects from structure to structure. The best example of inapt application of rules was noticed when the learner generalized that movement of auxiliary before verb changes the form of the sentences from statement to question. This principle gives an absolutely incorrect pattern if the subject is constituted of a complex noun phrase (The will storm destroy the hut?) because the learner has generalized that the auxiliary needs only one forward movement to transform a statement into a question. During this study, it was noticed that the structure in this question is beyond their capacity at the initial level but later on such errors are corrected without the help of the teacher. Structural dependency is one of the principles which is applied to all human languages.
This study has noticed and confirmed that learning of second language is guided by parametric hierarchy. But when two disordered parameters are available, it becomes very difficult for the learners to choose the correct one. In this case, like other studies in the series (Saffran, 2001&2002 and Yang, 2002&2004), this study has also come to the conclusion that the learning mechanism paired with UG can help the learners in setting the right parameters. The adult learners apply innately set parameters in SLA but the striking fact in this regard is that they make quick changes in resetting the parameter whenever the change is initiated. This brings change in the grammatical competence of the learner because whenever a change is initiated and adopted, the peripheral grammar starts taking a shape with the help of quirks and irregularities. This is the time when unmarked grammar of a new language starts prevailing over marked grammar which is the core grammar available to the learner right by birth. During this study, it was noticed on several occasions that the making of interlanguage grammar is not the result of teaching instructions only. There are a few other factors which provide vital support and ample material for the development of peripheral grammar such as motivation, need, teacher’s competence, competence of the fellow learners, and social environment. It was noticed that the learners corrected their grammar just by listening to their classmate who are above average position. The utterances like I am agree shows making of interlanguage grammar but the same learner when developed this utterance
into *I agree* or *I will agree* clearly shows the shaping of target language grammar with the help of UG.

A lot of discussion with appropriate and relevant illustrations have been made in this study and it was found that UG is a system of principles and parameters which help in L1 acquisition. The second language learners also face a situation similar to the L1ers. Hence, there is no doubt that UG mediates L2 acquisition. The claim of the proponents of *No Access Hypothesis* (Cook, 1988; Cook and Newson, 1996; Epstein, Flynn and Martohardjono, 1996) has also been tested and it was found that child L1 acquisition and adult L2 acquisition are not entirely different. But it was also noticed that all the mechanism available to L1 acquisition are no longer available to L2 acquisition. In case of L2 acquisition, there may be no direct access to L1, but L2 learners are having access to principles and parameters of UG. This, in fact, is indirect access which helps in restructuring the L1 grammar into L2 grammar right from the day the learner is exposed to L2.

It is a remarkable fact that there is no one methodology that can explicate the role of UG in second language acquisition because the constraints which work on one language may differ on the other language. However, the efforts should be made in order to make teaching and learning of languages other than L1 easier and faster. The four main problems have been noticed in this area. It is very important that in SLA classrooms these
problems should be taken into account and a lot of pre teaching effort should be done to face these problems which are found almost everywhere. These problems are:

1. Teachers- Time and again, it has been noticed that teachers both qualified and unqualified are not competent to teach English. The tests of basic level which were designed to know the competence level of first year graduate level students could not be solved even by the teachers. This shows the plight of the education system also the declining values in the educational institutes. Is was really ridiculous and painful to know that the teacher were incompetent and ignorant. Many of them who were employed in the Government schools and colleges were not ready to update themselves as per the requirements of time and also their students.

2. Students- Nowadays, in the institutes of higher education, there are the students who have studied English as core subject at least for 12 to 14 consecutive years. Therefore, the issue of direct or indirect access should have been settled down and the restructuring of interlanguage grammar should have been completed. But the situation is entirely different in case of at least 70% students of undergraduate level who have lived till intermediate class in rural area. L2 competence level of such students is in a very bad condition. There is no doubt that L2 parameters have already set in them but the regrettable fact is that these parameters are absolutely inappropriate or incorrect for correct and
desired performance in L2. Most of the learners were found struggling between choosing correct and incorrect forms. For example, it was very difficult for the learners to believe why the sentence *He is good in English* was grammatically incorrect and how the sentence *He is good at English* was correct. A lot of undoing is required which has settled into their mind through access to the mother tongue. This undoing can be done only through increasing awareness of the L2 grammar, enhancing their motivational level, and giving value to teaching values.

3. Curriculum- It is mostly indubitable that curriculum plays a vital role in getting right education at right time. English which is the part of school and college curriculum has not been very effective in making the students competent enough to fulfil their day to day need. It was found that speaking and listening skills are least taught skills which finally result in and permanent incompetency. The availability of UG in SLA and access to L1 parameters can rightly help if the syllabus is designed according to need of the learners and right sequence of leaning skills. It was noticed during this study that the present syllabus needs frequent revisions by a team of expert and competent language teachers so that it can be useful to the learners.

4. Teaching Methods- In chapter two of this study, several approaches of ELT have been discussed not only to review historical background but also to find an appropriate method of teaching English to the adult learners. having worked upon the learners as well as the methods, it
was found that no single method can serve the purpose in ELT classrooms. The concerned teachers have to design an eclectic approach to get the desired results. When students or the learners are from diverse background, no single method can be completely useful. The problem of diversity of the learners in their socio-cultural background, need, purpose, motivation level, already existed knowledge level, and highly competitive scenario cannot be solved unless a diverse eclectic teaching approach is applied.

After the revolutionary developments in the field of information technology, the teaching has been entirely changed because technology is being increasingly used both by the teachers and the learners. It has also been noticed that online availability of translation software can lead the scholars to ponder over the availability of interlanguage universal grammar which is working in the field of SLA also. A few scholars like Catherine K. Moore (2009) have expressed their concern over the over use of technology but it is hardly debatable that technology can be removed from teaching. Only the teachers will have to think about the appropriate use of technology.

No research in the field of SLA can be a complete solution for the problems that are faced in the ELT classrooms. There is always left a scope for further investigations and findings. Time which is the mightiest thing brings many changes in all directions. These changes should be recognised
and given due respect. The need of the hour is always greater than the need of a person. Therefore, tradition alone cannot give us solution for all the problems. A lot of individual talent is also needed to assess traditional approaches and to reform them according to the present need. The question whether UG governs the path of SLA or not is now no more a very difficult question to answer. Many researches before this study have already answered this question but it is still a matter of further research as how we can use UG availability factor in designing the syllabus for ELT classrooms. In Hindi speaking states of India, the scholars and teachers need to conduct studies on how UG helps in SLA and how its role with Hindi L1ers is different from the learners whose mother tongue is other than Hindi. This is the time for longitudinal and mixed method researches. Johnson & Onwuegbugu’s (2004) article titled *Mixed Methods Research: A Research Paradigm Whose Time Has Come* emphasizes the same idea. The first issue of the journal (2007) in which this article was published clearly forwards the message of the editor who says that the aim of the *Mixed Method Journal* is "to publish empirical, methodological, and theoretical articles about mixed methods research...the journal will serve as a unique outlet for innovative and influential work in the field of mixed methods research". Thus a continuous need of L2 curricular evaluation is a must do task to cop-up with rapidly changing the need of the hour. The concern of 'time and timing' should be central because of the crisis of ELT at school and college levels. The longitudinal research which evaluates L2 curricular options can suggest the best solution that fulfils the need of the
hour. Finally, the most necessary thing to mention is that the teachers will have to discover new remedies for new problems because "He that will not apply new remedies must expect new evils; for time is the greatest innovator". (Bacon, 1625)

*****