

CHAPTER - III

A Plea For Innatism

So far we have discussed in the previous two sequels the so-called Transformational Generative Grammar and also shown in what sense it is linked with the trio concepts, viz., competence, creativity and performance. We also examined in what sense a native speaker can acquire the mastery of language. We have characterised, following Chomsky, linguistic competence as the mastery of rules that lie below the surface of the observable parts of language. This mastery of language entails the ability to make judgements concerning the violation of these rules. We also specified, following Chomsky, as part of linguistic competence the creative use of language, i.e., the ability to interpret utterances that are *novel* in a specified sense. Concerning the processes underlying competence, two claims were made. It was claimed that these processes must include both tacit knowledge of some rules and tacit knowledge of what counts as violation of a rule of language. It was also claimed that the use of language is creative in the sense that it is as autonomous as thinking itself. It does not depend on the nature of external stimuli or inner drives, needs etc. It appears from the above that the competence agent must be in a state of mind of having internalised a set of rules for the language. But how does this state of mind be acquired? According to Chomsky, this state of mind may be acquired through the innate idea of hypothesis. This innate idea of hypothesis is a conjunction of three propositions of which the first is independent of the second and third, but these two entail the first. In the first proposition it is claimed that as far as language acquisition is concerned, it must be the case that the process of acquiring a state of mind of having internalised rules of language is accounted for by a structure innate to the human mind; the second proposition states that this innate structure is a set of innate ideas, and the third proposition holds that the set of innate ideas correspond to a set of non-trivial synthetic linguistic universals.⁽¹⁾ Thus a plea for innatism as proposed

I. Moravesik, J.M.E : *Linguistic Theory and the Philosophy of Language, Foundation of language, 1967. P.224.*

by Descartes has regenerated with the speech of Chomsky.

It is said that the rules of language which constitute the competence of a child are mentally presented. They are nothing but the outcome of some innately possessed organising principle. So one can say that the study of grammar as proposed by Chomsky is nothing but a study of the mind. So to study of language of a person is to study his mind. This recalls the *rationalism of Descartes, and explicitly juxtaposes this with the empiricism of Quine*. The slogan is “language is innate.” This slogan, *language is innate* is seemed to be radical and so counter-intuitive in the face of existence of close on 10,000 different languages in the world, that it is necessary to summarise and evaluate the evidence for the claim and try to undermine the various kinds of counter-evidence that have been presented. At various times, Chomsky has presented many different kinds of evidence in favour of the claim that language is in large part genetically determined. These include the speed and age-dependence of acquisition; convergence among grammars, analogies to vision and other modular abilities, species-specificity, the “over-determination” of language acquisition in deaf and blind.

We think, following Chomsky, that the most viable witness of the slogan *language is innate* can best be apprehended in the process of language acquisition. It is reflected in solving the question: how a child acquires the mastery of his language? Gaining the mastery of language is a process of language acquisition. A child as being endowed with a set of abstract categories and rules which he applies to absorb and internalise the data of the language he is learning. At first the child is innately acquainted with a set of substantive and formal rules. Then he unconsciously acquires the device how sentences are produced and comprehended. Then he is exposed to the utterances of the language he is to learn. He then comes to know that many of the hypotheses he formulates do not conform to facts about the language: while some hypotheses do. Eventually, he comes to accept, again unconsciously, only those hypotheses which enable him to give correct interpretations of the language. In this way

he gains the mastery of his language. The acquisition process of language of a child discussed above is very much similar to the experimental process as adopted by scientists. A scientist encounters his experimental data with a set of hypotheses as to the nature of the data. He then comes to know that some of these hypotheses are compatible with observed data, while some others are not. He then utilises compatible one for constituting his scientific theory. The only difference between child's acquisition of hypothesis and scientific hypothesis is that unlike scientist a child approaches the data and then internalises it with a set of hypotheses framed in terms of certain innate universals. But this does not undermine the role of experience in the acquisition of language. How can a child be enable to test his hypothesis if he does not hear the utterances. It is only through the process of experience that his innate mechanism is made possible. Katz expresses Chomsky's idea by saying that "experience serves not to provide the things to be copied by the mind, as in the empiricists account, but to help eliminate false hypotheses about the rules of language".⁽²⁾ By advocating innatism, Chomsky aims at to highlight two interesting areas of linguistic knowledge. Firstly, he admits tacit knowledge of grammar which we have internalised and which constitute our competence. Secondly, he also admits innate possession of those forms and categories, which ultimately explain our competence. He also insights that a child can acquire a language only if it follows from the universals that are innately determined. Thus it proves that innateness is fundamentally an issue of how a person acquires a language. To learn a language, says Chomsky, is to develop a theory which enables internalisation of a set of linguistic data. It also helps to generate capacity to produce an infinite number of sentences.

But the problem is how a child can develop such a theory. It is true that a given set of linguistic strings can be equally taken care of by alternative grammars-- grammars which are not manipulated by any innate scheme. This makes sense to say that there may have several alternative grammars which can be used to produce relevant sentences with the same structural descriptions, but all of which (Grammars) are not exhilarated by innate schema. So there

2. J.J Katz : *The Philosophy Of Language*, New York, Harper and Row, 1966, P-278.

underlies a selection problem on the part of the learner. This is where innatism comes to our aid and thereby serves a useful role. It is important to note here that there are people who think that by admitting innatism Chomsky does not succeed to reconstruct rationalism over empiricism. Even Quine has claimed that behaviourism with its empiricist inclination is upto its neck in innate mechanism. Here the point, however, is not to dig up or examine whether this innate structure dictates the hypotheses formable on the basis of the data. The fundamental distinction between Chomsky and Quine is that unlike Quine, Chomsky holds that facts about language and its mode of acquisitions are under the limitations imposed by the innatism of the human mind.

It has already been pointed out that a child can develop the so-called grammar as proposed by Chomsky by his linguistic competence. Linguistic competence by and large helps the child to find out the relevant structural descriptions of the data to which he is exposed. He thus enables to cultivate a set of rules which relates the structures. The ability to relate structures gives rise to a formidable insight in favour of innateness. The structural similarities of sentences cannot be duplicated as a hypothetical automation. Or in other words one cannot acquire language learning abilities by hypothetical automation. For example, one can get interrogative sentence, say, *Is Ram good?* from the sentence *Ram is good* simply by replacing *is* in front of the sentence. But does it mean to say that this principle holds good for all other sentences which are structurally similar to this one. Can we say : *Is the woman who winning is tired* is the correct interrogative sentence obtained from: *The women who is winning is tired?* Certainly not. So mere hypothetical automation does not help us to acquire language learning abilities. It is therefore reasonable to argue that the child has not innate recognition of structure--a structure which helps him to acquire language learning abilities unconsciously. He must possess an innate tendency to construct certain kinds of relevant rules. Thus, we can say that a child can develop as well as construct the relevantly constrained grammar without being automatised.

A question may arise at this juncture. The question is: Is it possible for

a human being to learn a language, which is not the outcome of innate schematism? Is it possible for a human being to have acquired language by applying technique, which is not indebted from innatism? Behaviourism of course, gives an affirmative reply to this question. Chomsky, however, does not agree with the behaviourism. Like behaviourism, Chomsky does not find any crucial role in language learning by using symptomatic devices, such as, stimuli, responses and reinforcement etc. Chomsky, however, recognises eliminative induction as proposed by Cohen as one of the best alternatives to innateness as an account of language learning. For him eliminative induction as an account of language learning, covers general learning strategies as against specific ones. He finds considerable significant contribution of their method in scientific discovery. But still Chomsky is in circumspect to admit Cohen's eliminative induction. For him although Cohen's eliminative induction may be adequate for language learning, still it lacks to specify how admissible hypotheses are to be developed in the beginning. Innate schematism, on the other hand, can provide such specification. So one can say that the method of eliminative induction, if not to be empty may be supplemented with an initial schematism that limits the class of humanly possible grammars. Unlike Cohen, Chomsky does not agree with the analogy between language acquisition and scientific discovery. Cohen claims that if the general capacity for eliminative induction suffices for scientific discovery, it suffices too for language acquisition. But this strategy against innateness will not work as acquisition of language primarily relies on our ability to form admissible hypotheses. But eliminative induction, as we see, is a theory relating to testing and confirmation.

It appears from the above that Chomsky argues against any language learning proposal other than innate mechanism. For him no such proposal other than innate mechanism enables to highlight how a child can acquire a language within a short time. He strongly affirms that no such learning process is involved in the process of language acquisition. Language acquisition should be confined within the framework of innate predisposition. In this sense language is a matter of growth rather than of acquisition. Language is growing

up through interaction with the environment, Chomsky says, "... in certain fundamental respects we do not learn language; rather grammar grows in the mind."⁽³⁾ He further continues, "When the heart, or the visual system or other organs of the body develop to the mature form, we speak of growth rather than of learning. Are their fundamental properties distinguishing the development of physical organs and of language that should lead us to distinguish growth, in the one case, from learning in the other? Perhaps, but it is not obvious. In both cases, it seems, the final structure attained and its integration into a complex system of organs is largely predetermined by our genetic program, which provides a highly restrictive schematism that is flashed out and articulated through interaction with the environment (embryo logical or postnatal). There are certain processes that one thinks of in connection with learning, association, induction, conditioning, hypothetical-function and confirmation, obstruction and generalisation and so on. It is not clear that these processes play a significant role in the acquisition of language. Therefore, if learning is characterised in terms of its distinctive processes, it may well be that language is not learned."⁽⁴⁾

The above recall of Chomsky gives two important clues. First he denies the common-sense view and secondly by denying the common-sense view he tries to establish a radical view. The common-sense view regarding language is that language by and large is known via media of learning processes. Chomsky denies it. He then establishes his view what we may call radical one by claiming that language (grammar) grows in the mind. This view brings innateness in the limelight of language acquisition. By admitting an innateness hypotheses, Chomsky, however, does not invite a metaphysical thesis which may be supposed to be empirically falsifiable, nor he admits his innateness hypotheses as a mere tautology. Rather, Chomsky has always tried to establish that the so-called innate schemata he introduces are open to empirical revision. One may, of course, try to undermine the view of Chomsky by claiming that there may have some languages which do not confirm his principle. But this does not mean to say that his proposed universal grammar is vitiated by default.

3. *Chomsky Noam : Rules and Representations, Oxford, Basil Blackwell, 1980, P. 134*

4. *Ibid, P-34*

It only confirms that these principles should be supplemented by richer innate principles.

Chomsky's conception of innate mechanism seems to be problematic if we remind Goodman and Searle. Goodman says that one might argue that the shapes and colours in paintings are in some sense surface (obvious) features, while the features that identify a picture as by a certain artist or of a certain school or period are in some sense deep (or obscure). Yet we learn with rather few examples to make of the latter subtle distinctions. Must the mind therefore have been endowed at birth with a schematism of artistic styles? This remark of Goodman certainly goes against Chomsky. For Goodman to identify a painting by a certain artist in the process of learning does not confirm that the mind be endowed with innate schematism of artistic styles. Likewise there seems no point to affirm why this should be so in the case of language learning. It seems irrelevant on the line of Goodman's perception that a child should be equipped with innate structures and principles to explain his knowledge.

Chomsky's view seems to be problematic if we adhere to Searle's view of language. According to Searle language is an institutional fact. Searle goes on to say that a child learns many complex patterns of social behaviour in the same manner in which he learns his language. Searle view also recalls the view of Later Wittgenstein. For Wittgenstein languages are rule following and the rules are accredited by our society, custom. So on the part of Searle, it is unlikely to affirm any distinct innate schemata to account for the child's learning of complex patterns of social behaviour. Why should things be otherwise in the case of language acquisition? Chomsky, however, does not work with the time of Goodman and Searle. He always intends to draw a line between mastery of language and mastery in intellectual fields. Mastery of language is basically linguistic while the mastery of intellectual is non-linguistic fields. He is of the opinion that unlike the mastery of language, the mastery of all such fields, such as artistic and non-linguistic social fields, is radically affected by intelligence and environment. Acquisition of language does not require intelligence and environment. Chomsky claims that even children of low

intelligence and brought up in a disadvantage as linguistic competence attain mature linguistic competence. This makes sense to say that apart from practice high intelligence, high environment, a child can acquire the mastery of language. This is made possible, claims Chomsky, simply for the fact that the child must possess innate capacity for absorbing language. One may claim quite reasonably that the upper socio-economic status children are more advanced than the lower socio-economic status children. But it is confirmed objectively that recent work on language acquisition has tended to neglect this fact.

Should we then make a resolution that social environment does not play any role in developing one's language. There are ample evidences that learning or mastery of languages like mastery in other fields, is equally a product of circumstances training and up bringing. Although it is true to say that language is not unique in the perspective of human capacities, but it continues with other human capacities, viz., his intellectual, artistic propensities, or his ability to behave appropriately in non-verbal social intercourse. All such things, of course, do not call for any innate predisposition or inclination. Moreover, if innateness hypothesis is supposed to be the only language acquisition device, then why all people do not have equal mastery in language? Does not social environment play some key role in accounting for this difference that we see in society?

So we can say that beyond innate mechanism, social environment cannot be ignored. Language learning, we think, is not a matter of making hypothesis in terms of innate schemata. It is a story of many trials and errors. It is a story of gradual upliftment from simple to complex. Language is not a single grammatical whole which a child has to penetrate in a short time. Rather following Wittgenstein we can say that language consists of different language games. The learning process of language of a child is a process of gradual upliftment from simple to complex language-game. It is always dangerous to think of language as a mere formal structure. Language must be rule-following. Rules of language are penetrated by a series of beliefs and expectations. These beliefs are the shared responses of a community constituted by its common

practices, modes of activities. In this regard learning is a part of a child's bit by bit absorption into the human activities that surround him. Language learning of a child is nothing but his gradual participation in the common practices, modes of activities, and the belief and expectations that are embedded in him. Keeping Wittgenstein view of language in mind, we can say that language learning is mere a part of a child's growing participation in a common form of life. This is something what we miss in Chomsky's conception of innate mechanism.

It may be the fact that the child has a native ability or talent. He must possess a faculty for language. The following dialogue of McNeilage is an excellent illustration of this native talent of the child:

- “Child : Nobody don't like me.
 Mother : No, say 'Nobody likes me'.
 Child : Nobody don't like me.
 (Eight repetitions of this dialogue)
 Mother : No, now listen carefully:
 Say, ' nobody likes me'
 Child : Oh ! Nobody don't like me”.⁽⁵⁾

The above dialogue is a clear indication of the child's own grammar. It indicates that the child is dominated by the decrees of the rules of his own grammar. He is commissioned by some implicit rules in mind that he fails to notice. But what is most important to be observed here is that this innate analysis does not far reflected unless socio-cultural factors are taken into account.

The socio-cultural factors function in a hierarchial order. A child starts with speech. The root of speech is sound. At this stage a child enables to make sounds and responds to sounds. The ability to make sounds and responds to sounds is the mark of edification out of which his ability to speak grows. But

5. Fowler Roger : *Understanding Language*, London; Routledge and Kegan Paul, 1974, P.207.

the question is: how does the sound making ability turn into speech? It seems that the child in his early stage makes discomfort cries and comfort noises. This means the earliest indication of meaning in the child's vocal behaviour. He subsequently is able to connect his discomfort cries and comfort noises with non-linguistic bodily conditions. But it is thought that even at this stage the child's behaviour pattern is affected by a social context in the form of the response of the parent to the child. Gradually the child enters into the next stage which is called babbling stage. Here the child talks in a way that is difficult to understand. At this stage the child plays with sounds. It (babbling) is a means by which a child through repeated practice acquires skill in making sounds. So, babbling gives him the beginnings of the highly complex skills that go to the production of the sounds of speech.

Soon after the babbling is narrowed down by imitation, the child is trying to imitate the sounds he hears around him. This stage is called mirroring stage. Here the child has an increased incentive to repeat the word. It becomes one of the sound groups most likely to recur in his babbling. With the growth of infantile speech there is also the growth of meaning. Next comes stabilization of meaning. Here vocal gestures are gradually narrowed down to definite reference. This process is largely indebted to social situation. For example, to confine the word *ma ma* to one referent is due to the fact that the mother responds to the child's utterance of the word more than any other person. When mother comes to the child, she says Mama is here! By imitating her mama, she not only imitates her word but also its meaning. In this way stabilization of meaning takes place. In this process the child gradually moves closer to closer to the conventional use of language. Lewis says "... Ultimately these speech forms and those meanings persist which are given social approval during the child's intercourse with others." ⁽⁶⁾

What we have seen above is that language learning is not a matter of innate schemata but a gradual process. Learning of language at every stage of a child is nourished by interaction between him and those around him. There is no reason why language learning should be pasted only to one's innate mental

6.] Lewis, M. M. : *Language, Thought and Personality*, New York; Basic Books, 1963.P. 54

equipment. In this regard Chomsky's theory of innate mechanism seems to be defective. Fowler's observation makes strong our stance against Chomsky. Fowler says, " Language in infancy seems to be predominantly the creation of the child; one suspects that at a later stage nurture plays a more prominent part than nature. The child going to school is subject to a battery of social forces which he did not experience in the relative privacy and simplicity of the home. His priority now is not to learn how to talk, but how to behave verbally according to the socio linguistic conventions of his community. He has to learn when to talk and when to remain silent-- this is not an authoritarian requirement, but one of the fundamentals of the linguistic fact within a community He has to learn to adjust the style of his utterances to the nature of the context of situation, by selecting some sentence-forms on some occasions, eschewing some types of construction totally at other times, and so on ... He has to learn to distinguish and exploit the vast range of functions performed by language in a social setting. By the age of five or six he has proved himself a true speaking animal; in the following years, developing language is one of the chief forces in his becoming integrated as a social animal too." ⁽⁷⁾

The first babbling may offer clues to the origin of the languages. Baby talk is not all gibberish it is perhaps the earliest forms of human language. In the current issue of the journal *Science*, Dr. Peter MacNeilage, Professor of Psychology of the University of Texas, in Austin, says that the evolution of language was from simple sounds and easy mouth movements. His findings go against the prevailing theory on language, put forth by linguist and author Noam Chomsky in 1950s, which says that the speech is a uniquely human trait, a genetic gift. The first sounds that the infant makes are formed by the natural coordinated motion of the lips opening and closing and the tongue's movements on the roof of the mouth. Early humans articulated such verbal patterns, suggests MacNeilage. With time, meaning was associated with these spontaneous, almost effortless utterances.

Our ancestors, speaking and understanding these sounds enjoyed what anthropologists call "selective advantage". Early human beings may have

7. Fowler, R. : *Understanding language, op. cit., P. 210*

communicated with these simple utterances allowing them to push off dangers. Early talkers survived, reproduced and helped language evolve in our brains through time, says the scientists.

Chomsky, however, felt differently. According to him, genes for language appear suddenly when human evolved from primates. What makes humans so different from animals, he says, is our ability to use language with words and grammars. A major change in the structure of our brains, due to these new genes, must have occurred to give us our syntax.

MacNeilage suggests a slower evolutionary process. He says that our ancestors and other primates have the mechanical resources to make these simple kinds of sound patterns. The material, Chomsky observes on the other hand, for doing speech did not require a genetic shift from primates to humans. These common signals creating by opening and closing the mouth have been present in our primate ancestors. Humans borrowed a mechanical capacity already in existence in primates to produce speech, Chomsky observes.

MacNeilage and Colleague Barbara Davis of the University of Texas in Austin studied the sounds of six infants during their first 7 to 12 months, and the first words of babies aged 12 to 18 months. They found that babbling followed a pattern of consonants followed by vowels. They compared the patterns of the babble to the structure of words 10 languages, including English, Maori, Japanese, Swahiti, French, Hebrew and German. The syllables in thousands of words tended to follow the same patterns as the infants' sound. They found that the patterns of the babies' sounds were similar to those in words that other researches have suggested might have been *ancestor* words. These are words that mean similar things in different languages, such as *mano* for man and *mena* for think. Since they are common across languages, they may have been the earliest words spoken, historical linguistics suggests.

Followers of Chomsky challenge MacNeilage's study. "The argument of MacNeilage is nonsensical", says Steven Pinker, a Chomsky Colleague and Massachusetts Institute of Technology, Professor of brain and cognitive sciences.

If you and I did nothing but babble *mama* and *gogo*, then perhaps MacNeilage would have a point. But we converse in meaningful words and sentences. And that's what Chomsky's theory is all about. Even if raw material for speech did not require a genetic shift, which itself is dubious because chimps don't babble or talk in syllables, the rest of language, words, phrases and sentences, surely did. Another Chomsky follower adds that there is a fundamental difference between words and sounds and there is a mechanism inside our brain that allows us to make the distinction. But MacNeilage clarifies that the derivation of both comes from the same simple jaw movements. While linguists debate, we will still be fascinated by baby's babble.

A Comparison Between Descartes And Chomsky

One thing seems to be clear from the above that the study of grammar (T. G. G.) reflects that men are very much equipped with innate knowledge. It owes its theoretical origin to the rationalist philosophers of seventeenth and eighteenth century. Chomsky and his followers argue vehemently that acquisition of language seems to be impossible unless it is supposed that children possessed certain kinds of innate knowledge. In his book **Cartesian Linguistics** Chomsky admits that the major items of linguistics viz., the creative aspect of language, the deep surface structure of language, linguistic universal, nativism can all be shown to have its origin in the tradition of Cartesian thought. This indicates how far the so-called mentalism of Chomsky is related to the Cartesian tradition. In admitting the view that his hypothesis is considerably similar to Descartes. Chomsky writes, "It seems to me that the conclusions regarding the nature of language acquisition ... are fully in accord with the doctrine of innate ideas so understood, and can be regarded as providing a kind of substantiation and further development of this doctrine." ⁽⁸⁾

Chomsky elsewhere admits the indebtedness of Descartes. This

8| Chomsky Noam : *Recent contribution to The Theory of Innate Ideas, Syntheses, 1967, P-10.*

indebtedness to Descartes is two folds: viz.; (1) language is the medium of expressing one's thought and (2) there are innate ideas. For Chomsky both the theses have far reaching significance for the study of language. The creativity of language which is supposed to be a central question in linguistics is characterised by Chomsky as Descartes' problem in linguistics. These two theses are intimately related to each other as they presuppose a **philosophy of mind** without which both these theses will have no existence. This again witnesses the **mentalistic turn** of modern linguistics. According to Chomsky language has an intimate relationship with mind. Descartes, however, rules out any mechanical explanation of mind and language. If grammar is supposed to be mentalistic in origin, then it should not be subjected to mechanical explanation. In this regard mind or the thinking substance (*Res cogitan*) becomes crucially important for Chomsky in the study of language. Chomsky finds four Cartesian theses which form the common core of the two tradition of linguistics. Among them three are said to be substantive while the other is methodological. The three substantive theses are: (1) the creative use of language, (ii) the distinction between the surface and deep structure of language, (iii) the acquisition and the use of language as based on the innate capacities of the human mind. The lone methodological, thesis is : Explanation is more fundamental than description of language. Substantive theses are taken together to constitute Chomsky's notion of linguistic competence. The third substantive thesis also works as a presupposition as without it the creativity of language cannot be explained. The creativity of language, says Chomsky, is the central fact to which a linguistic theory must address. It presupposes the rationalist philosophy of mind. Thus it appears that the central question in linguistics is inseparably related to a certain conception of mind.

Descartes' Problem in Linguistics

Let us explain the root of Descartes problem in linguistics. Descartes problem in linguistics is related to the problem how to explain the normal

creative use of language? What does the creative use of language mean? In what sense a language is said to be creative? It is said that the creative use of language does not imply any special use. The normal use of language is itself creative. This is simply for the fact that it allows novelty and freedom. It means to say that the use of language is accompanied by some unique characteristics. These characteristics are possible only when we assume that the speaker has the ability to form new sentences which are characterised by these unique features. So the prime task of a linguistic theory, says Chomsky, is to give an account of this ability possessed by all human beings. This is what constitutes Descartes problem in linguistics. But the questions are : How does Descartes approach this problem? And secondly, what implication does he draw from the fact of creative use of language? Let us explain these two questions in turn.

There we find at least two accredited sources of resolving Descartes problem in linguistics while he approaches the creativity problem. The first is that language is an expression of thought and the second is that language is not amenable to any mechanistic explanation. If language is supposed to be an expression of thought and thought is said to be essentially creative then language is also said to be creative. So the creativity of language is identical with the creativity of thought. But how the creativity of thought is reflected in language? In answering to this question it is said that like language, thought is unbranded and autonomous. Like thought the creativity of language use may be said to have the property of being "both unbounded in scope and stimulus free". This establishes how creativity in thought is reflected in creative use of language. Secondly, it is claimed that the linguistic behaviour of man is not subjected to mechanical explanation. This makes sense to say that language cannot be predetermined. If this is to be the case, then we can say that man is free in his use of language. This again indicates that language has a mentalistic basis. To establish the point that the creative use of language is the result of certain mental activities the Cartesians proposed a test. It is a test where a parrot is so conditioned that it can speak only after a given stimulus. The result will show that whatever parrot will say will be strictly determined by the conditions which

were already set before. But this would not be the case of a human mind. Because human organism having a mind has the freedom to express its thought by using the language appropriate to it. So the creative use of language is intrinsically related to mind. It will not be unreasonable to make an inference here that the organism which exhibits the creative aspect of language use must have a mind like ours. This is a key to the difference between a human being and a machine. Chomsky makes the distinction between *compelled to act* and *inclined to act* owing to bring out the difference between a human being and a machine. Thus the Cartesians postulation of mind becomes necessary for the true characterisation of human linguistic behaviour. Chomsky estimates Descartes proposal for the mental as a scientific approach to language.

Chomsky takes the help of Cartesian resources for developing his own system of grammar in order to explain the creative aspect of language use. Following Descartes, he starts from the premise that language is free from stimulus control. Accordingly, generation of new sentences cannot be predictable on the basis of external stimuli. Chomsky apprehends the creative use of language as a rigorous and systematic explanation. For him creativity is intrinsic to language and it is made possible solely due to the nature of grammatical rules. It was originally proposed by Humboldt. For Humboldt language is an active process and it is not something which is complete. He holds that language use is a creative act and it cannot be interpreted as the mechanical reception of an inert product. In this connection Humboldt proposed the notion of a language universal or form of language which is said to be based to man's linguistic ability. It refers to the notion of a generative grammar. According to Chomsky, Humboldt's notion of *form of language* can be interpreted in terms of a generative grammar. Humboldt makes it explicit that language is a generative process governed by a finite system of rules. It is infinite both in terms of its scope and product. These generative rules constitute his *form of language*.

The foundation of deep and surface structure of language also lies submerged in the Cartesian thinking. According to the Cartesian thinkers

language has two aspects, viz., sound and meaning. The view that language has two aspects-- sound and meaning, is same as to say that it has an inner and outer aspect. In concrete terms it can thus be studied either "from the point of view of how it expresses thought or from the point of its physical shape". These correspond to semantic and phonetic interpretations of the sentence. These two systems of interpretations may be respectively characterised as the deep and surface structure of a sentence. According to Chomsky the deep structure of a sentence is an underlying abstract structure that determines its semantic interpretation. The surface structure of a sentence, on the other hand, is the manifestation of the observable organisation of language that determines the phonetic interpretation. Through the phonetic interpretation the physical form of the actual utterance is related to its intended form. However, it is important to note that these two structures may not be necessarily identical. Chomsky says that the deep structure may not have point by point correlation to phonetic realisation.

So far from the above one thing is clear that language cannot be thought of without its relation to mind. The study of language cannot, therefore, ignore the mentalistic origin of language. Knowledge of language, says Chomsky, is not acquired through external means, rather it is said to be the part of the innate structure of human mind. Descartes theory of innate ideas thus has a special relevance in Chomskyan linguistics. It may be claimed emphatically that rationalist theory of mind serves as the background theory to Chomsky's system of linguistics. Let us show how does Chomsky develop his theory of language by assuming Descarte's theory of mind at the background.

According to Chomsky a child cannot acquire his knowledge of language entirely from what is given. One reason for claiming this is that the data is often found to be inadequate and scattered, but what is learned exhibits uniform pattern. This uniformity is not determined simply by the data itself. It is the mind which is equipped with the knowledge of certain principles and ideas which are innate in nature. They are characterised as linguistic universal both by Cartesians and Chomsky. Our knowledge of those universals is unconscious.

They are the preconditions of language acquisition and hence are not taught. If we do not presuppose that a child possesses an unconscious knowledge of the rules of grammar, we cannot explain how a child on the basis of inadequate data enables to know the highly complex grammatical rules of his language. The child's acquisition of language can only be justified by assuming that there is an innate knowledge of language with which the child is born.

So far we have examined how far Chomskyan linguistic is influenced by Descartes' philosophical thinking. But it is true that Chomskyan linguistics differ from Cartesian linguistics on substantial counts. It is not true to say that Chomsky's account of language acquisitions loses its ground once it lacks of similarity with other doctrines. To be fair Chomsky does have reservations about the affinity between his theory and older ones. He admits that "similarities have been stressed and divergences and conflicts overlooked" ⁽⁹⁾

Copper holds that to claim any similarity between old and new innateness hypothesis is illusory. He goes on to say that there is no single, uniform or coherent doctrine of innateness among the rationality. Of course, there are certain salient feature of their doctrines which were adopted by most rationalists. But he claims that with these features no significant affinity can be made in the new hypothesis.

Copper attempts to pin point the differences between Chomskyan linguistic and Cartesian linguistics. He is concerned with the three constitutive notions of Chomsky's linguistics, namely innateness, universality and necessity. Since these three notions also characterise the very nature of Cartesian thought, Chomsky's claim is that his theory of language is on the same ground which is Cartesian in nature. Copper, however does not agree with this commitment. He finds a considerable difference between the two methods as far as the use of these concepts is concerned. Copper says that in Chomsky's linguistics the term *innateness* is used to mean a kind of disposition, whereas for Descartes it is used to mean that human beings know certain truths and ideas prior to experience. As far as the use of the term *universality* is concerned, there he

9. Chomsky Noam : *Cartesian Linguistics*, New York, Harper & Row, 1966, P.73.

finds also considerable difference between Chomsky and Descartes. By the term *universality* Chomsky means universality of human knowledge which is universally and generally possessed by all human. This is totally different from the rationalists. For Descartes universality is meant to be the knowledge of universals - the non-particular truth. A similar kind of difference is found when we come to the notion of necessity. For the rationalists necessity means something non-contingent, whereas for Chomsky it means a pre-requisite for language learning. In view of these differences, Copper concludes that Chomsky's notion of innateness is not similar to the Cartesian notion of innateness. It is a new sense in which the notion is used and thus the distinction should be made between, what Copper calls, innateness-Old and New. ⁽¹⁰⁾

Re-examination of Copper's Standpoint

Let us examine how far Copper's objection against Chomsky is tenable and how far his claiming of new innateness is justified? We think Copper fails to understand Chomsky properly. He fails to see that Chomsky is using the same traditional notion but is expressing it in a language which is suitable to his enterprise. Consequently, it is needed to reformulate many of the notions that we have in the rationalists tradition. But from this it does not follow that it has changed their essential content which subsequently leads to the formulation of a new concept of innateness. Unlike Copper we think that the content of these notions remains unchanged. But what was changed was their outward expressions.]

According to Copper the so-called innateness as presupposed by Chomsky can be called a dispositions concept — a concept which is conceptually far away from that of Descartes. Copper understands the term

10. Chomsky Noam : 'Philosophical Review', Vol.84, 1975, Pp.70-87.

disposition in the line of behaviouristic sense. For him the term *disposition* has a behaviouristic meaning and hence it is lacking mental reality. But Copper has failed to observe that *disposition* has a meaning which is other than behaviouristic. Here we find an assimilation between older rationalists and Chomsky. The older rationalists apprehend disposition in a non-behaviouristic way. In this regard one cannot rule out Descartes' interpretation of this term innateness as disposition. According to Descartes innate ideas exist within us in the form of capacities and capacities exist in mind potentially and are thought to be consciousness only in a situation that is appropriate to it. Innateness for Descartes, is thus meant to be a potentially disposition. So it can legitimately be claimed that Descartes has got the notion of disposition while he formulates his theory of innate ideas. Descartes opines that a cognitive act -- an act which is necessarily a conscious act, is the outcome of certain innate ideas. Thus for Descartes innate ideas exist as potentialities and it is formulated within the broader theory of disposition where the term *disposition* acquires a non behaviouristic interpretation.

Chomsky's notion of innateness cannot equally be taken as disposition in the same sense in which the behaviourists understand by this term. In this regard Chomsky's use of the term disposition is very much similar to Descartes. There underlies no substantial difference between the two as both of them formulate their respective theories in a similar manner. It may be pointed out here that Copper's objection against Chomsky is not tenable as the issue which he intends to attack is not an issue. The failure of Copper actually lies in the fact that he has failed to apprehend that the term *disposition* has a non-behaviouristic meaning. This is evident from Chomsky's acceptance of Descartes interpretation of disposition as real power existing in mind. In addition Chomsky like Descartes also admits the active role of power, where power is meant as growth. Chomsky makes this idea while discussing language learning. According to Chomsky the process of learning requires or involves a few distinct cognitive states. Knowing English, for example, is a cognitive state which starts from the initial state and it finally reaches at the steady state. This initial state is found to be common to all human species and therefore is

said to be innate. It consists of rules and principles which are specific to language faculty. These rules and principles together form universal grammar. The universal grammar i.e. (the initial state) moves towards the steady state (the actual state) where the speaker attains the grammar of his language. Here Chomsky's method is very much similar to the Cartesian methodology.

The non-behaviouristic understanding of disposition occupies the central place in Chomsky's theory of innate ideas. It is very much attached with linguistic competence. Chomsky has said that the notion of linguistic competence cannot be understood in any behaviouristic term. He understands the notion of competence as a system of knowledge — *a mental structure consisting of a system of rules and principles that generate and relate mental representation of various types*. This makes it clear that Chomsky's notion of innateness cannot be taken as dispositional in the same sense in which the behaviourists understand by this term.

As far as universality is concerned, Copper also finds a difference between Descartes and Chomsky. Descartes apprehends universal truths in the sense of non-particular and thus universality of innate knowledge implies knowledge of universal truths. But Chomsky understands universality of innate knowledge from the other side. For him universality of knowledge implies knowledge that is universally possessed. It is further observed that since Chomsky's Universals are not universals in the traditional rationalists sense, they are not innate by the rationalist criterion. According to Copper one of the important marks of the rationalist concept of the universal is that *no one could fail to recognise them (universally known truths) as true*. Chomsky, Copper says on the contrary, understands universal in a different way. He understands universal in terms of language. This means Chomsky's universal is linguistic. Chomsky speaks about grammatical and phonetic universals and thereby claims that these universals will be present in each and every language. Chomsky's notion of universal differs from Cartesian standpoint on universal, Copper observes, as he maintains that the so-called grammatical and phonetic universals need not be found in each and every language. That is why Copper has claimed that

Chomsky's notion of innateness is very much different from that of Descartes.

But we think Chomsky's notion of universal is no way essentially different from the rationalists' notion of universal. The only difference that we find arises due to the context in which they are applied. This is particularly true in the context of Chomsky whose main concern is with languages. The difference among particular languages is a fact. So the most challenging problem before Chomsky is to explain the witness of universals in spite of the difference among languages. Chomsky, however, tries to overcome this difficulty by assuming that the principles and categories of universal grammar exist in all human beings as the part of their common genetic endowment. Due to this genetic endowment the knowledge of universal grammar must be universally possessed by all human beings. But what is important to point out that although these truth are universal, they may not all have application with respect to different languages. In this regard language acquisition plays an important role because it is supposed to be the only way through which one can arrive from universal grammar to a particular language. There underlies a unique relationship between the universal grammar on the one hand and the linguistic differences on the other. Learning of a language is nothing but a process which passes through different cognitive stages of a learner. It is started from the initial stage -- the universal grammar and finally reaches at a stage which is named the attained stage -- a stage in which a child may acquire his own language.

Like universality, says Copper, the concept of necessity is also supposed to be the essential or defining feature of innate ideas. According to the rationalists, the concept of necessity is very much a logical concept. Accordingly, necessary truths are conceived as those which are true in all contexts of application. But for Copper, Chomsky's notion of necessity radically differs from the rationalist concept, simply because unlike rationalist, he apprehends the concept of necessity as an empirical concept. Empirical concept of necessity is used by Chomsky in the sense that it requires to be fulfilled. Like the logical sense of necessity it is not spontaneous. We can say here that although Chomsky does not use the notion of necessity in a strictly formal

sense, but this does not make his position radically different from the rationalists. It is noted that in some situation rationalist too can have the notion of something being empirically necessary. It is noted that at times rationalists used innate ideas in the sense of empirical requirement because without empirical requirement, as they argue, there will not be any cognition.

Does it mean to say, from the above, that there is no difference between Descartes and Chomsky as far as the concept of innate ideas is concerned ? We have already mentioned that there underlies a fundamental distinction between them. The distinction is that unlike Descartes, Chomsky examines innate ideas in the linguistic level. He uses the theory of innate ideas to language. In this regard, we can say that Chomsky's deviation from Descartes is not substantial and it should be seen in relation to the primary concern of his enquiry. Since linguistics is the context of enquiry, Chomsky's attempt is to conceptualize Descartes theory of innate ideas in such a way so that it can be shown to be significant for the study of language without distorting the linguistic realities. So the deviation that we find in the case of Chomsky can best be claimed to be a methodological deviation than as a deviation in terms of its content.

Linguistic Universal

Chomsky's concept of linguistic universals witnesses the concept of innateness. Chomsky holds that in spite of the surface differences in language, all languages by and large have many basic similarities and these are called *Universals* of language. Chomsky says, "... Any child will pick up the language of any community in which it finds itself. Rather than postulate that every child is born with a hundred innate grammars ... It is a better guess that all languages share a single underlying structure and that children are born with a disposition to follow this structure in projecting an actual language on the basis of what is said around them".⁽¹¹⁾ According to Chomsky there are linguistic universals which are implanted into our brain as part of our genetic inheritance. Linguistic

11. Chomsky, Noam : *Language and Mind*, Hurcourt Brace & World, 1968, P.23.

universals are programmed into our brain as part of our innate mental equipment. A child can learn any human language even on the basis of inadequate information. This indicates that he is innately equipped with universal grammar.

One may claim that the language using Chimpanzees stands as a threat to the Chomskyan claim that humans are innately endowed with linguistic skills. Since Chimpanzees can be taught to communicate with a humanly built linguistic system, human language cannot be said to remain unique to man. But this objection is not tenable as from the fact that Chimpanzees can be taught to speak human languages, it does not make sense to say that humans are not innately disposed to learn languages. Man can learn to build bird's nests, but from this it does not follow that birds are not innately equipped to build their nests. Unlike the language using Chimpanzee, the linguistic development of a child is genetically determined.

But if it is supposed, after Chomsky, that linguistic development is genetically determined, then we badly miss the all important feature of language - i.e, its communicability. The view that language is innately endowed with a universal grammar does not seem to be effective unless its socio-cultural factors are not considered. Chomsky overlooks the crucial fact about language that it is fundamentally a social behaviour. Language is no longer a self contained system -- a system which is completely guided by its syntactical structures and rules independent of context and ways of life. The real purpose of language can be focused by the following remark of Searle. Searle reads: "I think that the most interesting question about syntax have to do with how form and function interact - they have to do with the questions *what are these syntactical forms for* ? Language, for me, is to talk with and to write with, so I want to say that the study of the syntax will always be incomplete unless we get the study of linguistic use" (12)

Following Searle, we can say that the structure of language is influenced by communicative function. Language is not a formalised system by which we can explain the competence of the native speakers only with reference to having

12. Searle J.R. : *Dialogue with Maggee, Men of ideas, Oxford University Press, 1982, P.171,*

an internal representation of such a system of rules.

It is also true to say that human beings from their early stage learns many complex patterns of social behaviour in the same manner in which a native speaker learns his language. If it is very unusual to admit any distinct innate schema to account for the human beings learning of complex patterns of social behaviour, why should things be significantly different in the case of language acquisition ? Why linguistic competence should be regarded as innate? Truly speaking language should not be considered as one and only one unique element in the spectrum of human capacities. Besides this we have also other social engagements, viz., non-verbal social intercourse which ranges from religious ritual. The infinite diverse interpersonal situations are really isomorphic with that of linguistic behaviour. If this would be the case, then why linguistic competence should not be regarded as continuous with other human capacities? So it is not prudent to conceive that language is only a matter of making hypothesis in terms of innate schema. Language learning is a process of many practices. It is a gradual process of a child from simple to complex language - games-- the process which advances a human being from naively to sophistication. This is the point, which Chomsky misses in establishing his innatistic scheme.

Different modes of Linguistic Universals

Although it is true to say that Chomsky tries to build up his linguistic universal on the background of innatistic framework, but at the same time it may happen that the so-called linguistic universals can be well taken care of without involving the innateness hypothesis. Following Putnam we can say that the similarities that we have in all human languages is not for the fact that the form already implanted one's mind, but because of the fact that they have descended from a common origin. Any plea to the common origin is supposed to be authentic simply because it is based on a number of languages share

various characteristics and thereby form a significant group. Putnam says “ It is overwhelmingly likely that all human languages are descended from a single original language, and that the existence today of what are called *unrelated* languages is accounted for by the great lapse of time and by countless historical changes.”⁽¹³⁾

There we have another alternative to the innatist explanation of linguistic universals which may come from what we generally know about human psychology. It is claimed that there we find linguistic universal from the nature of learning which does not require innatist explanation. Here we may convey the idea of linguistic universals by saying that all languages have a preference for suffixing or over prefixing. Osgood has examined this hypothesis. He goes on to say that the process of learning is facilitated in convergent cases. He shows how learning is restarted in divergent cases, where similar stimuli call forth diverse responses. It is proved how prefix order has some correspondence with divergent cases, while the suffix order with convergent cases. There is nothing wrong to claim that language would prefer suffix more to prefix in the interest of learning.

The idea that all languages have sentences of both active and passive forms is the idea of another linguistic universals of different mode. There, of course, underlies a general interest in transforming an active sentence into passive and vice-versa. When we talk about things, there is always some particular thing which we want to highlight over others and accordingly we are prone to use it first. This general propensity or inclination justifies why language should have active as well as passive forms. Let us explain this point with the help of an example. *Jones writes a letter*, is a sentence of active form. Now if we are willing to give preference on the word *Letter* then we have some device for encoding this preference and thereby we have the passive form of the sentence like - *A letter is written by Jones*.

The concept of linguistic universals may be witnessed from the emphasis on the communicative function of language. This theory was proposed by

13. Putnam, H : *The Innateness Hypothesis and Explanatory Models in Linguistics* in J.R. Searle, *The philosophy of Language*, Oxford, 1971, P. 136.

Habermas. Habermas theory presently stands as an adequate alternative approach to the foregoing Chomskyan scheme. Following Habermas we can say that an analysis of language is possible not by taking into account the mere syntactic system but by taking communicative aspect as the basis medium. It is a fact that in speaking language we not only make well formed sentences, but also relate our speech to others around us. Habermas says, "In order to participate in normal discourse the speaker must have in addition to his linguistic competence --basic qualifications of speech and of symbolic interaction (role behaviour) at his disposal, which we may call communicative competence."¹⁴ By the phrase, *Communicative Competence*, Habermas, however, intends to say ideal communication which is completely different from the communication that we normally mean. A communication is said to be an ideal communication only if both the speaker and the hearer stand on the same footing and will not have any disagreement between them regarding the force of the power, or ideology or any other source. In an ideal communication both the speaker as well as the hearer do share equal dignity and honour.

So far we have cited a few alternative explanations of linguistic universals which are not prerogative of innatism alone. Does it mean to say that innateness hypothesis is no longer associated with language acquisition nor with linguistic universal ? Perhaps not. Its importance lies elsewhere. In his recent paper Matthews accuses those who *misconstrue this innateness hypothesis as providing an account of language acquisition*. Matthews has claimed that the ground reality of innateness hypothesis lies not in language acquisition, nor linguistic universals, but the poverty of the stimulus argument. Let us see in what sense Chomsky explains this argument.

Chomsky holds that a child becomes a master of a rich and complex language just on the basis of relatively few sentences. He knows a few grammatical rules (input) and thereby makes an innumerable sentence (output). There underlies a huge gap between input and output which is needed to be bridged. The gap between input and output can be bridged only by admitting to the child a rich innate component.

14. Habermas, J. : *Toward a Theory of Communicative Competence*, in H.P.Dricitzel, *Recent Sociology*, No.2, New York, Macmillan, 1970, P.132.