

## CHAPTER-VII

### **Concluding Remarks**

The objective of this thesis is to explain and examine Chomskyan insight regarding language, grammar and mind. We have seen in the course of our discussion in what sense Chomsky understands language as the mirror of human mind. We think that Chomsky makes himself famous not only by introducing a dynamic and scientific understanding of language, he equally makes himself famous by turning the philosophy of language into a new dimension. We think that nothing has had a greater impact on contemporary philosophy than Chomskyan theory of language. On one hand he revitalises the so-called rationalist standpoint and on other hand he completely ignores the so-called behaviourism. He completely rules out the semantics of language which was so much prominent in turning philosophy into linguistic domains. In doing all these things, Chomsky was severely criticised by so many prominent philosophers at least in his earlier stages; but subsequently he makes himself unique that nobody can ignore him as a leading proponent of modern linguistic. There is no question of doubt that philosophy in the first half of 20<sup>th</sup> Century had turned into linguistic philosophy and at that time language was predominantly concerned with semantics. This tradition had been dominating before the appearance of Chomsky. But with the appearance of Chomsky the so-called linguistic turn which was based on semantics further takes a new turn. According to Chomsky, it is wrong to hold that language is something that can be used externally. For him language is purely syntactic and it can be apprehended internally. Thus, Chomsky introduces a linguistic turn in philosophy by denying the old one. In this regard, he understands language in terms of grammar, which is the outcome of biological endowment and hence determined genetically.

We have seen that the so called grammar as proposed by Chomsky is

not the grammar that we usually and literally mean. For Chomsky, grammar is the outcome of the cognitive faculty of our mind or brain. Chomsky has provided a framework for the construction of theories of language and of grammar of particular languages. But there has been a certain amount of controversy over the ways in which such theories and grammars are to be tested. The so-called grammar as echoed by Chomsky always deserves speakers' intuitions by means of which he can predict that certain utterances are grammatical while others are ungrammatical. Lees says that such predictions can be tested against speaker's intuitions of grammaticality. But Chomsky was wrong or dubious about this sort of direct test. Is Chomsky's example, **colourless green ideas sleep furiously grammatically** deviant or semantically or logically deviant? People have disagreed about this and as Partee notes, Chomsky has changed his mind twice about this example.

When Chomsky introduces his theory of transformational generative grammar (TGG), he thereby provides a powerful framework in which grammars of natural languages could be written. Putnam himself observes that the framework is too powerful as it puts hardly any restrictions on grammar. Therefore, to say that a TGG exists for any natural language is to say something relatively trivial if no further constructions are placed on what counts as a TGG. Lees, however, proposes an obvious constraint of grammar that a grammar must be learnable. A natural language is a language that children can learn as their first language. Any grammar that could not be learnt in this way can be ruled out as the grammar of a possible natural language. But Chomsky rules out this proposal as he comes to know that the so-called psychological theories of learning as proposed by Lees are no help at all, as there is something wrong with psychological theories of learning. Chomsky seems to conceive that language learning may involve a specific faculty that is not involved in other learning. This is made possible, said Chomsky, simply because of the fact that a child has an *innate schematism*. Thus the process of language learning or language acquisition reflects the old rationalist theory of innate ideas as defended by Descartes and Leibnitz. Thus every native speaker possessed *tacit knowledge* of principles of universal grammar. However, the view of *tacit*

*knowledge* has been criticised by both Searle as well as Nagel. Searle says, “One of the chief difficulties of Chomsky’s theory is that no clear and precise answer has ever been given to the question of how the grammarians’ account of the construction of sentences is supposed to represent the speakers’ ability to speak and understand sentences and is precisely what sense of *Know* the speaker is supposed to know the rules of grammar.”<sup>(1)</sup>

Chomsky’s key contributions are predominantly related to the study of language and the study of mind. This is what we have tried to examine in this thesis. Chomsky has shown, unlike many others, that there is only one human language. Of course, there we find immense complexity of the innumerable languages but what Chomsky subscribes is that although there underlies an immense complexity of the innumerable languages we hear around us, there must be variations on a single theme. In this regard he has revolutionized linguistics and by way of doing this he has set a cat among the philosophers pigeons. Another notable aspect of Chomskyan revolution is that he has attempted to revive the theory of innate ideas. He has demonstrated that a substantial part of our knowledge is genetically determined. He has focused on rationalist ideas that go back centuries. He has provided sufficient evidence that unconscious knowledge is what underlies our ability to speak and understand. He does not agree with the dominant school of behaviourism in psychology. He has returned the mind to its position of incomparability in the study of mankind. In short, Chomsky has changed the way we think of ourselves, gaining a position in the history of ideas on a par with that of Darwin to Descartes.

Through this thesis we have stated that it was Chomsky’s research on the formalization of syntactic theory that constitutes his most original and probably his most enduring contribution to the scientific investigation of language. His scientific investigation of language has opened up a whole field of research. It draws attention not only linguistics, but also to logicians and mathematicians. To pay tribute to Chomsky’s contribution of scientific language, Lyons says, “ Even if it were decided eventually that none of Chomsky’s work on generative grammar was of any direct relevance to the description of natural language, it would still be judged valuable by logicians and mathematicians,

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1. Searle, John : *Chomsky’s Revolution in Linguistics*, included in ‘*On Noam Chomsky: Critical Essays*’, edited by G. Harman, Anchor Press, 1974, P.11.

who are concerned with the construction and study of formal systems independently of their empirical application.”<sup>(2)</sup>

It is true to say that Chomsky’s model of transformational grammar was designed for the analysis of natural languages. Chomsky goes on to say that the findings of transformational grammar have certain definite implication for psychology and philosophy. But he was against behaviourism. He holds that there underlies a gap between human language and systems of animal communication. It cannot be bridged by any obvious extension of current psychological theories of learning based on laboratory experiments with animals. This follows from the principle of *creativity* manifests in the use of language, and particular model of generative grammar. This point is made clear with the help of an example. Recently attempts have been made to teach language to Chimpanzees. Attempts have also been made to teach Chimpanzees spoken language, but could not succeed. The reason for this failure is that unlike human beings, Chimpanzees do not have the same kind of vocal apparatus. More experiments, therefore, have operated with communication system that make use of the manual-visual, rather than the vocal auditory, channel; and they have been remarkably successful. But even they have been disproved by Chomsky’s assertion that “acquisition of even the barest rudiments of language is quite beyond the capacities of an otherwise intelligent ape.”<sup>(3)</sup>

But it has been questioned that if Chimpanzees have not succeeded in acquiring at least the *barest rudiment of language*, children too in the earlier stages of language-acquisition have not succeeded in acquiring the *barest rudiments of language*. But we think this argument seems to be fallacious. Unlike Chimpanzees, children go way beyond the stage at which the chimpanzees stop. According to Chomsky this is made possible because children are operating with a species-specific maturational disposition which Chimpanzees lack. So despite the alleged structural similarities between young children’s utterances and the utterances of Chimpanzees, it is quite true to say that unlike Chimpanzees the children are quite obviously acquiring language. What Chomsky has asserted is that the behaviourist account of language, if it is not entirely abandoned, must be supplemented with something than rather empty appeals to

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2. Lyons, J: *Chomsky*, The Harvest Press, 1977, P.25.

3. Chomsky, Noam: *Language and Mind*, Extended ed, New York: Harcourt Brace Jovanovich, 1972. P-59.

*analogy.*

We think that by admitting innateness hypothesis, Chomsky not only revitalises the so-called rationalists standpoint as expounded by Descartes and Leibnitz, he at the same time makes himself a dynamic thinker in upholding the view that language is the mirror of human mind. Although Chomsky pays due respect to the so-called traditional rationalism of Descartes and others, but at the same time he makes himself distinctive from Descartes by apprehending language as a biological endowment. The rationalism of Descartes is relevant to knowledge; but the rationalism of Chomsky is relevant to language only. That is why it has been often claimed that by recalling innateness hypothesis, Chomsky himself introduces a new turn of linguistic philosophy by criticising the externalists standpoint of language. Chomsky seems to have conceived that information currently available in empirical linguistic theory supports the so-called traditional rationalists' conception of innate ideas. According to this theory, human beings have concepts implanted in their minds prior to any experiences. The squabble over this claim breaks down into two questions. First, what did the rationalists mean by their doctrine of innate ideas and is it what Chomsky thinks they mean? Secondly, what assumptions must we make about the innate intellectual capacities of children to account for the way in which they acquire language? According to Searle, Chomskyan understanding of innateness hypothesis is definitely related to the second question. We think, following Searle, that although Putnam and Goodman have raised so many objections and counterpoints against the innateness hypothesis, but they do not come to grip with the more important of Chomsky's arguments. Chomsky elsewhere inclines to say that the rules concerning deep and surface structures are so complex and so abstract as to defy any stimulus-response account of their meaning. We think this standpoint of Chomsky is always question begging. Is it logically sound to claim, as Chomsky does, that only by supposing that a child has the form of the grammar programmed into his brain can acquire intellectual fact in these rules? Is it not an empirical issue to deal with the syntactical rules of natural languages? We think Chomsky has partially committed a

mistake in his empirical theory of the syntax of natural languages and thereby has drawn the wrong conclusion from that theory.

It is important to note that when Chomsky goes on to say that language is the mirror of human mind, he thereby means the creative *aspect of language use*. For him, language is creative in the sense that it is innovative and also appropriate and coherent and therefore free from stimulus control. Chomsky further says that the Cartesians saw the creative aspect of language use as reflecting what is essential in human intelligence, distinguishing people from animals, but not susceptible to any sort of physical explanation. Indeed Chomsky says that we are as far today as Descartes was three centuries ago from understanding the creative aspect of language use. Chomsky understands language as an inner abstract formal system which is determined biologically and genetically. He takes generative grammar to be a way of describing language as an abstract formal system quite apart from any consideration of possible psychological realisation. Chomsky is very much keen to know the internal deep structure of language which for him the real mental structure and which can be apprehended by the application of transformational generative grammar. When we speak of John's certainty that *Bill will leave*, because the surface structure of John is certain that *Bill will leave* is similar to its deep structure; but we do not speak of John's certainty to leave, because the deep structure of John is certain to leave is quite different from its surface structure. According to Chomsky, unlike surface structures, the deep structures of sentence are more abstract in the sense that they are not always directly recoverable from the sound of sentences. According to Chomsky, there remains a syntactic cycle in deep structure—a cycle of transformations of sentences, noun phrases and adjective phrases. Chomsky in this regard calls upon Ross's argument that pronominalization is cyclic. But Harman criticises Chomsky on this point as he holds that Ross's argument of pronominalization which requires two rules, viz., forward and backward, will be incompatible with the syntactic cycle.

Nelson Goodman and Hilary Putnam on many accounts, criticised

Chomsky. Goodman following Locke, says, “ ‘Lock made ... acutely clear’ that the doctrine of innate ideas is ‘false or meaningless’.” But Chomsky says that Goodman’s treatment of the question suffers from a historical misunderstanding. Moreover, Goodman fails to formulate the exact nature of the problem of acquisition of knowledge. Goodman further holds that a child can acquire the first language as prior to first language learning, the child has already acquires the rudiments of a symbolic system in his ordinary dealings with the environment. Thus Goodman introduces the relevance of behaviouristic approach in learning language. He further holds that first language learning is analogous to second language learning in that the fundamental step has already been taken and details can be elaborated within an already existing framework. We think the above observation of Goodman deserves some force if it were possible to show that the specific profiles of grammar, i.e., the distinction of deep and surface structure, the specific profiles of grammatic transformations, the principles of rule ordering were present in some form in these already acquired prelinguistic *symbolic systems*. But Chomsky claims that there is not the slightest reason to believe that this is to be the case. Thus the argument of Goodman appears to be untenable.

Like Goodman, Putnam also disagrees with Chomsky regarding the learning or acquisition process of language. Putnam inclines to say that on the level of phonetics the only property proposed in universal grammar is that a language has *a short list of phonemes*. As far as the level of sound structure is concerned, Putnam admits only significant properties of language which may be called proper names. He holds that the nature of the phrase structure component is determined by the sheer existence of proper names and it can adequately be explained by the fact that all the natural measures of complexity of an algorithm lead to the result that phrase structure systems provide the algorithm which are simplest and that there is nothing surprising in the fact that languages contain rules of abbreviation. Chomsky himself raises all these issues in his book **Language and Mind** and apprises Putnam’s arguments as inconclusive. For Chomsky, Putnam’s arguments remain to be inconclusive as there are certain incorrect assumptions that he (Putnam) makes about the na-

ture of the acquired grammars. For Chomsky, the conclusion, Putnam outlines, is correct; but the assumption by means of which the conclusion is drawn is wrong. Putnam, according to Chomsky, proposes strong empirical hypothesis regarding the specific choice of universal features, conditions on the phonological rules, conditions on rules application and so on. If these proposals are correct or near correct, Chomsky quips, then, similarities among languages at the level of sound structure are indeed remarkable and can not be accounted for simply by assumptions about memory capacity as Putnam suggests. Chomsky further claims if phrase structure system contains proper name, then one can conclude nothing about its other categories. So the dispute underlying in phrase structure grammar can not be solved or resolved with the existence of proper name as Putnam suggests.

As far as his *rationalism* is concerned we have a little bit of reservation. We think that Chomsky's case for rationalism is not quite strong as he suggests. It heavily rests upon the alleged universality of certain formal principles of sentence construction in natural languages. Here Chomsky is committed to the view "that if an artificial language were constructed which violated some of these general principles, then it would not be learned at all or at least not learned with the ease and efficiency with which a normal child will learn human language".<sup>(4)</sup> But one may raise a quip by saying that this hypothesis is not subject to direct empirical verification. It is impracticable to bring up a child from birth with no knowledge of any natural language exposing him only to utterances in an artificial language spoken in a full range of normal situations. Importantly, it is neither clear at all how one would go about designing an acceptable psychological experiment bearing less directly upon the issues involved. Even if we admit for the sake of argument that the formal principles to which Chomsky appeals, are universal in the sense that they do indeed hold in all languages actually spoken by human beings, are we justified in maintaining that they are peculiarly congenial to the human mind, so that any human conceivable language must conform? Since we cannot prove that languages violating these principles could not be learned, we are entitled to withhold our assent to Chomsky's hypothesis that these formal universal are innate. Even it

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4. *The listener*, 30 May, 1968, p-688

may be said alternatively that all languages have a common origin in the remote past and have preserved the formal principles of their source. Chomsky has subscribed this point in his **Language and Mind**. He argues that it “involves a serious misunderstanding of the problem at issue.”<sup>(5)</sup> Chomsky goes on to say that the hypothesis of common origin contributes nothing to explain how the grammar of a language must be discovered by the child from the data presented to him. But this is not the problem for which the hypothesis of common origin is being proposed here as an explanation. Chomsky’s assumption that certain formal principles of grammar are innate is intended to account for two problems simultaneously, viz. (i) the universality of the principles and (ii) the child’s success in contracting the grammar of his language on the basis of the utterances he hears around him. It is the second of these questions that Chomsky regards as the most important.

One thing is important to be noted here is that though Chomsky calls himself a *mental*ist, he does not agree with the traditional opposition of *body* and *mind*. His position appears to be consistent with the view that the *knowledge* and *predisposition* for language, though *innate*, require rather definite environmental conditions during the period of *naturalism*. One might go on to suggest, as an alternative to Chomsky’s hypothesis, that it is not a *knowledge* of the formal principles of language as such that is innate, but a more general *faculty* which has given the right environment conditions, will interact with these to produce linguistic competence. Chomsky, however, does not agree with this alternative. For him this is not a true alternative. He accepts that the proper environmental conditions are necessary for the maturation of innate structures.

So we can say that the so called rationalist thesis as understood by Chomsky does not mean that it is without importance. He has shown that there is nothing inherently unscientific about the assumption that competence in speaking a language implies that the speaker has in his mind a number of generative rules of a highly restricted kind. These rules are capable of *stroning* and operating upon abstract mental structures in the course of producing utterances. Chomsky, we think, is right in challenging, “the belief that the mind must be simpler in its structure than any known physical organ and that the most primitive of as-

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5. Chomsky, Noam : *Language and Mind*, Extend ed. New York, 1972, Pp. 74-5.

sumptions must be adequate to explain whatever phenomena can be observed”.<sup>(6)</sup>

According to Chomsky creativity is connected with competence (recursive rules). But still Chomsky elsewhere holds that creativity is to be the problem of human language. Although he maintains a close proximity between creativity, competence and performance, but still he seems to conceive that barring competence everything is extra-linguistic. We think Chomsky confuses himself regarding the concept of creativity. In one sense he apprehends language within the aura of creativity and thereby holds that the creative aspect of language is the glory of language; but on the other hand, the so-called definition of grammar just prevents it. Thus there underlies a conflicting situation on the part of Chomsky regarding his apprehension of the creative aspect of language. Chomsky, however, says, “*The creative aspect of language use remains as much a mystery to us as it was to the Cartesians who discussed it, in part, in the context of the problem of other minds.*”<sup>(7)</sup> If creativity of language is held to be a mysterious as Chomsky does, then how can competence or generative grammar get to the bottom of the mystery of the creative aspect of language use? Thus we can say that the creative aspect of language which can be explained by mentally represented generative grammar as claimed by Chomsky, does not gain much ground. Does it make sense to say that the creative aspect of language use is the outcome of inductive generalisation on the data of our learned corpus? We think the creative aspect of language neither falls within mentally represented grammar, nor falls within the generative grammar. Following Copper, we can say that the creative aspect of language use is an ability of using and recognising words in metaphorical ways. The idea that new instances are identified by virtue of the features they share with the previously encountered once is misplaced.<sup>(8)</sup>

Chomsky is firm to hold that a native speaker being the possessor of innate ideas can produce various judgements about his language. He can transfer an active sentence into its passive form, realise the distinction between deep and surface structure of a sentence. Plamer, e.g., points out that this is highly dangerous to presuppose that a native speaker is endowed with inner repre-

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6. Chomsky, Noam : *Language and Mind, op. cit., P-22*

7. Chomsky, Noam : *Reflections on Language, op. cit., P-138*

8. Copper David E.: *Knowledge of Language, New York, 1975*

sented deep structure. He says, "Most native speakers if asked questions about their language will give replies in accordance with what they learnt at school. They will say, for instance, that "*It's me*" is ungrammatical and that English has three genders, masculine, feminine and neuter, and three tenses present, past and future. It is however true that we can not write a satisfactory grammar without intuition, but this is the intuition of the Linguistic about the way in which languages are constructed."<sup>(9)</sup> A child can know that  $3+3=6$ , but from this it does not follow that he acquires the knowledge of abstract principles. When a native speaker comes to know two or more expressions are synonymous, we do not witness any evidence in favour of implicit knowledge of language. Thus, many philosophers hold that there is no need to presuppose mentally represented deep structure as Chomsky does owing to identify the structure of language. For them observations, contextual conditions, practices are enough to do that. Thus for them Chomskyan approach of mental representation is cancelled for and hence considered to be untenable. Our knowledge of the language gives no privileged to mental representation. Obviously, every speaker of a language has mastered and internalised a generative grammar that expresses his knowledge of language; but from this it does not follow that he is aware of the rules of the grammar.

It is however important to note here that Chomsky appears to have conceived unconscious knowledge of language in order to describe the competence of a native speaker. For him one's knowledge of language is not a case of **knowing that**, but it is a kind of **knowing of**. But this view has been vehemently criticised by many linguists. It has been claimed that a child can build toy bricks with the help of physical structure and it is quite ridiculous to hold that the child has had mental representation. Does Chomsky mean to say that a cyclist maintains a good balance when riding because of his internal representation of the principles of mechanics? Should we say on the basis of his universal form of grammar that every cyclist has a tacit knowledge of the principles of mechanics? We think Chomskyan remark about tacit knowledge (competence) do not seem to provide an illuminating way of talking about speakers of a language.

As far as the distinction between competence and performance is concerned one can say that although the supposed distinction bears a theoretical and a methodological necessity in linguistics, it is by no means certain whether Chomsky himself has drawn in the right place or not. At times it appears that he confuses between competence and performance. It can be argued that he describes as matters of performance a number of factors that should be handled in terms of competence. Moreover, any linguist's judgement of what is more natural way of describing the data will tend to be somewhat arbitrary. Consequently, it is, at times, not clear when the differences between two alternative descriptions of the same data are differences of substance and when they are merely differences of terminology and notation. In the **Aspect of the Theory of Syntax**, Chomsky goes on to say that linguistic theory is concerned primarily with an ideal speech community, who knows its language perfectly and is unaffected by such grammatically irrelevant conditions as memory limitations, distraction, shifts of attention and interest, and errors on applying his knowledge of the language in actual performance. This passage definitely bears upon the language the reflection of what Chomsky understands by means of performance. But one thing is very much clear from this passage that by defining performance, Chomsky, as we think, includes everything that does not fall within the scope of a deliberately idealized and theoretically restricted notion of linguistic competence. It would perhaps be better to restrict the notion of performance to the production and interpretation of utterances on particular occasions of the use of language.

Does it mean to say that the so-called linguistic idealization as proposed by Chomsky is illegitimate? Perhaps not. It is true to say that linguists can give full recognition to differences of dialect and style and to their social and contextual determination and it falls within the province of socio-linguistics to do just this. Hymes cogently argued that the notion of competence makes the farther point that *a child from whom any and all of the grammatical sentences might come with equal likelihood would be a social monster*. This is definitely true and Chomsky does not wish to ignore it. Nor he wishes to deny the identi-

cal variation or its social function. Chomsky considers it as the crucial property of human language, which can be studied without talking socially and contextually determined variations into account.

We have, after Chomsky, examined in what sense language has its being in the innate competence of the individual. So among many other reasons the most fundamental reason for studying language is that language is supposed to be the mirror of mind, Chomsky says, "One reason for studying language and for me personally the most compelling reason is that - it is tempting to regard language in the traditional phrase, as "A mirror of mind".<sup>(10)</sup> Chomsky conceives that the study of language should reveal things about the nature of the mind. In this regard we must remember the comment of James Battile who once admitted that the so called principle of grammar (i.e. language) forms an important and very curious part of the philosophy of the human mind. But this remark of Battile is nothing unprecedented. If we look back to the history of philosophy, we find that even in the traditional philosophy of seventeenth and eighteenth centuries, the relevance of language as the reflection of human mind has been recognised. Leibnitz, for example, says, "I truly believe that language are the best mirror of human mind, and that an exact analysis of meaning of words would reveal the operation of the understanding for better than anything else".<sup>(11)</sup>

Language has not been studied by Chomsky as a mere means of communication that bears meaning and expresses thoughts and feelings. Language has been studied with a view to having an insight into the focal point which controls the functions of language. But this focal point should be understood neither as a concept, nor as a thought, nor as a feeling; but as the heart of the human understanding that integrates all concepts, thoughts and feelings. It is presupposed that there are some veiled principles which direct all our thoughts and feelings. These principles are understood as the product of human mind and are reflected in language. They are also supposed to be the mental data of the human society and are not thought to be subjective ; but in a particular sense objective. They are thought to be objective in the sense that they are universal not in the sense of historical accident but in the very sense of bio-

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10. Chomsky, Noam : *Reflections on Language*, op. cit., P-4

11. Gnose P.G. : *Analytic Philosophy*, Oxford, IBH Publishing Co. 1970, P.-10

logical necessity. A human language is a system of remarkable complexity. This complexity is revealed in the deep level of understanding. Understanding of human language seems to be an extra-ordinary intellectual achievement for man. A normal child can acquire the linguistic device without invoking any specific training. He just follows some specific rules of grammar and thereby succeeds in creating innumerable sentences. This process of creativity witnesses his deep sense of understanding of language. Having been acquired this device he can easily communicate his thoughts and feelings, consequently he seems to behave like a competent user of language. His linguistic capacity is not restricting to the sentences that he previously used and understood. Instead, he develops the capacity in generating new sentences, making new things and explores what these new sentences mean. He thus acquires the competence by choosing the good one from the bad one that he understands. In this sense language has been characterised as compositional. Language is compositional in the sense that it is constructed as well as comprehended by the conscious mind, with minimal effort. It also controls as well as supervises the entire process of communication. It is, however, not revealed or manifested in surface level of grammar, it lies in the deep structure of grammar. Chomsky says, “The language is a mirror of mind in the deep and significant sense. It is the product of the human intelligence, created anew in each individual by operations that lie far beyond the reach of will or consciousness”<sup>(12)</sup>

It is claimed that Chomsky’s mentalism can best be apprehended through the syntactic structure of language as Chomsky believes that the study of syntax is the study of human mind. According to Chomsky man is essentially a syntactical animal as the structure of his brain determines the structure of his syntax. That is why the study of syntax is one of the keys, perhaps the most important key to the study of human mind. Accordingly, the syntactical structure of human language are thought to be the product of innate feature of the human mind. Language, says Chomsky, is defined by the syntactical structure and it is determined by the innate properties of the human mind. One may raise a question by saying that as syntax and semantics cannot be separated and hence there is no necessity to postulate the existence of syntax of purely syn-

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12. Chomsky Noam : *Reflection on Language, op. cit. P-4.*

tactical deep structure. But Chomsky rules out this question. Addressing Chomskyan standpoint, Searle says, "... if there were no deep structure, linguistics as a study would be much less interesting, because one could not then argue from syntax to the structure of the human mind which for Chomsky, is the chief interest of linguistics".<sup>(13)</sup>

Chomsky considers universal grammar as the essence of human language as it is not the outcome of logical necessity; but the outcome of biological necessity. The rules and principles of universal grammar are thought to be invariant. Elsewhere he apprehends universal grammar as transformational generative grammar simply because it provides an adequate measure for establishing philosophy of language within the horizon of mentalism. Language, Chomsky holds, is a colony of sentences. A grammar is a recursive definition of the entire set of sentences. In this sense transformational generative grammar is understood as the mental representation of human beings. It is the theory of mental states underlying the production and comprehension of utterances. It is a system of rules that a speaker has internalised unconsciously. It makes sense to say that the grammar of language has no existence apart from mental representation. Chomsky goes on to say that the properties of grammar must be these that are given to it by the innate mental processes of the organism that has invented it and that invents it anew with each succeeding generation.

But how do we accomplish such a rich system of knowledge? In this regard different ideas have been put by different philosophers. Following Aristotle one may claim that the world is structured in a certain way so that the mind is able to perceive this structure. Human mind thus attains the knowledge of universal from perception of particulars. But this attainment of knowledge requires a hierarchical process as it starts from particulars and via particulars to species genes – it eventually gains the knowledge of universal. But how do we conceive these different stages of knowledge? These stages can be apprehended through an active participation of an innate capacity of mind. But how are these stages organised? They are organised through sense perception. But are these stages organised without invoking an organiser? this

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13. Searle, J. 'Chomsky's Revolution in linguistics', edited by Gilber Harman, *Chomsky Noam : Critical Essays*; Anchor Press, Garden City, New York, 1974, P-19.

question can best be answered by admitting mind as an organiser. It is the human mind which has organised these different stages of knowledge through sense perception. These again confirm that there underlies a system of internalisation that is latent in the mind. Accordingly it is said that we come to know or what we come to believe rests on a specific experience that has been evoked by the cognitive system of human mind. Human mind is equipped in such a manner that it enables one to carry innate power. It has an innate cognitive power says Cudworth. Human mind has sort of exciting and awakening powers of its own. Sense experience perceives objects, but it is the human mind which enables to compare, to analyse the various cause-effect relations. It gives a comprehensive idea of the whole. It is like the eye through which a book can be read; but it is the function of the human faculty, i.e., the mind which apprehends the theme of the book. Chomsky goes on to say that intelligence essences of the things exist no where but in the mind itself. Like Chomsky, Wittgenstein makes the similar remark. He says, "It seems that there are certain definite mental processes bound up with the working of language, processes through which language can function ... The sign of our language seems dead without the mental process, and it might seem that the only function of the sign is to induce such process, and that there are the things that we really ought to be interested in ..."

Although it is true to say that Chomsky has borrowed his concept of innateness hypothesis from the classical school of mind, he nevertheless does mind to dig up the defects of classical philosophy of mind. Chomsky goes on to say that the greatest defect of classical philosophy of mind seems to be its unquestioned assumption that the properties and content of the mind are accessible to introspection. Consequently, the far reaching studies of language that were carried out under the influence of Cartesian idealism suffered from a failure to appreciate either the abstractness of those structure that are 'present to the mind', or the length and complexity of the chain of operations that relate the mental structure.

A parallel defect can also be found regarding the study of language and mind in the modern period . According to Chomsky the most notable weakness

in the modern structuralist and behaviorist approaches, the faith that the mind must be simpler in its structure than any physical organ. It is taken for granted without argument that a language is a habit structure or that knowledge of language is merely a matter of knowing how, a skill expressible as a system of dispositions to respond. Accordingly, knowledge of language must develop through repetition and training. There is no reason to disbelieve the fact that the study of knowledge of language and use of this knowledge should lead in entirely different direction. Chomsky suggests that owing to achieve progress in the study of language and human cognitive faculties in general, it is necessary first to establish *psychic distance* from the *mental facts*. Then one can put forward to explore the possibilities for developing explanatory theories. Each phenomena must require explanation and that we have no right to bypass the underlying mechanism. Being a native speaker one can acquire a vast amount of data available to us. That is why one can fall into the trap of believing that there is nothing to be explained. One can falsely assume that whatever organising principles and underlying mechanism may exist must be 'given' as the data is given. So the system of rules, which one requires as a native speaker, enables him to apprehend new sentences and also helps him to produce a new sentence on an appropriate occasion.

Chomsky is of the opinion that the person who has acquired knowledge of a language has internalised a system of rules that relate to sound and meaning in a particular way. The linguistic by virtue of constructing a grammar of a language is in effect proposing a hypothesis concerning the internalised system. Knowledge of language, i.e., the internalised system of rules is only one of many factors that determine how an utterance will be used or understood in a particular situation. The knowledge of language is involved in performance. This is one of the most fundamental factors. Barring this, there are so many other factors which also play active role for understanding language. There is no reason why one should not also study the interaction of several factors involved in complex mental acts underlying actual performance. But Chomsky conceives that such a study does not work far away unless the separate factors are themselves fairly understood.

So the grammar as proposed by the linguists is an explanatory theory. It suggests an explanation for the fact that a speaker of the language in question will perceive, interpret or use an utterance in a specific way. It is said that a native speaker has mastered a grammar on the basis of very restricted and degenerate evidence. In such a case the grammar has empirical consequence that extend far beyond the evidence. At one level the phenomena with which the grammar deals, are explained by the rules of the grammar itself and the interaction of these rules. At a deeper level, these same phenomena are explained by the principle that determine the selection of the grammar on the basis of the restricted and degenerate evidence available to the person who has acquired knowledge of the language. The principles that determine the form of *grammar* and that select a grammar of the appropriate form on the basis of certain data constitute universal grammar.

So the study of grammar is a study of the nature of human intellectual capacities. It attempts to formulate the necessary and sufficient conditions that a system must meet to qualify as a potential human language. These conditions are not accidentally true of the existing human languages, but are rooted in the human language capacity. This also constitutes the innate organization that determines what counts as linguistic experience and what knowledge of language arises on the basis of this experience. Universal Grammar, then constitutes an explanatory theory of much deeper sort than particular grammar.

It is, however, not true to say that the linguist prefers universal rather than particular grammar. Realistically the linguists always involved in the study of both universal and particular. Particular grammar is completely guided, of course, unconsciously, by the universal grammar. So any attempt of formulating the principles of universal grammar must be justified by the study of particular grammar. So it is claimed that at every level the linguist is involved in construction of explanatory theories and there is a clear psychological interpretation for his theoretical as well as descriptive work. At the level of particular grammar, he is attempting to characterise knowledge of language a certain cognitive system that has been developed unconsciously. At the level of universal grammar he is trying to establish certain general properties of human intelligence. In this sense

Chomsky conceives that linguistics, so characterised, is simply the sub-field of psychology that deals with these aspects of mind.

To claim that language is the mirror of mind is equally claimed that language is the way of expressing thoughts. Thought is a blanket term. Thoughts are also supposed to be the inner states of people. Thought are also to be claimed as *propositional attitude*. A thought is nothing but an inner representation of a human being. So it can be said that our system of inner representations and our system of representation are the same. There can be no thought independent of language. If this so happens then our language of thought equally means our language of talk. In this regard thought is on a par with language . Language, as supposed by Chomsky, is related to the cognitive capacities of human being as the ingredients of thought, viz., belief, desires etc., are nothing but the cognitive units of human mind.

We think that by understanding the philosophy of language within the horizon of mentalism, Chomsky, not only introduces a new dimension in the field of linguistic, he equally stands against semantics. He says, “The question of truth, conformity to the external reality, does not enter.”<sup>(14)</sup> In the last two chapters, we have focussed on this issue and thereby seemed in what sense Chomsky differs himself from the modern semantics , such as Quine, Davidson, Putnam, Wettgenstein etc. According to the semantics the very meaning of language can be determined externally; Chomsky rules out the external force of language . For him the external force of language, if there be any, actually lies beyond the search of our minds.’ Language, says Chomsky, is necessarily internal. Because of this internalist commitment, language has only syntax and pragmatics, but there is no semantics. Language is purely syntactical and hence there is no need to admit a separate level of representation and hence it is wrong to claim that language is used to represent the world. Thus Chomsky holds that no semantics for natural language exists.

The so-called representational theory of meaning is another important thing of semantics that has been vehemently criticised by Chomsky. The lan-

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14. Chomsky, Noam: *Rules and Representations*, London, Basil Blackwell, 1980.a, P.65.

guage-world relation as expounded by Wittgenstein and many others is a case in point. It is held that words refer to things and sentences refer states of affairs, i.e., the meaning of a sentence is given by its truth-conditions: the set of conditions whose fulfilment would guarantee the truth of the sentence. Wittgenstein Picture theory of meaning; Tarki's Theory of Truth; Quinian theory of meaning (translation manual form); Davidsonian modest theory of meaning; Dummett's full blooded theory of meaning all work on the same line. Even in recent times, Putnam inclines to say that it would be possible to extend such a truth based analysis to the treatment of natural-kind terms like cat, gold and water; on the assumption that their meaning is determined by *casual connection* to their referents. A cat, e.g., picks out cats, rather than dogs because there is causal chain linking utterances of the word to examples of the animal. All the views cited above are based on the external reality. But Chomsky holds that the external reality is largely irrelevant to the linguistic description. For Chomsky, a theory of sense based on truth-conditions takes us crucially outside the language faculty. Apart from Syntax and pragmatics nothing else is required in language. But we think that the relevance of semantics can still be required in the case of lexical items. Barring semantics, it is hard to distinguish between *think* and *believe* ; *buy* and *sell* ; *cat* and *dog*. But Chomsky would like to say that the so called semantic interpretation actually lies submerged in the syntax. That means from a strictly linguistic point of view, semantic representation would be just a further level of syntax.

Moreover, Chomsky holds a position on truth which is anti-Quinean. This is directed towards Quinean adherence to the analytic/synthetic distinction. For Quine analytic sentences are those which are true in virtue of their meaning ; and synthetic sentences are those which are true in virtue of facts about the world. But Chomsky inclines to say that following Quine it is difficult to determine *whether All cats are animals*, are necessarily true or not in the case in which all cats turn out to be Martian robots. But Chomsky holds that the whole debate has been misplaced. For him since these are facts about conceptual structure, they are reflected in the properties of the language faculty. Accordingly, they have an explanation in terms of the linguist's account of all

semantic properties of the words concerned and the structural properties of the sentence containing them. Chomsky also vehemently criticises the force of referential theory. Here we can cite his example; i.e., the reference of London. It seems quite clear that London refers to the city which is also the capital of UK. But Chomsky here draws a distinction between our use of the word to refer to London—something which is unproblematic and since we can use the word to refer, the word itself refers to some real entity in the world. Chomsky does not agree with the conviction that the word itself refers to some real entity in the world as it goes outside the language faculty. This view of Chomsky particularly goes against Frege. Unlike Frege, Chomsky possesses an alternative account. He holds that sometimes relations are nothing to do with things in the world, but are relations between mental representations. They are entirely inside the head.

We have seen that Chomsky vehemently opposes the semantic interpretation of language as proposed by Davidson, Quine and many others. He says, “When we try to pursue such questions, we soon become lost in a tangle of confused issues and making problems and it is difficult to propose answers that carry any conviction.”<sup>(15)</sup> Chomsky holds that it is quite ridiculous to claim that a reasonable semantic theory might “establish a universal system of semantic features and laws regarding their inter-relations and permitted variety.”<sup>(16)</sup> It is not at all obvious that special semantic interpretation rules are needed to assign forms to sentences on the basis of their syntactic derivations. Rather we might hope to frame the principles of logic so as to apply directly to the deep and surface structures of sentences. We can see how an account of meaning might appeal to deep and surface syntactic structures, rules of logical implication, non-logical meaning postulates and definitions that are not to be distinguished from other basic principles of common knowledge; but we see no role for principles that assign semantic representation involving universal semantic features to syntactic analyses of sentences. Chomsky elsewhere maintains that syntax should be studied independently of semantics. He forcefully favours syntax rather than semantics. For Chomsky man is essentially syntac-

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15. Chomsky Noam :, *Language and Mind, op. cit., P-60*

16. *Ibid, P-123*

tical animal. The structure of his brain determines the structure of his syntax and therefore the study of syntax is an important key to the study of the human mind. For Chomsky language is determined by syntactical structure and syntactical structure is determined by innateness.

Chomsky, being a linguist, vehemently opposes the neo-positivist-symbolic logic approach represented by Quine and many others and also rules out the standpoint of modern semantics, viz., Davidson, Wittgenstein etc. In the Chapter of **Language and Interpretation: Chomskyan tussle with Semantics**, it has been revealed in what sense Chomsky disagrees with the externalists standpoint of language. Unlike the contemporary semantics, Chomsky pleads for Transformational Generative Grammar in order to know the deep structure of a sentence. We think that Davidsonian account of language directly confronts with Chomskyan account of language. Davidson inclines to say that the so-called deep structure of a sentence can be revealed by a theory of truth what Davidson called *logical structure* of the sentence. For him the so-called deep and logical structures, being the foundation of semantics, remain same. Davidson however holds that unlike logical structure, the deep structure of a sentence also produces surface structures of sentences. But this does not hamper the dignity of the logical structure of sentence as it is very much essential to an account of truth of the sentences in general.

Davidson further inclines to say that the so-called deep structure of a sentence as propounded by linguists reflects the internalised grammar of speakers of the language. Chomsky elsewhere favours the implications of transformational generative grammar by saying that it can be made to “correspond to the linguistic intuition of the native speaker”<sup>(17)</sup> Davidson argues that it is always problematic to find out under what situation a theory corresponds to a speaker’s linguistic intuition. For him if the so-called deep structure of a sentence is apprehended to be a logical form, then it would be possible for us to give an empirical assessment of the so-called linguistic intuition as proposed by Chomsky. According to Chomsky, the sentence (1) *I persuaded John to leave* though has the same surface structure with the sentence (2) *I expected John to*

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17. Chomsky Noam: *Aspects of the Theory of Syntax*, Cambridge (Mass), 1965, P.24

leave. But they differ in deep structure. Davidson, however, raises a point here. For him it is true to say that when an embedded sentence like (2) is transformed into the passive, the result remains cognitively synonymous with the active form; but a similar transformation does not yield a synonymous result for the analogue of (1). Davidson does not disagree with Chomsky in this regard; but he points out that how does it show that (1) and (2) do possess radically different deep structures? What can at best be held, Davidson holds, that a theory, which assigns different structures to (1) and (2), is simpler than one, which fails to do so. But it is quite absurd and obscure on the part of Chomsky, says Davidson, to claim that it is our linguistic intuitions that can make the difference.

Davidson further goes on to say that Chomsky is right in making a contrast between (1) and (2) ; but at the same time he holds that there is no point in claiming that this contrast is made possible within the preview of linguistic intuition of native speakers. Davidson thinks that we need go no further than to ask about the semantic role of the word *John* in both semantics. He holds that the word *John* can be replaced by any conferring term without altering the truth-value of (1); but this is not to be the case in (2). Thus, from the semantic standpoint, it may be claimed that the contribution of the word *John* to the truth condition of (1) is radically different from its contribution to the truth condition of (2). In this process, Davidson claims, there is no need to the *speaker's tacit knowledge* of the grammar or the *intrinsic competence of the idealised native speaker*. Rather it rests on the explicit knowledge any speaker of English has.. Davidson on the basis of the above observation claims that there is no point of claiming the linguistic intuition of native speaker owing to dig up the deep structure of sentence. The same can easily be done, Davidson holds, by anticipating the so-called logical structure of the sentence which is very much akin to semantics. Davidson, therefore says, "The beauty of a theory of the sort we have been discussing is that these intimations of structures, however useful or essential they may be to the discovery of a suitable theory , need play no direct role in testing the final product."<sup>(18)</sup>

Chomsky, however, assumes that syntax and semantics can be distin-

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18. Davidson Donald: *Symantics for Ntural Languages included in ' On Chomsky's Critical Essays', edited by G. Harman, Anchor Press, 1974,P-252.*

guished and in particular, that there is a level of deep syntactic structure that is distinct from the level of logical and semantical representation as echoed by Davidson. We think that Davidson is not only criticised by Chomsky. Even some linguists have argued against Chomsky by saying that Syntax and Semantics are inextricably entertained. We think that the issue is so complex and obscure that it is very difficult to give a clear verdict either in favour of or against Chomsky.

Barring all these criticisms mentioned above, we are still happy to claim that no philosopher in the modern era ignores the contribution of Chomsky. In one hand he has successfully revised the old rationalist tradition in the field of linguistics and on the other hand, he turns the philosophy of language into a new direction by criticising or forfeiting semantics. Thus one can estimate his own contribution as *pre-Galilean*. Even some philosophers considered Chomsky as *big as Galileo*. Just at the end of the 16<sup>th</sup> century, Galileo founded the experimental method which underpins the whole of modern sciences; likewise at the end of the 20<sup>th</sup> Century, Chomsky is generally viewed as the originator of the cognitive revolution which is beginning to extend that method to the study of the mind.. Chomsky's achievement is vast. He is not only the originator of cognitive revolution, he has also been instrumental in changing our view not just of language, but of human nature. Working in the field of modern linguistics almost the last four decades, Chomsky has revealed the amazing complexity of human language and thereby has provided sufficient evidence that there underlies only one language and that it is innate. He demolished the behaviorist framework based on psychology and thereby restored the mind to its previous position of Cartesian evidence. Although Chomsky does not believe in heroes, but he has himself become one. There can be little disagreement that he has fulfilled his expressed hope that "I have done something decent with my life." All in all we are happy to come to an end by recalling the famous remark of Searle, who says that the greatest contribution of Chomsky will be that he has taken a major step towards restoring the traditional conception of the dignity and uniqueness of man.

