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LANGUAGE STUDY-A DRAMATIC SHIFT IN CHOMSKYAN PERSPECTIVE

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Abstract

Human life cannot be imagined without language. It is an inseparable aspect of human species. Though language is a very complex phenomenon, but there is a consistent and sincere endeavor to study language. Understanding language implies a way to understand our thought process and knowing the world. In this pursuit language is being studied with its crucial aspects and different dimensions. It was thought that the main purpose of language is communication. But it is a debatable issue whether communication is the sole purpose and defining feature of language or not. Many linguists and philosophers stand in different pole to exhibit their opinion. We find Edward Sapir (1884-1939), Wittgenstein (1889-1951), Benjamin L. Whorf (1897-1941) and the many others on the one camp and few like Chomsky on the other. Here my endeavor is to explore the dramatic shift in language study from Chomskyan perspective.

1. Introduction

Language by itself is a marvelous object of study. It has several dimensions. Philosophers have all looked upon language as a very important phenomenon. In the history of Western Philosophy, 17th century witnessed a paradigm shift in perspective in terms of speculations and researches, not only in science, but also in other branches of study. It provides us with a new foundation with a new perspective. Its main focus was on the nature of human mind or intelligence as well as the human language.

The 17th century French philosopher Rene Descartes (1596-1650) is first to come up with a very interesting observation about language which later influenced Noam Chomsky. In his Discourse on Method (1637) Descartes indicates that our use of language is one of the important aspects of human behavior which tend to show that our actions are governed by some non-mechanistic principles. In addition to this, for Descartes, the use of language is species-specific activity which conclusively proves the existence of mind over and above the body. In his own words, Descartes writes:

“If there is such machines having the organs and outward shape of a monkey or any other irrational animal, we should have no means of knowing that they were not of exactly the same nature as these animals, whereas if any such machines resembled us in body and imitated actions so far as this was practically possible, we should still have two very certain means of recognizing that they were not, for all that, real human beings. The first is that they would never be able to use words or other signs by composing them as we do to declare our thoughts to others. For we can well conceive of a machine made in such a way that it emits words, and even utters them about bodily actions which bring about some corresponding change in its organs (if, for example, we touch it on a given spot, it will ask what we want of I; or if we touch it somewhere else, it will cry out that we are hurting it, and so on); but it is not conceivable that it should put these words in different orders correspond to the meaning said in its presence, as even the most dull-witted of men can do.”(Descartes, Rene., A Discourse On The Method Part-V, 56-57. Translated by Ian Maclean. Oxford: Oxford University Press, p-46, 1637.)

In order to understand the above passage, we can formulate an argument in the following way:

Minds can use language in a novel way.

No physical object can use language in a novel way. Therefore, minds are not physical objects.

For Descartes, it is impossible that a physical object could generate and understand the rich variety of sentences produced by a human being. That task only can be effortlessly handled by human beings. In other words, what Descartes actually seems to mean in the quoted passage is that, it is impossible to construct sufficiently complex machine which may have an appropriate verbal response to the rich variety of sentences to which human beings respond verbally.

The Cartesians tried to show that if the corporeal body is sharpened, clarified and extended to its limits, it is still incapable of explaining the normal use of language as well as the basic properties of thought. Therefore, in Cartesian terms, a second substance whose essence is thought is to be

required. This substance is known as mind and it has a “creative aspect of language use” (in Chomskyan terminology). Alongside this above view, Descartes further reiterates that the normal use of language cannot be explained by any automaton or animals. Therefore, for Descartes, language is a species-specific-human possession.

Chomsky took this clue from Descartes from two respects:

Firstly, it is also for Chomsky that the normal use of language is the creative aspect of human mind which cannot be explained in terms of any mechanistic principle. Chomsky drew our attention to the fact that child and the native speakers can understand and produce infinite number of sentences.

Secondly, according to both Descartes and Chomsky the use and acquisition of language is a species-specific activity. The animals or automaton neither can possess mind (Descartes) nor they can be able to understand the rich variety of sentences (Descartes and Chomsky).

In contrast, we should acknowledge the view of Charles Darwin (1809-1882)-the famous British naturalist who articulated the conception of language as a kind of instinct in 1871 and considered some theoretical preliminaries which lay out his theory of language evolution.

The theory of language evolution involves mainly three stages:

- (1) The first stage consists of the general increase in intelligence and complex mental abilities.
- (2) The second stage involves sexually selected attainment of the species capacity for complex vocal control, e.g. singing.
- (3) In the third stage, meaning is added to the songs. The semantic aspect operates at this level. This semantic factor is one of the key determinants in facilitating the increase in intelligence.

Theoretically, Darwin makes several important observations, such as:

(A) He makes a crucial distinction between language faculty (the biological capacity which enables humans acquire language) and particular languages (Latin or English). Darwin refers the language faculty “as an instinctive tendency to acquire an art.” It is shared by all the members of human species.

In order to understand the term instinct Darwin writes:

“I will not attempt any definition of instinct. It would be easy to show that several distinct mental actions are commonly embraced by this term; but everyone understands what is meant, when it is said that instinct impels the cuckoo to migrate her eggs in other bird’s nests. An action which we ourselves should require experience to enable us to perform, when performed by an animal, more

specially by a very young one, without any experience, and when performed by many individuals in the same way, without their knowing for what purpose it is performed, is usually said to be instinctive. But I could show that none of these characters of instinct are universal...” (Darwin, Charles. *On The Origin of Species: By Means of Natural Selection*. London: John Murray. Albemarle Street. P-207-8, 1859.)

Darwin neatly bypasses the unproductive nature/nurture debate that has consumed so much scholarly energy by observing that language is not a true instinct, as every language has to be learnt. Still his perspective is thoroughly modern in its nature. He knew the peculiarities of human vocal tract, but he argues that human capacity for language must be sought in the brain, rather than in the peripheral vocal tract. According to him, articulated speech is a special feature of human species, but this mere power of articulation is also common in animal communication system, for instance, parrots can talk. Darwin states that humans have an immense power of connecting definite sounds with definite ideas. For him, the capacity depends on the development of the mental faculties.

Finally in his theoretical observation, Darwin draws analogy between birdsongs and infant babbling. He inferred his notion of language as ‘an instinctive tendency to speak’ from the ‘babble of our young children’.

(B) It is to be noted that for Darwin unlike Descartes language is not species specific. His several perspectives and observations are thoroughly modern and influential.

2. Language study with special reference to Chomsky

Now in order to study language of 20th century and its influence on Chomsky, we should acknowledge the difference between modern philosophy of language and traditional philosophy of language. The analytic philosophers study language not in order to formulate scientific hypothesis about it, but rather because they believe that such a study is an invaluable tool to help them to achieve their primary goal of setting philosophical questions. Some traditional philosophers like Descartes took some clue from language to facilitate their philosophical endeavor, but mostly they were interested in system building on the basis of sure and certain foundations. At that time, metaphysics occupied a central position. In this respect, 19th century linguistics can be labeled as ‘Historicism’. It is a movement or earlier period of linguistic thought. The Neo-grammarians (They are a group of scholars, based at the University of Leipzig in the late 19th century, who were largely responsible for formulating the principles and methods of historical linguistics that have since governed most work in the subject) are the followers of such movements. They consider that the only kind of explanation valid in linguistics is the kind of explanation which a historian might give. The languages have been a subject to a variety of internal and external

causal forces. Historicism is one of the movements against which Structuralism reacted and in relation to which it may be defined. Structuralism appeared in the second half of the 20th century, and grew to become one of the most influential approaches in academic fields. It was concerned with the analysis of language, culture and society. It is a great intellectual movement whose headquarters have been in France. The work of Ferdinand de Saussure (1857-1905) concerning linguistics is generally considered to be a starting point of structuralism. The common feature of structuralists positions is the belief that phenomena of human life are not intelligible except through their interrelations. These relations constitute a structure and behind local variations in the surface phenomena, there are constant laws of abstract structure.

American Structuralism had similar ideas coming from a different source. It (American Structuralism) was founded upon the empirical tradition, and its task was to organize the masses of linguistic data. Philosophers were more interested in discovering the structure of the world via structure of language and this overpowered their desire for system building. In this context, there are two pre-eminent figures (Leonard Bloomfield and Noam Chomsky) who hold structuralism for decades.

Leonard Bloomfield (1887-1949) not only studied language and language acquisition, but endeavored to make linguistics autonomous and scientific. In this pursuit, he was prepared to restrict the scope of language to the study of syntax; because he believed that the elements apart from the syntax could not be treated with sufficient precision and rigor.

According to Bloomfield, there is no fundamental difference between human and animal communication, for both are formed out of training and habit. This training and habit situations are observable. His belief was based on the behaviorist school of psychology, according to which only that mental process which is manifest in behavior can be scientifically observed and become the valid scientific conclusion. For Chomsky, Bloomfield's theory is a pure mechanistic explanation and does not take into account the creativity and variability of language.

On the other hand, in language study, specialists like philosophers and linguists as well as ordinary common man believe that language and communication are intimately connected. There are at least 5000 living languages in the world and 140 of them are spoken by a million or more people. Question might arise that is there any convenient set of symbols for the communication of our thought?

According to the famous American linguist Benjamin L. Whorf (1897-1941), the answer is 'no'. He argued that higher levels of thinking require particular language and the particular language can shape the ways of thinking of the users of language about things. In other words, language

pervades thought, with different language causing their speakers to construe reality in different ways.

In this regard, we may think of the famous philosopher Ludwig Wittgenstein (1889- 1951). According to him, language is a vehicle of thought in at least in the crucial sense in which we ground our communities qua communities. If there is no discernable understanding of language, we can never know whether we share the same meanings, expectations, agreements and so forth. Wittgenstein further maintains that an understanding of language has become the measuring stick for what it means to be another human being, a person. According to Wittgenstein, all our behavior is potentially informative which may be also used for the communication.

Furthermore, according to Wittgenstein, we could still communicate without language, but we could not influence one another in such ways; we could not build roads or machines to make our life better. For these activities we require a sophisticated grasp of language. We even do not know what it is to exist without language? This implies a certain discontinuity between those who have mastered language and those who seemingly have not.

Another renowned figure in this respect is German linguist Edward Sapir (1884-1939) who treats language as a cultural product and considers linguistics to be a fruitful possibility of scientific study of society. For Sapir, language is purely human and non- instinctive. It consists of a conventional system of arbitrary sound symbols that are produced voluntarily. Therefore, from his definition of language, animal communication system as well as any sort of human articulation which is not symbolic or voluntary is excluded. A speech element can symbolize either a concept or relations within and between concepts. For example, if we hear the word “house”, we might have in mind a certain prototype, that is, four stone walls, a wooden door, glass windows and a tiled roof; but we do not think of a particular house we once acquainted. Because, the word “house” stands as symbol for a concept. It consists of very few basics: walls and a roof, suitable for people to live in. As Sapir writes:

“The world of our experiences must be enormously simplified and generalized before it is possible to make a symbolic inventory of all our experiences of things and relations and this inventory is imperative before we can convey ideas.” (Sapir, Edward., Language: An Introduction to the study of Speech, New York: Harcourt Brace, 1921, p-12)

So far, according to Sapir, language conceptualizes our world and provides us for the categories we think in.

The aforesaid discussion therefore stresses on the communicative aspect of language.

Now, in this context, Philosophy has witnessed a dramatic shift in language study from Chomskyan perspective. Chomsky is most influential linguist of the second half of the twentieth century when structuralism appeared and grew to become one of the most influential approaches in academic fields. It was concerned with the analysis of language, culture and society. It is a general intellectual movement whose headquarters have been in France. The work of Ferdinand de Saussure (1857-1905) concerning linguistics is generally considered to be a starting point of structuralism. The common feature of structuralist position is the belief that phenomena of human life are not intelligible except through their interrelations. These relations constitute a structure and behind local variations in the surface phenomena, there are constant laws of abstract structure. It drew our attention to the fact that structures are not just listings of items. American structuralism had similar ideas coming from a different source. It was founded upon the empirical tradition, and set itself the task of giving an organized account of masses of linguistic data. At that time, philosophers were most interested in discovering the structure of the world via structure of language and this overpowered their desire for system building. Our present concern is Noam Chomsky (1928)-the famous American linguist who holds structuralism for decades.

Now, thinkers like him exhibit the view that communication is not the defining feature of language. His notion of language merely encompasses its structural aspect. In order to get clearer about Chomskyan position regarding this issue, let us see his view on language. He defines language as:

“I will consider language to be a set of (finite or infinite) of sentences, each finite in length and constructed out of a finite set of elements.” (Chomsky, ‘Syntactic Structures’, Mouton, The Hague, 1957, p-13.)

One of the most remarkable things in this statement is that a language is regarded as a set of all the linguistic products that can be constructed according to certain rules. An alternatively and intuitively more satisfactory view would be that a language consists of all units and rules which make up the system underlying the products. From the perspective of language users one could propose a more psychologically based definition; the language of a speaker or listener is her/his knowledge of rules and principles governing sentence construction and interpretation. It is the knowledge that enables the speaker-hearer to produce and identify grammatical sentences. It is also her/his ability to produce and comprehend infinite set of utterances, discourses and texts which fit the underlying system of rules. In other words, according to Chomsky, the most striking feature of language is the creativity of the native speakers. The speaker’s ability to formulate infinite number of sentences from finite means is the most intriguing feature of language. A native speaker can understand a new sentence not encountered before, in addition to this, s/he can response to a familiar stimulus in a completely novel way.

On the other hand, Chomsky focused our attention to two fundamental facts about language. First, virtually every sentence that a person utters is a brand new combination of words appearing first time in the history of the universe. Therefore, a language cannot be a repertoire of responses. The brain must contain a recipe or program that can build an unlimited set of sentences out of finite words. That program may be called a mental grammar. The second fundamental fact is that children develop those grammars rapidly and without formal instructions and grow up to give interpretations to novel sentence constructions that they have never encountered before. Therefore, he argued that children must be equipped with a Universal Grammar which accounts for the formation of the grammar of a particular language from the unorganized corpus and other sentences heard from parents and other members of the speech community. There are also some fundamental concepts such as competence, performance in order to express his view on the relation between language and communication.

According to Chomsky, competence is native speaker's knowledge of her/his language, the mastery of the system of rules. On the other hand, performance is the production of sentences in real life situations. So, a speaker's knowledge of the language is her/his competence, and the expression of competence in actual life situation is her/his linguistic performance.

Now, Chomsky's notion of competence has sometimes been attacked for failing to account how language is used. But he accepts that language is used purposefully. For Chomsky:

"Surely there are significant connection between structure and function; this is not and never be in doubt." (Chomsky, N., 'Reflections on Language', London: Temple Smith, p-56.)

Chomsky further claims that through the knowledge of the structure of language one may know how to use it. In his later writings, he defines grammatical competence as:

"By 'grammatical competence' I mean the cognitive state that encompasses all those aspects of form and meaning and their relation, including underlying structures that enter into that relation which are properly assigned to the specific subsystem of the human mind that relates representation of form and meaning." (Chomsky, N., 'Rules and Representation', Columbia University Press, New York, 1980, p-59.)

The description of grammatical competence explains how the speaker knows that:

1. 'Why are you making such noise?' is a possible sentence of English and 1a. 'Why you are making such a noise?' is not.

Chomsky has also introduced that term pragmatic competence and shows its difference from grammatical competence. Pragmatic competence is the knowledge of how language is related to the situation in which it is used. It may be possible to have grammatical competence without pragmatic competence. Pragmatic competence is characterized by certain system of constitutive rules represented in the mind. For example, a policeman may know the syntax of traffic signals (red and green lights and their sequence etc) without having the knowledge of how to use them to direct traffic.

So far, knowledge of language use is different from knowledge itself. In other words, pragmatic competence is not linguistic competence. His acceptance of the notion of pragmatic competence does not mean that for him communication is the sole purpose of language. He writes:

“Language can be used to transmit information but it also serves many other purposes: to establish relations among people, to express or clarify thought, for creative mental activity, to gain understanding and so on. In my opinion, there is no reason to accord privileged status to one or the other of these modes. Force to choose, I would say something quite classical and rather empty: language serves essentially for the expression.” (Chomsky, N., ‘Language and Responsibility’, Sussex: Harvester Press, 1979, p-88)

So far, Chomsky claims that *“Language is not properly regarded as a system of communication. It is a system of expressing thought.”* (Chomsky, N., ‘New Horizons in the study of Language,’ Cambridge: Cambridge University Press, 2000, p-76)

Conclusion

In conclusion, we may say that, Chomskyan thesis has the specialty to give linguistics “the prestige of a real science.” Most of the works and researches adhere closely to the scientific method. On the other hand, from his period, linguistic study has been shifted from corpus based methodology to a search for explanatory principles which may reveal the complexity of human nature.

So far, from the given account of language study we might say that language is not a cultural artifact comparable with our learning ‘to tell me the time’ or ‘how the federal government works’. Language is a complex specialized skill which develops in the child spontaneously without conscious effort or formal instruction; it is deployed without awareness of its underlying logic and it is qualitatively same in every individual. In other words, learning a first language is something that every normal child does successfully in a matter of a few years without the need for the formal instructions. Language is distinct from more general abilities to process information and behave

intelligibly. For these reasons, some cognitive scientists have described language as a psychological faculty, a mental organ, a neural system and a computational module. Thus it is not surprising that children's acquisition of language has received so much attention.

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