

A Comparative Study on Structuralism and TG Grammar

Hui Zhang

School of Normal, Ya'an Polytechnic College, Ya'an, China

16877867@qq.com

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Abstract: Human can't live without language. Language has different forms and meanings according to different countries, different races and so forth. With the development of civilization and globalization, there're frequent communications and cooperation among nations. Therefore, making a comparative study on Structuralism and TG Grammar is quite necessary and important. Through this comparison, we could find some clues whether there is a universal grammar or not and in which way we shall continue our studies on language.

1. Introduction

Language is an invaluable precious treasure to human beings. Taken for granted, language is an integral part of our life and humanity. It is really quite difficult for us to find one field that has nothing to do with language. For instance, if there is no language, how could Newton tell us about the law of universal gravitation? If there is no language, how could Marie Sklodowska Curie describe her experiments of finding out Radium? Even though some people think that it's unworthy to take language as an academic subject, they take it as a tool for access to some other fields. There are not human civilizations without language. In other words, any of social activities couldn't work if language doesn't exist. Then what is language? In the eyes of linguists, language is a system of signs, structures, a psychological and cognitive process, a social behavior and function and a creative system that allows novelty and innovation. (Liu Limin)

Also in daily life there are lots of things which seem to be mysteries to us. For instance, why children could imitate what they hear? How could children acquire their first language fluently and efficiently even though their parents don't usually correct their grammatical errors? Moreover, how could one whose parents are all deaf and mute learn native language well and swiftly?

Now that language is so important to us, making investigations on language is pretty necessary and useful. The science of language is linguistics. How to place language depends mainly on how to investigate the world. Therefore, linguistics is related to philosophy closely and inseparably. Moreover, language is used to talk about language which is more complex than any other subject. It's impossible for us to cover all language phenomena. Consequently, there're many schools of thoughts on language and no unifying ideology.

The history of linguistics can be dated back to the period of ancient Greek; I'll not talk about it in this paper. What I want to say is about the comparison between American structuralism and Chomsky's transformational-generative grammar. These two schools have great effect on linguistic study.

2. The Main Characteristics of Structuralism

Linguistics in America began around 1920's and onward. At the beginning of 20th century, some linguists influenced by Saussure and behaviorism in philosophy and psychology worked on descriptive linguistics and structuralism. During this period, there are some linguists such as Franz Boas, Sapir, and Leonard Bloomfield who have made great contribution to American linguistics. American Structuralism is a branch of synchronic linguistics emerged independently in the United States. Franz Boas denied that language is soul of race. In his opinion, the difference of languages is just in terms of structure not being divided into primitive and developmental. Moreover, he observed

that each language has its own phonetic system and manners of articulation, also has its own grammar system. Therefore, we couldn't impose our language form on any other language. When it comes to Sapir, it drew us on the Sapir-Whorf Hypothesis immediately. In Sapir's book *Language* he said that language bears no natural relationship to nation. He paid much attention to the study of linguistic form, and put forward six grammatical processes. As for Leonard Bloomfield, he is the founder of American Structuralism. In other words, he opened up a linguistic school, ---Structuralism Linguistics. Strictly speaking, Bloomfield didn't advanced new theories, just developed Boas' theory. Different from Boas and Saussure, Bloomfield explained language affected with behaviorism. For him, linguistics is a branch of psychology, which is close related to behaviorism. Like behaviorists, Bloomfield believed that human beings cannot know anything they haven't experienced. Therefore, he thought that children learn language through a chain of "stimulus-response reinforcement", and the adult's use of language is also a process of stimulus-response. In order to make his theory understood, Bloomfield exemplified interestingly and stated three principles. The first principle is: when one individual is stimulated, his speech can make another individual react accordingly. The second is: the division of labor and all human activities based on the division of labor are dependent on language. The third is: the distance between the speaker and hearer, two separate nervous systems, is bridged up by sound waves. Moreover, Bloomfield criticized traditional grammar and he pointed out constant practice and repetition in real situations involved in learning a language can help learners much.

Structuralism linguistics attaches importance to simplification, which lead to the ignorance of semantics and culture and pay much attention to describe surface parole. Just looking at this term structuralism, it's not difficult for us to infer that it has something with structure. In other words, structure is the key.

Structuralism linguistics makes great contribution to the analysis of language, both substantially and methodologically. Moreover, it's valuable for new language description and language teaching. However, it has a fatal error, the exclusion of meaning. By and large, structuralist ideology is as follows: all language is unique; grammar is a description of language structure; linguists seek after pure descriptive knowledge. And the methodology consists of four elements: substitution analysis; contrast analysis; distribution analysis; immediate constituent (IC) analysis. There're some limitations of structuralist analysis. The first one is the exclusion of meaning which results in the failure to analyze the constructions that are similar in structure but different in meaning. Secondly, the IC parsing does not provide useful information. The third is the failure to analyze ambiguity and to describe the function of language. The last but not the least, it neglects communication function and context which leads to mechanic method in teaching language.

3. Chomsky and His TG Grammar

As to Chomsky, a student of Hebrew with the structuralist methodology, he established the famous Transformational-Generative (TG) grammar when he found that the classification of structural elements of language according to distribution and substitution had its limitations. TG sees language as a system of innate rules.

In Chomsky's view, a native speaker possesses a kind of linguistic competence. The child is born with knowledge of some linguistic universals. While acquiring his mother tongue, he compares his innate language system with that of his native language and modifies his grammar. Therefore, language learning is not a matter of habit formation, but an activity of building and testing hypothesis. As for the construct of a sentence, TG grammar describes it as composed of a deep structure, a surface structure and some transformational rules. (Hu, 355)

There are five stages of development of TG Grammar.

The Classical Theory aims to make linguistic a science. The Standard Theory deals with how semantics should be studied in a linguistics theory. The Extended Standard Theory focuses discussion on language universals and universal grammar. The Revised Extended Standard Theory (or GB) focuses discussion on government and binding. The latest is the Minimalist Program, a further revision of the previous theory. (Hu, 434)

Chomsky's ideology is rationalism and his purpose is to find a universality of language structure. The method he used is logical inference, whose characteristic is exclusion of meaning. Chomsky believes innatism, which means that language is somewhat innate. Specifically, children are born with what he calls Language Acquisition Device (LAD).

Chomsky argues that the behaviorist theory fails to recognize what has come to be called the logical problem of language acquisition. This logical problem refers to the fact that children come to know more about the structure of their language than they could reasonably be expected to learn on the basis of the samples of language which they hear. According to Chomsky, the language the child is exposed to in the environment is full of confusing information (for example, false starts, incomplete sentences, or slips of the tongue) and does not provide all the information which the child needs. Furthermore, the evidence seems very strong that children are by no means systematically corrected or instructed on language. (M. Lightbown and Spada, 15)

However, some terms in Chomsky's innate hypothesis are misunderstood, especially Innateness. Some people think that human beings could speak since born now that language competence is innate. In fact, the term innateness Chomsky want to describe not means that one could say a concrete language such as Chinese or French, etc since born, but that human beings especially language users have underlying knowledge about the system of rules of language. Moreover, language and language competence are always talked as the same thing by many people, which seem a bit ridiculous. Chomsky stressed now and then that only language acquisition device is innate. He also underlined that universal grammar is not so-called grammar, but a kind of theory about grammar. Universal Grammar is the central concept of Chomsky's theory. It's the system of principles, conditions, and rules that are elements or properties of all human languages. It's the essence of human language. (Cook and Newson, 1)

There are four main questions that could be summarized by Chomsky to show the aims of linguistics: firstly, what constitutes knowledge of language? Secondly, how is such knowledge acquired? Thirdly, how is such knowledge put to use? Fourthly, what are the physical mechanisms that serve as the material basis for this system of knowledge and for the use of this knowledge?

Also Chomsky made the distinction between competence and performance. Linguistic competence is a language user's underlying knowledge about the system of rules while performance is the actual use of language in concrete environments.

4. Conclusion

American Structuralism thinks that human's mind is blank just like white board by birth. They learn to talk by mechanic way through acquired experience. It seems that there is no difference between human and animal if their minds are all blank. So I just wonder how children can say some sentences correctly before someone teach them. Structuralism couldn't give me a reasonable answer. Therefore, I turn to Chomsky. His LAD theory could explain my puzzlement. Anyhow, there's also similarity between structuralism and Chomsky's theory. Sapir noticed the universal features of language. Even though he thought that all human races and tribes have their own languages barbaric or developed, their basic frameworks are highly developed. This has something in common with Chomsky's UG.

In fact, no one can point out one thing without any defects. In other words, nothing is perfect. Both structuralism and Chomsky's theory are valuable and play important and influential roles in the study of language. In my opinion, there is no need to compare these two influential schools too specifically for they have the same goal finding the proper way to define and describe the linguistics phenomenon and then return it to the practice and actual use even though they sprung from different background, had different philosophical and psychological bases and different research views and features.

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