

The Debate between Lin and Kim: Rethinking Universal Grammar

Qiulan Yin*

School of English, Beijing International Studies University, Beijing 100024, China

*Correspondence: yuql2020@163.com

Abstract: Concerning the problem of language acquisition, Chomsky proposes universal grammar, which is the property shared by all human beings, and there is an innate language faculty in our brain. However, Lin tries to refute Chomsky by pointing out that there is a fatal problem with Chomsky's research method; then, Kim tries to refute Lin's argument and repudiates all the methods in empirical science. This article will try to judge whether their arguments are reasonable or not and explore what is truly wrong with Chomsky's universal grammar.

Keywords: Universal Grammar; Research method; Refutation; Scientific theory.

1. Introduction

What can separate us from animals? Obviously, it is language that can express our thought, our mind and make us communicate with others. However, where does our language come from? Why are human beings the only species that can speak language? There are too many questions confusing us and waiting us to solve. Therefore, many linguists devote their lives to explaining this phenomenon, and abundant theories about species specificity have been proposed, one of which is Chomsky's universal grammar, taking up an important position in the linguistic field [1]. However, because of a lack of evidence to prove his theory, Chomsky also has many opponents as much as his followers. Lin is one of them, who thinks that it is "a method which is deeply flawed and which make it impossible to discover any innate linguistic universals" [2]. Lin claims that Chomsky is totally wrong from the perspective of his research method and that Chomsky cannot find the truth if he insists on his theory of universal grammar [3], while Kim holds the view that "Lin fails to provide a reason to invalidate the search for UG on methodological grounds" [4]. Before discussing who is right, the key point of the debate should be made clear, that is, does Chomsky's research method truly go in the wrong direction? What is the research method and why does Chomsky use that method. These questions will be answered in the following sections. The debate between Lin and Kim is conducive to helping linguists get close to the truth. In this paper, I will introduce what Universal Grammar is and my view on the debate.

2. An Introduction to Chomsky's Universal Grammar

Chomsky's theoretical framework has experienced five stages: classical theory (1957-1965), standard theory (1965-1972), extended standard theory (1972-1981), government and binding theory (1981-1993), and the minimal program (1993-now). There are always various criticisms of his theory, but once he found the defect of his theory, he would improve them. No matter how many developments in his theory, how many new terms he advanced, the core of the theory still remains the same-universal grammar: "the system of principles, conditions, and rules that are elements or properties of all human languages... the essence of human language" [5], and all of these developments try to answer the question: what kind of attributes does the human brain have to make human beings speak languages? Although universal grammar has suffered many doubts from others,

How to cite this paper: Yin, Q.
(2024). The Debate between Lin and Kim: Rethinking Universal Grammar. Trends in Sociology, 2(1), 21-29. <https://doi.org/10.61187/ts.v2i1.85>



Copyright: © 2024 by the authors. Submitted for possible open access publication under the terms and conditions of the Creative Commons Attribution (CC BY) license (<http://creativecommons.org/licenses/by/4.0/>).

Chomsky claims that it is the best theory at present to explain the language phenomenon based on abundant empirical facts [6]. In this section, I will introduce Chomsky's universal grammar in detail.

2.1. The Language Faculty

Why can human beings speak languages while other species cannot? Chomsky believes that language is innate and that human beings are endowed with the language faculty when they are born, which is genetically determined. Therefore, in this part, I will discuss two problems: first, whether the process of (first) language acquisition is innate or not; second, if language faculty truly exists, which part of our brain is the language faculty in; "To say that language is not innate is to say that there is no difference between my grandmother, a rock and a rabbit. In other words, if you take a rock, a rabbit and my granddaughter and put them in a community where people are talking English, they're all learn English" [7]. According to Chomsky, when children are born, their brains have biological attributes that can make them acquire language so quickly in a suitable environment; therefore, the ability to speak language is the result of the interaction between the brain and the environment. If language is not innate, that is to say, the brain does not play a role in the process of acquiring language, then when we put dogs or cats in a speech community and talk to them every day; they can also speak language just like human beings. However, that is not the fact. Therefore, we should admit the important function of the brain, and there must be something special in the human brain. In addition to species specificity, Chomsky also uses other kinds of evidence to prove his hypothesis, which include "the speed and age-dependence of acquisition; convergence among grammars, analogies to vision and other modular abilities" [8].

The second question is about if the language faculty exists, what kind of mechanisms it will be and where the most possible position it will be in. Is it separated from other aspects of the mind as a system or just a part of the "central system" with other cognitive abilities [9], such as the taste and smell? Chomsky claims that our mind is modular: "UG is a theory only of the language module, which has its own set of principles distinct from other modules and does not interrelate with them" [10]. Therefore, in Chomsky's opinion, the linguistic mechanism is independent from other cognitive abilities. Chomsky offers empirical fact-the double dissociation to prove his hypothesis. Double dissociation means that there are two components; if one of them is impaired, the other will not be affected. For example, it is not necessary for a blind man to be deaf. The same is true for the relationship between language and other cognitive abilities. Children with William's syndrome have mental deficiency, with an IQ of approximately 40-50, but these children can speak very fluently and have a good command of language; conversely, people who suffer aphasia have normal intelligence, but they cannot speak language. All of these findings suggest that language ability is separated from other cognitive mechanisms. The exact place of the language faculty, because of the limitations of scientific technology, is still a mystery for us. However, "different linguistic functions are typically localized differently, with the left hemisphere taking the major responsibility for syntax, but semantic and pragmatic process also invoking the right hemisphere" [11]. With the diversity and complexity of language, the linguistic mechanism is not in a particular place in our brain but consists of different parts in both the left and right hemisphere, which form a system, that is, language faculty.

2.2. The Ideal Research Method

"Nowak claims that only after Chomsky has linguistics become a mature science" [11]. Chomsky regards linguistics as a science and applies the research method of empirical science to linguistics. He points out that whether in the natural science field or any others, there is no need for us to study everything. We must eliminate the irrelevant factors that hinder our research and seek truth under an ideal circumstance, which is called the "Galilean style" [12]. When Galileo conducted the experiments of the falling bodies,

he did not take all the factors into consideration, which neglected the wind resistance and friction, and this did not cause a negative effect on his experimental result. Therefore, when solving language acquisition problems, Chomsky ignored factors such as “memory limitations, distractions, shifts of attention and interests, and errors (random and characteristic)” [1], because he believes that our understanding of “knowledge of language” is not affected by those factors. The object of the research is the ideal language speakers, who do not make mistakes when speaking language because of nervousness, tiredness, etc. His focus is on language competence, not performance. With Chomsky’s method, there are no distinctions in the dialects or styles in a speech community. The performance mistakes cannot be regarded as the evidence to support or oppose the hypothesis, “where that evidence comes from is limited only by imagination and ingenuity” [8]. The idealization is “how to get from an abstract law to the concrete laws that make up its phenomenal content” [13].

2.3. Parameters and Principles

Universal grammar is not the description of the structure of a particular language, and it is not the principles to guide or prescribe the language learners, but rules that can reflect the language mechanisms in the human brain, which suggests the biological attribute of the human brain. The principles and parameters proposed by Chomsky aim to explain the nature of universal grammar. When we are born, the language mechanism is in an initial state, and there are many “principles” that include “X-bar theory, subadjacency, case theory, binding principles, etc.”. However, after the language mechanism is set by various parameters, it will become a particular language, such as English and Chinese. The diversity of the language in the world is the result of the parameter settings, which are related to the stimulus of the language experience. The distinction of the particular language embodies the vocabularies and phonology, which belong to the external process, and the syntax, which varies from the parameters [14]. For example, there are differences in the word order of a particular language. In Chinese, the word order is SVO, while in Japanese, it is SOV. “The major difference between SVO and SOV word order then results from the different choice of value for this ‘Head-first/Head-last’ parameter” [8]. According to Chomsky, the origin of various languages is the same—the initial state of the language faculty, and what is different is which parameter is set. We can compare it to a parallel circuit to help us understand although we do not know the concrete model of this circuit. There is a main switch to control the whole circuit, which is similar to the language faculty, and we must guarantee that everything is normal; then, the whole circuit is in a smooth operation. In the branch circuit, there is a switch that is similar to parameters to determine which light is turned on. However, in the parallel circuit, whether the switch is on or off depends on human beings, and the parameters are triggered by language experience. In other words, Chomsky wants to find universal rules that are shared by all human beings by studying sentences in various languages.

The Plato’s problem—“how children can acquire their first language with such remarkable speed and efficiency” often confuses us [9]. Principles and parameters can give us a good explanation. If there is nothing in our brain, only depending on the input from the environment is not enough for us to acquire the language. So, there must be something already existed in our brain before we are born. The parameter that is triggered by the environment determines which language the children will acquire. Therefore, the appropriate environment also plays an important role in the process of language acquisition.

3. The Debate between Lin and Kim

When Chomsky’s universal grammar was put forward, there were many oppositions and criticisms because Chomsky could not provide sufficient evidence to prove his theory. However, none of these criticisms have much influence on the dominant position of universal grammar in the linguistic field. Previous criticisms were limited to the content, but

Lin, who “offer[s] a refutation of UG from a novel perspective”, is different from them. Lin believes that Chomsky’s research method is totally wrong and cannot find the essence of the language [3], while Kim claims that Lin’s refutation almost denies all the inductive methods of empirical sciences [4]. In this part, I will summarize the argument between Lin and Kim.

3.1. *Lin’s Argument*

Chomsky has been revising the universal grammar several times. In the Principles and Parameters version, he proposed two important principles: subadjacency and binding principle by analyzing English sentences. Therefore, Lin summarizes Chomsky’s method: “On the basis of certain interesting data, find some general principles that explain them; revise the principles if necessary” [3]. However, Lin claims that there is a serious problem in the research method. First, subadjacency is advanced according to analyzing the English sentence, so there must be some other languages that do not satisfy the principle. Now that Chomsky wants to find the universal principles shared by all human beings, subadjacency should satisfy all human language. If not, we can’t acquire that language because there is no such principle in our brain. However, the fact is not. Therefore, it is more reasonable for Chomsky to take all the languages existing in the world into consideration, which seems to be an impossible mission. Regardless of the number of languages that have already existed, there may be more kinds of languages in the future due to factors such as the social environment. Therefore, it is unrealistic to include all languages as research objects, and never will we find the nature of universal grammar. Second, Chomsky only studied grammatical and ungrammatical sentences, which is not enough to find the truth because “[w]hat the constraint on movement of words in sentences is depends ultimately on a person’s brain structures” [3]. Lin claims that grammatical sentences may not be understood by human beings because of memory limitations, while ungrammatical sentences can be understood by others because the brain can process them. The most important thing is whether the brain can process the sentence and grammaticality cannot show anything. Therefore, we should take factors that can influence brain processes, such as “memory, attention, information retrieval speed, information processing speed, etc.”, into consideration.

Then, Lin comes up with some questions and answers to prove his argument from the perspective of “methodology of UG, the minimalist program, and some more arguments for UG”. First, in regard to the methodology of UG, Chomsky makes analogies with the visual system, thermonuclear theory and biology when studying languages because he thinks that the language system is similar to the system mentioned above. Marr’s vision theory focuses on the computational level and ignores factors such as eye structure, so Chomsky applies the same research method to the language system, which neglects so-called unrelated factors such as memory and attention. However, Lin claims that the language system is totally different from the visual system in that everyone perceives the same image when we see an object, which suggests that every part in our eyes has its own functions and is invariable, while different people have different understandings when we see a sentence structure, and what causes the phenomenon is that the functions of memory and attention play are variable. Therefore, it is necessary for us to consider the brain structure. The thermonuclear theory is proposed on the basis of limited data. So does the universal grammar. However, Lin claims that the thermonuclear theory is reasonable because scientists take casual factors such as hydrogen and helium into consideration, while Chomsky does not. The main components of the sun are hydrogen and helium, so it is not weird to connect the enormous energy with the fusion of the hydrogen while the language is different because the casual factor of the language research is the brain process, not the grammatical and ungrammatical sentence. The third analogy is made with biology. In biology, genetic diversity determines species diversity, and the se-

lective expression of genes finally determines the form and function of cells by transcription and translation, so biological theory was proposed on the basis of causal factors such as genes and gene switches. Chomsky claims that the parameter determines the variation in grammar just as the genes determine species diversity. Lin refutes this analogy by pointing out the essential distinction between biology research and universal grammar research. That is, whether the causal factors are taken into consideration. It is obvious that Chomsky's universal grammar does not occur because the causal factors are memory, attention, etc., not grammatical and ungrammatical sentences. Then, Lin discusses the minimalist program in terms of mergers, economy principles and parameters in MP. He claims that the minimalist program is advanced on the basis of fundamentally wrong research methods, such as subjacency. Therefore, there is no need to talk more about the minimalist program. Third, it is about more arguments for universal grammar. Chomsky provides some arguments to prove how reasonable the universal grammar is, such as the poverty of stimulus, best theory and "Martian scientist". However, Lin claims that it is meaningless to talk about all these arguments, which can prove the validity of UG because the nature of UG is totally wrong. For example, "what Chomsky says about best theories in science seems fine. However, his own theory is deeply flawed. The 'best theory' argument is therefore has little force in upholding UG".

3.2. *Kim's Argument*

Since Lin refutes Chomsky's universal grammar and cannot find the innateness of language from the perspective of the research method, Kim is skeptical of Lin's argument [4]. Kim claims that it is unnecessary for universal grammar to take all languages that have already existed in the world into consideration because in the empirical field, "[t]heories intended to explain more than a finite range of empirical phenomena face the problem of induction". We use finite data to deduct the truth without having to include all relevant factors. The scope of the study, such as Newton's law of gravitation, was not tested on the entire universe when the theory was proposed, and Lin's argument almost denies the empirical scientific research method, which is untenable. Second, Lin does not provide evidence to refute the "best theory" but points out that talking about the "best theory" is nonsense only because the research method is wrong. Kim claims that only when you provide the concrete evidence to prove the universal grammar is wrong can you say the "best theory" is meaningless. In addition, some theories, even if they are correct, will fall into a dilemma in which people cannot realize the correctness of the theory because of the limitations of objective factors such as the level of technology.

4. Does Universal Grammar truly Exist?

Through the above sections, we have a general understanding of the arguments of Chomsky, Lin and Kim. In this chapter, I will express my views on the debate between them and my own ideas on the nature of language.

4.1. *Regarding the Argument between Chomsky and Lin*

Lin mainly criticizes Chomsky from the research method, so if we want to judge whether Lin's criticism is effective for Chomsky, we should consider whether Chomsky's research method is reasonable. Chomsky claims he applies the empirical method to the language study, but is this truly the case? Chomsky used the research method with which Galileo performed an experiment on free-falling bodies, which was in an ideal experimental environment. For example, Galileo did not take the wind and air resistance, which will affect the results of the experiment, into consideration but neglected these factors by using heavy objects such as stones to eliminate the interference resulting from these factors as much as possible. Therefore, in language research, Chomsky takes the ideal speaker as the object and grammatical sentences as the data and proposes principles based on the observation of sentences that ignore the effect caused by memory, attention, etc. Lin claims that causal factors affect grammatical knowledge. In my opinion, in Galileo's

free-fall bodies experiment, the height is the dependent variable and time is the independent variable. What Galileo idealizes is the experimental environment so that he can make his experiment closer to the truth because it cannot be carried out under vacuum on the earth. He tries his best to create the best experimental environment by controlling irrelevant factors such as air resistance while concerning Chomsky's research method. Chomsky idealizes the phenomenon of language performance, and he pays much attention to the phenomenon, but he neglects these factors, which makes that happen. What he does is only the description of the phenomenon, and he cannot go further if he insists on this research method, which is wrong in that Chomsky does not consider the causal factors at all. Chomsky always claims that he regards language acquisition from an innate perspective, but according to his research method, I only see that he focuses on the surface of the language—the structure of the sentence. In addition, there is another great difference in the research method between Chomsky and Galileo, which is that the research object of free-fall bodies is such things as iron balls, which have no subjective initiative. For example, Lin proposed the “the fall of live birds” and writes: “the fall time of a bird depends not only on the height from which it's released but also on an indefinite number of other factors [which are subjective], such as whether the bird wants to fly, whether it is ill...” [2]. However, the research object of the language study is human beings, which have their own consciousness, and we cannot neglect this difference. Thus, “Chomsky's defense of the universal grammar is the misunderstanding of the free-fall bodies theory” [15].

Lin claims that the causal factors of grammatical knowledge are concerned with the brain, while Chomsky believes that they are unrelated factors. Then, I will discuss the causal factors of grammatical knowledge. First, we should know what grammatical knowledge is, and is it conscious or not. Chomsky believes “the notion [of] ‘language’ in this case: that is, to accept the locution ‘so-and-so knows the grammar of his language, its rules and principles’, including those that lie beyond awareness” [16], which suggests that the knowledge of language is unconscious. To some extent, I agree with that point. The grammatical language is implicit. Maybe someone would question that if one is unconscious of that thing, how could say one knows that? For example, New York is the capital city of the United States. If one wants to understand this sentence, he must know every word in this sentence, or he can't understand that. That is right, but grammatical knowledge is a different case. We understand that sentence because we know the meaning of every word, while we don't know why we say that sentence in the order of SVO. When we are children, we don't know what is subject, what is object, but we say the correct sentence spontaneously, so there must be something in our mind while we are not aware of it. Now that grammatical language is concerned with the brain, we should not neglect the factors that are concerned with the brain. In addition, I think although we are not conscious of the grammatical knowledge, it's actually in our subconsciousness. Similar to the stress reaction, when people encounter some stimuli from the environment, there will be some physiological reactions, such as tachycardia and the acceleration of hormone secretion. When we are exposed in a speech community, the brain is stimulated by various sentences, and then we store the information in our brain as a response to the stimuli. Actually, the language environment we are exposed to is not as poor as Chomsky says, and Dabrowska says: “[i]f we assume that language acquisition begins at age 1 and ends at age 5 and that children are exposed to languages for 8 h a day, they get 11680 h of exposure. At 3600 input words per hour, this amounts to over 42 million words over 4 years” [17]. Therefore, when we are children, stimulated by various languages in the environment, and stored the information in our brain then in the subconsciousness, we have perfect grammatical knowledge. During this process, the brain structure plays an important role, such as memory, attention, and the ability to analyze information. Therefore, we should take such kinds of factors into consideration as causal factors.

4.2. Regarding the Argument between Lin and Kim

The main difference between Lin and Kim is whether the universal grammar should consider all languages in the world or not, that is, some questions about “universal”. Kim claims that it is unnecessary to apply universal grammar to all languages [4], while Lin claims that if we do not take all languages into consideration [3], how can we know that universal grammar is universal and fits all languages? Therefore, if we want to judge the argument between Lin and Kim, we should have an understanding of the type of “universal”. As far as I am concerned, Kim’s argument is not so powerful as to refute Lin’s. There are two reasons. The first is Lin’s main argument is that Chomsky does not consider the causal factors so that he cannot find the innateness of universal grammar, but Kim does not express his opinion from this perspective, and what Kim focuses on is only the question of “universal”. The second question is that Kim claims that Lin’s refutation of Chomsky’s research method is equivalent to refuting all empirical scientific methods, such as the law of gravity, which does not satisfy all places in the universe. Although Newton proposed the law of gravity by a falling apple and did not regard all the things in the world as evidence to prove it, it is obvious that all the things in the earth are affected by gravity, and all the apples in the trees fall down and do not go up, so Newton’s theory is based on the observable truth, which is objective, and then takes a typical thing as the representative. In addition, Newton advanced his hypothesis on the basis of the observable facts at first, then he would examine his hypothesis by predicting something unknown. If his prediction is correct, his hypothesis could be proved. However, the language study is another different case. Language is complex and diverse, which is easily affected by something unpredictable, such as history and culture, and language acquisition is also mysterious. Chomsky believes there is a language faculty in our brain whose initial state is universal grammar, while other linguists believe that language is not innate, so Chomsky’s principles, such as subadjacency and structure dependence, are based on that language is innate, but whether language is innate or not is still another hypothesis. Chomsky cannot predict something unknown to prove his theory. In short, Chomsky’s hypothesis is based on another hypothesis, while Newton’s theory is based on facts, so I think Kim’s refutation is not valid.

Then, I will discuss something about “universal”. Chomsky wants to find the universal “grammar”, which is innate and shared by human beings. “Grammar” is not the grammar of a particular language but a property that everyone owns when they are born. Chomsky said that “I have not hesitated to propose a general principle of linguistic structure on the basis of observations of a single language” [12], which suggests that even from one language, we can also find the universal, such as subadjacency based on English data. Under this circumstance, there must be some languages violating these principles. For example, in Japanese, the movement does not work. Now that Chomsky’s universal grammar isn’t that kind of surface grammar we use in our life, then the principles such as wh-movement, structure-dependency is meaningless because they are proposed on the basis of grammatical sentences and ungrammatical sentences of a particular language. In addition, even if these principles are correct, how can we ensure that they are shared with all human beings? There is no criterion to judge the “universal”. In short, the “universal” what Chomsky talked about is different from what he actually did.

4.3. Regarding the Existence of Universal Grammar

There are indeed some problems in Chomsky’s research method, but this cannot prove that the nature of universal grammar is wrong. The research method is the way to find the universal grammar, not a disavowal of the essence. In this part, I will discuss the existence of universal grammar. Does universal grammar truly exist? In my opinion, universal grammar doesn’t exist. First, if we want to judge whether a hypothesis is right or not, we should know the standard of correctness or provide concrete evidence to prove it. Unfortunately, neither the standard nor the evidence can universal grammar provide to

us. However, maybe someone questions us that the nature of language is essentially mysterious; all the hypotheses at present cannot give us exact evidence, while Chomsky's universal grammar is the "best theory" to explain the phenomena. However, then we should make clear who thinks this theory is the best, is it for all human beings in the world or all the linguists? Neither of them, it's only for the generative linguists. It is impossible for those who claim that language is not innate to believe that universal grammar is the best. The criterion of the "best" is also unclear, and it is easily affected by our own idea, which is not objective. Thus, we cannot say universal grammar is the best theory.

Second, "a necessary condition for the linguistic competence is to understand the expressions of language, which is the requirement of the semantics not the syntax" [18]. Grammar is the way to prescribe language, which can make rules to regulate the use of language to avoid language disorders. However, if we want to judge whether a person has language competence or not, we should ensure that he or she can communicate with others. Therefore, the meaning of the sentence is very important. Chomsky pays much his attention to grammatical rules, while the nature of language is based on the usage of language [19].

Finally, I want to talk about if universal grammar truly exists, how can we find it? As Lin says, "we must investigate the processing requirements of language on the brain, and get to know more about the brain structure" [3]. The causal factors of universal grammar are concerned with the brain, which is more complex than language. It is impossible for us to find a thing based on another unknown and more complex thing. Therefore, if we truly take the brain structure into consideration, there will be a big challenge for human beings, and only when we make all the things in our brain, such as cognitive ability, clear can we find universal grammar. Therefore, universal grammar does not exist.

5. Conclusion

Although the issue of language acquisition is still controversial and there is no exact answer to this, Lin's refutation of Chomsky's universal grammar has great significance in promoting linguists in finding the nature of language. Lin tries to refute Chomsky from the perspective of research methods, which provides a new way to solve the problem of language acquisition. If Chomsky continues to use this method, he would go away from the truth. He should take the brain structure into consideration because it is the causal factor of grammatical rules. However, Kim's refutation is not so powerful as to refute Lin's argument, and he should make clear the type of universals and realize that there are some differences between Chomsky's language research and the empirical scientific research in that one is based on the hypothesis and the other is based on the observable facts. Finally, I express my view that universal grammar does not exist.

References

1. Chomsky, N. (1965). *Aspects of the theory of syntax*. MIT Press. <https://doi.org/10.21236/AD0616323>
2. Lin, F. Y. (2015). What is really wrong with universal grammar (Commentary on Behme). *Language*, 91(2), e27-e30. <https://doi.org/10.1353/lan.2015.0025>
3. Lin, F. Y. (2017). A refutation of universal grammar. *Lingua*, 193, 1-22. <https://doi.org/10.1016/j.lingua.2017.04.003>
4. Kim, J. J. (2018). A refutation of a refutation of universal grammar. *Lingua*, 210, 122-124. <https://doi.org/10.1016/j.lingua.2018.04.005>
5. Chomsky, N. (1976). *Reflections on language*. Temple Smith.
6. Chomsky, N. (2000a). *New horizons in the studies of language and mind*. Cambridge University Press.
7. Chomsky, N. (2000b). *The architecture of language*. Oxford University Press.
8. Smith, N. V. (2004). *Chomsky: Ideas and ideals* (2nd ed.). Cambridge University Press. <https://doi.org/10.1017/CBO9780511606779>
9. Fodor, J. (1983). *The modularity of mind*. MIT Press. <https://doi.org/10.7551/mitpress/4737.001.0001>
10. Cook, V. J., & Newson, M. (2000). *Chomsky's universal grammar: An introduction* (2nd ed.). Foreign Language Teaching and Research Press.
11. Konat, B. (2016). The structure of idealization in Noam Chomsky's generativist theory. *Poznan Studies in the Philosophy of the Sciences & the Humanities*, 108, 204-216. https://doi.org/10.1163/9789004318847_011

12. Chomsky, N. (1980a). *Rules and representation*. Blackwell.
13. Cartwright, N. (1989). *Nature's capacities and their measurement*. Clarendon Press/Oxford University Press.
14. Mei, D. (1995). Universal grammar and "parameter-principle theory". *Foreign Language*, (4), 17–23.
15. Jin, H. (2018). Rethinking universal grammar. *Journal of Xi'an International Studies University*, (3), 24–28.
16. Chomsky, N. (1977). Knowledge of language. *The British Journal for the Philosophy of Science*, 299–320.
17. Dabrowska, E. (2015). What exactly is Universal Grammar, and has anyone seen it? *Frontiers in Psychology*, 6, 852. <https://doi.org/10.3389/fpsyg.2015.00852>
18. Zhu, Z., & Dai, T. (2007). Some difficulties in the conception of universal grammar. *Foreign Language Research*, (4), 1–4.
19. Ibbotson, P., & Tomasello, M. (2016). Evidence rebuts Chomsky's theory of language learning. *Scientific American*, (5), 70–75.

Disclaimer/Publisher's Note: The statements, opinions and data contained in all publications are solely those of the individual author(s) and contributor(s) and not of BSP and/or the editor(s). BSP and/or the editor(s) disclaim responsibility for any injury to people or property resulting from any ideas, methods, instructions or products referred to in the content.