

# Debate between American Philosophers H. Putnam and N. Chomsky on the Internal or Social Nature of Language

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*The topic of this article concerns the view on the philosophy of language of two leading American thinkers of the 20<sup>th</sup> century – N. Chomsky and H. Putnam, namely the divergence of their views on the proper approach to the study of language: semantic externalism and internalism. Firstly, N. Chomsky is famous as a linguist, who draws philosophical conclusions from his linguistic research background, thus immersing himself in the field of philosophy of language and philosophy of mind. His political activity can be considered as a separate type of intellectual activity. Secondly, H. Putnam is a philosopher of science, particularly the philosopher of physics, mathematics, logic, from the study of which he turns to the study of language. Thus, H. Putnam and N. Chomsky got there in the field of philosophy of language; their field of study covers philosophy, linguistics, and political science.*

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## Internalism of N. Chomsky

The revolution carried out by N. Chomsky in linguistics through the view of language as a unique human biologically rooted cognitive ability has influenced various fields of knowledge such as cognitive psychology, philosophy of mind, philosophy of language, and the cognitive revolution in general. The first thing to note about his philosophy of language, which is the basis for further understanding, is that, in contrast to the behavioral understanding of language and in contrast to his teacher N. Goodman, Chomsky's approach is internalism.

The foreign researchers of Chomsky's philosophy, whose works were involved in this study, include J. McGilvray, J. Collins, the works of N. Smith, A. Bezuidenhout. For example, J. McGilvray, a professor at McGill University, specializes in philosophy of language, philosophy of mind; he is actively studying the philosophy of N. Chomsky. It is important to mention his work *The Cambridge companion to Chomsky* (McGilvray, 2005). Also, N. Chomsky's philosophy was the subject of study of Ukrainian researchers, namely S. Denisova, I. Aleksyuk, O. Hakman, and others. The main researchers of the philosophy of H. Putnam are M. McKinsey, M. Rowlands, J. Bickle. Among Ukrainian researchers, it is worth to mention A. Baumeister, I. Dobronravova, S. Rudenko, and many others. For example, in his article *Pragmatic Realism and Question about Objective Validity of the Practical Values and Norms. Discussion between Hilary Putnam and Jürgen Habermas* (2014) philosopher A. Baumeister notes that in the end "makes the transition from ontological internalism, which he developed in the work *Mind, Truth and History* (1981), to the so-called 'pragmatic realism' (pragmaticrealism)" (Baumeister, 2014: 7).

The American philosopher studied language as an intrinsic property of man, as his research focused not on individual national languages but also on general linguistic characteristics. His approach is called linguistic internalism, which considers language as an inner and innate ability. That is why N. Chomsky refers to innate ideas and calls his linguistics Cartesian. The idea of innate grammar, the innate ability to process language data creatively, originates from the first research of N. Chomsky. The work *Syntactic Structures* lays the foundations of transformational grammar, the author's method of N. Chomsky. In this work, for the first time, the thesis is expressed that a man has something innate that allows him to learn a language, and for the first time, the creative nature of language use is expressed. This work represents a systematic formalization of grammar, based on the assumption that the structure of human consciousness limits the structure of language; that all languages have something in common, namely: the universal characteristics and creativity. Creativity, in this context, is considered in a specific sense, namely – as the ability of a native speaker to produce and understand an infinite number of sentences, which they have never heard before (Chomsky, 1965: 232). Such a theory reflects the process of language perception and its use.

According to the internalists' concept of language, language is a property of the mind or brain of an individual and follows the internal states of mind. The American philosopher called his concept an "I-language," where the "I" means both internal and individual, opposed to the "e-language," where the "e" means external. For N. Chomsky, the I-language exclusively is a proper subject for scientific research. Therefore, N. Chomsky denies the thesis that there is a part of a brain which specializes in language. All people are born with a language system formed in the same way. The newborn's language system is the initial state of a language system. The theory of universal grammar is regarded as a theory of the initial state of the language system.

The thinker N. Chomsky gives an example of the process of mastery of speech by a child from birth. During the first year of life, a person hears a limited number of speech expressions, from which he or she abstracts the rules of sentence formation (Chomsky, 1966: 15). In the second year of life, the child demonstrates the ability to understand and create an unlimited number of statements that he or she has never heard before. Thus, N. Chomsky concludes that from a fairly small amount of data, a person can create an unlimited number of statements due to the innate ability to perceive and reproduce language. Therefore, N. Chomsky insists on the poverty of stimulus in the process of learning a language. The innate ability is a creative aspect of language use. A person can understand a sentence with grammatical mistakes and create a sentence he or she has never heard. Therefore, it is not enough to know grammar and vocabulary to master the language, but it is necessary to be able to use them as a tool of creativity.

N. Chomsky began to study language in the scientific community, which tended to behaviorism, and language was considered as determined by social influences. In addition, it was N. Chomsky, who emphasized that social influences are not so significant and that before learning a language, a person must already understand that he or she is dealing with a language. Due to the fact that his teacher Z. Harris was a faithful externalist, N. Chomsky was forced to insist on his position.

The semantic externalism, on the other hand, denies that the reference and intentional properties of utterances in language can be fixed regardless of the physical and social environment of the speakers.

### **Semantic externalism of H. Putnam**

Language externalists deny that languages are systems of internal mental representations. The externalists' approach is represented in H. Putnam's works. H. Putnam is one of the most famous American philosophers of the 20<sup>th</sup> century; he is a mathematician, logician, and computer scientist. The hottest debate between N. Chomsky and H. Putnam occurred in the field of philosophy of language. In contrast to N. Chomsky, H. Putnam was a staunch supporter of semantic externalist. In his controversy with internalism, H. Putnam emphasized the realism of semantics, believing that the notion of meaning speaks in favor of externalism because the meaning itself is not "in our heads". Putnam insists that meaning is a social construct; the meaning is learned by a person in the process of communication and refined throughout life. Because, a large number of meanings are available only to experts in a particular field. Thus, there is only a small group of people who have the ability to determine the semantic meaning of a word accurately.

According to H. Putnam, to find the semantic properties of words, we must take into account the external causal relationships between the objects in the world and words. Putnam's thought experiment on the Twin Earth is designed to reveal this approach.

### **Twin Earth experiment as an argument for externalism**

According to experiment, H. Putnam offers to imagine planet twins – the Earth and the Twin Earth. These planets have absolutely no differences; they are identical atom by atom. Two identical boys – Fred and twin Fred – live on these two planets and we are about to suppose that Fred and twin Fred are two individuals who duplicate each other in every atom. Nevertheless, there is one significant difference between those planets – the formula of liquid, which both boys call "water." "One of the peculiarities of Twin Earth is that the liquid

called “water” is not H<sub>2</sub>O but a different liquid whose chemical formula is very long and complicated. I shall abbreviate this chemical formula simply as XYZ. I shall suppose that XYZ is indistinguishable from water at normal temperatures and pressures. In particular, it tastes like water, and it quenches thirst like water. Also, I shall suppose that the oceans and lakes and seas of Twin Earth contain XYZ and not water, that it rains XYZ on Twin Earth and not water, etc.” (Putnam, 1979: 223).

Fred lives on the Earth, where the substance that fills the seas and oceans and precipitates in the form of precipitation has the chemical structure of H<sub>2</sub>O. Twin Fred lives on the twin Earth, where the substance that fills the seas and oceans and precipitates in the form of precipitation has some other chemical structure, called XYZ. Also, assume that Fred and the twin Fred do not know about the chemical composition of what they call water (either because they live in a time when the chemical composition of substances has not yet been described or because they are uneducated). Since Fred and his twin are atoms to atom identical, their complete systems on the part of their internal language are exactly the same. However, when they say “water,” they refer to different objects. The meaning of what they call “water” is different. As long as they have the same internal language, the meaning differs because of external factors. Therefore, the meanings are not in our heads, and external factors construct them.

That is how H. Putnam argues that internalism has no evident base. One of the main argument of N. Chomsky for internalism was the argument of poverty of stimulus. The essence of the argument is that the set of data that we learn in the family report during the first year of life is not enough for the amazing language acquisition that we demonstrate as a result.

Also known that H. Putnam does not agree with a statement that there are not enough external stimuli for a baby to learn the language. He insists that the baby spends five years learning the mother tongue and anyway continues making mistakes. “Now the child by the time it is four or five years old has been exposed to vastly more than 600 hours of direct-method instruction. Moreover, even if ‘reinforcement’ is not necessary, most children are consciously and repeatedly reinforced by adults in a host of ways – e.g., the constant repetition of simple one-word sentences (‘cup,’ ‘doggie’) in the presence of babies. Indeed, any foreign adult living with the child for those years would have an incomparably better grasp of the language than the child does. The child indeed has a better accent. Also, the child’s grammatical mistakes, which are numerous, arise not from carrying over previous language habits but from not having fully acquired the first set. But it seems to me that this ‘evidence’ for the IH stands the facts on their head” (Putnam, 1979: 114).

That is why he believes that the process of learning language does not differ from any other learning. Moreover, humans spend more time learning to speak than in learning anything else. Babies are learning language from the first day of life every day and in spite of that, still make many mistakes. There is no miracle in language acquisition. Consequently, the assumption of the existence of innate language structure would be incorrect. “I will be told, of course, that everyone learns his native language (as well as everyone does) and that not everyone solves puzzles or proves theorems. But everyone does learn pattern recognition, automobile driving, etc., and everyone can solve many problems that no computer can solve. In conversation, Chomsky has repeatedly used such skills to support the idea that humans have an ‘innate conceptual space.’ Well and good, if true. But that is no help. Let a complete seventeenth century Oxford University education be innate if you like; still the solution to ‘jump’ was not innate; the Prime Number Theorem was not innate; and so on. Invoking ‘innateness’ only postpones the problem of learning; it does not solve it” (Putnam, 1979: 116).

According to H. Putnam, language learning does not require the presence of an internal language structure, because language learning involves learning the meanings of words and their proper use, which has formed in a particular society. Therefore, language belongs to the social reality, and the social aspect should be taken into account when exploring language. “Feeling that meanings are public property – that the same meaning can be ‘grasped’ by more than one person and by persons at a different time – they identified concepts (and hence ‘intensions’ or meanings) with abstract entities rather than mental entities. However, ‘grasping’ these abstract entities was still an individual psychological act. None of these philosophers doubted that understanding a word (knowing its intension) was just a matter of being in a certain psychological state (somewhat in the way in which knowing how to factor numbers in one’s head is just a matter of being in a certain very complex psychological state)” (Putnam, 1979: 218).

The Twin-Earth experiment shows that meaning of the word “water” can be understood properly only by the person who knows the chemical formula of water. This also applies to other examples, proving that it is common for us to know and even use the words, the meaning of which we cannot define. Putnam gives an example of the fact that he is not able to make difference between beech and elm, for him they are both just deciduous trees. However, for botanists, this difference is obvious. If there were no botanical science, there would not have two separate words to name these two species of trees. Thus, the meanings are specified by society through the work of experts in various fields of knowledge. “The last two examples depend upon a fact about language that seems, surprisingly, never to have been pointed out: that there is division of linguistic labor. We could hardly use such words as ‘elm’ and ‘aluminum’ if no one possessed a way of recognizing elm trees and aluminum metal; but not everyone to whom the distinction is important has to be able to make the distinction” (Putnam, 1979: 228).

Thus, the concept of division of linguistic labor is created, which reflects the division of labor in society. “This division of linguistic labor rests upon and presupposes the division of nonlinguistic labor, of course. If only the people who know how to tell if some metal is really gold or not have any reason to have the word ‘gold’ in their vocabulary, then the word ‘gold’ will be like the word ‘water’ was in 1750 with respect to that subclass of speakers, and the other speakers just won’t acquire it at all. And some words do not exhibit any division of linguistic labor: ‘chair,’ for example. But with the increase of division of labor in the society and the rise of science, more and more words begin to exhibit this kind of division of labor” (Putnam, 1979: 228).

As for the approach of internalism to the study of language, Putnam uses the expression “innateness hypothesis.” Thus, he marks a set of guidelines that apply to the assumption of the innate aspect in the process of language acquisition. He does not agree with this hypothesis and formulates the opposite position, which allows us to consider language from the standpoint of the study of society. The emphasis in this hypothesis is the ability to explore the emergence of new words and their meanings with the development of science. He calls it the “hypothesis of the universality of the division of linguistic labor... It seems to me that this phenomenon of division of linguistic labor is one which it will be very important for sociolinguistics to investigate. In connection with it, I should like to propose the following hypothesis: Hypothesis of the Universality of the Division of Linguistic Labor: Every linguistic community exemplifies the sort of division of linguistic labor just described: that is, possesses at least some terms whose associated ‘criteria’ are known only to a subset of the speakers who acquire the terms, and whose use by the other speakers depends upon a structured cooperation between them and the speakers in the relevant subsets” (Putnam, 1979: 228).

This thesis is that we do not always know the meaning of our own words, and in these cases, we rely on experts. Since elm and beech mean two different things in my language, the entries in my mental lexicon for these words have the same information – a deciduous tree. These words have different meanings because I live in a language community of experts whose knowledge of elms and beech is rich enough to distinguish them. In addition, which I will rely on when I need to be more accurate than my internal resource allows.

The cosmological example with twin planets is very illustrative. In addition to the main meaning put into the essence of the experiment, it testifies to the interest of philosophy in cosmological ideas. Therefore, for example, it was possible to explain the essence of the emergence of language by resorting to other metaphors, but in the scientific community, there is growing interest in the philosophical understanding of cosmological phenomena, as professor S. Rudenko writes in his article. “Based on the above, the transcendental philosophy will allow rethinking not the concept of space, which has been studied well enough, but the concept of time, whose earthly experience does not apply to phenomena located at such remote boundaries” (Rudenko & Sobolievskyi, 2019: 168).

### **Chomsky’s response to the Twin Earth thought experiment**

It is known that N. Chomsky is skeptical of the scientific significance of the ideas of external social semantics regarding the division of linguistic labor, and denies that there are experts, to whom we trust to define the terms. He also denies that the meanings of individual words represent certain social norms. He believes that neither Fred nor his twin made any mistakes regarding their own individual language. After all, in their inner perception, the word “water” does not mean a certain chemical formula. Moreover, the meaning of the word “water” varies depending on the circumstances. If a person wants to quench thirst and points to the juice for the words “give me water,” then there is no mistake: in these circumstances, the word “water” means any liquid that can quench thirst. To summarize his opinion, N. Chomsky identifies the types of speech errors or incorrect use of words. He identifies three senses, in which we can talk about the misuse of language: the individual, the social and the expert senses.

1. The first case of misuse involves the speaker using a word without conforming to his own internal language (for example, swelling of the tongue).
2. The second case of misuse concerns a situation where a speaker uses a word in a way that reflects a certain social standard. For example, colloquialism, which is not a literary form of language, may be of interest to sociological or any other study, but is not relevant to the study of language, because, for N. Chomsky, it is not a mistake just as Spanish is not a mistake of English.
3. In the end, N. Chomsky agrees that for someone, the elms and beeches are indistinguishable, and this leads to misuse, in the sense that someone uses the term in a sense that is different from the expert’s definition. However, the community in which the correct use of the term is violated may not have contact with the community of experts in any way, so the fact that someone violates the rules of use established by experts is not the argument in favor of a social theory of meaning.

Philosopher N. Chomsky responds to the critic of H. Putnam in work *New Horizons of the Study of Language and Mind*. He emphasizes that the thought experiment must confirm a certain position by demonstrating its intuitive obviousness. However, in this experiment, we

do not use linguistic intuition because we use words that are not intuitively understood. That is, not the words of our everyday language, but the technical and scientific terms. “In fact, some curious moves take place at this point. Consider the Twin-Earth thought experiment designed by Hilary Putnam, which has provided much of the motivation for externalist assumptions. In one version, we are to explore our intuitions about the extension or reference of the word ‘water’ on Twin-Earth, where speakers identical to us use it to refer to XYZ, which is not H<sub>2</sub>O. But we can have no intuitions about the question, because the terms extension, reference, true of, denote, and others related to them are technical innovations, which mean exactly what their inventors tell us they mean: it would make as little sense to explore our intuitions about tensors or undecidability, in the technical sense” (Chomsky, 2008: 148).

According to N. Chomsky, this experiment leads to completely different conclusions if we bring it closer to the everyday use of language, which is not related to technique and science. This use allows us to apply our linguistic intuition and see the obvious position of internalism. Therefore, N. Chomsky offers his version of the thought experiment. “Suppose we pose the thought experiment using ordinary language. Suppose, for example, that Twin-Oscar comes to Earth, is thirsty, and asks for that, pointing either to a glass of Sprite or of what comes from the faucet – some odd mixture of H<sub>2</sub>O, chlorine, and I hate to think what else, differing significantly from place to place (but called ‘water’)” (Chomsky, 2008: 149).

In his experiment, Fred not only knows the word “water,” but also uses it in a natural situation of thirst. Thus, N. Chomsky demonstrates that the difference in the formulas of water on the planets does not change the meaning of the word “water”. After all, this word is used for one purpose, regardless of the chemical composition of the liquid.

As a result, H. Putnam writes, “Chomsky knows perfectly well that there is a relation between speakers, words, and things in the world.” So there sometimes is, abstracting from circumstances of use, in more or less the sense in which a relation holds of people, hands, and rocks, in that I can use my hand to pick up a rock. But that leaves us a long way from establishing anything remotely like the conclusions Putnam wants to reach” (Chomsky, 2008: 150).

Consequently, N. Chomsky puts forward the following arguments in favor of the fact that the thought experiment about the Earth’s twin does not prove the fact that language is not an internal system because the meaning is not in our heads:

1. The inconsistency of linguistic examples for an intuitively obvious way of confirming an opinion. “In one version, we are to explore our intuitions about the extension or reference of the word ‘water’ on Twin-Earth, where speakers identical to us use it to refer to XYZ, which is not H<sub>2</sub>O. But we can have no intuitions about the question, because the terms extension, reference, true of, denote, and others related to them are technical innovations, which mean exactly what their inventors tell us they mean: it would make as little sense to explore our intuitions about tensors or undecidability, in the technical sense” (Chomsky, 2008: 148).
2. There are words in a language that denote real phenomena and occur in experience. Thus, we can say that there are words that are intuitive to a man because he encounters these phenomena in everyday life. However, there are words that are almost absent in the everyday world of a man. They are encountered only by specific professional groups. If we oppose internalism, we should take into account natural human words as well and not just technical terms. Because, according to N. Chomsky, they change the situation and the experiment itself. From the point of view of internalism, the

situation with the Earth's twin could be considered, but we should consider the case where everyday language would be applicable. If twin Fred got to Earth and asked for a drink, pointing to tea like water, he would be wrong in the sense of H. Putnam. However, from the point of view of Fred's inner language, there is no mistake. In these circumstances, the formula of liquid is not so important as its ability to quench thirst. "The Twin-Earth problem is posed by withdrawing the presuppositions of discourse on which normal usage rests" (Chomsky, 2008: 149).

3. An important argument of N. Chomsky is that the meaning is not unique and common even for a small group of people. We cannot unequivocally find an error in understanding the meaning of a word, because the meaning depends on the context in which the word is used. In different circumstances, the same word will have different meanings. 'Second, the revision is not helpful, since the Peircean thesis involves an invented technical notion of reference, so we are back where we were, with intuitions that we cannot have. In ordinary usage, "reference" is not a triadic relation of the Peircean sort. Rather, person X refers to Y by expression E under circumstances C, so the relation is at least tetradic; and Y need not be a real object in the world or regarded that way by X. More generally, person X uses expression E with its intrinsic semantic properties to talk about the world from certain intricate perspectives, focusing attention on particular aspects of it, under circumstances C, with the "locality of content" they induce (in Bilgrami's sense)" (Chomsky, 2008: 150).
4. For N. Chomsky, H. Putnam insists on the position of semantic externalism, because it is important for him to preserve realism in the perception of human language, to preserve the correlation between human language and the world around. However, is it useful for the scientific study of language? N. Chomsky believes that the realism reflected in semantics, according to H. Putnam, is not absent, but simply does not apply to the science of language. The theory of how society influences the construction of the meanings of words is quite possible. However, according to N. Chomsky, it is a sociological theory and does not add anything new to language study. The theory of sociological influences on phonetics can be constructed with the same success, but this will not apply to phonetics as such. "The philosophical inquiry seems oddly framed in other respects as well. Thus, the word 'water' is a collection of phonetic, semantic, and formal properties, which are accessed by various performance systems for articulation, perception, talking about the world, and so on. If we deny that its meaning is in the head, why not also that its phonetic aspects are in the head? Why does no one propose that the phonetic content of 'water' is determined by certain motions of molecules or conventions about "proper pronunciation"? The questions are understood to be absurd or irrelevant. Why not also in the case of meaning?" (Chomsky, 2008: 151).

In the end, N. Chomsky did not deny that language is a social tool. However, for him, Putnam's idea of the need to study the social mechanisms that affect the development and formation of language is simply not interesting. He sees no methodology that would allow the sociological study of language to be given a truly scientific basis. At present, according to N. Chomsky, research on the distribution of linguistic work does not concern the study of language at all. This is not scientifically sound, but it is a "theory of it" because it is impossible

to limit the amount of social factors influencing language. They are just many. “Putnam’s statement that ‘Languages and meanings are cultural realities’ is accurate in one sense, which is why (like everyone else) I describe the way the terms are understood in the cultures we more or less share in terms of structures of power and authority, deference patterns, literary monuments, flags and (often mythical) histories, and so on. Such terms as ‘language’ are used in different ways in other speech communities; and our terms belief, meaning, etc., commonly lack any close counterpart. But these ‘cultural realities’ do not contribute to understanding how language is acquired, understood, and used, how it is constituted and changes over time, how it is related to other faculties of mind and to human action generally” (Chomsky, 2008: 159).

## Conclusion

Thus, we can conclude that two approaches, both internalism and externalism, are well-founded. However, we can say that they do not oppose each other, but rather complement each other because they have different research goals. The internalism, presented by N. Chomsky, aims to explore the process of language acquisition and language structure common to humanity and to formalize this structure. At the same time, the semantic externalism in Putnam’s version aims to reveal the sociological factors influencing the formation of language as a public phenomenon. Thus, these approaches explore the phenomenon of language in terms of its opposite manifestations, and combining and rethinking the results of research on both approaches can provide an opportunity to consider language in its entirety.

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