CURRENT RESEARCH JOURNAL OF PHILOLOGICAL SCIENCES
(ISSN –2767-3758)
VOLUME 05 ISSUE 04 Pages: 69-75
SJIF IMPACT FACTOR (2022: 6. 041) (2023: 7. 491) (2024: 8.235)
OCLC – 1242423883
Publisher: Master Journals

Journal Website: https://masterjournals.com/index.php/crjps

Research Article

A PRAGMATICALLY ORIENTED APPROACH TO GENERATIVE LINGUISTICS

Submission Date: April 20, 2024, **Accepted Date:** April 25, 2024,
Published Date: April 30, 2024
Crossref doi: https://doi.org/10.37547/philological-crjps-05-04-12

Sukhrob Avezov Sobirovich
Lecturer at the Department of Russian literature studies, Bukhara State University, Uzbekistan

ABSTRACT

The annotated paper examines the possibility of creating an original grammatical system when teaching a new language. The pragmatic approach to generative linguistics was the methodology of language acquisition using a unified model of the Russian sentence. The article discusses algorithms of sentence modelling at two levels: external and internal, based on the theories of N.Chomsky and L.Teniers. The external level includes the construction of a unified sentence structure from the deep structure to the surface structure according to N.Chomsky. And the internal level includes the structural correlation of model elements as the content of the unified sentence structure itself - according to L.Tenier. The theories of N.Chomsky and L.Teniers defined all models as a union of components and reflected in the same models the relations of hierarchy between the components. The study demonstrates a way of teaching foreign speakers the language with the help of the author's theory of algorithmic syntax.

KEYWORDS

Structuralist methods, generative linguistics, algorithmic syntax, transformational analysis, unified sentence structure.

INTRODUCTION

Structuralism is the main trend in linguistics of the 20th century. The most important trends of structuralism were glossematics in European linguistics, American structuralism, transformational generative grammar of N.Chomsky, generative linguistics, and structural

CURRENT RESEARCH JOURNAL OF PHILOLOGICAL SCIENCES
(ISSN –2767-3758)
VOLUME 05 ISSUE 04 Pages: 69-75
SJIF IMPACT FACTOR (2022: 6. 041) (2023: 7. 491) (2024: 8.235)
OCLC – 1242423883
Publisher: Master Journals

syntax of L.Teniers. The ideas of F. de Saussure played a huge role in the formation of all directions of structuralism. A number of structuralist methods are still fruitfully used in the works of linguists belonging to various directions and in various countries. When analysing this trend, we should not forget that the modern study of language is unthinkable without the achievements of structuralism.

Main part. For the first time, the requirement to study syntax, not only phonology, morphology, phonomorphology, as it was customary among descriptivists, in a purely formal way was formulated by L.Bloomfield. The method of immediate constituents was put forward as a method of such a formal study. This method proposed by L.Bloomfield was further developed in the 40-50s. Already by the mid-40s, American structuralists, in particular descriptivists, were increasingly turning to the study of syntax problems, and in the 50s syntax became the centre of attention of leading American linguists. Direct constituent analyses and transformational analyses began to be developed as the main methods of analysing the syntactic level.

In essence, the method of analysis by direct constituents turns out to be a further and peculiar theoretical development of F. de Saussure's theory of syntagma, since it is based on the notion of a certain link consisting of two interconnected "constituents" or constituents, of which one is the main and the other is dependent. Each of the "constituents" can be combined with units of higher or lower order in relation to it, which allows for the unfolding or collapsing of a sentence. It was the latter circumstance that caused its further use as one of the stages in the creation of a new method of syntactic analysis. The necessity of searching for new ways of analysis and developing a new methodology is explained by the fact that the DC analysis no longer met the requirements for syntactic research due to the development of a number of related disciplines, due to the emergence of new purely applied and general theoretical tasks. In particular, the DC method is able to reveal only the hierarchical structure of a sentence, but it does not allow us to distinguish structural types of sentences.

Since the mid-50s, a new method of syntactic analysis, called transformational analysis, has been developed and applied in American linguistics. By the mid-60s, the transformational method had become one of the most widely used methods not only in the United States but also in other countries. The success of the transformational method was facilitated by its fundamental difference from the descriptive technique of analysis, which made it possible to comprehend already known linguistic material in a new way.

It should be noted, however, that the transformational method differs from the NS method primarily in its aims. The difference in the aim is that with the DC method one tried to answer the question of how a sentence is composed, what parts it consists of. With the help of the transformational method we tried to find an answer to the question from which sentence or sentences this particular sentence is derived by means of structural transformations.

CURRENT RESEARCH JOURNAL OF PHILOLOGICAL SCIENCES
(ISSN –2767-3758)
VOLUME 05 ISSUE 04 Pages: 69-75
SJIF IMPACT FACTOR (2022: 6. 041) (2023: 7. 491) (2024: 8.235)
OCLC – 1242423883
Publisher: Master Journals

By the 1960s, N. Chomsky's ideas, which represent a further and special development of transformational methodology, were particularly developed. The basis of N. Chomsky's concept is the notion of generating grammars. According to this concept, the grammar of a language, and in fact the whole language, is considered as a certain generating device. N. Chomsky himself traces the origins of generative grammar to W. Humboldt's ideas about the creative aspect of language. The purpose of generative grammar is to identify the strict rules by which this creative activity takes place in language.

A generative grammar is not derived from linguistic material (otherwise, text), but is constructed, designed, and then its adequacy to the object is checked. This means that a transformational grammatical model must have the ability to generate correct sentences of a language. According to N. Chomsky, the grammar of language is "a kind of mechanism that generates all grammatically correct sequences of language and does not generate a single grammatically incorrect one". In N.Chomsky language acts as a special generating device that gives correct sentences at the output. Accordingly, his grammar is synthesising, "generating".

One of the possible types of grammars N. Chomsky calls the direct constituent model. This grammar represents: a) a set of units and symbols. For example, N is a noun, V is a verb, NP is a noun group, VP is a verb group, T is an article, etc.; b) a set of rules for deploying these symbols. Such grammar on the example of one sentence: The child plays ball looks as follows: N - V - O4.

The described model, we adhere to the opinion of N. Hosky, "is stronger" than the others and more suitable because it can produce more sentences: He reads the newspaper. Jason sent a letter. Sabina is expecting a baby, etc.

The peculiarity of N. Chomsky's grammatical conception is that while earlier American linguists paid predominant attention to grammatical analysis, Chomsky proposes to deal primarily with grammatical synthesis. Chomsky's grammar is a synthesising grammar. Such an approach to the problem of grammar creation is explained first of all by purely practical tasks arising in connection with the ever-increasing role of mass communication problems.

Generative linguistics has put forward several fundamental oppositions: a clear distinction is made between "competence" - knowledge of language and "use" - the use of language in speech activity. A transformational generative grammar describes first of all the speaker's competence. The structure of this grammar has three main components: syntactic, semantic and phonological, of which syntax is the main, central component, while semantics and phonology perform interpretive functions in relation to syntax. Transformational generative grammar introduces two levels of syntactic representation: deep (deep structure) and surface (surface structure); the task of syntactic description is to calculate all deep and surface structures and to establish a strict correspondence between them.

CURRENT RESEARCH JOURNAL OF PHILOLOGICAL SCIENCES
(ISSN –2767-3758)
VOLUME 05 ISSUE 04 Pages: 69-75
SJIF IMPACT FACTOR (2022: 6. 041) (2023: 7. 491) (2024: 8.235)
OCLC – 1242423883
Publisher: Master Journals

Generative linguistics was widely developed both in the USA and abroad in the 60s of the 20th century. It increased the requirement for the explicitness of the linguistic description given in the form of calculus; it drew attention to unobservable objects of syntax, the existence of which is determined indirectly, contributed to the development of an apparatus for the description of syntax comparable in detail to the apparatus for the description of morphology, introduced into linguistics the technique of formalisation of description, facilitating, in particular, the automation of linguistic processes with the help of computer technology.

In Uzbekistan, the methods of transformational grammar were addressed in his research by A.E. Karlinsky, who used the superposition of two systems to determine the spheres of possible interference on the basis of the laws of interlingual identification.

Declaring N. Chomsky's idea about the possibility of generating a new grammatical system for applied purposes, we tried to justify it using the theory of generative grammars - GG and the method of direct constituents (DC). A generative grammar is not only a method of language research for strictly practical purposes, but it is also a kind of general theory of language. "The grammar of a language, is essentially a theory of language". This theory endeavours to consider language not only in its static but also in its dynamic aspect. Based on this statement of N.Chomsky, we called our approach to syntax the theory of algorithmic syntax.

The unified model of the Russian sentence developed in the theory of algorithmic syntax, interpreted through the prism of N. Chomsky's theory, and the algorithms for analysing this structure, demonstrate the adequacy of the grammatical theory based on structuring, through modelling the deep and surface structures of the Russian sentence, to the presumed results in facilitating the learning of the Russian language.

In addition to these structural theories, L. Tenier's structural syntax stood alone. American structural syntax - analysis by immediate constituents (IC), which developed into generative grammar and later formed into constitutive syntax in all its manifestations, and L. Teniers' structural syntax, which became the basis for dependency grammar, were considered by many scholars as alternative theories. L.Teniers' sentence structure is a set of dependency relations between its components. He actually proceeded from the fact that syntactic relation reflects the relation of subjects and concepts to each other. L. Teniers' structural syntax is quite different from structural constitutive syntax in that it does not study the structure of the sentence itself, but the various structures forming the sentence - it is the syntax of structures (from Greek syntaxis - construction, order). L. Teniers' syntax is not a doctrine of the sentence as a whole, but only of the structures within the sentence.

L. Teniers' concept reflects the communicative process: to speak means to transform structural order into linear order (illocution), to understand speech means to do the opposite (perlocution), where the linear (formal) order of words

CURRENT RESEARCH JOURNAL OF PHILOLOGICAL SCIENCES
(ISSN –2767-3758)
VOLUME 05 ISSUE 04 Pages: 69-75
SJIF IMPACT FACTOR (2022: 6. 041) (2023: 7. 491) (2024: 8.235)
OCLC – 1242423883
Publisher: Master Journals

presupposes the arrangement of words in the speech chain, and the structural order determines the relations between words, their interdependence, where the linear order is one-dimensional and the structural order is multidimensional.

In the theory of L. Teniers we are interested in this vision of structure. The dependency principle distinguishes Teniers' theory from constitutive grammars (NS grammar, transformational grammar), where models are defined as a union of constituents between which formal hierarchy relations are established. In contrast to these grammars, in L. Teniers, one element of the highest level can refer to a set of elements of the lowest level.

In the theory of algorithmic syntax, in order to minimise and simplify the assimilation of knowledge, there is a "reconciliation" of these two theories, which are not actually confrontational, but logically represent a single whole. There is a unification of the sentence using the methodology of generative grammar, and then, despite the apparent detachment of transformational grammars from L. Teniers' position, an attempt is made to analyse the verbal, substantive, adjectival and adverbial nodes that make up the structure of the whole sentence. In other words, an attempt is made (in favour of pragmatics) to unite two seemingly alternative theories.

When it becomes necessary to correlate any provisions of two alternative theories, it is necessary to consider to what extent these provisions can be modified (transformed in order to obtain something new), unified (brought to a single system), so that they do not lose their original meaning in the process of modification and at the same time acquire the ability to combine with each other. Thus, in our work we strive to achieve an acceptable limit of modification and unification of the problem. In our work, the combination of N. Chomsky's structural models with the hierarchical relations between the constituent components of L. Teniers' sentences is transformed for applied purposes.

All the models constructed by us can be defined both as an amalgamation of constituents and to reflect in the same models the hierarchical relations between the components. That is, on the basis of L. Teniers' theory, we try to extend transformational grammar, supplementing it with hierarchical relations between components, to investigate the structures that make up sentences from the inside and try to construct sentences with the help of these structural models.

H. Chomsky and his followers did not unfold their composed models and did not demonstrate syntactic relations between the constituents. In turn, L. Tenier and his followers did not unite his hierarchically arranged nodes, stems, graphs into a single model. They did not go from the "atomistic" description of language to its systemic comprehension, although the basis for this transition would have been the use of structural modelling from private nodes to the full model of the sentence.

Although, quoting the words of L. Terrier: "Along with the partial and fragmentary stems used to explain this or that section of structural syntax, it

CURRENT RESEARCH JOURNAL OF PHILOLOGICAL SCIENCES
(ISSN –2767-3758)
VOLUME 05 ISSUE 04 Pages: 69-75
SJIF IMPACT FACTOR (2022: 6. 041) (2023: 7. 491) (2024: 8.235)
OCLC – 1242423883
Publisher: Master Journals

is possible, at least theoretically, to imagine a certain integral stemma in which all the structural elements of a given sentence would be taken into account; it is possible, at least, to make an attempt to approach this ideal", we see that the idea of integrating a unified model has been proposed.

In this connection, it seems to us that there is nothing more illustrative in the process of mastering a foreign language than to trace a language system by a structural model of a sentence, and then sequentially (algorithmically) consider syntactic relations between the components, having constructed and studied all kinds of stems and nodes linking the components. The theory of algorithmic syntax is based on the linguistic theory of N.Chomsky in terms of transformational generative grammar, which, according to V.A. Zvegintsev, "realises the aspiration to construct an adequate and sufficiently explanatory linguistic theory". The unified structure of the Russian sentence, which we interpret through the prism of the theories of N. Chomsky and L. Teniers, and the algorithms of semantic and syntactic analysis of this structure allow us to demonstrate the adequacy of the grammatical theory through the modelling of the deep and surface structures of the Russian sentence.

The technological approach to the problem suggests how a theory of language acquisition should be constructed in order to arrive at practical and effective results. Therefore, the structural-algorithmic approach to the theory of algorithmic syntax used is the most representative for understanding the underlying essence of language acquisition.

CONCLUSION

The aim of the theory of algorithmic syntax is to identify analogues of the communication process from the field of computer science, to construct a virtual integral stemma of a simple sentence, to bring together into a single algorithmic system the grammatical knowledge of the sentence in order to find ways to improve the theory of language acquisition.

The prospects for using the theory of algorithmic syntax are to develop a theoretical justification for new language teaching technologies based on this theory, to develop a theoretical justification for educational computer programs for Russian and Uzbek languages as foreign languages, to prepare material for the computer acquisition of algorithmic grammatical knowledge using remote control, to create a virtual presentation of Russian or Uzbek sentences in 3D format for a clear demonstration of sentence construction in practical classes on studying Russian and Uzbek languages as foreign languages.

REFERENCES

1. Chomsky N. Rules and representations. N. Y., 1980.
2. Avezov S. S. MACHINE TRANSLATION TO ALIGN PARALLEL TEXTS //International Scientific and Current Research Conferences. – 2022. – С. 64-66.
3. Chomsky N., Halle M. The sound pattern of English. N. Y.; Evanston; L., 1968.
4. Авезов С. КОРПУСНАЯ ЛИНГВИСТИКА: НОВЫЕ ПОДХОДЫ К АНАЛИЗУ ЯЗЫКА И ИХ

CURRENT RESEARCH JOURNAL OF PHILOLOGICAL SCIENCES
(ISSN –2767-3758)
VOLUME 05 ISSUE 04 Pages: 69-75
SJIF IMPACT FACTOR (2022: 6. 041) (2023: 7. 491) (2024: 8.235)
OCLC – 1242423883
Publisher: Master Journals

ПРИЛОЖЕНИЯ В ОБУЧЕНИИ ИНОСТРАННЫМ ЯЗЫКАМ //International Bulletin of Applied Science and Technology. – 2023. – Т. 3. – №. 7. – С. 177-181.

5. Tanenhaus V. K. Psycholinguistics: an overview // Language: psychological and biological aspects. Cambridge,1988. P. 1—37.
6. Авезов С. О корпусной лингвистике, трудностях перевода и принципах организации параллельных корпусов текстов //«УЗБЕКСКИЕ НАЦИОНАЛЬНЫЕ ОБРАЗОВАТЕЛЬНЫЕ ЗДАНИЯ ТЕОРЕТИЧЕСКОЕ И ПРАКТИЧЕСКОЕ СОЗДАНИЕ ВОПРОСЫ" Международная научно-практическая конференция. – 2022. – Т. 1. – №. 1.
7. Nigmatova L., Avezov S. ПРИМЕНЕНИЕ МЕТОДОВ NLP В КОРПУСНЫХ ИССЛЕДОВАНИЯХ: ОСОБЕННОСТИ И ОГРАНИЧЕНИЯ //«УЗБЕКСКИЕ НАЦИОНАЛЬНЫЕ ОБРАЗОВАТЕЛЬНЫЕ ЗДАНИЯ ТЕОРЕТИЧЕСКОЕ И ПРАКТИЧЕСКОЕ СОЗДАНИЕ ВОПРОСЫ" Международная научно-практическая конференция. – 2023. – Т. 2. – №. 2.
8. Авезов С., Юсупова А. ПРОЦЕСС ОБРАБОТКИ УЗБЕКСКОГО ПАРАЛЛЕЛЬНОГО КОРПУСА В УСЛОВИЯХ НЕДОСТАТОЧНОСТИ ДАННЫХ //Евразийский журнал социальных наук, философии и культуры. – 2023. – Т. 3. – №. 3. – С. 49-58.
9. Sobirovich A. S. Lecturer at the Department of Russian Language and Literature Bukhara State University //Scientific reports of bukhara state university. – С. 86.
10. Авезов С. С., Маринина Ю. А. Электронные Корпусы: Инновационный Подход К Обучению Переводу //Periodica Journal of Modern Philosophy, Social Sciences and Humanities. – 2023. – Т. 16. – С. 7-13.
11. Tenier L. Fundamentals of Structural Syntax. - Moscow: Progress, 1988. - 250 c.