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ABSTRACT

of the dissertation for the degree of Doctor of Philosophy

**SYNTACTIC TRANSFORMATION ISSUES IN ENGLISH
IN THE CONTEXT OF NOAM CHOMSKY'S
MINIMALIST PROGRAM**

Speciality: 5708.01 – Germanic languages

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Applicant: **Roya Gazanfar Abdurahmanova**

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The work was performed at the department of the English Grammar of the Azerbaijan University of Languages.

Scientific supervisor: Doctor of Philological Sciences,
Associate Professor
Leyla Mirhasan Jafarova

Official opponents: Doctor of Philological Sciences
Parviz Yasinali Aghayev

Doctor of Philosophy on Philology,
Associate Professor
Baylar Islamkhan Hajiye

Doctor of Philosophy on Philology
Aynur Muzaffar Aghazadeh

Dissertation council ED 2.12 of Supreme Attestation Commission under the President of the Republic of Azerbaijan operating at Azerbaijan University of Languages.

Chairman of the
Dissertation council

Doctor of Philological Sciences,
academic
Kamal Mehdi Abdullayev

Scientific secretary of the
Dissertation council:

Doctor of Philosophy on Philology,
Associate Professor
Irada Nadir Sardarova

Chairman of the
scientific seminar:

Doctor of Philological Sciences,
Professor
Fakhraddin Yadigar Veysalli

GENERAL DESCRIPTION OF THE RESEARCH

Urgency of the theme and the degree of research. The study of the function of language in the process of communication is one of the main problems of modern linguistics. Until the end of the twentieth century, the focus in linguistics was on the study of the system and structural organization of language. At present, linguists focus on the analysis of various factors governing the communication process.

The concrete use of language in real-time is considered to be the result of an infinite set of coincidences, the interaction of the language system with non-linguistic factors. It should be noted that from this point of view, Chomsky's concepts in linguistics attract more attention. According to his theories, man is a key factor in the analysis of language.

A special approach to language learning is based on N.Chomsky's claim to the theory of language competence and language performance¹. According to these theories, the central object of linguistic research is the immutable, use-independent sign system or grammar in the brains of language speakers.

N.Chomsky always tries to reveal the secrets of human intentions in their speech or hearing, based on the model *of the ideal speaker* and *the ideal listener*, and on the knowledge of the native speakers of the language.

The main goal of N.Chomsky's theories is to determine the general boundaries and limitations of languages. Finding out which mental systems and mechanisms language is based on, is the plot of his existing theories. In addition, the idea to those listed above, the idea that constraints and schemes are innate can be found in N.Chomsky's minimalist program².

¹ Hawkes, T. Structuralism and semiotics / T.Hawkes. – London: Oxford University Press, – 1992. – p.15; Renate, R. Valency Patterns and Meaning Interpretation: / Phd thesis/ – Birmingham University, 2013. – p.3

² Chomsky, N. Language and mind / N.Chomsky. – Cambridge University Press 3rd ed. – 2006. – 208 p.

At the current stage of the science of language, the study of various phenomenon related to human thinking and activity is of particular relevance.

The issues of transformation play an important role in the context of N.Chomsky's minimalist program in modern English, and although works have been written about it in various aspects, the current topic has not been studied separately and thoroughly in the Azerbaijani language.

The research is devoted to the study of problems of transformation at the syntactic level in the context of Noam Chomsky's minimalist program in English.

In the dissertation, for the first time, transformations in the context of N.Chomsky's minimalist program are systematically analyzed. As a result of the analysis, certain scientific results have emerged. Materials in Azerbaijani, Russian, and English were used to substantiate the theoretical ideas.

The dissertation examines the existing complexity of previous theories of transformations and attempts to overcome them. An example of this is the reduction in the number of presentations at the linguistic level and the use of an bare phrase structure instead of the X-line theory in the analysis of sentences at the syntactic level of the English language.

As for the scope of the theme, it should be noted that since the 50s of the last century, the theories of N.Chomsky have become important for the science of linguistics, and as a result, the number of studies on the concepts of the scientist began to increase.

In the study of N.Chomsky's theories in foreign linguistics, L.Antoni, N.Hornstein, R.Barski, J.Boeckx, C.Otero, N.Ritter, P.Seuren, M.Thomas, in Russian linguistics L.N.Viktorovna, A.A.Kibrik, I.A.Melchuk, Y.Testelets, L.Zasorina, T.Nikolayeva, in Azerbaijani linguistics, F.Y.Veysalli, A.Y.Mammadov, A.H.Veysalova, T.M.Akbarova, N.A.Aliyeva, and other linguists were involved.

F.Y.Veysalli extensively studies N.Chomsky's linguistic views and pays attention to the solution of various phenomenon related to human thinking and activity. According to him, "*any unit of*

language is two-sided and both sides must be taken into account in its definition; i.e., as N.Chomsky claims, the importance of the speaking-listening components must be taken into account”³.

A.Y.Mammadov translated N.Chomsky’s book “Language and Mind” into Azerbaijani⁴ and thus made a great contribution to Azerbaijani linguistics. In the work, N.Chomsky touches on the relationship between language and mind and tries to substantiate the idea that language is innate. The theory of the deep structure and surface structure is also included in this work.

The object and subject of the research. The object of research is the existing transformations within the framework of N. Chomsky's minimalist program.

The subject of the research is the summarization and systematization of the results obtained from the research and analysis of the transformation at the syntactic level.

The aims and objectives of the study. The main purpose of the research is to determine the scope of syntactic-level structures by exploring transformations in the context of N.Chomsky’s Minimalist Program and to identify innovations in this area.

The thesis deals with the analysis of transformations at the syntactic level, the limitations of syntactic relationships. To achieve this goal, the following tasks need to be fulfilled:

- To study and systematize the historical development of Generative grammar models;
- To investigate, clarify, and specify the criteria of conformity inherent in Universal Grammar;
- To reveal the effect of binary branching and minimalism in the structure of bare phrase structure;
- To identify the types of transformation of the headword and consider the constraints of the headword and the principle of locality;
- To review and justify the transformation of the headword in Old English, as well as in modern English;

³ Veysalli, F.Y. The Basics of Structural Linguistics. I / F.Y.Veysalli. – Baku: Education ed., – 2005. – p.26

⁴ Chomsky, N. Language and Mind / N.Chomsky. Translated from English by A.Y.Mammadov. – Baku: Book world, – 2006. – p. 152.

- To define the boundaries of the affixing hopping process and reveal the C-command in the Wh Movement;
- To clarify and analyze the concepts of convergence and pied-piping used during transformations;
- To define the concepts of “Stranding” and “Left Branch Condition” and to study their features;
- To consider and analyze the cases when the Wh-words come to the fore in special questions, exclamatory sentences, and attributive clauses;
- To reveal the essence of the hypothesis of a COMP filter and the ISH.

The research methods. Methods of observation, descriptive, componential analysis, linguistic analysis, and transformation methods are widely used in the dissertation.

The main provisions for the defense:

- The criteria of universal grammar are the main line of the minimalist program;
- The approach to the formation of phrases and sentences in minimalism is different from the approach that exists in traditional linguistics;
- Copying and deletion play an important role in the transformation of V-to-C and V-to-T movement in English;
- Tree-branching of sentences presents their substructure more easily;
- The importance of transformation a headword into the beginning of a sentence with the help of a constitution used at the front;
- Categorical features such as Wh, EPP, and TNS play an important role in transformation;
- Existing restrictions make the transformation more appropriate;
- There can be several transformations in one syntactic structure, in this case the transformations occur cyclically and periodically;
- During the transformation of some wh-words, the transformation of the argument takes place.

Scientific novelty of the research. The systematic study of existing transformations in syntactic structures provides the scientific

novelty to the presented dissertation. In this research work, for the first time, the existing principles, parameters, and limitations of syntactic relations in syntactic structures have been widely and comprehensively revealed, referring to the existing language materials, as well as scientific-theoretical sources.

The theoretical and practical significance of the research.

The dissertation examines the current of minimalism and its features in different syntactic structures. The study of the transformation features of the headword, the word beginning with *wh*, and the syntactic argument in the context of the minimalist program, and the generalization of the theoretical ideas obtained from this research provide the theoretical significance of the research. All the issues listed above play an important role in the development of general linguistics, especially structural linguistics. The results of the research can be successfully applied in a number of areas of linguistics, and generalizations and conclusions can be successfully applied in research in this area. In this regard, the dissertation can be used at the highest level of teaching English grammar, lectures, and seminars on general linguistics.

The dissertation comprehensively analyzes the transformations and existing limitations in syntactic structures and presents them to the scientific community.

Approbation and application. In connection with the research work, reports were made at various international and national conferences, articles, theses, and conference materials reflecting the content of individual chapters of the dissertation were published in various periodicals and collections. The chapters of the thesis were reported at the meetings of the department.

Name of the organization where the dissertation work was performed. The research was carried out at the Department of English Grammar of the Azerbaijan University of Languages.

The total volume of the dissertation with a sign including a separate volume of the structural units of the dissertation. The dissertation consists of an introduction, 3 chapters, a conclusion, a list of used literature, appendices, and abbreviations. The introductory part of the dissertation is 9 pages (14719 characters), Chapter I 37 pages

(69039 characters), Chapter II 51 pages (80719 characters), Chapter III 44 pages (70315 characters), Conclusion part 4 pages (6538 characters). The volume is 246330 characters.

MAIN CONTENT OF THE RESEARCH

The **“Introduction”** part of the dissertation substantiates the relevance of the topic, provides information about the object and subject of the thesis, goals and objectives, research methods, the main provisions of the defense, scientific novelty, theoretical and practical significance.

The first chapter of the dissertation is called **“Theoretical approaches to syntax”**. This chapter consists of three subchapters: **“Influence of theoretical approaches to syntax on linguistics in the period before N.Chomsky on N.Chomsky’s work”**, **“Theories on syntax related to structuralism in the period of linguistics before minimalism”**, and **“Universal grammar as the basis of minimalism”**.

In linguistics, the term syntax is used in two senses: 1) the syntax of the language, i.e. the syntactic structure of the language, and 2) as a branch of grammar. As a branch of grammar, syntax consists of two major parts: word syntax and sentence syntax^{5/}

Textual syntax was also added here in the 1960s. Y.G.Testelech writes in this regard: *“Since the syntax deals with word combinations and sentences consisting of related words, the concept of connection and its method of expression are the main points in the syntax. Syntax, as part of grammar, works in units such as word combinations and sentences”*^{6/}.

L.Kellner notes that grammar is divided into syntax and morphology: *“Morphology studies grammatical forms, and syntax studies the functions and relationships of these forms.”*^{7/}

⁵ Modern Azerbaijani Language. Syntax / – Bakı: Azertedrisneshr ed., – 1959. – p.3.

⁶ Testelech, Y Introduction to General Syntax / Y.Testelech. – Moscow: RSUH ed., – 2001. – p.19

⁷ Kellner, L. Historical outlines of English syntax / L.Kellner. – London-N.Y.: – 1913. – p.3 [https://archive.org/stream/historicaloutli01kellgoog#page/n25/ mode/2up.

N.A.Aliyeva compares the difference between morphology and syntax with the difference between organic and inorganic chemistry. He writes: *“In organic chemistry, a molecule is a hierarchically organized object, but here the hierarchy is simple and the hierarchy between elements is easily defined. Inorganic chemistry, atoms form molecules with a more complex hierarchical structure, and information about the quality and quantity of these atoms does not allow us to determine the structure and properties of organic matter”*⁸.

F.Y.Veysalli studies the main issues of syntax in traditional linguistics. He writes that modern linguistics rightly states that grammar, including its syntax, should not be a code of rules and instructions. *“Grammar is mainly “What is this?” to answer the question, and to choose the right from the wrong or crooked. Although it is difficult to say that every language does not depend on the people who speak it, it is true. Grammar must substantiate its natural appearance as a codified norm, and must be able to distinguish good from bad”*⁹.

N.Chomsky writes in this regard: *“From now on, when I say “language”, I mean a set of sentences (finite and infinite); each of these sentences is made up of an infinite number of elements that end in length”*¹⁰.

L.Bloomfield defined syntax as a science that studies the sequence of sentences¹¹.

F.Y.Veysalli writes that, *in general, the syntax should reveal the rules of language units in the syntactic axis in the act of speech, and that two issues should be emphasized here: 1) the study of structural relations; 2) the study of semantic relations*¹².

⁸ Aliyeva, N.A. The Problem of Syntactical Relation in Structural Linguistics: /PhD. thesis / – Baku, 2017. – p.12

⁹ Veysalli, F.Y. The Basics of Structural Linguistics. I / F.Y.Veysalli. – Baku: Education, – 2005.– p.111

¹⁰ Chomsky, N. Language and problems of knowledge / N.Chomsky. – Managua Lectures. MIT Press, – 1987. – p.6

¹¹ Bloomfield, L. Language / L.Bloomfield. – Chicago: – 1933. – p.144

¹² Veysalli, F.Y. The Basics of Structural Linguistics. I / F.Y.Veysalli. – Baku: Education, – 2005. – p.113

This shows that, unlike syntactic word combinations, it studies constructions with an implicit or explicit center, studying their structural (structural features), semantic (semantic features), and pragmatic (processing features).

The second subchapter of the first chapter is called *“Theories on syntax related to structuralism in the period of linguistics before minimalism”*. This subchapter discusses the history of structuralism, its development, and substantiate its main provisions.

In general, the twentieth century is known as a period of development of science. Linguistics was also contributed by this case, as in the first half of that century, the existence of a world of small particles became known to the science of physics. It was discovered that any observable phenomenon could be broken down into smaller constituent elements. The structure of any phenomenon is formed by an phenomenon, object, or process that interacts with each other.

In the twentieth century, the concept of the structure was accepted in two aspects:

1. Under this heading, integrity was meant. In this case, the structure covers the analysis of the internal relationships of the elements that make up the object.

2. This concept was taken separately from the concrete reality. The concept of the structure was seen as a pure form and relationship.

Finally, the concept of structure enters linguistics. Different approaches to modern structural linguistics are exhibited in different currents. Among the existing differences, it is possible to come across common features.

Although the language, which forms a special system with its internal laws, has been studied by various approaches and methods, some issues arising from its complex nature have not yet been adequately studied, especially those related to the use of language. Although the study of language from a structural point of view allows to understand it as a system, the analysis of the applied direction, the process of speech, which reflects the possibilities of

human self-expression and communication, seems more relevant in modern globalization¹³.

The third subchapter of Chapter I, “*Universal grammar as the basis of minimalism*,” discusses the theory of universal grammar. The terms of universal grammar are defined and the reasons for its acceptance as the basis of minimalism are explained.

The idea that people can use an unlimited number of materials available in their language belongs to W. von Humboldt, and this idea is the basis of N. Chomsky's theory of generative grammar¹⁴.

In the 19th century, a crisis arose in linguistics, and therefore the theory of universal grammar began to fail. Chomsky saw the reason for this case in the fact that structuralists turned their backs on rationalist ideas. In the twentieth century, N.Chomsky was able to draw attention to this theory again. Chomsky's idea of universality is based on the interaction between language and thinking. This is another proof of N.Chomsky's sympathy for R.Descartes' rationalist views¹⁵.

Traditional grammatical syntax is classified (taxonomically) based on various syntactic structures such as word combinations and sentences that exist in the language. Chomsky, on the other hand, prefers a completely different approach to the study of grammar – the cognitive approach. The reason he chose this approach was that the native speaker had an instinctive skill in his mother tongue¹⁶.

A Swiss psychologist J.Piaget researched on language acquisition in preschool children. According to him, children have certain mechanisms of mental development. Depending on these mechanisms, the child's language acquires at a certain age and stage¹⁷.

¹³ Xanbutayeva, L.M. The Place of Syntactic Units in Speech Act Theory / L.M.Xanbutayeva. – Baku: Science and Education ed., – 2018. – p.5

¹⁴ Veysalli, F.Y. Encyclopedia of Linguistics / F.Y.Veysalli. – Baku: Mutarjim, – 2006. – p.268

¹⁵ Lyons, J. Language and linguistics / J.Lyons. – Cambridge: Cambridge University Press, – 1981, – p.239

¹⁶ Chomsky, N. Syntactic Structures / N.Chomsky. – Mouton: The Hague, – 1957. – p.20

¹⁷ Piager, J. The language and thought of the child / J.Piager. – Routledge: – 2001. 3rd ed., – p.188

N.Chomsky disagrees, on his book “Language and Mind”: “*I don't know what Piaget takes as the basis for the transition from one stage to another.*”¹⁸

It is clear that N.Chomsky does not consider the mental development of the child as a condition for language acquisition. Piaget claims that a child under the age of 7 can speak perfectly after gathering information from the world around him. We also agree with N.Chomsky, because the fact that mentally retarded children have language skills is still a fact.

The idea of universality is based on Por-Royal grammar. The difference between this grammar and other grammars of that time is that it has an explanatory nature, rather than merely setting rules. Por-Royal grammar greatly influenced Chomsky's linguistic views, as both theories required attention to the difference between form and meaning in terms of universality¹⁹.

Basing on the existence of the connection of the brain with language N. Chomsky came to the conclusion of the existence of cognitive language and laid the foundation of the theory of universal grammar. This theory is about the nature of universal grammar, which is inherent in human languages.²⁰

The second chapter, “**The Transformation of the Headword**”, consists of four subchapters.

The first subchapter is called “*The concept of syntactic structure in minimalism.*” This subchapter identifies the principles that guide all language structures and discusses the development of parameters that are characteristic of structures at the syntactic level of the English language. In syntax, the principle of binarity is defined as the basic principle that can guide all structures.

In the syntactic structure, phrases and sentences are formed as a result of several merging operations. Units at the syntactic level

¹⁸ Chomsky, N. Language and Mind / N.Chomsky. – Baku: Book world, – 2006. – 152. – p.136

¹⁹ Chomsky, N. Cartesian Linguistics: A Chapter in the History Of Rationalist Thought / N.Chomsky. – Cybereditions Corporations, – 2003. – p.52

²⁰ Vivian, J.Cook. Chomsky's Universal grammar: An Introduction / Vivian J.Cook, Mark Newson. 3rd ed. May, Willey Blackwell, – 2007. – p.136

combine in a pair of components to form a larger component. As a result, the existing structure can be presented in the Tree Diagram. From this point of view, it is possible to take a closer look at the ways in which phrases and sentences are constructed. Thus, it is possible to look closely at the ways in which phrases and sentences are formed. To clarify our point, let's look at how a combination of two simple words is formed:

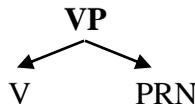
A: *What are you trying to do?*

B: *Please everybody*²¹.

The sentences presented by the second speaker show the simplest way to combine two simple words, i.e. *try* verb and *you* pronoun. It is also clear that the phrase *please everybody* has more verb features than noun features. We think that the possession of a phrase presented to the above-mentioned features is due to the fact that it occupies the same position in the syntactic structure as a simple verb. To be more precise, since this structure comes after the infinitival particle “to”, we come to the following conclusion: *I am trying to please everybody*.

When we look at the semantic features of the phrase, we come to the same conclusion. *Please you* means action, it does not describe a person's appearance. The word *please* is the main meaning of the phrase *please you*, so the phrase *please everybody* is a verb phrase. The verb phrase belongs to the VP category label. The actual combination can be presented using the traditional labelled bracketing technique as follows: [VP [V please] [PRN everybody]]

Instead of the labelled bracket technique, the existing structure can be seen more clearly using the Labelled tree diagram.



Graph 2.1.3.

²¹ Holmes, K.A. *Maybe God is trying to tell you something.* / K.A.Holmes.– America: Xulon Press, – 2003. – p.175

The idea expressed in this tree diagram is that the phrase *please everybody* is a verb phrase from the beginning. There are two components to VP: verb (*please*) and pronoun (*everybody*). The verb *please* is the main word that defines the grammatical and semantic features of the phrase *please everybody* as the main word of the existing phrase. At this point, another technical phrase appears, i.e. VP *please everybody* the presentation of the verb *please*. Thus, a given presentation is a broader phrase formed by combining any component of the corresponding type of the word *please*. Here, the component attached to the verb *please* is the pronoun *everybody*, which has the function of complement. The verb *please*, which is the main word of the phrase, defines the grammatical features of the pronoun *everybody*. In this case, since *please* is an active verb, it requires an active verb, and this requirement is met. *Everybody* pronoun can act as an effective case. The tree diagram presented above is considered to be equal to the bracketed structure. We are provided with the same clear information about the structure of the phrase *please everybody* presented with both the tree diagram and the labelled parentheses. The only differences between the parentheses and the tree diagram are in the presentation, i.e. the symbols. In a tree diagram, each category is represented by a single labelled node (i.e., by category labels such as VP, V, or PRN). In any case, category labels that describe all the grammatical features of relevant words, such as V – Verb, PRN – Pronoun, should be considered stenographic abbreviations of grammatical features. For example, when the pronoun *everybody* is enclosed in labelled bracketing, it has a number of features, such as second person and accusative case, although these features are not listed on the PRN category label.

Since the main goal of the current minimalism is to reveal the general structural principles that govern word combinations and sentence forms, the discussions should be summarized at this point. We assume that if all the phrases are assumed to be formed as described above, they can be formed by the operation of a node in which two components are combined to form wider components. This is how the above-mentioned *please everybody* phrase was created.

The second subchapter of the second chapter is called “*The concept of syntactic relation in minimalism.*” This subsection explores the concepts of syntactic connection, and discusses their role in syntax in detail.

In order to communicate through language, it is necessary for words, which are small units of language, to combine to form sentences. The smallest unit of communication is considered a sentence.

In describing the structure of a simple sentence, the concepts of sentence member and syntactic relations are used:

1. In order to distinguish the parts of a sentence, questions are asked on the phenomenon or subject that defines the word. This method is not sufficient for unambiguous analysis. Difficulties arise while distinguishing between primary and secondary members of a sentence.

The apex of a sentence is considered the subject, and the predicate is an element that depends on it, but in some languages, the predicate is more independent than the subject. This manifests itself in the fact that it is impossible to report without violating the correctness of the sentence, but in many types of sentences, the absence of a clause is the norm.

2. The following types of syntactic relations are observed: predicative and non-predicative, subordination and independence; Subordinate relationships are divided into compromise, management, and approach types²².

Logically, the relationship between subordination and independence cannot be compared, because independence is not a connection, but a logical connection and subordination is really a binary connection in the true sense of the word.

There is a certain relationship between the types of subordinate clauses and the types of clauses in a sentence. However, the nature of this dependence has not been studied, so it is not clear how to move from one analysis to another.

²² Radford, A. Analyzing English Sentences. A Minimalist Approach/ A.Radford. – Cambridge University, – 2009. – 526 p. PDF www.public.asu.edu/~gelderer/ Radford, – 2009. – p.126

T.M.Akbarova writes that “*syntax studies the connections between words. Syntactic relations are defined by subtitles, and there are three types: the function of the whole unit to the compounds that make up the subordinating relation, the meaning of the indirect participants is related to the whole unit: the humble man, the heroic people, and so on. Compounds formed by subordinating relations are called subordinate or modified compounds. In these combinations, one of the participants’ appoints the other. There is no predicative connection between the indirect participants of the associations formed by subordinate relations*”²³.

O.Jespersen called such compounds that do not have a predicative connection between direct participants functional units²⁴.

In the third subchapter of the second chapter, the transformation from the category of tense to the complementizer, which is one of the types of transformation of the headword, is analyzed.

The two structural descriptions of the sentence are widely used in the rules of generative transformation. Each sentence is doubled. One of them is the deep structure and the other is the surface structure²⁵.

The words present in the brain are sent to their field, the section where they can affect the syntax. This is the area with the Deep Structure. Later, this layer undergoes a number of transformations. This is where syntactic action takes place. The changes that take place are observed in the surface structure of the language. The resulting sentences create grammar. Let’s consider a linguistic phenomenon called inversion in traditional grammar. For example; *You will leave.*

*Will you leave?*²⁶

There is an opinion that in the interrogative sentence the auxiliary verb *will* goes to the beginning of the sentence. Till now,

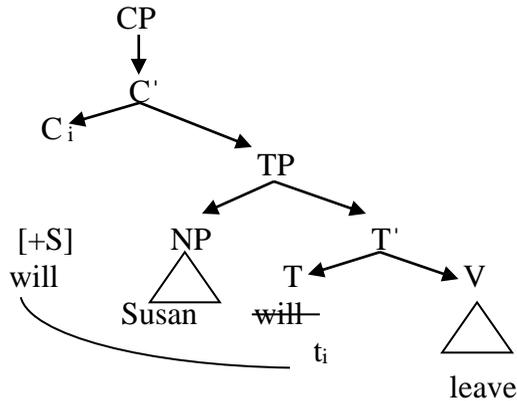
²³ Akbarova, T.M. Structural-Semantic Analysis of Mononuclear Constructions in English and Azerbaijani Languages: /PhD. thesis/- Baku: AUL, – 2006. – p.17

²⁴ Jespersen, O. The Philosophy of Grammar/ O.Jespersen. – Moscow: Foreign Literature ed. – 1988. – p.100

²⁵ Veysalli, F.Y. The Basics of Structural Linguistics. I / F.Y.Veysalli. – Baku: Education, – 2005. – p.182

²⁶ Jackson, J. I will Not Leave You Comfortless: A Memoir. / J.Jackson. – London: Milkweed Editions, – 2012. – p.200

we have not come across the rule that *you* comes after *will* in interrogative sentences. The theory of the transition from V to T states that the subject is within VP, and then moves to TP. Let's apply this idea to tree branching:



Graph 2.3.1.

Will you leave? If we analyze the branching of the sentence, we see that this sentence is headed by a complementizer, and it contains [-Wh]. Since the sentence presented is an interrogative sentence, this sign will be [+Wh]. Here [+Wh] is the category label of the Wh word. In this case, asking, which is a characteristic feature of the interrogative sentence, comes to the fore. This, in turn, requires TP to put *will* first. The presence of *will* in T causes the sentence to be grammatically incorrect, so *will* is deleted from T. However, it leaves a mark so that other elements do not pass there, and this is indicated by the lowercase letter "t_i". This is called the transformation from the *Tense category to the Complementizer*.²⁷ Finally, the result we get is the structure of the interrogative sentence.

Let's consider another example:

*You have eaten salmon.*²⁸

²⁷ Chomsky, N. *Syntactic Structures* / N.Chomsky. – Mouton: The Hague, – 1957. – p.100

²⁸ Jacobs, M. *Northwest Sahaptin Texts.* / M.Jacobs. – Columbia: Columbia University Press, – Part 1. – 1934. –p.89

Have you eaten salmon?

Inversion occurs again. In this case, the inversion will start from the CP, not from the T, and will move there because the T is empty. The suffix *-en* in CP will change to V, i.e. *eat* verb. The *have* in the T also shifts to the C, so we witness the Cyclic Transformation. [+ Wh] 's requirement is to have *Have* come first. To do this, *have* must be deleted in Perf.P. [+ Wh] – Since it requires *have* to come from T, it moves to the *have* C in T and we put *ti* in CP, this trace moves to T, and from there it goes to C.

The fourth subchapter of the second chapter is called **“Transformation from the category of verbs to the category of tense.”** This subchapter clarifies the essence of the transformation from the verb category, which is another type of transformation of the headword, to the category of tense.

After looking at the movement from T to C, let's look at a different type of movement operation. This movement operation is, to express more precisely, the transformation from V to T. This is called the transformation from the verb category to the tense category. The movement of this type was more productive in English during the reign of Queen Elizabeth (i.e. during the reign of Elizabeth I, during the reign of William Shakespeare), but was no longer productive in modern English.

In the English language of the preceding period, it was characteristic to make sentences negative by placing the adverb not before the verb, or rather, by placing it between the auxiliary verb and the main verb. For example:

*She shall not see me*²⁹.

*I will not think it*³⁰.

In negative-interrogative sentences, the auxiliary verb is placed before the preposition and *not* precedes the verb.

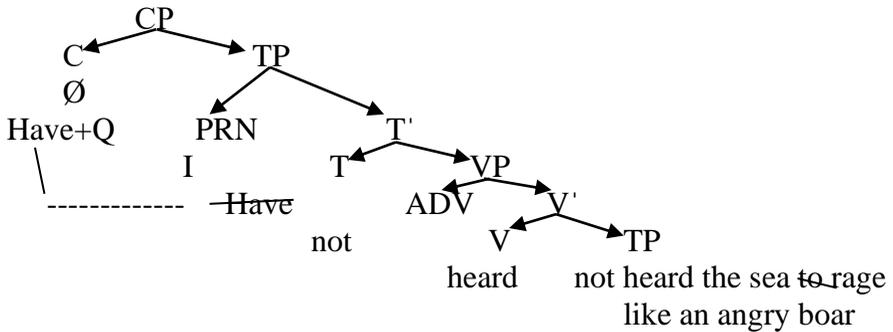
²⁹ Jacobs, M. Northwest Sahaptin Texts. / M.Jacobs. – Columbia: Columbia University Press, – Part 1. – 1934. –p.89

³⁰ Shakespeare, W. The Pelican Shakespeare: Much ado about nothing. / W.Shakespeare. – California: Penguin Books, Harvard: Harvard University Press, – 2010. – p.76; http://shakespeare.mit.edu/much_ado/full.html

At that period *not* was the adverb of Shakespeare's activity, and the verb that came after it served as a specifier of the phrase. For example: it is a specifier of *not see me* and thus defines see me. Sentence analysis explains the position of *not* in front of the verb *see*³¹.

Given that the auxiliary verb in interrogative sentences involves the transfer of the auxiliary verb from T to C (as in modern English), the process (operation) of moving from T to C in the following sentence will be the same as in the branching presented in a simplified form. (Here we take *the sea rage like an angry boar* as a subordinate clause).

*Have I not heard the sea like an angry boar*³².



Graph 2.4.2.

The auxiliary verb *have* first joins in the T, then moves to the C (i.e, a copy of the auxiliary verb first joins with the question suffix WH in the C) and puts a copy to be deleted in the T. The fact that *not* is a specifier of VP explains the fact that *not* is located in front of the verb *heard* (after the movement of *to have* to C)

³¹ Shakespeare, W. *The Dramatic Works of William Shakespeare: With an Original Memoir.* / W.Shakespeare. – Michigan: University of Michigan, – 1846. – 1153 p.

³² Shakespeare, W. *The Pelican Shakespeare: Much ado about nothing.* / W.Shakespeare. – California: Penguin Books, Harvard: Harvard University Press, – 2010. – p.47

However, an interesting aspect of the negative sentences in English in the works of W. Shakespeare is that in finite clauses without auxiliary verbs, the position the main verb is in front of *not*:

*I care not for her*³³;

*My master seeks not me*³⁴.

We mentioned earlier that the *not* took the position before the main verb in Queen Elizabeth's English. The situation is different in the sentences in W. Shakespeare's work given above. This means that no finite auxiliary verb has been developed in English for the time of Queen Elizabeth I, and this verb changes its position from V, which is the headword in the phrase, to fill the T position in TP. Therefore, in a sentence like *I care not for her*, there is a transformation from V to T.

Thus, the verb *care* is transferred to the T, the main word in the TP, and then moves in front of the note with the unpronounced original presence of the *care* in F. The resulting TP is merged with an unpronounced complement that emphasizes the declaratory power of the sentence, while appointing the nominative category to the subject.

The third chapter of the dissertation is called **“Transformation of Wh words and the transformation of the syntactic argument.”** This chapter also consists of four subchapters.

The first subchapter is called **“Transformation of Wh words in special questions.”** The essence of the Wh word transformation and the points of their use in special questions, are discussed in detail in this chapter.

Until now, when analyzing syntactic structures, it has been assumed that CP contains the headword C constituent (this position can be filled with a complementizer and a preceding auxiliary verb) and the complement of TP.

However, in this case, the position of Wh phrases in front of auxiliary or modal verbs in interrogative sentences is questionable.

³³ Shakespeare, W. The Works of William Shakespeare. / W.Shakespeare. – Routledge, Warne, & Routledge: University of Wisconsin, – Vol. 1. – 1864, – 375 p.

³⁴ Shakespeare, W. The Works of William Shakspeare, Dramatic and Poetical: Two gentlemen of Verona. / W.Shakespeare. – Illinois: University of Illinois, – 1878. – 754 p.

To explain this idea, we refer to A.Y.Mammadov's book: He writes about it: "*N.Chomsky was able to describe an important part of the grammar of the English language by applying the existing rules. He noted that the rules for the formation of indirect structures are limited and that they can create an infinite number of deep structures. However, these structures are deprived of the ability to create an infinite number of real superstructures. When we look at the types of sentences according to their purpose and intonation, it was observed that such structures are more common in question and negative sentences*"³⁵.

Let's pay attention to the structure of the following interrogative sentences:

*Where do you live?;*³⁶

*What did you do?*³⁷

How was your exam? How long will it take? In interrogative sentences like that *How* is mentioned as Wh-word. It exhibits the same syntactic behavior as Wh-words.

In each of these sentences, the auxiliary verbs in the CP are transformed to the front of the sentence, and each of them is preceded by a Wh word. If we look at the relevant rules, we see that the Wh words must come at the end of the sentence in the role of the complement of the verbs.

The second subchapter of the third chapter is called "***Pied-Piping – the gradual transformation of the whole syntactic structure***". The subject of this subsection is the fact that the component that changed its position during the transformation of the WH word causes the transformation of the nearest element along with itself.

Pied-piping is a way of inconsistency in syntax. This phenomenon presents components that can and cannot be continued

³⁵ Mammadov, A. Modern Problems of Linguistics / A.Mammadov. – Baku: AUL ed., – 2006. – p.18

³⁶ McGee, J.L. Where Do You Live?: A Journey into Truth and Freedom. / J.L.McGee. – Bloomington: Westbow press, – 2011. – 136 p.

³⁷ Hale, J.O. Danny Blue?! What did you do? / J.O.Hale. – Indiana: AutorHouse, – 2009. – 24 p.

in the transformation process. Pied-piping is most common in interrogative sentences and relative clauses where the WH word comes to the fore. Pied-piping is the most common occurrence in German languages. Some languages use more pied-piping than other languages, and although there are some differences between languages in this area, pied-piping is used to some extent, even in most languages where inconsistencies are not possible.

Pied-piping differs significantly from language to language. Languages with relatively stable word order use pied-piping more than languages with free word order. Thus, pied-piping is more common in English, which has a relatively stable word order, than in Slavic languages, which have a more free word order. When applying the word order of Russian and Latin to English, the sentence structure is incorrect. This restriction is known as the Left Branch Condition³⁸. The noun specifier on the left cannot be separated from the noun phrase. It is important for the specifier before the noun to pied-pipe the whole nominal structure.

Pied-piping is a very interesting topic for modern grammarians³⁹. During the pied-piping dependent words take their place in accordance with the headwords, i.e. *parents*. Usually, the opposite does not happen. Let's clarify our point with the following examples:

1. *Sarah goes with her father*⁴⁰.
2. *Who does she go with?*
3. *With whom does she go?*

In the first sentence, the word *Sarah* takes its position from *with*. The preposition *with*, in turn, takes his position from the verb *go*. *Who* takes its position from the auxiliary verb *does*. We can say that this is one of its two existing *parents*, and the other parent is

³⁸ Ross, J.R. Constraints on Variables in Syntax / J.R.Ross. – America: Indiana University press, – 1968. – 277 p.

³⁹ Heck, F. On Pied-Piping: Wh-Movement and Beyond / F. Heck. – Berlin: de Gruyter. – 2008. -s.11; Horvath, J. Pied-piping. In The Blackwell companion to syntax, Volume III, edited by M.Everaert and H. van Riemsdijk / J. Horvath. – Malden, MA: Blackwell Publishing, – 2006, – p.569-630

⁴⁰ Field, W.Carolyn. Values in Selected Children's Books of Fiction and Fantasy. / W.Carolyn Field. – London: Library Professional Publications, – 1987. – p.30

with. However, by violating this sequence, *with* takes his position from *whom*. Otherwise, there would be no reason for it to be at the very beginning of the sentence. It is clear from this case that the headword has taken its position from the word that depends on it. Following this analogy, we come to the theory of *pied-piping*.

In the third subchapter of the third chapter, ***the transformation of exclamatory sentences and relative clauses*** is analyzed.

A sentence is such a structure in which each piece has its own role and a special way of connecting it to other pieces. Communication between people takes place only through sentences, which allows language to function as a means of communication. O.Musayev writes: "*Sentences used in the process of communication are different in terms of the purpose of expression and grammatical structure.*"⁴¹

We conducted a series of analyzes to observe how the *wh*-word transformation occurs in exclamatory sentences.

It can be noted that the analysis of exclamatory sentences beginning with particles is very interesting. Let's look at examples:

*What a lot of books you have read!*⁴²

*... How nice to see a new face, 'the woman in black velvet said'*⁴³.

*"... How can you be cruel like that!" she cried out*⁴⁴.

What a great car you have!

What a handsome man he is!

How strange it was!

*How quickly he understands!*⁴⁵

⁴¹ Musayev, O.I. English Grammar / O.I.Musayev. – Bakı: Gismat LTD., – 2009. – p.356

⁴² Atkins, J. Graham Greene. / J.Atkins. – UK: Calder publisher, – 1957. – p. 219

⁴³ Greene, G. The Collected Novels Volume Two: The Heart of the Matter, The Quiet American, and The Power and the Glory. / G.Green. – UK: Open Road Media, – 1970. – p.50

⁴⁴ Warren, P. The Cave Robert. / P.Warren. – America: University press of Kentucky, – 2006. – p.296

⁴⁵ <https://www.englishclub.com/grammar/sentence/type-exclamative.html>

As it is seen, in these examples, the particles expressing the meaning of the exclamation point are used at the beginning of the sentence, and there is no inversion in the sentence. This means that the exclamation mark does not carry [T], but [WH, EPP]. Particles containing the *wh* words are CPs led by C, which has the property of exclamation in exclamation sentences, i.e. C here has the feature of exclamation power (N Power). The interrogative sentence is the only sentence with interrogative pronouns, which has the character of [C] containing [T].

The last subchapter of the dissertation is called “***Syntactical Argument Transformation***”. In this subsection, the node where the argument is formed, and its transformation are analyzed step by step.

The issue of *wh* transformation remains relevant in modern English. Through this action, the stabilized grammatical function is transferred to the designated place, i.e. to the appropriate phrase. An example of this is the transformation of the complement of a known sentence into the subject of an unknown sentence:

*The crew paved the entire stretch of the highway*⁴⁶.

The entire stretch of highway was paved (by the crew).

When we look at the subject in syntax, it is assumed that to this day the subject has originated within the TP and remains its own specifier. Of course, there are exceptions. In the transformation of the *Wh* word, it was noted that the subject moved to the CP, which is a complete phrase. However, in modern times, such issues have been studied more extensively, and the fact that the subject originated internally within VP, was the argument of that phrase, and then rose to the position of specifier within the verb phrase has found its place in the works of many scholars such as N.Chomsky. The transformation was initiated by the Extended Projection Principle carried by the tense-labelled phrase. Due to the fact that Spec-TP is in the A-position (there can be only argument phrases in this position), the operation of moving the subject to spec-TP is called

⁴⁶ Soderquist, S. Practical Tips for Author. / S.Soderquist. – UK: CreateSpace, – 2017. – p.81

Syntactical Argument transformation⁴⁷.

The main **Conclusions** of the study can be summarized as follows:

1. While examining the criteria that form the basis of universal grammar, it became clear that the existing criteria are based on minimalism. Therefore, universalism is becoming more and more profound and forms the basis of the "Minimalist Program".

2. While studying the development models of generative grammar, we have identified its types, such as *Transformation Grammar*, *Standard Theory*, *Extended Standard Theory*, *Government and Binding Theory*.

3. We have studied how words combine to form syntactic phrases, and we have concluded that more complex phrases are formed first by an organized binary (double) merge operation and then by transformation. We argued that each of these phrases moved to form a larger component. In this case, null constituent acts as one of the factors providing constitutional binarity.

4. Two copies of the headword transformation were identified: 1) transformation from T-to-C; 2) transformation from the V-to-T. Existing transformations are subject to the strict Locality principle due to restrictions on headwords. This constraint ensures that the transformation is consistent and cyclical in style and that the transformation must occur between the headword presented in the structure and the next highest headword, and this has been proved by examples.

5. The inversion of the auxiliary verb in the interrogative sentences involves the transformation from T to C when analyzed more deeply at the syntactic level. This process occurs when the position of T in TP shifts to the position of C in CP. The position of the C in the interrogative sentences is affixal in nature. Due to the fact that this position is very strong due to its strong temporal nature and the fact that it contains null question particles, the auxiliary verbs in T are directed towards C.

⁴⁷ Radford, A. English Syntax. An Introduction. / A.Radford. – Cambridge University, – 2004. – p.87

6. It has been proved that the inversion of the auxiliary verb implies certain operations, such as copying and deletion. A copy of the auxiliary verb in T is combined with the figurative question particle S in the C, and then the original speech of the auxiliary verb in T is canceled.

7. Verbs that are described in English and have the main meaning from the period of Queen Elizabeth I are transferred from V to T through the movement operation from V to T. This process is no longer possible in modern English. This is due to the fact that the affix T, which causes verbs to rise to T has been strong in English since the time of Queen Elizabeth I. The modern English version of T is weak. Therefore, the Tns affix in T falls down to the main verb through the suffix shift. However, small signs of transformation from V to T are observed in personal sentences, with the verbs *be* and *have* rising from a lower position to the position of T in TP. T, which is described in modern English, is not lexical verbs, but lexically light verbs such as auxiliary verbs, can attract T.

8. Special attention is paid to the comparison of modern English with early versions of English. We present an alternative analysis of the negation particle, which we analyze as a specifier of VP, and in English, which is characteristic of J.Chaucer, "ne" is defined as the specifier of the constitution of the NEGP. However, that particle remains blank in modern English. It is possible to observe the transformation from V to T at the investigation of the particle of negation in Shakespeare's works. In modern English, however, the participle of negation cannot motivate the transformation of a lexical verb.

9. Based on the Affix hopping and morphological interpretation of the verb *do*, we note that the syntactic component of grammar arises in the presented syntactic structure, and the corresponding structure is then sent to the PF component to form morphological and phonological meanings. If the resulting structure has a free TNS affix, it will immediately fall into the main word expressed by the verb through the Affix hopping.

10. According to the principle of involving the nearest element in sentences containing more than one *wh*-words, the word nearest

wh-word is subordinated to the Complementizer itself in the context of the C-command. *Wh*-word brings with it the closest element during the transformation, which is also called *pied-piping* in linguistics.

11. N. Chomsky's concept of Convergence was analyzed as a process that provokes the movement of the smallest possible phrase containing the *Wh* word. The result is grammatically correct, because the advanced *wh*-word is transferred to the spec-CP, and this position can be taken only by the maximum projection. The transformation of the *wh*-word is able to advance the smallest possible maximum projection of the question word. In English, *wh* phrase, which is a complement to the *wh*-word in the literary language, also brings its own word during the transformation, and thus the whole phrase is transferred to spec-CP. The reason for this is that the restriction of the English language in the literary language prevents the exclusion of words, and the principle of convergence transfers all verbal combinations to spec-CP. The Left Branch restriction prevents words whose possessive pronouns are removed from the DP they contain. As a result, according to the Principle of Convergence, all DPs containing *who* come forward in sentences.

12. Looking at the syntax of exclamatory sentences, we found that they have the [Wh, EPP] feature and, conversely, do not have the T feature. Like other sentences, we observed that the headword in these sentences was a C element. We have brought all this as an argument for the exclamation of the exclamation mark, and in this case, the transformation of the *wh*-word occurs without the inversion of the auxiliary verb.

13. Derivation of relative clauses, on the other hand, leads to the transformation of a *wh*-word phrase, which contains a relative pronoun that has been transferred to the spec-CP. The pronoun here is able to accept null pronunciation in its position in the spec-CP. Under the influence of the Multiply Filled COMP Filter/MFCF a complementizer a relative pronoun or both of them have to gain null pronunciation in relative subordinate clauses.

14. Moved *wh* phrase are positioned in the A bar (A') through transformation. This position can be taken by the argument. This

means that the *Wh*-words can move to the spec-CP, and there is a A bar position. Therefore, we have concluded that the transformation of a *Wh*-word is a special example of the transformation operation of A bar.

15. The Subject arises within FB, and this is called the FB-Internal Subject Hypothesis. The FB specifier moves to the specifier position in the TP, and this is called the Transformation of the Argument. Idioms in the form of whole sentences are experimental evidence for ISH. With the requirement that idioms have to be a single constitution, the subject which is based on the position of a specifier within the VP as the predicate, and from there rises through the transformation of the Argument to the position of a specifier to the TP led by T.

The main content of the dissertation are reflected in the following articles:

1. Head Movement in the Syntactic Structures // III International Scientific Conference of Young Researchers, II Volume. – Baku: – 2015, – p.1073-1075.
2. Wh Movement // Actual Problems of Teaching Foreign Languages. The Materials of Republican scientific-practical conference. AUL, – Baku: – 2015, – p.202-206.
3. Pied-Piping in Syntactic Structures // “Language and Culture” The Materials of Respublican scientific-practical conference. – Baki: AUL, – 2015, – p.70-73.
4. A-Movement in Syntactic Structures // Baku State University, XXI Republican scientific conference for PhD students and young researchers, – Baku, – 2017, – p.170-171.
5. Movements in Syntactic Structures in English // Modern Science; Current Issues of Achievement and Innovation. The Collection of articles of the IX International Scientific-Practical Conference 20 October 2019. – Penza: Science and Education, – 2019, – p.124.
6. T-to-C Movement// – Baku: BSU, “Language and Literature” International scientific-theoretical journal, – 2019. №3(III), – p.75-78.

7. Historical Developments of Generative Grammar Models // – Bakı: AUL, Language and Literature, – 2019. IX Vol., №4, – p.40-47
8. V-to-T Movement in Minimalist Program // – Bakı: “Science”, Terminological Issues, – 2020. – p.253-261.
9. Syntactic Structures in Minimalist Program // – Bakı: Mutarjim, The Actual Problems of Learning Humanitarian Science, – 2020. №2, – p.3-8.
10. Syntactical Relations in Minimalist Program // – Baku: Researches, – 2020. № 1-2, – p.127-133.
11. Universal Grammar as the Basis for Minimalist Program// – Russia, Togliatti: Baltic Humanitarian Journal, – 2020. Vol. 9, №3(32), – p.224-227.
12. New Insight to Linguistics with Noam Chomsky// “Language, Personlity, Society and Nizami Gandjavi’s activity” Conference Materials, – Sumgayit: SSU, – 2021, №6, – p.376-379
13. The Influence of Structuralism on N/Chomsky’s Activity // – The Collection of the thesis of the conference of the Actual Problems in Teaching Foreign Language – AUL, – Baku: – 2021, – p.93-95
14. A-Movement in Syntactic Structures of Idioms // – Baku: Research Papers, AUL, – 2022. №1, – p.54-58.

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