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**DEVELOPING LEARNING AND COGNITIVE COMPETENCE  
THROUGH MYTHOLOGEM INTERPRETING**

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*Abstract*

The article concentrates on the study of developing learning and cognitive competence in students of language specialties through interpreting mythologem in fictional texts. The interaction of the information potential of mythologem and the information space of a literary text is investigated. The main models of mythological frames and ways of their actualization in the texts of English-language fictional prose are considered. Working with information field of myth students should rely on the structure of myth. The excerpts for analysis are chosen in the way as to show students how to interpret different fictional texts at upper and peripheral levels of the mythological frame. At the upper level the myth is associated with the conceptual design of the author in full. At the peripheral level the myth gives additional characteristics of the heroes and performs an aesthetic subtask. Examples of the analysis of excerpts from fictional texts show the possibility of developing cognitive abilities in the process of mythologem interpreting. Cognitive activity on mythologem analysis allows students to see the underlying content of a literary work, as well as to understand and decode the author's intention. The relevance of the research consists in the need to further study the information potential of mythologem and its role in the development of learning and cognitive competence.

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**Keywords:** Learning and cognitive competence, information potential of mythologem, mythological frame, fictional text.



## 1. Introduction

Currently, the activity character of education suggests the need for the formation of learning and cognitive competence as one of the main directions to modernize the content of education, and one of the essential components in the structure of professional competence of students of language specialties. Besides, learning and cognitive competence is one of the constituents of foreign language communicative competence of students, which in its turn is the core objective of teaching a foreign language. By including the learning and cognitive component in the model of foreign language communicative competence, Bim (2002) draws the attention of researchers to the need of teaching students the particular skills of independent learning of a foreign language and culture, which reflect the specificity of a foreign language as the subject and the object of study.

In the work "Key Competencies as a Component of Student-centered Education", Khutorskoy (2003) points out the learning and cognitive competence as a key one, and defines it as a set of competencies in the field of independent cognitive activity, which contains the elements of logical, methodological, educational activity, and correlates with real cognizable objects. This includes the knowledge and skills of goal setting, planning, analysis, reflection, self-assessment of learning and cognitive activity, as well as mastering the creative skills of productive activity.

Thus, for students, learning and cognitive competence is a further development of general and specialized educational skills, familiarization with the available methods and techniques of independent language learning and awareness of cultures. This competence suggests a positive motivation of students to learn new things, a lifelong self-education, focus on active involvement in educational activities.

One of the key components of learning and cognitive competence is the cognitive one. According to Boldyrev (2016), "The study of language in its cognitive function, i.e. as a means of organizing, processing and transmitting information, involves considering it as a person's cognitive ability [...]" (p. 14).

Thus, the cognitive component of learning and cognitive competence is aimed at developing students' skills to work with information, such skills as searching for the necessary information, perceiving, analyzing, synthesizing, comparing, transforming, and creating new information based on the old one. Among the characteristics of students who exhibit autonomy in oral communicative-cognitive activity, Putistina (2008) highlights, in particular, the desire to independently receive information in a foreign language from various sources.

Cognition is the process of purposeful active reflection of reality in human consciousness. The results of knowledge are transmitted from generation to generation with the help of physical storage media - books, drawings, objects of material culture. Within the framework of the cognitive approach, most scientists solve two main problems: the study of the structure of the representation of various types of knowledge, and the study of the ways of conceptual organization of knowledge in the processes of understanding and constructing language messages. Texts, from which we get the knowledge about the world, have a huge impact on the information base of a person. When a text is being produced or decoded, a person uses the knowledge language expresses and conveys. The role of language in cognition is that a variety of textual information is transmitted through a language and, thus, the cognitive function of a language is actualized in the process of its functioning. Any knowledge is objectified in language, and, as

Zvegintsev (1982) rightly notes “knowledge is only in so far knowledge, since it can be preserved by human memory” (p. 75).

Modern scientists make extensive use of the cognitive approach in interpreting text to establish its coherence, for necessary conclusions and generalizations, for decoding new information. Therefore, work with text can play a special role in the development of students' learning and cognitive competence. We understand text as an organized semantic space. It is impossible to understand and interpret a text without knowing certain cultural and linguistic facts that constitute the “cultural context” and are based on “precedent texts” (already existing).

On the other hand, modern cognitive science uses the following basic structures of knowledge representation which constitute information stored in memory: "frames" (Charniak, 1978; Fillmore, 1977; Minsky, 1979); "scripts" (Schank, 1982); "cognitive models" (Lakoff & Johnson, 1980); "mental models" (Johnson-Laird, 1983) and others. The above-mentioned structures play an important role in the development of learning and cognitive competence since its cognitive component involves, in particular, the ability to work with information presented in the form of images, frames, scripts, etc., as well as the ability to process information and transform it into various cognitive structures.

## **2. Problem Statement**

The work on developing learning and cognitive competence can be carried out within the frameworks of many programme subjects for training students of language specialties. This study examines the possibilities for developing this competence in classes that involve interpretation of an English language text, that is, in a series of lessons in such courses as "Reading" and "Analytical reading." The mythologem is considered as a possible tool for developing the cognitive component of learning and cognitive competence. Being a frame, mythologem is incorporated and readily available in a text, so it may serve as a means of accentuating the precedent information.

In the structure of cultural memory of mankind an important place is given to myths. There are many definitions of the “myth” concept. However, we shall focus on the viewpoint of Meletinsky (2019) who believed that "myth is a means of conceptualization of the world – what is around man and in himself. To a certain extent, myth is a product of primitive thinking. Its mentality is connected with collective ideas, unconscious and conscious, rather than with personal experience" (p. 24). Supporting Meletinsky's viewpoint, we should also mention an important component of myth, rightly highlighted by Losev (1991), which is a symbol that can contain in addition to symbolic also allegorical layers. We also cannot but agree with Losev's (1996) opinion, who defines myth as a generalization. According to the majority of scientists, myth-making should be considered as the most significant phenomenon in the cultural history of mankind because myths formed a special model of the world, and influenced both the creation of human worldview in general, and the creation of mythological worldview in particular. Mythological worldview is considered the first form of consciousness of ancient people reflecting their views on the origin of the world. People are the creators of myths and the bearers of mythological knowledge, and the object of knowledge in the mythological worldview is the whole world.

Myth contains a large amount of information; the knowledge of myth is stored in the memory of a person in the form of mythological frames (the structure of representation in a person's memory of particular myth data with a known meaning).

One of the objectives in this research is to study the role of the information potential of myth – the "precedent text", and its impact on the understanding and decoding of a literary work, taking into account the fact that the myth is a phenomenon of "cultural context". Mythologem, being a basic unit of linguistic representation of myth, is an element of compositional and semantic structures of a text. It concentrates essential information. The concept of a "precedent text" was introduced by Karaulov (2017), who considered a text to be precedent if "it is cognitively and emotionally significant for a particular person, well known to a wide range of those around that person, and which was repeatedly addressed in the discourse of that person" (p. 216). By "intertextuality" we shall understand, after Chernyavskaya (2014), a special quality of certain texts that interact with other texts or their fragments in terms of content and expression.

The status of myth as a "precedent text" directly depends on the degree of actualization of its information potential, and its links with the semantic and compositional structure of the text. The **informativity** of a language unit is understood as a measure of its content in a particular actualization (Gal'perin, 2018). We fully support I. R. Gal'perin's viewpoint, and believe that, being actualized in the information space of a literary work, myth as a "precedent text" acquires a new contextual meaning.

In determining the information potential of myth, we shall rely on the structure of myth proposed by Losev (1996), and distinguish between "the central content of myth" (the upper level of a mythological frame) and "the secondary content" (the peripheral level) (p. 24).

### **3. Research Questions**

- How to enhance learning and cognitive competence in students of language specialities?
- How to teach students to identify mythologem in a fictional text?
- How to motivate students to find and interpret precedent texts?

### **4. Purpose of the Study**

Thus, the main purpose of this research is to study the interaction of the information potential of a mythologem's "precedent text" and the text of a literary work, as well as to study the possibility of building certain skills related to the developing of learning and cognitive competence when working with such a cognitive structure as a mythologem.

### **5. Research Methods**

To achieve the goal and objectives of the research the following methods were used: the method of reviewing and analysis of theoretical literature on the subject; the method of semantic analysis to determine the meanings of factual material; contextual and intercontextual analyses to identify the relationship between the texts; the method of interpretation analysis.

## 6. Findings

### Mythologem as a means of accentuating the precedent information

The mythologem in a fictional text, being an element of compositional structure, also serves as a means of accentuating precedence and intertextuality. Working with the information field of myth students can understand the writer's conceptual design, which is the “upper level of the mythological frame”. They can focus only on the additional characteristics of the heroes, if the myth is on the “periphery”, far from the semantic center (core) of the text and thus performs an aesthetic subtask.

We shall consider the case when the information space of the myth, represented in a person's memory in the form of a mythological frame, is associated with the conceptual design of the author, and is actualized in full in O. Henry's story “The Gift of the Magi”. The Oxford Dictionary gives the following definition of the word “magi”: “(in the Bible) three wise men from the East who are said to have brought gifts to the baby Jesus” (Hornby, 2005, p.924).

The author makes the mythologem "Magi" the title of his story. The basic content of the myth of “the Magi” is as follows: the Magi learned that Jesus was born when they saw a miraculous guiding star, and they came from the East to Jerusalem to ask Herod to help them find the future king of the Jews. Herod made use of the Magi and learned the name of his possible successor. The Magi followed the star and came to Bethlehem, where they prostrated themselves before the baby and offered him gifts: gold, frankincense and myrrh. In memory of bringing the offerings by the Magi, the custom of giving presents for Christmas was ingrained.

O. Henry builds his story on the contrast: the house in which a young couple lives, is old and gloomy, everything is gray around, but with their love the characters like paint the whole world, making it bright, joyful and spiritually rich, “Had the Queen of Sheba lived in the flat across the airshaft, Della would have let her hair hang out of the window some day to dry just to depreciate Her Majesty's jewels and gifts. Had King Solomon been the janitor, with all his treasures piled up in the basement, Jim would have pulled out his watch every time he passed, just to see him pluck at his beard from envy” (Henry, 1998, pp.12-13). Contrasting comparisons of what the Queen of Sheba and Della, as well as King Solomon and Jim own, allow the reader to understand that the Dillingham family “has no less treasures” than the legendary kings.

Comparison is one of the most common stylistic devices that characterizes certain properties of an object by comparing it with another object or phenomenon (Arnol'd, 2014). It introduces a mythologem into a fictional text. O. Henry compares the main characters with the Magi who came to the newborn Jesus. Extracting from the reader's cultural memory the mythologem "Magi", the writer transforms it in accordance with his intentions and worldview, thus creating his own model of the artistic world. The information space of the mythologem "Magi" is connected with O. Henry's conceptual design, however, the myth as a "precedent text" acquires a new dimension: the true “wise men” in the story are the lovers Jim and Della. They bring “gifts” to each other, donating something important, precious (the watch is a gift and the memory of the father; luxurious hair is a symbol of beauty), “And here I have lamely related to you the uneventful chronicle of two foolish children in a flat who most unwisely sacrificed for each other the greatest treasures of their house. But in a last word to the wise of these days let it be said that of all who give gifts these two were the wisest. Of all who give and receive gifts, such as they are the wisest. Everywhere they are the wisest. **They are the magi.**” (Henry, 1998, p.17).

Thus, students, guided by a teacher, get acquainted with this myth, and following O. Henry, transform this precedent text, make adjustments to the author's intention: wise men are people who give each other love and kindness. In the story, the basic content of the mythologem "Magi" - "wise men" is actualized, and thus it can be said that the information field of the myth is actualized at the level of the main characters and the whole text.

In Eudora Welty's (1980) story "The Worn Path", the informational content of the myth is in the "central part" of the mythological frame. It is aimed at creating an image of the character. The mythologem in the story is an allusion to the myth of the Phoenix bird. "Allusion is a device of using a name that hints at a well-known literary or historical-cultural fact" (Arnol'd, 2014, p. 89). According to ancient Greek mythology, the Phoenix is a bird that looks like an eagle with bright red plumage. Foreseeing death, it burns itself and is born again from the ashes. The Phoenix is considered a symbol of perpetual renewal.

The main character of the story is an elderly African American woman named Phoenix Jackson who despite her age has to walk a worn path to the city to get free medicine for her sick grandson. So at Christmas, once again she goes to get the medicine for her beloved grandson overcoming hills, streams, a barbed hedge. The author emphasizes old age, fatigue and infirmity of his heroine, "She was very old and small and she walked slowly in the dark pine shadows, moving a little from side to side in her steps, with the balanced heaviness ... Her eyes were blue with age" (Welty, 1980, p.147); "Old Phoenix would have been lost if she had not distrusted her eyesight and depended on her feet to know where to take her. Moving slowly from side to side, she went into the building, and into a tower of steps, where she walked up and around until her feet knew to stop" (Welty, 1980, p. 147). At times she stops and sits, exhausted, until in her clouded mind flashed, "My grandson. It was my memory had left me. There I sat and forgot why I made my long trip" (Welty, 1980, p. 148).

Time after time the poor woman overcomes all the difficulties on her way, reaches her destination and, having received the medicine for her sick grandson, hurries back. Being the only person close to the boy, Phoenix realizes that she should not die, should not give up and think about death, and, yet she is able to move, she must save her sick grandson. The main symbolic meaning of the mythologem "Phoenix" - "rebirth" is actualized in the story. The information space of the myth is intertwined with the writer's intention to depict a stouthearted elderly woman who, for the sake of the great goal, "burns" herself like a magic phoenix bird, and "regenerates" after she reaches her goal.

Thus, the mythologem "Phoenix" is not only a means of building the storyline; it also contributes to creating the image of the heroine. The information field of the mythologem is actualized at the level of the whole story, making the "precedent text" of the myth and the story coreferent. Due to the fact that the information field of the myth is embedded in the information space of the story, the author has the opportunity to penetrate deeper and reveal the image of the character. Students, working with the mythologem in this case, look for the necessary information related to it, summarize this information, compare and interpret the image of the character in a different way.

Now we shall proceed to the cases when the information potential of mythologem is not fully actualized, and it is at the peripheral level of the information space of a literary work which is, as a rule, of great length.

In John Galsworthy's novel "To Let" (part 3, chapter 1 "Old Jolyon Walks"), we analyze the author's use of the mythologem "Jezebel" in the following example: "Without money of her own, and with only a stepmother - closely related to **Jezebel** - she was very unhappy in her home life" (Galsworthy, 1975, p.176). In the Bible, Jezebel, the wife of the Jewish king Ahab, is a cruel and shameless woman. Old Jolyon writes a letter to his son, stating the circumstances under which the marriage of Jon and Fleur is not possible. One of the reasons for the marriage of Jon's mother and Soames Forsyte was not only Irene's lack of money after her father's death, but also her relationship with her stepmother, whom the author calls a relative of Jezebel, a symbol of despotism and cruelty. Through one evaluative-characterizing allusion, one succinct comparison John Galsworthy describes not only the nature of the stepmother, but also the attitude towards her. If students are given the task to familiarize themselves with this mythologem on their own, then later, analyzing how strong the biblical image is, they can easily get a complete picture of the image of the stepmother in Galsworthy's novel, even though the author does not give a direct description of the character.

The text actualizes the main meaning of the mythologem " Jezebel " - "cruelty". However, the "precedent text" is aimed at a small fragment of the novel, and it is a means of accentuating a certain conflict and additional characterization. The mythologem as a means of accentuating the precedence performs in this context an aesthetic subtask of focusing the reader's attention on the existing image and its characteristics. The information potential of the mythologem, however, is on the "periphery" of the information potential of the entire literary work.

In Ray Bradbury's novel "Fahrenheit 451" there are several similar cases when the author "uses" the mythologems which perform an aesthetic subtask to focus the reader's attention on additional characteristics of the heroes; the mythologems being on the "periphery" of the information space of the whole novel. For instance, Beatty, preaching morality to Montag in order to protect him from rash acts (hiding books, instead of burning them) which could cost him his life, emphasizes, "We must be all alike. Not everyone born free and equal, as the Constitution says, but made equal. Each man the image of every other; then all are happy, **for there are no mountains to make them cower, to judge themselves against**" (Bradbury, 2013, p. 78). According to the Bible, God only allowed the Chosen one, Moses, to ascend Mount Sinai, and forbade all others ascending the mountain. Beatty is clever, well-read and indulges in everything that is forbidden to other firefighters and, thus, he rises above them. The mythologem "Moses" and its basic meaning "chosen by God" appear in the text implicitly. However, the mentioned dictum from the Bible shows the mechanism of inclusion of the myth into a small fragment of the fictional text in order to give an additional characteristic to the hero. The precedent text is on the "periphery" of the information space of the novel, but it focuses students' attention on an important characteristic feature of the character which helps understand certain conflicts.

In his following utterance, Beatty trying to be convincing refers to the ancient Greek myth of Hercules and Antaeus, "Do you know the legend of Hercules and Antaeus, the giant wrestler, whose strength was incredible so long as he stood firmly on the earth. But when he was held, rootless, in mid-air, by Hercules, he perished easily. If there isn't something in that legend for us to-day, in this city, in our time, then I am completely insane" (Bradbury, 2013, p. 108). The myth is introduced into the text through proper names. The emphasis is on the main elements of the information field of the myth of Hercules and Antaeus - "strength", "invincibility" of Hercules, and "vulnerability", "dependence on the Earth" of Antaeus. The

precedent text is transformed: replacement occurs at the level of the main characters – Montag and Beatty, the purpose of "fight" between heroes is also transformed. Beatty makes it clear that Montag will always be vulnerable when he tries to "get off the ground", i.e. from the society that has prescribed the rules by which he should live. Beatty will be able to destroy Montag easily, should he go the other way.

The mentioned myth has the status of a mythological allusion, which the author uses for his intention to create a certain conflict, and draw the reader's attention to additional features of the characters. Here, as in the previous cases, students are put in the conditions of independent cognitive activity to searching for information related to various mythologems, comparing mythological heroes and the heroes of the novel. Students draw certain inferences, and then use them to interpret the images of the characters.

## 7. Conclusion

The challenge of enhancing the learning and cognitive activity of students is connected with the search for such teaching tools that will ensure the active cognitive position of students, will create optimal conditions for students to reflect, will motivate them to thinking and practice activity. Cognitive skills developing, in particular, the ability to more effectively use available information and learn a new one, is associated not only with doing certain exercises, but also with mental activity developing, with mastering certain methods, algorithms to solve learning and cognitive tasks. The readiness of an individual for independent learning and cognitive activity is based on this function-search algorithm.

In this regard, the work with the mythologem in the process of interpreting a fictional text within educational subjects "Reading" and "Analytical reading" contributes to developing the learning and cognitive component of a foreign language communicative competence in language specialties students.

Myth contains a highly concentrated information which is stored in the memory of a person in the form of a mythological frame. This information is the "cultural context", and fictional text cannot be decoded without it. Authors of fictional texts highlight those elements of a myth that reveal their ideas at most, and give the "precedent text" an extra meaning.

Mythologem, being a linguistic representation of a myth, is considered as a frame, an information unit used by authors of fictional texts in a particular amount and preformed (ready-made).

In the literary works under analysis, mythologem serves as a means of accentuating precedent information, and as a tool or solution to reveal conceptual information. In addition, in most cases, both texts — the "precedent text" of a myth and the text of a literary work— are coreferent. Mythologem is most often introduced into a fictional text by means of such stylistic devices as allusion and comparison. Text interpreting through the use of mythologem offers an excellent opportunity for learning and cognitive activities, such as finding the necessary information, analyzing, comparing, transforming, creating new information based on the old one. Mythologem analysis helps students penetrate into the deep meaningful structures of a literary work and understand author's intentions.

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