Cognitive And Communicative Strategies for Building a Modern Scientific and Academic Discourse

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Abstract

The issue of cognitive and communicative strategies plays a vital role in the formation of modern scientific and academic discourse. It is one of the sources of its further development in the context of modern digitalisation. The research focuses on the quality of using such strategies for argumentation, as well as the consistent and logical presentation of scientific concepts. The article analyses the methodological aspects of the cognitive-communicative strategy and the peculiarities of its use in the linguistics of English. The authors studied the principles and methods of building such strategies and determined the impact of digital technologies on this process. Special attention is paid to the development of the modern scientific environment, key institutions of influence, the activities of some independent researchers, and their interaction with research centres. Through critical analysis, the authors have uncovered the key approaches to constructing, using, and the principles of functioning cognitive and communicative strategies in the linguistics of English. Furthermore, they have identified potential principles for their transformation by the development of digital technologies in scientific research. The article examines the characteristics of the development of academic discourse in English and the emergence of new lexical constructions and neologisms brought about by the digital revolution. The main goal of the research is to outline the prospects for further development of academic discourse in linguistics of English and the possibilities for its enhancement through the use of these technologies. It is proven that the development of general and communicative competencies regarding all types of communicative activity in various areas of language communication is the primary task of linguistics in English.

Keywords: Critical Analysis, Communicative Strategies, Argumentation, Academic Discourse, Research Centres, Scientific Environment, Educational Institutes.

INTRODUCTION

Research centres create effective conditions for gradually transforming the principles of scientific and academic discourse in linguistics. They are marked by the current development of the scientific environment and the integration of a range of software-based digital and applied critical analysis methods. The main issue of the development of linguistics in English concerns the effective argumentation of personal scientific research and the possibility of using a cognitive and communicative strategy to analyse the key concepts of the proposed studies, related theses, structural blocks, and elements. In particular, an essential factor for applying such strategies is the creation of dedicated events and international projects on the international stage. They can engage scientists and special authorities to improve the efficiency and productivity of research.

EU countries are actively investing in the technological development of innovative linguistic tools. They encourage the use of digital technologies and the possibility of access to information for a wide range of scientists who can use this information to improve their research practices. However, considering the scientific environment, one of the most concentrated scientific settings in the linguistic concept is educational

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institutions. They define the internal regulations of the research concept for the development of linguistics in English and prepare subsequent generations of scholars for conducting corresponding scientific activities. The implementation of a cognitive-communicative strategy in the linguistic concept can be effective in the context of its further development and the possibility of using it to argue one's own scientific thoughts and research results. The methods of argumentation of such beliefs and the possibility of their implementation towards the main goals of the scientific environment remain debatable.

Modern research centres, educational institutions, and individual researchers face the challenge of an effective monitoring and innovation development system. After all, the use of digital technologies and their implementation in scientific activities create new lexical phrases, contribute to the development of scientific neologisms, and have a transformed semantic structure caused by globalisation processes. In terms of the aspects of developing scientific and academic discourse and the environment where the cognitive and communicative strategies of linguistics in English function, research on its further development may be crucial for the modern scientific community. These studies require comprehensive analytical and theoretical research.

LITERATURE REVIEW

The problem of cognitive and communicative linguistic strategies has been studied by scientists in terms of their improvement, as well as enhancement of the quality of English-speaking scientific discussion and reasoning methodology. According to Rafiee (2018), the essence of cognitive and communicative strategy lies in selecting lexical forms and phrases used to achieve communicative goals. This aligns with the views of Gkonou (2018), who believes that the features of cognitive and communicative strategies can be utilised to enhance scientific discourse. Krysanova (2019) found that cognitive and communicative linguistic strategy is built on arguments and theses, as well as on the ability to work with refutation. Another critical method, as noted by Kulinich (2022), is critical analysis. According to Chen (2015), critical analysis is an effective tool for improving scientific research. It allows an analysis of a wide range of theoretical and practical perspectives on a specific issue.

Szyszka (2017) argues that the modern development of linguistics requires optimising cognitive and communicative strategy. It can be achieved through the implementation of digital technologies. Point (2021) investigated the role of digitisation in scientific discourse. The author concluded that integrating such technologies significantly enhances the productivity, efficiency, and quality of scientific research in linguistics of English. Odiboh (2020) highlights the need to reform scientific institutions, particularly universities, and improve research linguistic work. According to Rosas (2016), investing in scientific activity is a competitive economic and technological development factor. It can be achieved through engaging the public and corporate sectors.

The practice of developing state projects to enhance scientific and academic discourse, as Pawlak (2018) suggests, should be based on a preliminary analysis of existing means of conducting it, identifying key shortcomings, and addressing them.

Idris (2022) studied cognitive and communicative strategy as a tool for holding a discussion among scientists, which is particularly relevant for linguistics. He noted that arguments can be based on reliable sources, as well as on the presence of practical and critical analyses. According to Nerubasska (2020), the practice of using critical analysis is crucial for the modern world due to the rapid development of communication requiring an effective method for conducting such discussions in the English-speaking environment.

Sytnyk (2022) points to European practices involving optimising educational programs, organising scientific conferences, and creating joint international scientific projects to improve modern views on scientific and academic linguistic discourse. Jeong (2020) believes that applying this approach in the contemporary scientific environment has advantages in terms of engaging and concentrating scholars, analytical centres, and representatives of corporate sectors who can invest in the scientific development of English-speaking linguistics.

Tarasova (2020) suggests that cognitive and communicative strategies can be used to argue one's own scientific research and its further implementation. These strategies can also be a source for attracting potential investors.
Zhao (2023) identified argumentation, critical analysis, consistency, and innovation as the fundamental cognitive and communicative strategy methods in linguistics. The combination of these factors can ensure efficient scientific activity and strengthen the role of scientific research in modern academic English-speaking discourse.

Consequently, given the ambiguity of scientific viewpoints on the further development and formation of scientific and academic discourse and the role of cognitive and communicative strategy for developing the linguistics of the English language, the topic remains appropriate for further research.

AIMS

The article aims to reveal the methodological and theoretical aspects of the cognitive and communicative strategy used in modern scientific and academic English-speaking linguistic discourse. The paper outlines the peculiarities of its construction and the possibilities for further development. This study focuses on analysing the following key principles:

building a cognitive and communicative strategy in the practice of academic English-speaking discourse;
using the practice of creating a personal argumentation strategy;
confirming scientific concepts of a theoretical and applied nature in the linguistics of English.

The main goals of the study include:

to reveal the peculiarities of applying cognitive and communicative strategies for developing the linguistics of the English language;

to outline the prospects for the development of scientific and academic linguistic discourse.

An essential aspect of this research is to outline methodological and practical approaches to using and evolving cognitive and communicative strategies in linguistics, as well as the practice of their application during discussions in an English-speaking environment. The results reveal the pattern of the modern scientific environment regarding the use of academic discourse, which is the main tool of scientific research in linguistics.

MATERIALS AND METHODS

The research was conducted using the following methodology:

critical analysis of theoretical concepts;
evaluation of modern practices for the dissemination of cognitive and communicative strategies in scientific and academic discourse on the concept of linguistics in English.

The authors used a number of scientific papers and analytical reports of educational institutions on the regulation and standardisation of the studied discourse. At the preliminary stage, the study systematised and outlined the main principles of theoretical views on cognitive and communicative linguistic strategies. It also identified their key advantages in conducting scientific and academic discourse in an English-speaking environment. Synthesis and comparative analysis were used to systematise the structural elements of scientific and academic discourse in the concept of linguistics. In addition, they were used to identify the key principles of English-speaking discourse formation, implementation, and use in the modern scientific environment. The practice of such use can increase the effectiveness of communication and integrate digital technologies to build scientific and academic discourse in the English-speaking linguistic aspect.

The next stage of the research methodology includes the identification of the peculiarities of influence and change of the scientific and academic discourse based on theoretical approaches concerning the possibility of new terminology emergence and the practice of using digital tools for their dissemination. The study shows the evolution of the cognitive and communicative strategy. Based on the critical analysis used in the article, the authors analysed the practices of scientific communication, argumentation, and support of thesis arguments regarding opinions on a particular issue in the concept of linguistics in the English-speaking environment.
The final stage includes the following steps:

to disclose the main aspects of using cognitive and communicative strategies based on the tasks of the scientific environment of linguistics;

to identify their impact on academic discourse in the English-speaking environment;

to determine further research prospects.

Special attention is paid to the functioning of scientific and academic discourse in the English-speaking linguistic aspect in modern educational institutions. The authors identified the main aspects of its dissemination and opportunities for use per the practices of implementation and utilisation based on current technologies, optimisation of information analysis, synthesis, and the formation of a well-reasoned scientific position in terms of linguistic features. The research methods used in the article are implemented per the stated purpose and the study’s main goals. As a result, based on the proposed research methodology, it is possible to present the results obtained from the conducted analysis.

RESULTS

The contemporary academic discourse is constantly evolving and transforming in line with modern scientific developments and its integration with digital technologies. According to the World Bank, the worldwide digitisation level is increasing by more than 5% each year, which is a positive trend. The theoretical concept of cognitive and communicative strategy in the linguistic concept lies in the ability to conduct negotiations under the communicative purpose, determined by the communication environment and the reflection of the interests of objects and subjects in this environment. The formation of a structured position and its implementation in the use of cognitive and communicative linguistic strategies can be achieved based on effective methods of argumentation.

The scientific environment is usually clearly standardised according to the stylistics of conducting discussions. This includes writing scientific publications or organising international conferences with clear regulations and established practices. Such an approach is of great significance for the modern world. After all, it can improve the functioning of the scientific environment following the aim of its development, namely:

improvement of business processes;

promotion of socio-economic processes;

solution of global issues.

The main source of scientific and academic linguistic discourse includes scientists, educational institutes, and community representatives. Therefore, the standardisation of cognitive and communicative strategies should be based on accepted communicative strategies, accepted in the field of linguistics in English. Based on a critical analysis of modern scientific concepts, it is possible to summarise the most popular strategies and their advantages when used in academic English-speaking discourse, as shown in Table 1.

The practice of utilising strategies in Table 1 can be employed to enhance the quality of cognitive and communicative strategies in contemporary scientific-academic discourse. Typically, these strategies encompass a set of reasoned standpoints that can implement cognitive influence methods. These methods include sequence, scientific significance, creativity, systematicity, etc. Additionally, the use of such strategies is built upon considering methodological aspects. The latter involves applied calculations or critical analysis of theoretical concepts. This practice holds significant importance in the scientific environment as it can provide an excellent foundation for discourse construction in European countries (Akimova et al., 2023).

The construction of modern scientific-academic discourse of linguistics in English is based on the application of certain cognitive and communicative strategies. These strategies serve to optimise the transmission of complex linguistic content and facilitate English-speaking communication. Cognitive strategies include the use of linguistic techniques, such as analogies and models, in order to make abstract concepts understandable.
Table 1: Communicative strategies for building a modern academic discourse

<table>
<thead>
<tr>
<th>Strategy</th>
<th>features</th>
<th>advantages</th>
</tr>
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<tbody>
<tr>
<td>reasoning and persuasion</td>
<td>logical structure, validity, credibility.</td>
<td>efficiency in convincing the audience, enhancing the impact of the study.</td>
</tr>
<tr>
<td>critical analysis</td>
<td>analysis depth, identification of strong and weak points.</td>
<td>improvement of the quality of scientific content and critical thinking.</td>
</tr>
<tr>
<td>classification and synthesis</td>
<td>systematisation of knowledge, compilation of information.</td>
<td>improvement of knowledge organisation, opening up new perspectives.</td>
</tr>
<tr>
<td>explanation and interpretation</td>
<td>clarity, accessibility, contextuality.</td>
<td>clarity and comprehensibility of complex concepts.</td>
</tr>
<tr>
<td>references to competent opinions and sources</td>
<td>reliability, scientific validity, and credibility.</td>
<td>strengthening trust and recognition in the scientific community.</td>
</tr>
<tr>
<td>forecasting and modeling</td>
<td>identification of trends and results forecasting.</td>
<td>optimisation of scientific research and development of strategic planning.</td>
</tr>
<tr>
<td>heuristic methods</td>
<td>creativity, intuition, flexibility of thinking.</td>
<td>stimulation of innovations and unique discoveries.</td>
</tr>
<tr>
<td>dialogue and discussion</td>
<td>interaction, mutual understanding, and collective problem-solving.</td>
<td>development of cooperation and collective intelligence.</td>
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Source: compiled by authors.

Among other things, communicative strategies include:

- a clear linguistic definition of technical terminology;
- the use of precise language as a linguistic tool to avoid misunderstandings and ensure the accuracy of information assurance in the English-speaking environment.

The structuring and organisation of texts play in the linguistics of the English language a crucial role. They emphasise the logic of argumentation and support the clarity of scientific conclusions. Critical evaluation of sources and content is a central element that ensures the integrity and reliability of scientific work. Interdisciplinary linguistic approaches broaden the horizons of scientific discourse by integrating different perspectives. Thereby, these approaches contribute to a more comprehensive understanding of research issues. The inclusion of feedback mechanisms and interactive exchange in the scientific community fosters the dynamic of English-speaking discourse development. Also, it allows for continuous questioning and knowledge advancement of the intricacies of the phenomenon of linguistics in English.

The diversity in the use of cognitive and communicative strategies in scientific and academic discourse reflects Europe's cultural and educational diversity. In comparison with the English-speaking discourse and its linguistic specificity, in Germany, for example, significant importance is given to the thoroughness of methodological approaches and the depth of theoretical discussions. It is reflected in the detailed presentation of research methods and results in scientific publications. In France, academic discourse is marked by a clear predominance of abstract theoretical reflections. Such predominance is manifested in the predominant use of deductive models of argumentation. French scholars typically derive specific conclusions from general theories. They often use empirical research methods and incorporate synthesis and comparative analysis elements.

In contrast, British discourse is typically characterised by a more pragmatic approach. In this case, an emphasis is often placed on the direct application of research findings. The latter is manifested in clear and focused communication. British scientists strive to announce their findings in a way that can be immediately applied in practice. Consequently, this leads to a strong emphasis on experiential applied research, which is directly reflected in the priority of linguistic means and techniques.
Given the wide variation in using linguistic strategies to shape modern scientific and academic discourse, there are a number of principles that should guide further analytical research and effective strategies for building a stronger case for a personal opinion in the English-speaking environment. The main principles of this approach are shown in Figure 1.

**Figure 1: Principles of scientific and academic discourse**

Source: compiled by authors

The principles depicted in Figure 1 indicate the methodology of constructing this discourse. They also shed light on the directions of its formation in modern educational institutions. For example, in the European educational environment, it is necessary to utilise digital technologies. They can enhance the role of implementing such linguistic strategies and effectively develop them by applying relevant regulations. Modernising educational institutions in European countries as part of a strategy to improve and develop linguistics in English should be based on the following principles:

- Introduction of distance learning with immersion in an English-speaking interactive environment.
- Using modern electronic libraries.
- Promoting the improvement of one's own professional competence on the basis of optimising the concept of linguistics of the English language.
- Ability to apply strategies for building a modern scientific and critical discourse through critical analysis, considering linguistic specifics.

A distinct segment of the development of scientific-academic discourse can be the growth and establishment of international scientific projects to address specific issues in the linguistic field. Creating such projects provides an opportunity to establish a quality interaction mechanism between researchers and individual legal organisations in the English-speaking environment. The practice of organising such conferences is most widespread among technologically advanced countries. Besides, they create opportunities for state management and can be used to address complex issues in the business environment. Increasing professional competence through the use of such conferences can have one of the most positive impacts on efficiency and productivity due to the high level of linguistic competence. A discussion with counter-arguments at such events is the best tool for identifying the truth behind the debate. In particular, it helps to introduce disputes and arguments, as well as to identify drawbacks and benefits using linguistic techniques and tools (Akimova et al., 2020).

The technological development of our time should also contribute to the formation of linguistic research centres and create a motivational component for linguistic scientists. That is possible through effective public administration and the creation of research projects that can be developed using accepted scientific and academic discourse. Its standardisation and updating are essential for disseminating a specific discussion structure and forming standard rules for most scholars in the field of linguistics in English.
Therefore, the linguistic development of cognitive and communicative strategies in the English-speaking environment should focus on:

forming an effective argumentation with the help of linguistic means, methods and techniques;

argumentation of one's own point of view;

using modern digital solutions that have been implemented to address the issues under study, in particular, linguistic interactive educational technologies, platforms and tools.

Despite the sample range, the application of critical analysis is one of the most popular methods of organising and using cognitive and communicative strategies for developing the phenomenon of linguistics in English. The prospects for further research should be based on modern scientific and academic discourse practices in educational institutes.

**DISCUSSION**

Based on the conducted research, it can be concluded that the practice of using scientific discourse is constantly evolving, and the functional role of its linguistic aspects in the English-speaking environment is growing rapidly. It requires qualitative modernisation according to the needs of the scientific community for conducting research and analysing scientific problems. According to Zakaria (2022), the prospects for further communicative strategies should involve clear argumentation and identification of other directions for developing the issue. The importance of this approach lies in the fact that it is only possible to explore scientific problems entirely based on the available critical arguments. The process of linguistic dynamics within the English-speaking environment develops synergistically with scientific research. Therefore, data analysis and synthesis are becoming increasingly significant in the modern scientific community. Theoretical analysis of the potential of linguistic techniques, concepts, and tools remains a decisive factor in further research. Throughout the course of scientific evolution, humanity has developed various theoretical concepts regarding diverse scientific issues of English-speaking discourse, which require detailed analysis within the concept of linguistics (Shytyk et al., 2020).

Scientific and academic discourse transforms in line with the emergence of new tools for argumentation, negotiation, publication writing, etc. In these circumstances, Fogel (2022) believes that digital technologies can become effective assistants in presenting a clear standpoint of the researcher and improve the ability to conduct constructive scientific discourse. The development of digital technologies and specialised software directly impacts the linguistic formation and dynamic trends of cognitive-communicative strategies in English. Linguistics of the English language involves the development of communicative competence, which entails the ability to relate linguistic means to specific spheres, situations, and communication conditions. It includes practical skills and abilities to use the language, i.e., the development of language skills sufficient for fulfilling communicative functions at a level that allows one to fully perform work duties, professional communication, and everyday interaction. Only by addressing these aspects comprehensively can one form the fundamental parameters of linguistic competence.

Universities and educational institutions are an essential means of disseminating and developing cognitive and communicative strategies for developing the linguistics of the English language. These institutions most commonly use and transform them. The prospects for the further development of these institutions may lie in improving the rules, ethics, and standards for utilising scientific and academic discourse using linguistic methods. Based on the operation practices of these institutions, it is possible to improve the quality of using a particular discourse, as well as to find common premises for its development and opportunities for dissemination among future scientists and experts. The quality of the development and evolution of English-speaking academic discourse in linguistics should be improved by researching possible prospects for its development, modernisation and optimisation.
CONCLUSION

According to theoretical foundations, the issue of the linguistic component of the cognitive-communicative strategy in the English-speaking environment involves the ability to conduct discourse with accessible arguments supporting one's own scientific views and positions. Although the practice of scientific and academic discourse is evolving, it is clearly regulated and standardised according to general rules regarding the correctness of information presentation and the argumentation of scientific and personal statements and theses, including aspects of linguistic specificity. In the context of the rapid development of modern science, the implementation of critical analysis and the ability to synthesise information are key tools for current scientific and academic discourse, actively contributing to the effective development and enhancement of linguistics in English.

Linguistics of the English language forms the basic competence of an individual, synergising communicative competence, linguistic competence, as well as related social, sociocultural, informational-analytical, and professional competencies, which constitute the educational and developmental goals of the development of the English language and English-speaking discourse, in particular.

Ongoing scientific discussions concern the potential use of specific linguistic practices and their dissemination in accordance with the communication strategy of English-speaking discourse. In the European Union, the main practice for using English-speaking academic discourse involves clear positioning, terminology, and consistency in the presentation of material with clear, logical connections and detailed issue exposition, which imposes certain demands on the linguistic component of the process.

Functional linguistics is language in action, its active functioning as a communicative medium. A significant role in the establishment of the functional direction in linguistics is played by understanding language as a purpose-driven system of expressive means.

Another important method for further development and enhancement of the linguistic concept of scientific and academic discourse is free access to information and the possibility of using specialised tools for critical analysis. The availability of broad access to information creates opportunities for scientific research aimed at enhancing the system of linguistic tools.

The outlined approach to defining the linguistics of English-speaking discourse in the context of forming cognitive-communicative strategies improves the use of scientific discourse in relevant institutions, discussions, and publications. All of this is intensified by digitalisation processes. As a result, we see that scientific and academic English-speaking discourse is rapidly developing towards innovative linguistic solutions and requires further digitalisation for rapid scientific progress.

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