

Critical thinking and argumentation: content and correlation of concepts

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Abstract

The article analyzes the approaches of scholars to defining the concept of critical thinking, and researches logic it is based on. The correlation of such concepts as critical thinking and argumentation is identified.

In the era of rapid development of the information society, the latest information and communication technologies, the role of information in human life is constantly growing. Its number and diversity are quite significant, and therefore today the issue of developing critical thinking for identifying and obtaining reliable information is relevant. A significant place in this process is occupied by the rules of logic, using which you can easily establish the truth or falsity of a particular information. Despite the multiplicity of principles of logic, techniques and theories, which is the result of research by many experts-scientists in this field, for military analysts, first of all, it is necessary to note argumentation – the process of justifying a certain position (statement, hypothesis, concept) by a person to convince its truth, expediency, which is the basis of critical thinking. It should be added that the ability to recognize propaganda and analyze false grounds in argumentation will help a military analyst not to become a victim of false information.

Key words: thinking, critical thinking, argumentation theory, argument, information and analytical activity, military analyst.

Introduction

The problem of defining critical thinking has been repeatedly raised in the works of both domestic and foreign scientists (G. Bekakhmetov, A. Brushlinsky, V. Kaloshin, V. Klimenko, A. Korzhumbaeva, S. Maksimenko, O. Matlasevich, I. Pasichnyk, O. Pometun, B. Russell, B. Sternbezh, R. Paul, L. Elder). Matthew Lipman, founder of the critical thinking Institute, sees it as qualified, responsible thinking that generates correct judgments because it is based on clear criteria, corrects itself (improves itself), and takes context into account. Critical thinking is a kind of reminiscence of the ancient concept of wisdom [7]. Modern research conducted in many countries of the world indicates a decrease in the role of critical thinking in the

educational process in general and professional activity of a person in particular. Idzawa and Hayden summing up the results of a study on the abilities of students from different countries state that the best American students solving mathematical problems showed significantly lower results than weaker Japanese peers. Neubert and Binko, based on similar studies, also conclude that only 39% of young people are able to find the right information, organize and interpret it correctly. In this context, it is worth noting that the main task of a modern university is to train specialists who can think critically in the face of rapid changes. Many authors view critical thinking as "the use of cognitive techniques or strategies that increase the

likelihood of obtaining the desired end result, while the thinking person uses skills that are reasonable and effective for the specific situation and type of task to be solved." According to I. Pasichnyk, critical thinking is a complex, integral quality of the individual, a set of motivational, cognitive, activity and reflexive components that ensure its self-knowledge, self-education and self-realization. Expressing the intellectual level of development of an officer, critical thinking contains professional and personally significant value [8]. According to the D. Ustilka data – the entire military service,

and especially the information and analytical activities of military intelligence, is permeated with the performance of non-standard tasks that require critical thinking. Unlike the thinking of an ordinary person, the critical thinking of an analytical officer has always been distinguished by such properties as clarity, accuracy, thoroughness, concreteness, consistency, depth, significance, impartiality, balance, logic in forming conclusions, etc. To clarify the features of critical thinking, it is important to clearly define the nature of this phenomenon.

Material and methods

Using the methods of analysis, scientific works of such authors as Braus Judy A., Wood David, Bryushinkin V.N., Eemeren Frans Hendrik van, Ivin O., Cluster D., Konverskiy A., Lipman M.,

Halpern D., Paul, R. and Elder L., who studied critical thinking and its impact on argumentation.

Results and discussion

Critical thinking is usually considered as an unconditional good for a person and society without any proof. This alone makes the boundaries of critical thinking unclear and its significance ambiguous. This situation requires its own clarification and, above all, by searching for the basic concept of critical thinking. The development of critical thinking becomes relevant due to the fact that social and technological progress puts forward the requirement for individuals to be able to quickly adapt to modern conditions of functioning of society, be capable of changes and self-improvement, and find ways to solve social and professional problems in atypical situations. Today, it is not enough for a military analyst to have one simple way of thinking. Modern highly differentiated society is based on a variety of social rationality, which often requires excellent thinking techniques from military analysts. And the military science itself also increasingly encourages new thinking styles, new procedures for proving, and finally, the author's approach to formulating and solving theoretical and practical problems. Thus, the transformation of the very way of life of modern humanity justifies the importance of having complex thinking skills,

primarily critical and creative, for the information and analytical activities of military intelligence.

The role of critical thinking in information and analytical activities is to control the performance of intellectual activities in order to increase their effectiveness. Critical thinking works through specific procedures and strategies that increase the likelihood of overcoming problem situations, as opposed to intuitive thinking, in which the correct answer is seen without the possibility of justifying the decision and proving its correctness. It provides an informed choice of the further direction of the solution through assessment and argumentation in the process of working with the problem situation. D. Halpern defines critical thinking in his work "The psychology of critical thinking" as follows: "The use of such cognitive skills and strategies that increase the probability of obtaining the desired result". It is distinguished by "balanced, logical and purposeful approach" [9], that is, directed thinking. Critical thinking in information and analytical activities is an open, evaluative, reflexive thinking that does not accept dogmas, develops by superimposing new information on

life's personal experience. This opinion is supported by J. A. Brows and D. Wood, who view critical thinking as intelligent reflexive thinking that focuses on solving what you believe and do. Critical thinking, in their opinion, is the search for common sense: objective and logical actions that relate both to their own point of view and to others [1]. To think critically in analytics is to be able to reject your own biases.

M. Clarin agrees, for whom critical thinking is rational, reflexive thinking that aims to decide what to believe or what actions to take. In this understanding, critical thinking includes both abilities and aptitude.

Authors of technology for the development of critical thinking Ch. Temple, K. Meredith, D. Steele are convinced that thinking critically means showing curiosity, using research methods: asking questions and systematically searching for answers. They argue that critical thinking works on many levels, not by being content with facts, but by identifying the causes and consequences of these facts. Critical thinking involves important skepticism, doubts about generally accepted truths, developing a point of view on a particular issue, and the ability to defend it with logical arguments. Critical thinking is not a separate skill, but a combination of many skills such as observation, description, comparison, evaluation, association, forecasting, defining, classifying, making a decision, or discovering a pattern, proving, correcting, discussing.

So, critical thinking allows a person to analyze information, select the necessary facts, logically comprehend them, argue, draw conclusions and generalizations, not to blindly believe authorities, but to develop your own point of view on various social, cultural, political and other phenomena of life.

Critical thinking is considered to be the inner side of argumentation. When searching for an argument by an analyst, it is important to critically analyze the arguments put forward in defense of a particular statement, opinion, thesis or point of view. If the conclusions of an argument logically follow from the arguments that act as its premises, it will be considered rational and convincing. The goal will be

achieved if the analyst, putting forward convincing arguments in defense and justification of his thesis, convinces the audience.

Argumentation in the broadest sense of the word is a rational way of convincing people by putting forward, justifying, and critically evaluating statements, assumptions, opinions, and hypotheses with appropriate arguments (or arguments). The most convincing in this sense are evidentiary arguments based on arguments whose truth is already known or proved earlier. V. N. Bryushinkin believes that "critical thinking is a sequence of mental actions aimed at checking statements or systems of statements to find out their inconsistency with accepted facts, norms or values... There are levels of critical thinking, each of which has its own type of argumentation, characterized by different ratios of logical and cognitive components: 1) empirical level – critical fact checking; 2) theoretical level – critical testing of theories; 3) metatheoretic level – critical testing of norms and values" [2]. In critical thinking the analyst identifies two structural elements: *fixation* to search for inconsistencies (critical fixation) and *argumentation*, which is aimed at substantiating these inconsistencies (critical reasoning). It is it that gives the answer to the question "how to argue in order to convince yourself and other people?" In addition, argumentation is always a dialogical process involving at least two parties: the one who convinces (the analyst), and the one who is being convinced (the manager, the customer). The success of an argument depends on how accurately the persuading party considers the personality of the persuading party. If we want the argumentation model to reflect the essential aspects of such processes, then we should consider not only the logical characteristics of the argumentation, but also the value orientations of the individuals involved in the argumentation, choosing argumentation strategies and the methods used to relate arguments to the personality structure.

It is worth paying attention to the close relationship between argumentation and critical thinking. Moreover, logic as a connecting link plays only a formal function here, while the

semantic connection is determined mainly by various practices of applying the theory of argumentation and critical thinking. The complexity of defining the theory of argumentation lies in the complex nature of the latter, and accordingly, it is very difficult to define argumentation that would suit all specialists.

According to the research of O. O. Ivin, argumentation is the presentation of evidence in order to change the position (beliefs) of the other party, and proof is one or more related statements. The proof is intended to support the thesis of an argument – a statement that the speaker finds necessary to inspire the audience by convincing them. Argumentation is also a speech action that includes a system of statements about justifying or refuting a certain thought and is directed at the mind of a person who, in turn, is able to accept or reject this idea. Furthermore, O. O. Ivin also considers argumentation as a purposeful activity, since its main task is recognized as changing someone's beliefs, or as a social activity, as argumentation is always aimed at an audience that is ready to accept or challenge the arguments given, which implies dialogue and an active position of the opposite party [4].

Argumentation is often referred to not only as the procedure for making arguments in support of something, but also as the very set of such arguments. Argumentation theory explores a variety of ways to persuade the audience through speech action, analyzes and provides explanations about the hidden mechanisms of the “invisible art” of speech action within a variety of limits – from scientific evidence to political propaganda, artistic language and trade advertising.

Modern experts in the field of argumentation theory Frans van Eemeren and Rob Grootendorst believe that argumentation is characterized by assuming the reasonableness of those who perceive it, their ability to rationally weigh arguments, accept or challenge them. As a result of the fact that argumentation is a continuous process, it can be argued that it is dynamic. The peculiarity of argumentation as a process is to create persuasiveness, to set the

addressee's beliefs [3]. Ideally, the strategic task of argumentation – persuasion – is achieved due to the reliability of arguments, their consistency, sufficiency and consistency of their presentation.

In analytics, argumentation as a cognitive process in human thinking is on a par with evaluation. The cognitive aspect of argumentation is that in the process of argumentation, the interaction of systems of perception, representation and Information production is carried out.

Argumentation can also be characterized as a special thought process that requires insight into the essence of the issue, highlighting its focus, as well as analyzing hypotheses and assumptions in order to confirm or refute them. As its main functions, argumentation involves confirmation, explanation, correction, denial, summary, and so on. In addition, from the knowledge base and generalizing frameworks, argumentation calls for the necessary evidence and patterns of behavior, if necessary.

According to A. E. Conversky, theory of argumentation is closely related to logic [6]. Indeed, the theory of argumentation, having taken its first steps in the time of Aristotle, was based on logical rules, but even then, the practice of argumentation went beyond logic and, in particular, was widely used in the rhetorical sphere. If the rhetorical approach was aimed at convincing the audience, then the logical approach meant focusing on getting a conclusion based on premises. In information and analytical activities, logical rules are the basis of argumentation. However, such framework functions should not be exaggerated.

The duality of argumentation (its structure is logical, and the context in which it exists is the domain of rhetoric) is pointed out by some scientists. There have been many attempts to reduce argumentation to formal relations, but formalization has its limits, which do not fit the argumentation considered in linguistics and philosophy. These types of arguments are broader than logical rules. Logic requires as a condition of argumentation only a series of arguments, one of which “allows” the

appearance of the next, in other words, logical argumentation can exist independently of communicants. Therefore, gradually even logicians deviated from the definition of argumentation as a process of logical proof of the truth of a statement and also began to adhere to a broader view, considering that argumentation is the operation of justifying any judgments, practical decisions or assessments in which, along with logical ones, language, emotional – psychological and other illogical methods of persuasion are also used. Under the influence of numerous studies in logic itself, the theory of argumentation is now presented as a complex teaching about the most effective logical and illogical methods and techniques of persuasive influence in the communicative process. Argumentation and proof in information and analytical activities are in hyper-hyponymic relations, since proof should be understood as a logical operation to justify the truth of any judgment through related judgments.

Argumentation is also the core of communicative rationality, since it is argumentation that connects thought and action. For the theory of argumentation, the activity of two parties who have entered into communication is important. In human communication, the addressee actively transforms the source message and, in turn, influences the source both by its internal organization and by the constant possibility of

feedback. It is the communicative sphere that combines argumentation with another important characteristic of communication – critical thinking.

The critical position of the argumentator is of great importance, because during the argumentation, arguments are reviewed and views are revised. A significant role is played by the possession of the method of mental control. Critical attitude is a way of organizing knowledge: not a simple connection between an individual and a phenomenon, but a conscious understanding and consideration of causes, motivations, and meanings.

In military analytics, the ability to argue is impossible without the ability to think critically, because the mechanism of critical thinking includes mental operations that determine the process of reasoning and argumentation: setting a goal, identifying a problem, hypothesizing, giving arguments and justifying them, predicting the consequences, accepting or not accepting alternative points of view. It includes the ability to apply basic intellectual skills (knowledge and understanding) to synthesize, analyze, and evaluate complex and ambiguous situations and problems. This includes the ability to identify a problem, clarify the situation, analyze argumentation, comprehensively study the issue, develop criteria for evaluating solutions and the reliability of information sources, and avoid generalizations.

Conclusions

The sphere that combines critical thinking and argumentation is language as a means of expressing the intentions, positions and actions of speech subjects. Accordingly, argumentation is a significant component of critical thinking, which is based on the ability to evaluate events (statements, evidence, etc.), make conscious choices, sound judgments about the suggested point of view or behavior model, perform reflexive actions that are used in the process of thinking, carefully analyze different opinions and views, identify their own positions and make objective decisions.

In addition, critical thinking is impossible

without rational argumentation. Each level of critical thinking has its own type of argumentation, and the mechanism of critical thinking itself includes mental operations that express the process of reasoning and argumentation. In turn, argumentation consists of three main elements: statement that is supported by a number of arguments and is formed through critical thinking; arguments that are supported by evidence, and evidence that is statistical data, personal experience, excerpts from the text and everything that works in favor of this argument.

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