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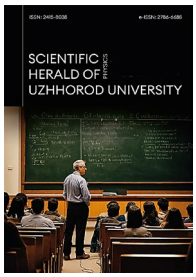

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Scientific cognition in sociology: Challenges and problems

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Abstract

Relevance Scientific cognition is the basis for the development of scientific disciplines, including sociology, and contributes to the understanding and explanation of complex social phenomena, political processes, clarification of causal relationships, identification of trends, understanding the structure and functioning of social phenomena, which is achieved through a systematic and methodological approach to the study of social reality. Sociology plays an important role in solving social problems, identifying social imbalances, studying social interactions and transformations, and developing social policies and strategies.

Purpose. The purpose of this study is to consider scientific cognition in sociology and identify its features, methods, and results.

Methodology. In the course of the research, the following theoretical methods were used: analogy – for comparing and analysing sociological phenomena using similar phenomena from other branches of knowledge; historical method – for studying the development of sociology as a science and the concept of scientific cognition over time; systematisation – to organise concepts and theories into a logical and structured system.

Results. In the course of the research, the following theoretical methods were used: analogy – for comparing and analysing sociological phenomena using similar phenomena from other branches of knowledge; historical method – for studying the development of sociology as a science and the concept of scientific cognition over time; systematisation – to organise concepts and theories into a logical and structured system. The study analysed the features of scientific cognition in sociology and its methodological foundations that contribute to understanding social phenomena. In particular, it was

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found that scientific cognition in sociology requires an interdisciplinary approach, cooperation with other sciences. Attention was focused on the methodological foundations of scientific cognition in sociology. The concept of a scientific approach in sociological research was also systematised, which provides objective results and expands the understanding of the social world.

Conclusions. The paper highlights the results and new approaches to the study of social phenomena. The challenges and problems faced by sociologists in the process of scientific cognition were identified, and possible ways to solve them were proposed. The study results make a practical contribution for sociologists, scientists and practitioners in the social sciences, creating the basis for the further development of sociological theory, methodology, and research approaches.

Keywords: ideology; mental world; knowledge transfer; reflection; social phenomena.

Introduction

Scientific cognition in sociology is an important component of the social sciences and plays a key role in understanding and explaining social phenomena, processes, and interactions in society. Understanding social phenomena and their impact on human life is essential to address current issues such as inequality, conflict, and social change. However, scientific cognition in sociology is not a smooth process. It faces a number of challenges and complexities that are worth considering. Firstly, sociology as a science is determined by the specificity of social phenomena, their contextuality and variability, which complicates the process of their research and understanding. Secondly, sociological cognition depends on the choice of theoretical approaches, methodologies, and research strategies, which can affect the objectivity and reliability of the results obtained. In addition, sociology constantly interacts with other sciences, such as psychology, economics, and political science, which brings its own characteristics and challenges to the process of scientific cognition.

In the past, a number of studies have been conducted that highlight the issues of scientific cognition in sociology and its features. The paper by Y.V. Tararoyev et al. [1] reveals important aspects of using sociology as a methodology for expanding social cognition. One of the central issues is the application of the methodological principles of the sociology of science. The authors focus on how sociological principles and methods can be applied to expand the subject field of social cognition. They show that sociological research can reveal the influence of social, cultural, and historical factors on the methodological foundations of scientific theories. Using sociological methods and approaches, researchers can analyse social phenomena and processes, considering their context, relationships, and influence of society [2].

According to the study by Sh. Isrofilova [3], scientific cognition in sociology is a form of a process aimed at developing and systematising objective knowledge about social reality. The paper distinguishes between empirical and theoretical levels of scientific knowledge. The empirical level involves observing objects, recording facts, and conducting experiments, while the theoretical level creates knowledge systems and theories that demonstrate common connections. V. Bakirov [4] and A. Chumachenko et al. [5] highlight the importance of understanding and methodological foundations of sociological cognition in the modern world. In the modern information age, an effective search for scientific knowledge is key to scientific progress. They offer dynamic entropy analysis of scientific concepts, which allows for a more rigorous sorting of concepts by their commonality. This approach provides a better definition of the structure of scientific knowledge, identifying similarities between different documents. All these aspects facilitate the development of sociological science and contribute to the growth of knowledge in this area.

Thus, the purpose of this study is to analyse and generalise scientific cognition in sociology, considering various approaches, theories, and methods. To achieve this goal, the following tasks were set:

1. To investigate the main approaches to scientific cognition in sociology, including empirical, theoretical, and interpretive approaches.
2. To analyse methodological issues related to conducting sociological research, including the choice of methods, data collection and analysis.
3. To identify the relationship of sociology with other sciences and consider the impact of this interaction on scientific cognition in sociology.
4. Identify the challenges and problems that sociologists face in the process of scientific cognition, and suggest possible ways to solve them.

Materials and Methods

In this paper, the object of comparison was various approaches, theories, and methodologies of scientific cognition in sociology. The research was aimed at analysing and generalising these approaches, their relationship with other sciences, and their impact on scientific cognition in sociology. To achieve this goal of analysing and summarising scientific knowledge in sociology, a variety of materials and methods were used, considering a variety of approaches and theories. The study used theoretical research methods such as analogy, historical methods, and systematisation.

Theoretical methods such as analogy, historical, and systematisation have been applied to generalise approaches and theories used in sociology. In particular, the analogy was used to identify common patterns, features, and similarities between different branches of knowledge. The use of analogy contributed to the transfer of ideas and methods from one context to another, which leads to new insights and expanded the understanding of sociological cognition. The historical research method was used to analyse the history of sociological thought and the development of scientific views in sociology. It helped to reveal the evolution of sociology as a science, its connection with social changes, and the development of the method of scientific cognition from prehistoric times to the present. This has influenced the understanding of the evolution of sociological concepts, ideas, and approaches.

The papers by F. Bacon [6], J. Locke [7], F.G.W. Leibniz [8], T.S. Kuhn [9], I. Kant [10] were analysed, which allowed establishing how the theory of sociology and scientific cognition progressed, the similarities and differences between different methods used in sociology, and approaches to building sociological concepts and methodologies. The study of the past has helped to establish connections and interaction between different schools and areas of sociological thought, which facilitates a better understanding and evaluation of modern theoretical approaches to scientific cognition in sociology.

Methods of systematic analysis of scientific publications and research were used to analyse the relationship of sociology with other sciences. The inclusion and exclusion criteria were used, the quality and reliability of research were evaluated, and the synthesis of information from primary sources of theories of the emergence of the concept of scientific cognition in sociology and the studies by researchers who have already dealt with this issue. The results obtained were compared with the results of contemporary researchers, which helped to identify new areas of research, changes in methodology, current problems and approaches to their solution. Systematisation allowed organising and classifying various approaches to scientific cognition in sociology to understand their structure and general features. This method allowed assessing the strengths and weaknesses of various approaches to scientific cognition in sociology. Alternative approaches, their rationale and possible advantages over standard approaches were considered. The use of these theoretical methods has made the analysis and generalisation of scientific knowledge in sociology more objective, systematic, and comprehensive, and also contributes to the development of sociological knowledge and the establishment of scientifically based conclusions.

Results

The diversity of human activities is dominant due to the widely acknowledged human desire for survival in general, as well as the improvement of one's image, style, and quality of life in particular. Human opposition to the forces of nature is the basic basis of social development, which has led to very significant consequences. Thus, human consciousness already in the ancient era conducted a search for the basic entities of the world and defined them in a certain way. Among them are "Human" and "God", and this could not be ignored by any worldview concept within the mental world, that is, the world of human feelings and representations. These entities in the human consciousness, on the one hand, opposed each other, and on the other – directly or indirectly related to each other. The concepts of "Human" and "God" are complex historical and philosophical concepts that have been present in different cultures and religions for thousands of years. Their origin cannot be linked to any particular event or author, as these concepts have emerged and evolved over a long period of human history. The concept of "Human" originated long before the advent of writing and historical records. The first forms of understanding human identity can be found in the reflection of one's own "I" and other people in ancient art, which is thousands of years old. For example, drawings depicting abstract human figures have been found in prehistoric caves, which may serve as the first attempts to define human identity. For example, in ancient Greek philosophy, Plato [11] and Aristotle [12] offer reflections on the essence of a human and their place in the world. The philosophical treatises of ancient India "Upanishads" and "Bhagavad Gita contain reflections on the human essence, soul, and the relationship of the individual with the Universe [13, 14].

As for any entities and the connection between them, the scientific literature suggests that they form a triad, which should be called fundamental because of the powerful consequences of both their existence and interpretation. Since the search for the basis of the unity of the Universe is recognised as a central task of modern science, it is very appropriate to refer to the study by M.S. Burgin and V.V. Pichurin [15], since the main goal of scientific research is to develop the ability of a researcher to combine separate knowledge into a single picture, i.e., to form complex knowledge. First of all, it is worth considering how the human world or the individual mental world works. It is described in a simplified form in Table 1.

Table 1. Structure of cognition: Connections of named sets

Sets	Compliance	Description
X		Some reality perceived by a person
I		Images of reality with X
f		Relationships between objects and their images
Z	f	Carrier that recognises objects with X by compliance f
Y	g	Set of objects that generate
J		Set of generated objects
g		Correspondence that expresses the generation of objects of one kind by means of another
Y=(Y, g, J)		Structure of named sets Y, g, J
A	Y, J	Object that belongs to both Y and J, since it is generated and generated

It is human thinking that can be analysed as the process of forming such named sets. Considering acts of sequential generation, it is possible to get such a concept of named set theory as a chain of named sets. Thus, for a person, the world exists as structured into systems of named sets. Further, in addition to the existence of a variety of individual worlds conditioned upon differences between individuals, one individual's inner world is stratified into a variety of semantic spheres, each of which is a special mental world. The following worlds are distinguished:

everyday life, scientific theorising, religious experience, fantasy, and games. Each such world is a collection of data from a person's individual experience that demonstrates a certain cognitive style and is (in relation to this experience) compatible with each other and consistent. However, elements from different worlds of even the same personality may not be compatible and even contradict each other. For example, knowledge from the world of scientific theorising and ideas from the world of religious experience. This shows that attempts by classical logic to model human thinking with logical calculations can only provide partial success. Logical diversity, which has emerged relatively recently, allows achieving significantly more. It provides ample opportunities for an adequate representation (both static and dynamic) of the mental world of one person and any set of people, without requiring them to be consistent, which is a central condition of ordinary logical calculations, limiting their capabilities.

Within the framework of the existential triad (Physical world – Mental world – Structural world), the action of one world on another can be different as a form: reflection, formation (transformation), generation. Highlighting the beginning of a cycle determines the root cause, and the order of relationships determines the meaning of the existential spin. For example, the first cause or beginning in the physical world is what reflects the essence of the materialistic concept, according to which everything is generated by matter. The beginning in the mental world, when its upper level is fixed, gives a theological concept of the creation of the world by God. At the same time, left-hand looping means that initially there was a plan according to which Creation took place, and right-hand looping means the primary creation of the material basis (chaos), from which nature has formed. The existential triad is directly related to the triad of ancient philosophy: Chaos-Cosmos-Logos.

The connection between the existential triad and the triad constructed by the renowned French philosopher J. Lacan [16], who used the structural method in psychoanalysis and discovered common structures in language and in the unconscious, giving rise to the "structural unconscious", which has a form: Real-Imaginary-Symbolic. According to the theory, the real is chaos, inaccessible to naming, the imaginary is an individual variation of the symbolic order, and the symbolic is the objective one. From the standpoint of the existential triad, the real is the physical world, the imaginary is the mental world, and the symbolic is the structural world. The fact that the structure of language is similar to that of the world embodied in the unconscious shows that language also has the real – semantics, the imaginary – pragmatics, and the symbolic – syntactics. Since all information processes can be understood based on the principles of organising messages, then in the intellectual sphere, the expression in any form of thoughts also, of course, implies their ordering. However, there are two possible options. Firstly, it will be temporary information structures that can be adjusted, supplemented, and redone. Secondly, there are also information structures that assume invariance in time and in changing conditions – this is a stereotype (it comes from Greek words that together refer to something as a solid imprint).

The following pattern is important: social static stereotypes generate social dynamic stereotypes, that is, the same type of reactions, the same type of behaviour of social groups in the same type of conditions. More stable social stereotypes include religious ones. The emergence of religious views is associated with the first attempts to systematically understand the external and internal world of a person, which became an important milestone in the development (phylogenesis) of consciousness. Religious systems, in addition to attempts to understand the material environment of a person, included elements that characterise their spiritual world and, above all, the sphere of the unconscious, emotional, which is potential information inherited from previous forms that are not included in the stereotype, but constantly remind of themselves with preserved fragments of the system information of the stereotypes of ancestors. F. Nietzsche [17] was critical of religious stereotypes and made a number of contradictory statements about their significance and impact on people and emphasised the role of faith and religion in society, but at the same time criticised them as a means of despising life and self-deception. The author perceived religion as a detachment from reality and a loss of independence and a violation of life and self-deception, a loss of independence. F. Nietzsche claimed that humanity "killed God" and lost faith in religious stereotypes, which led to moral collapse. He criticised Christian morality as slave morality and ridiculed the idea of devotion and self-sacrifice, promoting the idea of personal will to power and self-realisation.

E. Durkheim [18] studied religion from a sociological perspective and considered that religious stereotypes are important for maintaining social unity and collective consciousness in society. He viewed religion as a social phenomenon with social influence and an important role in maintaining the social structure. Thus, the stability of religious stereotypes is determined by the strength of connections between information elements based on unconditional faith; putting forward provisions that cannot be refuted and proved; the ability to adapt through the sphere of emotions to changes in the environment with minimal energy losses. Religious stereotypes themselves did not arise immediately, but as a result of a long evolution from a complex conglomerate of real experience, traditions, through optimisation – information unloading to build a holistic, relatively consistent concept designed for certain societies and developing with them. Gradually, these information systems stabilise and begin to behave as informationally closed systems [19].

Science arose as a result of the ordering or systematisation of information obtained in the processes of accumulating empirical knowledge about nature, humanity, and society, following the separation of mental labour from physical labour. F. Bacon [6] played an important role in the development of the scientific method. He explored the influence of religion on science and developed ideas about the role of observations and experiments in the generation of knowledge. He developed the concept of "The New Organon", in which he proposed a system of observations, experiments, and inductive thinking as the basis of scientific research. Having originated in the depths of the mythological and religious worldview, scientific cognition co-existed with them for

many years. But the development of science went at such a pace that at a certain stage there inevitably arose a conflict between certain religious stereotypes, which, due to the principle of self-preservation of systems, sought to limit the flow of significantly new system information, and the boundless desire of scientific cognition – to create, accumulate, and organise new information systematically. The essence of this conflict is explained by different approaches to the creation of information systems: in religion – based on faith in the infallible creator of all things, in science – with the help of an apparatus or evidence-based experimental confirmation.

Scientific paradigms are very common social stereotypes. The concept of "paradigm" was introduced into science by the American historian and methodologist T.S. Kuhn [9] in his paper "The structure of scientific revolutions". He first proposed the concept of a "scientific paradigm", which he defined as a generally accepted system of beliefs, methods, approaches, and values that form the basis of scientific research in a particular field of scientific knowledge. The paradigm defines the framework within which the community of scientists operates, sets accepted rules and standards of scientific practice. According to Kuhn, scientific paradigms can exist for a long time, but from time to time scientific revolutions occur, when accumulated anomalies or discrepancies in the paradigm lead to a change in basic beliefs and a revision of scientific ideas. This can lead to the replacement of the old paradigm with a new one, which opens up new ways of thinking, researching, and explaining phenomena. The author's paradigm concept formulated a new approach to understanding the development of science and its changes. It influenced further research in the philosophy of science and helped better understand the dynamics of scientific knowledge and innovation in science.

In general, in any definition of science, there are always indications that science is a form of theoretical consciousness. That is, it belongs to the level of organisation of knowledge, one of the main features of this level is reflection. This is the desire for conscious control over the course, form, conditions, and foundations of the process of cognition. Therefore, science, precisely because of its internal theory, cannot be imagined outside of increasingly comprehensive and deep self-criticism, and the development of scientific knowledge is not only for the accumulation of knowledge, but also for the evolution of science. Guided by the terms "extensive" and "intensive", which distinguish and outline the external and internal, there are reasons to discuss not only the expansion of the known and the boundaries with the unknown, but about a deeper penetration into the process of knowledge (its "anatomy", "physiology", or "mechanics"), revealing its internal and external determinants, which are, of course, interrelated. For a long time, reflection on science was carried out, firstly, exclusively by means of philosophy and, secondly, focused on the process of scientific cognition. At the moment, philosophy has lost its former monopoly in cognitive research and shares this subject with other disciplines. However, the scale of understanding science has now significantly expanded. The most important of the concepts of principles is that with the deepening and differentiation of internal, concrete reflection, an external form of reflection, or "non-specific", developed extremely rapidly, the subject of which is the conditions and social consequences of the cognitive process. Both forms are found in almost every available scientific commentary. At the same time, this refers primarily to shifting the focus of consideration of scientific problems towards the social role of science and the responsibility of scientists for results. This is one of the main topics of modern culture. But science is no less focused on the changes that have affected and will continue to affect thinking within cognition.

The first type of reflection dominated almost the entire classical period of the establishment of science and was characterised by the object orientation of cognition. Self-awareness of science is considered in the connection between knowledge and object. The subject of knowledge involved in analysis is considered only as an intermediary between objects and knowledge. This mapping is called ontology. Certain aspects of ontologism can be traced in the work of the philosopher J. Locke [7] in his paper "An essay concerning human understanding", where he discusses the origin of knowledge and reason, and defines its objective nature. They made a significant contribution to the development of philosophy and the establishment of ideas about the relationship between object and knowledge. Ontology is characterised by a clear interpretation of the relationship between objects and knowledge based on the concept of truth. Only the actual content is considered. It is assumed that each specific object has a completely unique knowledge associated with it (typologically identical). The process of acquiring knowledge can be considered directly as a process towards objective truth. Thus, the purpose of the research is to determine the truthfulness of the movement of thought, the existence of its ultimate foundation in the object, and the unique truth that can be obtained through its exploration. This model of the nature of reflection is well connected with the concept of primary and secondary traits, which are interpreted as obstacles to achieving the truth. Empiricism emerged as the most expressive philosophical expression of ontology as a kind of reflection. And in this case, considering the self-consciousness of science, it is very clear why the philosophy of empiricism was so popular in the era of classical science, as it predominantly supported ontological postulates.

Influenced by the achievements of German classical philosophy, especially the philosophy of I. Kant [10], from about the middle of the 19th century, the vector of internal scientific thinking began to change. I. Kant considered the role of a priori forms of cognition, such as the spatiotemporal structure and categories of mind, in the development of scientific knowledge. He argued that a person's cognitive abilities are limited by these a priori forms, which impose certain conditions on the perception of the world. In addition, the philosopher put forward the idea of the need for synthesis between a priori forms and empirical research material in order to obtain scientific knowledge. I. Kant emphasised the importance of reflection and introspection of scientific cognition, and recognised the importance of critical thinking and constant revision of cognitive principles. Self-consciousness of science is concentrated around the "subject-object" duality, which allows considering the second type of reflection – epistemology. The focus lies on the subject,

whose cognitive actions are aimed at seeking the fundamental principles of scientific cognition. Then the subject of reflection is both the forms of cognition and its internal organisation. Thus, with regard to any entities and the connection between them in the scientific literature, it is proposed to assume that they form a triad, which should be called fundamental because of the powerful consequences of both its existence and interpretation. The triad at the conceptual level can be represented as follows: (X, c, Y), where X and Y are some entities, and c is any relationship between them. Based on the theory of fundamental triads, it is possible to achieve a deep understanding of the structure of the world through the proclamation of an existential triad, which cyclically combines the "physical world" (real), the "mental world" (imaginary) and the "structural world" (symbolic). Practical experience and theoretical reflection show that each information process should also be represented as a triad: communicant (addresser, sender) – communication channel – recipient (addressee, receiver).

It is recognised that the central task of modern science is to find a universal principle. Because scientific search is based on the development of a researcher's ability to combine disparate fragments of knowledge into a single picture. That is, to establish a comprehensive understanding. Regardless of the specific definition of science, the paradigm always states that science belongs to the level of organisation of knowledge and that one of its key characteristics reflects: the desire to consciously control the basis of cognitive processes, their forms, conditions [20]. The first type of reflection that prevailed during the classical period of scientific development is known as ontology. It is characterised by a focus on the object of cognition and is considered the basis for the self-consciousness of science. In this approach, the subject of cognition is considered only as an intermediary between the object and knowledge, and the movement of self-consciousness of science revolves around the triad "knowledge-object". From about the mid-19th century, the vector of internal scientific thinking began to change. Scientific self-consciousness focuses on the "subject-object" duality, which allows considering the second type of reflection – epistemology. While the main question for ontology is how to obtain true knowledge about an object and what are the prerequisites for this result, the main question for epistemology is the ability to construct knowledge.

Discussion

The paper by M.S. Almarcha et al. [21] examined various theoretical and methodological approaches to research in sociology, drawing attention to teaching a set of concepts in dynamical systems theory through the experience of body motion. T. Froese [22] reported that there is an undetected similarity between three classical descriptions of object experience conditions that belong to three different disciplines. In sociology, this similarity is manifested through a phenomenon that can be described as "inversion" – the process of transferring local causes of consequences to the object of observation itself. On the other hand, in psychology, this similarity is manifested through a phenomenon that can be called "externalisation" – the transformation of tactile sensations of the proximal interface into the visual experience of a distant object. In biology, this similarity is manifested through "projection" – the transformation of impressions from the sensory surfaces of the animal's body into the perception of an external object. This approach contradicts constructivist interpretations and promotes participatory realism, which views scientific observation as a socially and materially augmented process. G. Steinmetz [23] and H. Harlak [24] pointed to the close relationship between psychology and sociology, which, although separate sciences, have a lot in common. Social psychology, in its coverage, is a cross between psychology and sociology. It aims to investigate the influence of others on the individual and covers topics such as social influence, social perception, social cognition, attribution, attitudes, social interaction in groups, and interpersonal relationships. One of the most popular trends in the sciences that study the mind is the idea of cognition as embodied, embedded, active, and ecological [25-28].

Some researchers, exploring the parallels between philosophy and psychology, have concluded that practising philosophy instead of or in addition to traditional therapy can improve mental health. Papers by C. Bamboulis [29] and C. López [30] confirmed this and established a link between self-awareness as self-improvement in Plato's dialogue and cognitive behavioural therapy. Despite many important points of agreement, some researchers reject the idea that Plato's self-awareness can be equated with self-awareness in psychotherapy. Instead of considering self-cognition in cognitive behavioural therapy (CBT) as a modern version of Plato's self-knowledge, R. Heinaman [31] considers the use of CBT as a preparatory process for human participation in platonic self-cognition, although it was not specifically created for this purpose. This leads to the conclusion that symmetric infercialism, which is the basis of CBT, loses its credibility when these aspects are taken into account. However, research refutes this criticism by focusing on three key aspects of self-cognition: self-cognition as an improvement in one's own beliefs through objective (non-subjective) means, self-cognition as a result of objective (non-subjective) achievements, and self-cognition as progress towards "good."

In addition to research related to philosophy, it is also worth paying attention to other aspects of Plato's theory. For example, paper by A. Lefka [32], devoted to Plato's metaphysics and epistemology, examined the philosopher's views on the nature of reality and knowledge. This indicates how Plato's self-cognition is combined with its metaphysical concepts, such as ideas or forms, and how it contributes to the achievement of an appropriate level of cognition. This programme includes the acquisition of various knowledge and skills, and the development of ethical and political qualities in private and public life, emphasising their role in shaping excellent citizens and achieving a "good life" that uniquely complements the studied perception of a person's place in the world [33-34]. In contrast to the Aristotelian-Thomistic perspective, M. Tabaczek [36] highlighted the role of divine action in the origin of life and explored the concepts of basic and instrumental causation, teleology, and transitive and immanent causation. It is worth emphasising that the researcher also focused on the connection between religion and science. This approach allows considering life

as a complex system focused on achieving certain goals and functions.

Notably, the study by T. Rego [37] conducted an in-depth analysis of the appeals present in the works of Plato and Aristotle. Continuing the above, these appeals open the way to a philosophy that focuses on virtues, emphasising the enlightened soul who strives to achieve wisdom. This wisdom, focused on nature and the Divine, is not only theoretical, but also practical, striving for "eupraxia". And, as noted more than once, it manifests itself in the rest of the arts, including politics. This concept of "kalokagathia" represents the field of a good life, an invitation to which is extended by philosophy, promising happiness [38; 39]. This philosophical discourse encourages further debate about moral education and its implications in a broad socio-political context. As the search for virtue and wisdom remains relevant in the modern world, Plato and Aristotle's discourses continue to provide significant lessons [40].

More broadly, the relationship of man with the universe is described by S. Swanepoel [41]. The paper focuses on three sources that form the concept of unity of being – the triad of influences: Dante, Blake, and Upanishads. The researcher interprets the unity of being as a source of "Vision", departing from the studied concept of man and the Universe. For comparison, the philosophical theory "Man and the Universe" emphasises the importance of human existence in the context of the Universe [42]. It proposes to consider a person as an active participant in cosmic processes, not separated from the Universe, but inextricably linked with it [43]. At the same time, based on the studied works of philosophers, a person has a unique ability for self-awareness and reflection, which makes them exceptional among other life forms. This opens up the potential for a deeper understanding of global patterns and the search for one's role in them.

Research has examined how ancient teachings and texts can enrich modern psychology. This applies to the above-mentioned "Bhagavad Gita" compared to modern psychology. In addition, M. Dhillon [44] identified three key topics in the interpretation of "Bhagavad Gita": comparison with modern psychotherapy, introduction to the concepts of modern psychology, and opportunities for building well-being and resilience. These findings highlight the significance and relevance of "Bhagavad Gita" in the context of modern psychology. W. McWhinney et al. [45] highlighted key concepts of mental worldviews and their impact on the perception of reality. The paper focused on how cultural and individual understanding of reality affects conflicts, polarity, and the perception and reproduction of the world. The researchers highlighted four main worldviews underlying cultural values and beliefs, explaining why global conflicts and polarities may seem unsolvable. Overall, this study emphasised the need for a deeper investigation of how different mental worldviews shape human perception and reproduction of reality, and their impact on global and individual conflicts.

According to the study, in modern socio-political conditions, human perception of the world is developed mainly under the influence of actual narratives that people "consume" from the media. Stories are a powerful tool for shaping society's view of reality. These narratives are a powerful mechanism for manipulating the public vision of reality [46]. In contrast, the study by A.V. González [47] was based on the theory of mass communication, especially on the theory of stereotypes, in particular, on the phenomenon of "filter bubbles", in which the researcher analysed how manipulation of existing stereotypes occurs through authoritarian political systems. Based on this analysis, both studies aim not only to protect freedom of expression, but also to raise public awareness of the importance of developing critical thinking skills and combating existing stereotypes.

A. Martín Navarro [48] explored the significance of religion from the perspective of sacred anthropology and religious studies. Religion is seen as an "architecture of value" and a "technology of salvation," meaning that it creates values and serves as a mechanism for individual and group healing. The paper analysed religious aspects in work of F. Nietzsche [17] "Thus Spoke Zarathustra" using the theoretical foundations of the anthropology of sacred and religious studies. The research is aimed at religious interpretation of the work and reflection on religious life in a post-metaphysical context. M. Penttilä [49] examined individual emotions in the context of religion. The researcher has found that the Pentecostal movement is the most widespread among Christian denominations, and its communities are places of strong emotional interaction. To ensure the continuity of religious interaction, a long-term tone of emotional energy and a stable social connection are necessary. The paper analysed emotional energy in charismatic communities using the self-report method, which facilitated the investigation of the emotional experience of participants and their attitude to faith. Compared to this study, it appears that pleasures such as happiness and surprise play a key role in engaging in charismatic communities and maintaining religious experiences. Emotional energy is defined as the main force of social life, and it affects group solidarity [50; 51]. And when compared with the results obtained, the essence of the conflict lies in the existence of information systems: in religion – based on faith, in science – using the method of evidence-based experimental confirmation.

W. Lynch [52] extensively highlighted the problem of the gap between the methodological rules set out by F. Bacon [6] and his natural philosophy findings. Analysing the method of F. Bacon, the researcher emphasised that mythological descriptions of the scientific method play an important role in naturalising scientific culture and controlling nature. Studies by followers of F. Bacon in the Royal Society provide an understanding of how the use of F. Bacon's hypothesis was temporarily supported by the promise of future benefits. Thus, the history of the philosophy of science should focus on the conditions that have contributed to the emergence of modern discourses, practices, and aspirations outside the internal history of science [53]. S. Secundant [54] examined the critical importance of the idea of a scientific revolution in philosophy of C. Wolf and the contribution of F.G.W. Leibniz in its origin. C. Wolf developed his philosophical system based on the Cartesian concept of certainty through conceptual clarification. This system, which was based on the analysis of concepts and their interrelation, offered a single system based on consistent grounds [55; 56]. As has been investigated, F.G.W. Leibniz's ideas about the

analysis of the concept contributed to his idea of philosophy as a science of the possible. The main critical ideas put forward by F.G.W. Leibniz showed a great influence on the development of philosophy. However, the system of C. Wolf studied by S. Secundant [54], although formed on their basis, had its own differences. The characteristic idea of C. Wolf's about building a universal body of knowledge to a certain extent neutralised the critical content of F.G.W. Leibniz's claims, which led to his statements about fatalism and atheism.

Exploring the philosophical views of I. Kant [10], N.F. Stang [57] focused on solving the problem of "heterogeneity" between intuitions and categories. The author reconstructs I. Kant's decision by using two key prerequisites, which he refers to as "Sufficiency of Grounding" and "Real Possibility." These prerequisites allow categorising objects by introducing "transcendental schemes". The argument of schematism by I. Kant is rendered confident through these prerequisites and the modal principle. The researcher offers an interpretation of transcendental schemes as "time definitions" that define the rules for the reflexive representation of time relations. Compared to the results obtained, these assumptions, together with the modal principle, support the schematicism argument, demonstrating that it is possible to bring objects into categories. Thus, scientific cognition in sociology is a complex and multifaceted process that requires the use of various methodologies and approaches. New facts and theories can lead to a rethinking of preconceived notions.

Conclusions

The study focused on the analysis and generalisation of scientific cognition in sociology from various approaches, theories, and methods. Various approaches to scientific cognition in sociology have been considered, in particular, empirical, theoretical, and interpretive approaches. It is proved that each of these approaches has its own characteristics, but they complement each other, contributing to a comprehensive understanding of social phenomena. In the course of analysing methodological issues and the emergence of these concepts in the field of sociology, it was revealed that the correct choice of methodology is a key factor for obtaining reliable and objective results. The use of a combination of different methods and techniques facilitates a broad overview of social phenomena and provides a variety of promising conclusions. The paper revealed the relationship of sociology with other sciences and the impact of this interaction on scientific cognition. Cooperation between sociology and other disciplines, such as psychology, economics, political science, and biology, allows expanding the understanding of social phenomena and developing new methodological approaches. As a result of a comprehensive approach to the study of the issue of scientific cognition in sociology, the challenges and problems faced by sociologists in the process of scientific cognition were identified, including possible ways to solve them.

Possible solutions to these problems are proposed, in particular, the use of combined approaches, careful planning and research, constant reflection and improvement of methodology. Thus, there is a need to constantly update theoretical approaches and expand research in new areas. The research has significant scientific potential and can serve as a source of information and a scientific basis for further studies in sociology. The findings will contribute to the further development of sociological theory, methodology, and research approaches, help solve social problems, and contribute to the development of society.

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Conflict of Interest

None.

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Наукове пізнання в соціології: Виклики та проблеми

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Анотація

Актуальність Наукове пізнання є основою розвитку наукових дисциплін, зокрема соціології, і сприяє розумінню та поясненню складних соціальних явищ, політичних процесів, з'ясуванню причинно-наслідкових зв'язків, виявленню тенденцій, розумінню структури та функціонування соціальних явищ, що досягається завдяки системному та методологічному підходу до вивчення соціальної дійсності. Соціологія відіграє важливу роль у вирішенні соціальних проблем, виявленні соціальних дисбалансів, вивченні соціальних взаємодій і трансформацій, розробці соціальної політики та стратегій.

Мета. Метою цього дослідження є розгляд наукового пізнання в соціології та визначення його особливостей, методів та результатів.

Методологія. У процесі дослідження використано такі теоретичні методи: аналогії - для порівняння та аналізу соціологічних явищ за допомогою аналогічних явищ з інших галузей знання; історичний метод - для вивчення розвитку соціології як науки та концепції наукового пізнання в часі; систематизації - для упорядкування концепцій та теорій у логічну та структуровану систему.

Результати. У процесі дослідження було використано такі теоретичні методи: аналогії - для порівняння та аналізу соціологічних явищ за допомогою аналогічних явищ з інших галузей знання; історичний метод - для вивчення розвитку соціології як науки та концепції наукового пізнання в часі; систематизації - для впорядкування концепцій та теорій у логічну та структуровану систему. У дослідженні проаналізовано особливості наукового пізнання в соціології та його методологічні засади, які сприяють розумінню соціальних явищ. Зокрема, з'ясовано, що наукове пізнання в соціології потребує міждисциплінарного підходу, співпраці з іншими науками. Акцентовано увагу на методологічних засадах наукового пізнання в соціології. Також було систематизовано поняття наукового підходу в соціологічному дослідженні, який забезпечує об'єктивні результати та розширює розуміння соціального світу.

Висновки. У статті висвітлено результати та нові підходи до вивчення соціальних явищ. Визначено виклики та проблеми, з якими стикаються соціологи в процесі наукового пізнання, та запропоновано можливі шляхи їх вирішення. Результати дослідження мають практичне значення для соціологів, науковців і практиків у галузі соціальних наук, створюючи підґрунтя для подальшого розвитку соціологічної теорії, методології та дослідницьких підходів.

Ключові слова: ідеологія; ментальний світ; передача знань; рефлексія; соціальні явища.