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ISOMORPHISM OF COGNITIVE ATTITUDES IN SCIENTIFIC AND RELIGIOUS KNOWLEDGE

© ***Tamara A. Bondarenko, Veronika S. Vlasova***

Don State Technical University,
Southern Federal University,
Rostov-on-Don, Russian Federation
2467@mail.ru, aav1303@mail.ru

The cognitive attitudes in scientific and religious knowledge are analyzed from the point of view of the presence of isomorphism in these processes. The comparative method was chosen as the nodal method of research, without which other approaches used in the article could not be implemented. The principle of trust in the subject of knowledge as the integrity and inseparability of all its attributes is justified: cognitive abilities, sensory experience, motivation, value system, etc. The innovation consists in an emphasis on the bodily experience of the cognizing subject, whose body is his support. The article presents the analysis of conventionalism as an attitude that is relevant for both science and theology. The article reconstructs isomorphic attitudes in scientific and religious knowledge.

Key words: isomorphism, scientific and religious knowledge, trust in the subject of knowledge, convention, everyday faith, symbol.

[*Т.А. Бондаренко, В.С. Власова* Изоморфизм когнитивных установок в научном и религиозном познании]

Проанализированы когнитивные установки в научном и религиозном познании с точки зрения наличия в этих процессах изоморфизма. Узловым методом исследования выбран компаративистский, без которого другие, примененные в статье подходы, не могли бы реализоваться. Обоснован принцип доверия субъекту познания как целостности и неразделимости всех его атрибутов: когнитивных способностей, чувственного опыта, мотивации, системы ценностей и т.п. Новация заключается в акценте на телесном опыте познающего субъекта, тело которого есть его опора. Представлен анализ конвенционализма как установки, актуальной и для науки, и для богословия. В статье реконструированы изоморфные установки в научном и религиозном познании.

Ключевые слова: национальные символы, маркеры, идентичность, тюркоязычный народ, национальный колорит, турецкая кухня.

Tamara A. Bondarenko – Ph.D. (Advanced Doctorate) in Philosophy, Professor, Don State Technical University, Rostov-on-Don, Russian Federation.
Veronika S. Vlasova – student, The Higher School of Business, Southern Federal University, Rostov-on-Don, Russian Federation.

Бондаренко Тамара Алексеевна – доктор философских наук, профессор, Донской государственный технический университет, г. Ростов-на-Дону, Российская Федерация.
Власова Вероника Сергеевна – студентка, Высшая Школа Бизнеса, Южный Федеральный Университет, г. Ростов-на-Дону, Российская Федерация.

The explosive growth of knowledge engineering practices actualizes the problem of synthesizing cognitive practices in the field of natural-mathematical and humanitarian sciences as well as unconventional existential practices. Authoritative sources affirm the need for the synthesis of science and religion. The general view is to recognize the positive role of religion in scientific knowledge without which it is impossible to comprehend the universum. It is time to recognize the existence of new forms of reality,

including higher reality. All authors draw attention to the importance of the moral imperative inherent in theology for the development of scientific worldview.

The result of the study of sources on this problem is the conclusion that there is no research, where the independent object of analysis would be specific, and not abstract, distinctive features, both in scientific and religious discourse. This article deals with the problem of isomorphism (similarity) in the cognitive attitudes of classical epistemological discourses and religious ones. Is there such an isomorphism and why can its detection be important?

The object of the study is cognitive attitudes in scientific and religious knowledge. The purpose of the study is to show isomorphism as a methodological legitimate means, which, when studying one open system, allows using the obtained information as a principle of complementarity for understanding another system. The methodological basis for the implementation of the purpose was the following approaches: gnoseological, reductive, semiotic and comparative. Their knowledge resource made it possible to deepen the understanding of the criteria for the validity of scientific knowledge and to consider the principle of trust in the cognizing subject, to identify the hidden advantages of the convention for the cognitive process.

All source-studying literature from the point of view of expediency is conditionally divided into three groups in accordance with concepts which have become aspects of the subject of study. The leading role in this discourse is occupied by the scientific works that consider the problems of obtaining scientific knowledge, the criteria for its reliability, the role of the subject in knowledge, and the involvement of faith in this process. Therefore, we paid special attention to the concept of multiplicity of cognitive practices by L.A. Mikeshina [12], to the principles of understanding the classical and non-classical epistemology of V.A. Lectorsky [9], as well as the position of K. Popper [15], a well-known representative of positivism. L.A. Mikeshina advocates the need to combine diverse types of cognitive practices. The philosopher identifies two main types of practices: in the image of "strict" natural sciences and existentially anthropological practices. The concept of "confidence in the cognizing subject," presented by L.A. Mikeshina is of great interest for this study. It took the status of a basic cognitive attitude in the presented discourse. For the study, the point of view of V.A. Lectorsky, who spoke out against the sharp opposition of scientific and ordinary knowledge, became important, because scientific thinking in certain cases, according to the philosopher, is carried out as the development continuation of extrascientific thinking. The relationship between science and religion, according to this scientist, cannot be considered on the principle of substitution, since each of these practices is in its own ontological plane and describes different types of human experience. Lectorsky's conclusion is of guiding importance, according to which the boundary between scientific and extrascientific thinking is mobile, historically variable, and nevertheless at each particular time period it is clearly marked.

For a scholar of the positivist direction, reliance on the representations of consciousness operated by modern non-classical epistemology is considered doubtful. K. Popper argues that scientific methods of research are the only correct ones, and only rationality acts as an objective way to justify being.

Body experience in the concept of trust in the subject of cognition as a matter of interested participation is absent in religious cognitive practice. At the same time, this topic and its development is implicitly present in patristic sources. The scientific works in which the practice of ascesis [19], redemption, tradition of hesychasm, mystical intuition, prayer ladder of experiences, were studied [4], were of considerable importance for the present context. All these existential states are associated with feeling, with the experience of the body, with its ability to get rid of the temptations of the flesh and to experience enlightenment. The main conclusion is that the practice of adoration does not ignore the physicality of a person.

The task of analyzing the convention as a cognitive setting led to the choice of both scientific research on this problem and scientific works that show how the idea of the convention works in theological discourse. Studies of the founder of conventionalism H. Poincaré, whose concept, although criticized due to its contradictory nature, nevertheless gained recognition in science. The development of the idea of conventions can also be seen in K. Popper's scientific works [15, pp. 78-79], who considers methodological rules as a convention.

The scientific works of the philosopher S.N. Koskov were also of particular importance [7]. Defending the idea of the conventionalism nature of scientific knowledge, he writes about its basic methodological status. The idea of convention as a powerful heuristic potential has an innovative meaning.

In religious knowledge, agreements (conventions) are of an absolute epistemological nature. Such well-known researchers as K. Armstrong [1], B. Erman [21], R. Aslan [2], H. A. Pagola [14], Z. Kosidovsky [6] and others repeatedly illustrate the adoption of agreements by the official Christian denomination, some of which are considered in this context.

The use of the symbol facilitates the absorption of the new things, accelerates the process of understanding. This feature of the sign-oriented and symbolic and metaphorical form of the expression of knowledge is actively used both natural-scientific discourse and religious. The texts of Books of the Old and New Covenant, Quran, scientific works on the semiotics of Yu. Lotman [10], medievalist U. Eco [20], J. Huizinga [18] played a fruitful role in achieving the goal. The unexpected, bizarre correspondence of a certain thing to a symbol is combined by complex harmony, requiring a person to effort to correctly interpret the meaning of the symbol. Thanks to the studies of these scientists, the authors of the article internalized knowledge about the multilayering of the symbol, about its role in the cognitive process.

Body and corporeity are considered hereinafter as synonyms. Knowledge itself refers to a person with all his characteristics. The position of the integrity of the cognizing subject requires recognition of the basic role of the human body, which is the beginning of the act of cognition. Modern concepts of the body claim its status as an axis of the world, a way of possessing it, the constant presence of the body in space or in time. According to Ortega y Gasset the man like a nail is driven into his body [13, p. 530]. Innate structures of cognitive abilities lie not only in the instrumentality of sensory organs, but also in the ability of the brain to interpret, mainly adequately, the obtained incentives in mesomeric reality. The E. Schrödinger equation, proving that it is impossible to accurately determine all the properties of a subatomic particle, is illustrated by him with a textual, thought experiment about a cat. "Schrödinger himself concluded that according to quantum mechanics the cat is simultaneously alive and dead until we open the box and find out its state" [5, p. 44], i.e., the actions of the subject control the everyday situation.

The principle of elimination from the cognitive process of the human body is inherent in the religious tradition throughout history. The sinfulness of the body, its inconsistency as a tabernacle for the soul is the habitus of physicality in the theological tradition. Paradoxically, the patristic itself did not see the fundamental contradiction laid down in the text of the New Testament, where Jesus, after his resurrection, convinces doubting Thomas of the fact that he has a body, materiality. Speaking to his disciples, Jesus says: "... Look at my hands and at my feet, that is me; touch and consider, for the spirit does not have flesh and bones, as you see." D.M. Merezhkovsky wrote about the significance of the resurrection of the body of Christ: "Christianity is not based on love for your neighbour, as they usually think, but on the irresistibly proven experience of the real possibility of physical resurrection [11, pp. 15-16]. Therefore, without body and flesh, the soul of a man is not capable of knowing the one God and cannot have an ontological status in the earthly world at all.

The principle of trust in a subject is relative, meaning that cognition does not copy objects of the outside world and requires evidence, verification, skepticism in relation to the received impetuses. Nevertheless, the isomorphism of subjective perceptual forms to the objective parameters of the outside world recognizes the legality of an attempt at hypothetical reconstruction of reality.

The modern understanding of the nature of scientific knowledge is based on conventionalism (agreement). The idea of the founder of the conventionalist interpretation of Henri Poincare continued its longevity in the paradigms of natural-scientific and humanitarian knowledge. Without dwelling on the reasons for the successful conventional vaccination to the minds of scientists, we note that, in the end, the postulates of this rationality acquired academic authority, legitimacy, and became a value, instrumental and heuristic resource. Science has lost its former status in the social context and has received a new methodological mandate to study reality. This mandate recognizes that science does not reflect independent of sensations reality.

As I. Lakatos wrote, all judgments and all descriptions of the world depend on the choice of conceptual apparatus, no conventional system is reliably true [8]. Human experience cannot, in fact, solve any scientific problem until certain agreements, conventions are recognized. In fact, in science there are many provisions that scientists take for granted. Therefore, the objectivity of any concept turns into a problem. The competition of hypotheses and theories called into question the status of knowledge, the determination of theory by empiricism. At the same time, the adopted methodological framework opens new horizons for the development of creative opportunities and the activity of cognition [7].

Conventionalism is also actively used in the Christian doxa, contributing to the entrenchment of faith in the minds of parishioners. There are some fundamental questions in the foundation of Christianity: "What was the nature of Jesus? Was he God? " In science, the meeting of bishops in the Byzantine city of Nicaea in 325 at the behest of Emperor Constantine is well known. Pavel's doctrine about a divine essence of Jesus won only in several months of intense negotiations [2, p. 240].

Conventionality in the history of Christian religion refers to the question of the immaculacy of the Virgin Mary. In 431 and 449, two Oecumenical Councils in Ephesus ruled that Mary was the God's parent. The situation in which this resolution was carried out was sometimes grotesque. Supporters of the cult of Mary put up a guard at the entrance of the hall, that did not let the opposition enter. In a fit of excitement, the bishops cursed each other, dragged each other by their beards, fought. One of them was so beaten with fists and kicks in the stomach that he died three days later. Centuries-old efforts to deify Mary ended in victory only in 1854, when Pope Pius XI by a special decree declared Mary's Immaculate Conception to be the dogma of Christianity [6, p. 402]. Interestingly, at the II Vatican Council the Catholic Church rejected the authorship of the Christian volumes by a majority vote, which was previously considered undisputed. Now, instead of listing names: Matthew, Mark, Luke, John it should be written "holy authors" [6, p. 322]. This fact is paradoxical, since in religious dogma, as a rule, conventions are not revised.

The circle of everyday knowledge includes faith, which allows a growing man to build an individual worldview. This belief is based on the tradition rooted in consciousness, asserting the correctness of the judgments of an adult, a teacher, a master, an educator. Ordinary faith is a condition for adaptation in the mezamir. Everyday faith cannot be excluded from knowledge, although some researchers often criticize it for its naive-realistic status. But collective beliefs unite people with social and communicative ties, on the basis of which solidarity arises. Strict scientific knowledge is also built on the prerequisites of faith [12, p. 273].

In formalized scientific discourses, the symbol is unambiguous, since the formalized method abstracts from the thought of objects. However, cogitation uses not only rational experience, but also sensual. In semiotics, the symbol acts as a designation of another

object, a phenomenon. Symbols are signs which have points of contact, as well as modes of difference. The sign is unambiguous, the symbol is distinguished by semantic depth, ambiguity. The sign is clearly related to objects and phenomena, and the symbol is flexible and plastic in relation to links with reality. The symbol takes into account the discursivity of the subject, his internal experience.

Each science has its own symbols. Chemistry's symbols are an atom, a retort, a capsule, etc. Mathematics has such symbols as sin, cos, tg, formulas for a solution of the problem; physics' symbols are designations of quantities: time – t, mass – m, speed – V; biology has such symbols as DNA, spiral, etc. Symbols and metaphors simplify understanding, cause emotionality in the subject of cognition. For example, the solution of the well-known Poincaré equation by the Nobel laureate Grigori Perelman is illustrated by the symbol the allegory of a loop that the researcher lashes on the globe. The creators of the theory of synergy I. Prigozhin and I. Stengers determined the symbol of the scientific revolution: ... "for classical science... the model was a clock, for the 19th century it was a steam engine... the sculpture seems to most fully express our ideal... in some, the most perfect samples of sculpture, for example, in the figure of dancing Shiva... the search for a difficult-to-catch transition from peace to movement is vivid..." [3, p. 27].

In the difficult period of the pandemic, modern virologists also used metaphorical language to explain their tasks. It was necessary to get infected cells "to show" lymphocytes their disease. The lymphocyte "touches" the cell, and if it feels pieces of viral proteins on it, it "understands" that the cell is sick [16, p.14].

It is conventionally possible to divide symbols into natural ones (water, light, plants, living things, etc.) and artifacts (cathedral architecture, sculpture, frescoes, icon painting, music, poetry, etc.). Light meaning God is of particular importance. Through the perception of light, the man can feel the divine presence. The idea of God as a light goes back to old-fashioned traditions. Light pours through stained-glass windows and holes in the walls of the Gothic cathedral. In Quran, divine light is compared to a crystal star pearl. Light was associated with a colour that has its own symbolism. Green, for example, means spring, a coming rebirth.

The essence of Jesus was embodied in the images of a shepherd with a sheep on his shoulders (saved soul), fish (in the period of early Christianity), in the image of a vine. U. Eco also writes about the image of a pelican feeding chicks with pieces of meat, which it beaks off from its chest. This is a symbol of Jesus, giving its blood and flesh to Eucharistic food. The image of a lion, which can be a symbol of redemption or a symbol of the vent of hell. In the symbolic universe everything corresponds to each other, and from a messy mass a beautiful symmetrical figure is formed [18, pp. 221-226]. The justice of Christians and Muslims is unusually sophisticated. So, in Christianity, the ostrich is a symbol of justice, since it has feathers of equal length. In Quran, justice is interpreted as follows: ... "those who do good... will not be offended either by the furrow of the date kernel."

Even the images of fantastic monsters (chimaeras, centaurs, predatory eagles, etc.) on the portals and column caps of cathedrals fulfill their positive functions, showing that the world is one, where the beautiful things get along with the ugly ones. The order and integrity are clarified through various ways. The saviour provided for all the integrity of things without exemption in order to maintain balance. This is the mentality of a medieval person, which is told by U. Eco [20, pp. 181-183]. Through worldly images, a person's sinfulness is better understood and his willingness to avoid sin is accelerated. Therefore, the ugly things can be useful, and therefore necessary. "Evil in the general order becomes beautiful and good" [20, p. 74]. Number, order, proportionality are ontological principles in theology. Numbers become mathematical theology. The design of any cathedral is numerical symbolism. Based on this fragment of the text, it is obvious that symbols are signs, metaphors, allegories, which are actively used both in the episteme and in the

religious doxa. Reliance on symbolic images performs the function of optimizing the process of cognition.

The comparative analysis of significant cognitive attitudes records the presence of isomorphism in them, inherent in both scientific and religious cognition. Such attitudes include: initial cognition that is trust in the sensual bodily experience of the cognizing person, the testimony of his body and state; conventionalism; symbolic and metaphorical cultural universals. All these cognitions contribute to optimizing the process of cognition and emotional involvement of the subject in the cognitive process.

Religious doxa is baseless. A priori religious faith cannot be challenged. Scientific knowledge requires validity, argumentation and verification. The purpose of religious knowledge is to find a way to save the soul, to feel enlightenment and grace. The goal of scientific knowledge is new knowledge, which in the modern synergistic paradigm is evaluated, first of all, from a value point of view.

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