RELIGIOUS STUDIES

Original Theoretical Research

UDC 2:1; 530.145

https://doi.org/10.23947/2414-1143-2026-12-1-45-49

Religion and Quantum Physics on the Worldview: What a Journalist Writing about Scientific Discoveries in the Context of Modern Technological Civilization Needs to Know?

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Abstract

Introduction. The purpose of the study is to attempt to define the guidelines and vector of opportunities in the profession of a science journalist for understanding the world of quantum physics relying on key ways of knowing. Through the media representation of the scientist's work, we gain insight into the foundations of scientific knowledge. Understanding this fact actualizes in the new context the implications of the key problems and achievements of quantum nanoscience for humanity as a whole.

Materials and Methods. Descriptive and analytical methods are used to determine the specifics of the work of a science journalist. Comparative analysis showed the similarity and difference of opinions popular in the research field on being, nature and man, thereby indicating the loyal relationship between religion and science, in particular, quantum physics.

Results. Science journalists bear a humanistic mission. They should lead society and the intellectually developed person to moral improvement. It makes sense for a specialist, who works in the scientific media field, to master basic philosophical concepts, take into account the conventional nature of science, as well as the existing line between the illusory and the real, objectively perceiving current scientific thought so that they will be able to become an effective link between the research organization and the target audience or the so-called "smart non-experts".

Discussion and Conclusion. When a journalist cultivates in the target audience a stimulus for further knowledge, they should take into account the fact of the spiritual development of the individual. Society expects that science as a social phenomenon will provide certain new and safe advanced technologies. Knowledge based on the laws of quantum physics is constantly changing, influencing, in turn, a person and the formation of their moral responsibility. A journalist who popularizes and disseminates the advanced technologies ought to be wary of the risk of science profanation or technological fetishism in their work. It is important to take into account the internal dialogue between the scientific and religious worldviews for greater transparency and value correctness.

Keywords: religion, scientific knowledge, quantum physics, science journalism, scientific discoveries, advanced technologies

For Citation. Farberovich O.V. Religion and Quantum Physics on the Worldview: What a Journalist Writing about Scientific Discoveries in the Context of Modern Technological Civilization Needs to Know? *Science Almanac of Black Sea Region Countries*. 2026;12(1):45–49. https://doi.org/10.23947/2414-1143-2026-12-1-45-49

Оригинальное теоретическое исследование

Религия и квантовая физика о видении мира: что важно знать журналисту, пишущему о научных открытиях в условиях современной технологической цивилизации?

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Аннотация

Введение. Целью исследования является попытка определить ориентиры и вектор возможностей в профессии научного журналиста для понимания мира квантовой физики, опираясь на ключевые способы познания. Осмысление того факта, что через медийное отражение работы ученого идет проникновение в основания научного знания, актуализирует в новом контексте осознание последствий узловых проблем и достижений квантовой нанонауки в целом для человечества.

Материалы и методы. Описательный и аналитический методы применены для определения специфики работы научного журналиста. Сравнительно-сопоставительный анализ показал сходство и различие популярных в исследовательском поле мнений на бытие, природу и человека, обозначив тем самым лояльное взаимоотношение религии и науки, в частности, квантовой физики.

Результаты исследования. На плечи научного журналиста возложена гуманистическая миссия: общество и интеллектуально развитого человека привести к нравственному совершенствованию. В этой связи специалисту, работающему в сфере научного медиаполя, чтобы служить эффективным звеном между научно-исследовательской организацией и целевой аудиторией либо так называемыми «умными неэкспертами», имеет смысл освоить базовые философские понятия, учитывать конвенциональный характер науки, а также существующую грань между иллюзорным и реальным, объективно воспринимая актуальную научную мысль.

Обсуждение и заключение. Воспитывая в целевой аудитории стимул к дальнейшему познанию, журналист должен учитывать факт духовного становления личности. Общество ожидает от науки как социального явления предоставления определенных новых и безопасных передовых технологий, а основанные на законах квантовой физики знания постоянно меняются, влияя в свою очередь на человека и формирование его моральной ответственности. Журналист, популяризирующий и распространяющий новейшие технологии, должен опасаться в своей работе риска проявления профанации науки либо технологического фетишизма, а для большей прозрачности и ценностной корректности важно учитывать внутренний диалог между научным и религиозным мировоззрением.

Ключевые слова: религия, научное познание, квантовая физика, научная журналистика, научные открытия, передовые технологии

Для цитирования. Фарберович О.В. Религия и квантовая физика о видении мира: что важно знать журналисту, пишущему о научных открытиях в условиях современной технологической цивилизации? *Научный альманах стран Причерноморья*. 2026;12(1):45–49. https://doi.org/10.23947/2414-1143-2026-12-1-45-49

Introduction. In the 21st century, man is rapidly plotting a trajectory between robotics and machine learning forward to future quantum information technology. Although, scientists understand that it is incredibly difficult to predict in which field quantum nanoscience will find application, and the experience of past years has proven that the path from scientific invention to technical implementation can be very long, for example, in relation to high-tech materials that must confirm their safety.

Nowadays, the knowledge, developed by fundamental researchers, shows what resources exist and what the potentials are in the near term. Humanity is increasingly striving for practical benefits and the production of economically viable products. Of course, the capabilities of quantum physics promise to be a real help for a leap in medicine, in storing and encrypting large databases, in the production of "smart" materials, and have already led culture to the Internet era. There is another question. Do people want to use this knowledge to form moral values? How should we correctly assess risks and make decisions in a rapidly changing civilization?

It is accepted that science studies the structure of the world, and religion studies morality and human behavior, but "the model of integration of religion and science provides for the possibility of expanding scientific knowledge in the field of traditional religious ideas. If this happens, then it is on the border of scientific and religious knowledge that a field arises in which their synthesis can be carried out with the help of philosophy" [1, p. 33]. S.V. Krivovichev in the book "Science of Believers or the Faith of Scientists: the 20th Century" considers that "there are not any serious contradictions between science and religion" [2].

It is interesting that outstanding scientists such as Gregor Mendel, Sigmund Freud, Albert Einstein, Max Planck "discovered mysterious new worlds, the study of which radically changed our worldview. Science does not act as a guardian of stability and order but as an incorrigible revolutionary who creates creative chaos. It makes our life no more orderly or calm but freer and more interesting" [3, p. 16].

Thus, "quantum mechanics has renewed the interest of philosophers and scientists in fundamental questions about the natural world, human knowledge and God" [4, p. 44]. One of the greatest achievements of science of the 20th century was "the conviction that the human mind and, therefore, science have no reason to reject God and religious knowledge of the world" [5, p.18]. There is a point of view that the main achievement of quantum mechanics is "awareness of the integrity, complementarity of the subject and object, person and world. The observer man in it becomes the co-creator of the creature world" [6, p. 48].

According to the founder of quantum theory, an outstanding German scientist, Nobel laureate in physics and at the same time deeply religious thinker Max Planck, "both religion and natural science need faith in God, while for religion God is at the beginning of all reflection, and for natural science God is at the end. For some He means the foundation, and for others He is the pinnacle of building any worldview principles" [7, p. 35].

In the course of modern discussions, the idea of the so-called quantum theology was even revealed, according to which "the Creator gives freedom to the created world to be in different states but connects the realization of these states with the spiritual position of man... This idea of Creation gives a fresh angle on the metahistoric nature of «the Fall of man», gives credibility to the possibility of a different reality in this world" [8, pp. 261–262]. Nevertheless, supporters of uniting science and religion believe it is possible to take "at least a small but important step in overcoming the stark conflict between humanity's technological progress and its humanitarian development" [9, p. 198].

We agree that "the expansion of the space of scientific search and the inclusion of theological discourse in it... will make it possible to overcome those materialistic «blinders» that today are an objective obstacle to the study of consciousness, and will contribute to solving a number of pressing scientific problems" [10, p. 109].

Materials and Methods. Through comparative analysis, the work attempted to emphasize a reflection of a loyal relationship between science, in particular, quantum physics, and religion, in order to identify key similarities and differences in views on being, nature and man. Descriptive and analytical methods are used to define the specifics of a science journalist's work.

Results. How should a journalist who popularizes and spreads the latest technologies work? Following the thought of His Holiness Patriarch Kirill of Moscow and All Russia in a number of his sermons [11], the main task is to see the synthesis of religion and science and introduce it into culture. It is necessary to combine faith and human knowledge especially in the age of digitalization, informatization and advanced technologies. This idea, obviously, should be attributed to a specialist working in the field of scientific media field.

Undoubtedly, a journalist who forms an opinion of the audience should rely only on reliable facts and the experts` point of view. To promote science, you inevitably need to immerse yourself in it. Considering that in the modern scientific and educational space or, as it is sometimes called, an atomized society, a journalist writing about science needs to be armed with knowledge of narrowly specialized spheres (physics, biology, chemistry, computer science, etc.), and sometimes interdisciplinary fields.

For example, such experience is implemented in Germany. In this regard, the modern practice of the Max Planck Research Society in Germany is attractive: during visits to laboratories and participation in everyday experimental work, a kind of networking of scientists and media representatives takes place. This is facilitated by the EICOS (European Initiative for Communicators in Science) programs for specialists in scientific journalism or the field of scientific communications, where not only media lectures, interactive sessions, open discussions take place but also real work with the set scientific task. "Maybe the main meaning of such programs is to break molds that still exist in society regarding science and those who engage in it" [12].

It is also useful for a scientific journalist to know about the conventional nature of science, that is, that knowledge is born by agreement of scientists from the development of hypotheses, and the theory may turn out to be both true and false. In addition, "a scientist always has an intuitive sense of what is scientific and what is not". These ideas are largely determined by the system of ideals and norms of science adopted by them: ideals and norms of explanation and description, evidence and justification of knowledge, their construction and organization" [13, p. 374]. Therefore, a scientific journalist should report the discovery as a breakthrough to a wide audience, while maintaining strict objectivity and accuracy. That is why, it is necessary to form a practical ability to apply the criterion of scientificity, that is to know the essence of philosophical approaches, to have independent thinking, to know philosophical categories. After all, it is possible that even an unbeliever but "a philosophically educated specialist, both as a specialist and as a person, thanks to their studies in philosophy, is able to correlate their knowledge and skills with the possible limit horizon for their application in general" [14, p. 75].

The task of a science journalist is not just to translate science into a generally understandable language, turning heavy reading into entertaining scientific pop in an accessible form, or to promote scientific cooperation through the great possibilities of the media space but also to urge to think that artificial intelligence, competing with natural, literally enters into battle, gradually blurring the boundaries. A person persistently invades God's plan. In fact, "the decision on the validity of risks is ultimately always based on a subjective assessment that takes into account knowledge and values. Discourse without a systematic knowledge base remains a discourse that ignores the moral quality of options for action, helps immorality break out" [15, p. 16].

It is clear that "the special status of scientific rationality in the value system of a technogenic civilization and the particular importance of the scientific-technical worldview are determined by the fact that scientific knowledge of the world is a prerequisite for its transformation on an expanding scale" [13, p. 100]. In this regard, through the lens of analyzing and promoting advanced technologies, especially in the still largely unexplored realm of the quantum microworld, scientific journalism should demonstrate that a new path of spiritual experience is possible for the human of the future. This path may arise from the dialectics of science, making it even harder to uphold moral foundations, responsibility for spiritual security, and an ecological mindset while striving to avoid blind permissiveness, technocratic illusions, and the split between scientific and religious knowledge. At the same time, amid interethnic and interfaith conflicts, science can serve as a bridge for reconciliation, or, conversely, as an arena for ideological struggle in the race for science-intensive technologies.

Science journalists bear a humanistic mission. They should lead society and an intellectually developed person to moral improvement. It is necessary to take into account not only the actual state of things and the actualization of scientific research results but also the attitude of the state, business community, and industrial partners to these achievements. "Quantum magic" fascinates consumers, those in power and industrialists, on the one hand, who show confidence and enthusiasm for startups, innovative businesses and high-tech developments. On the other hand, information about prospects, advantages and risks often leads the parties not to agree but rather to "polarization of existing positive or negative attitudes" [15, p. 15].

The rapidly spreading ideas of transhumanism about creating a superman with superpowers, speculating on innovations, technological fetishism, and the tendency toward scientific expansion (aimed "not only at forming an artificial environment but also at modifying humanity itself" [16, p. 337]), are key factors for science journalists. They help form an objective view of current scientific thought and recognize the line between science and illusion. After all, God gave a person the assignment to learn and become better and kinder. Nevertheless, "modern physics has opened the door to a new and broader view of the relationship between the human spirit and reality" [17, p. 127].

Discussion and Conclusion. Thus, the constant leitmotif remains the desire of people to determine the algorithm of the world order or "revelation" about the nature of physical reality. Therefore, in the segment of quantum research of journalistic practice, the authority of scientists, beliefs or fears of society, philosophical foundations and the spiritual heritage of mankind remain.

In the conditions of modern technological civilization, the significance of these aspects in the activities of a journalist who writes about scientific discoveries is beyond doubt. On the contrary, the analysis convincingly demonstrates that one should be afraid of the risk of science profanation or technological fetishism. For greater transparency and ethical integrity, it's important to consider the inner dialogue between scientific and religious worldviews. The topic of covering and promoting advanced research in the media requires periodic analysis, especially with every high-profile invention, innovative technical solution, or general growth in knowledge.

When sparking interest in further knowledge among the target audience, journalists must consider the audience's spiritual development. Society expects science, as a social phenomenon, to deliver new, safe advanced technologies. Meanwhile, knowledge based on quantum physics laws is constantly evolving, which in turn shapes people and their sense of moral responsibility.

We echo the question from British physicist and mathematician Roger Penrose: "Are our ideas about the world around us, governed by classical and quantum physics in their modern sense, adequate to describe the brain and mind?" [18, p. 324]. The answer may lie in the search for life's meaning and purpose, and in forming a values-based worldview, especially on the eve of the quantum information era.

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Conflict of Interest Statement: **the author declares no conflict of interest.**

The author has read and approved the final version of manuscript.

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Конфликт интересов: **автор заявляет об отсутствии конфликта интересов.**

Автор прочитал и одобрил окончательный вариант рукописи.

Received / Поступила в редакцию 16.09.2025
Reviewed / Поступила после рецензирования 02.10.2025
Accepted / Принята к публикации 07.10.2025