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On the formation of a new information worldview of the future (literature review)

Uliana Maraieva

PhD in Philosophy, Department of Philosophy, Faculty of Social Sciences, Uzhhorod National University, Uzhhorod, Ukraine, ulyana.marayeva@uzhnu.edu.ua, <https://orcid.org/0000-0002-2600-8532>

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Abstract: Aims: The purpose of the research is to scientifically define and philosophically comprehend the components of the new information worldview and its positioning in the development strategy of the cultural and historical era. The article reveals the content and format of the information society and its prospects in civilizational progress. The aims of the study are to philosophically and methodologically structure the fundamental and innovative elements of the modern worldview paradigm. While the fundamental clusters of the information worldview are similar to the paradigmatic elements of previous eras, the innovative dimensions have new socio-cultural characteristics. **Methodology:** The work was based on the analysis of scientific studies of the modern information environment. Information and communication technologies become the main object of research not only from the point of view of scientific and technological but also from the point of view of humanities and science. A separate methodological approach in the study of the information worldview is the philosophical synergetic methodology, designed to use an interdisciplinary approach. **Results:** The results of the analysis indicate the gradual establishment of the information component as a dominant element of the modern scientific and worldview picture of the world. The paradigm of the information society is distinguished. It is based on fundamental (unchanging) and flexible (changeable) elements. Among the key functions of the information worldview that have a philosophical dimension are: innovative, synergistic, and anthropocentric. The importance of the research results lies in the modelling of socio-cultural development in the context of positioning a person, community, or civilization in the information environment. Information activity determines the status and prospects in the modern technological world. Such guidelines actualise the epistemological, axiological, methodological, and ethical dimensions of the scientific and philosophical study of information technology systems. Information has the potential to be integrated into the scientific picture of the world as a dominant worldview element. **Scientific Novelty:** A promising area of research into the worldview

of the future is the strategy of correlation between the information and technological environment and the socio-cultural space. Information has the potential to become a common denominator for various human-dimensional and technology-oriented components of the socio-cultural space. **Conclusion:** The modern information worldview paradigm (like any other worldview model from previous eras) has its own philosophical and methodological guidelines that determine its functional potential. Culture, science, and philosophy become the main broadcasters of the information dimension. Information, in its turn, successfully communicates with the public consciousness and individual beliefs about cultural, scientific, and philosophical development. The information worldview performs a number of socio-cultural functions that regulate the interaction between man, society, nature, and technology.

Keywords: information society, worldview paradigm, information worldview, philosophy of culture, socio-cultural space, information, and communication technologies.

Introduction

Each cultural and historical epoch has distinguished a dominant component from the diversity of the worldview system. The mythology of antiquity, the theology of the Dark Ages, the humanism of the Renaissance, and the rationalism of the New European era are the most striking manifestations of the dominant worldview models. The twentieth century in philosophy was a period of rejection of monism in worldview constructions and an attempt to establish the concept of pluralism in the global worldview system. However, these attempts confirmed the inability of human society to abandon the dominant component of the worldview paradigm. Industrialisation, and with it the rationalistic and technological worldview, was replaced in the twenty-first century by informatization with its information and technological dimension.

Research Problem

The research problem of the article is to analyse the pluralism of views of contemporary scholars, philosophers, and artists on the role and place of information in human life, society, and civilization as a whole. A review of the ideas and concepts of the information environment makes it possible to understand the mechanisms of influence of information and technology on individual and social consciousness. Based on the scientific, technological, psychological, and socio-cultural manifestations of information activity, an attempt is made to systematise current worldview beliefs and predict future worldview.

Research Focus

The focus of the study is on the philosophical and ideological functions of the information dimension of civilizational progress. Innovation, synergy, and anthropocentrism are characteristic components of social activity in the information environment. The dichotomous confrontation between traditional and innovative, dialectical and synergistic, existential and anthropological is gaining new dimensions in the information world. Thanks to information and communication technologies, a person has more opportunities to choose the best option for cognitive or value activity.

Research Aim and Research Questions

The purpose of the study is to highlight the philosophical, methodological, scientific, epistemological, and axiological components of the information worldview. The article reveals the content and format of the new dominant element of the worldview paradigm of our time, which is the information technology aspect. A new worldview paradigm based on the information potential is being formed in our time and demonstrates all the prerequisites for establishing itself as a dominant aspect. The purpose of the study is to systematise scientific, philosophical, and cultural developments on the

problems of the formation of the information worldview and its prospects. The task of the article is to highlight the theoretical and methodological (philosophical), practice-oriented (scientific), and cultural and historical (mental) components of the information worldview.

Literature Review/Theoretical Overview

The problem of informatization in the scientific and philosophical context was considered in stages, gradually revealing new facets in the worldview dimension. The rapid growth of interest in information as a component of the worldview occurred in sync with the rapid development of information and communication technologies.

Paradoxically, historically, scientific and philosophical discourse has been dominated by the idea that humanity is constantly overloaded with information (Bawden & Robinson, 2020). Either quantitatively (in general terms) in the modern post-industrial period, or quantitatively (in the sectoral scientific and technological dimension) during the period of industrialization, or qualitatively (in the ideological and propaganda dimension) in the Middle Ages. But information has always been given special weight in worldview constructions.

The principle that information and technological achievements are used for human well-being is a key human-dimensional guideline for the future worldview paradigm (Umbrello, 2023). Any other scientific and philosophical interpretations of the positioning of information or technologies pose threats to humanity.

Nikitenko (2020) emphasises that philosophy, using an evolutionary analysis of civilizational progress, has managed to bring the information worldview into the cohort of factors that determine the global development of mankind. Scientific thought began to be enriched with specific scientific and philosophical definitions. Particularly, Rascão (2021) proposes to use the term “philosophy of information” not autonomously (for example, as “philosophy of science” or “philosophy of religion”), but in the context of its correlation with the concept of the information and digital society. Aufa et al. (2020), using the example of the mass use of smartphones, offer an interpretation of the concept of the philosophy of technology, noting that the usual human-dimensional natural environment has the ability to be transformed into a digital environment.

The threat of information progress is the “infopocalypse” - a world in which it is initially difficult (and ultimately impossible) to distinguish the real from the virtual (Fallis, 2021). An important aspect of modern scientific and philosophical discourse is the conceptual understanding of trust (Ferrario & Viganò, 2020). Understanding is the basis of interaction between people in the active use of information and digital technologies. Usually, the traditional regulatory and ethical system does not have time to update the current paradigm, so it is proposed to form new dimensions of responsibility when using ICTs.

Floridi (2009) considers the possibility of forming a qualitatively new concept of the infosphere (by analogy with the technosphere or noosphere). However, it is proposed to universalize the format of the infosphere and present it as a symbiosis of the natural, technological, socio-cultural, and individual humanistic. This positioning of information is the most acceptable in its interpretation from the point of view of the worldview dimension.

Research Methodology

General Background

The methodological arsenal for studying the problem of information worldview is traditionally formed from the interaction of general scientific and philosophical methods. Since information activity is based mainly on practical experience, research on this problem uses a system of empirical research methods (Siegrist & Árvai, 2020). At the same time, the information technology dimension relies mainly on rationalistic methodology.

The information component is becoming so large-scale from the point of view of modern science that it is advisable to use all available scientific and methodological potential in relation to it. According to Kankam (2019), the peculiarities of research activity in information research are distinguished in three key methodological approaches: pragmatic, interpretive, and positivist (in all its manifestations).

A methodological approach that facilitates research work with information dimensions is the construction of information architecture (von Eschenbach, 2021). Such a structure greatly simplifies the algorithms of information wave activity and the researcher's ability to operate these processes.

Since the information worldview claims to be dominant in a particular post-industrial cultural and historical era, the study actively uses cultural studies methods. Namely, the confirmatory analysis of the factors of the theory of culture and the theory of cultural cognition is actualised (Johnson et al., 2020).

Information modelling is relevant in the context of the proposed scientific research, as this method allows not only to state the existing realities of the development of the information worldview but also to predict the prospects of the informatization process. Information systems that focus on monitoring and analysing data quickly achieve their goals of developing an information development strategy (Sacks et al., 2020).

Schumann & Du (2022) define information as an effective “intermediary” between humans and technology. Communication between humans and machines is not limited to syntactic structures, developing interactive communication. This is how a new methodological information paradigm is being formed. The language of words is initially supplemented by the language of numbers, which in combination eventually form an innovative communication of meaning.

Online technologies are optimal methodological tools for assessing, monitoring, and promoting the information environment (Coghlan et al., 2021). The methodological concept of Hong (2020), which consists in the use of Technologies of Speculation, has been updated in scientific research. The methodologically verified structure demonstrates the same verified disregard for moral and ethical norms during the information technology boom. It is noted that speculation and manipulation can exist (and in today's realities are actively used) in the information space, and this process can cross out the global plans of the infosphere to dominate the worldview system.

Research Results

The idea of an overarching paradigm that will unite innovation progress is being actualised in the modern scientific discourse (Cantwell, 2019). In such a paradigm, technologies will play the role of tools, and information will play a synergistic role between humans, society, nature, and technology.

The increasing role of information is observed in many areas of public life. For example, in socio-political life, information is gradually establishing its influence on the point of being able to transform the social order (Hassan, 2020). Such realities demonstrate the algorithm already familiar to previous

cultural and historical epochs, according to which the dominant principle gains influence on most areas of social activity and eventually gains a dominant status in the worldview.

The results of the study can be divided into two main clusters:

- practical and everyday aspects of the philosophical and ideological paradigm of the information space;
- global strategic concepts of the development of the information worldview in the modern socio-cultural dimension.

Considering the practice-oriented components of the information worldview, it is worth pointing out the relevance of the functionality of information and communication technologies, which helps to establish these elements in the modern worldview. The main functions that are actualised in the worldview dimension due to ICTs are highlighted in Table 1.

Table 1

Practice-oriented functionality of the information worldview

<p>1. Innovation</p> <p>2. Synergy</p> <p>3. Anthropocentricity</p>	<ol style="list-style-type: none"> 1. Information is a driving force for innovative transformations of individual beliefs and social consciousness 2. Information dimensions require interaction at various levels for all complex systems (natural, social, technological, anthropological) 3. The human-dimensional purpose of the information technology arsenal and its use for the benefit of both the individual and civilizational development in general
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Source: author's own development

The confrontation between dogmatism and innovation is common in the history of human civilization (Schulz et al., 2020). After all, each cultural and historical era has gone through a change of worldview paradigms, alternating between the dominance of dogmatism and innovation. Modern worldview aspects indicate a rapid increase in the innovative nature of human consciousness and society. It is noted that the information worldview is not limited to the epistemological or axiological dimensions of philosophy. If considering philosophy as a path to truth, the role of information in this process will be defined (Zuidervaart, 2023). Informatization provokes a rethinking of reality understanding (Almendros & Echeverria, 2019). The increase in the existential status of information in philosophical paradigms automatically elevates the information component to the general worldview. Ezebuilo (2023) emphasises the need to preserve the moral and ethical component when considering innovative elements of worldview influence. Ethics determines the ability to integrate information into the humanities and sciences cluster of knowledge (Fiesler et al., 2020). Ultimately, information should be consistent with the moral and ethical guidelines of the civilized world.

Information and technological digital progress radically changes not only the semantic principles of the new worldview but also the format of its expression. Particularly, Worldview-2 is a typical

example of an innovative reproduction of the modern world order (Hashim et al., 2019). The task of philosophy is to maintain a balance between the traditional and innovative dimensions of the practical and everyday component of the worldview paradigm. The improvement of digital world data to the level of WorldView-3 with super spectral resolution and global coverage is stated (Guo & Li, 2020). We can confidently predict the emergence of advanced digital systems WorldView-3, WorldView-4, etc. Civilization tends to develop in the direction of using progressive ideas or institutions (Makaiau, 2022). Therefore, each of the new modifications of the digital worldview dimension will be more advanced, accurate, and vivid, leading to a wider and deeper coverage of human consciousness and society by innovative technologies.

One of the weaknesses of information in the worldview dimension is its growing dependence on technology (Fomunyam, 2019). The algorithm according to which technology is only a tool in the information space is relevant and in demand in the public consciousness. However, the distribution of influence in recent years has been gradually but surely shifting to the technology segment. This process threatens the information worldview, as it deprives it of its intended purpose.

In this context, there is a key warning that worries the scientific and philosophical community. Will the digital worldview replace the human-dimensional aspects of the worldview? In previous cultural and historical epochs, mythology, religion, or science directly influenced a person's ability to think and feel, but in no way encroached on this natural or social potential of a person. The rapid (by the standards of civilizational development) replacement of live communication with digital space, intellectual abilities with artificial intelligence, and creative potential with technological creativity eliminates the human dimension of the worldview paradigm, effectively depriving a person of a unique status in the world order. At the same time, it is noted that information can potentially be used to avoid the direct negative impact of technology on humans (Aggarwal, 2020).

Kumar (2020) notes the synergistic function of the information worldview at the moment of expanding the status of information. Laininen (2019) highlights the algorithm of cultural transformation, according to which the driving force of this process is the synergistic interaction of the individual (initiative) and social (organized) levels, which form the systemic dimensions of the worldview paradigm. One of the most striking examples of the systemic nature of information worldview beliefs of our time is the socio-economic concept of sustainable digital development (Nikitenko et al., 2019). Sustainability contributes to the formation of systemic views, which are further transformed into fundamental worldview constants.

The present (namely, the global crises of recent years) demonstrates the need to revive the tandem of the natural sciences and humanities (Nerubasska et al., 2020). The uniqueness of this synergistic interaction lies in the fact that technological, digital, and information tools are becoming implements for solving problems.

One of the aspects of the human dimension of the information worldview is the ability to store personal information, which has become a manifestation of freedom (Broeders, 2016). At the same time, information is positioned as an optimisation model for organising research activity (Heinrichs, 2021). This approach does not involve replacing the epistemological subject of knowledge. That is, a person retains the status of the only subject of cognition, and information technologies cannot claim this status.

Social consciousness is a fundamental factor in determining the dominant element of the worldview system. Sodirzoda (2021), notes that information and communication technologies form a favourable basis for the activity of intellectual (knowledge) and moral (creativity) components of public consciousness.

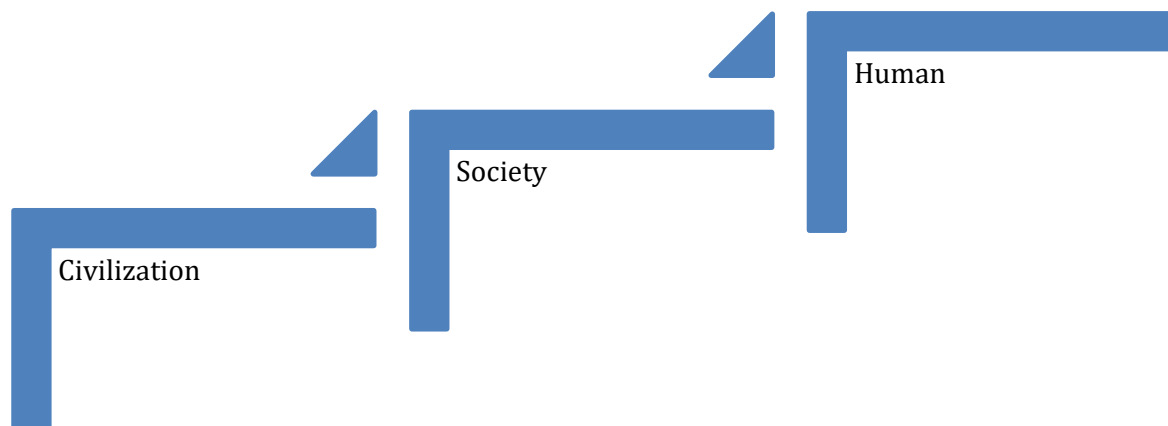
An important aspect of establishing an information worldview is the harmonisation of the fundamental elements of the information environment. One of them is the communication aspect, which has become crucial for the worldview paradigm, as it is a source and translator of information (Burger, 2022).

Discussion

The approval of a particular worldview element or worldview paradigm, in general, requires the actualisation of a whole range of ideological, mental, psychological, and ethical aspects. It is in this context that the main contradictions arise in the formation of global or local public opinion. Information in the modern world is becoming the element that organises the roles and status of key players in the worldview paradigm (see Figure 1).

Figure 1

Philosophical positioning of the subjects of the information worldview



Source: author(s) own development

The above figure does not violate the positioning of the subjects of the information space. Civilization is the fundamental consumer of information, and the individual is the culminating element of this process (with the status of society as an active link between the global and individual dimensions). The information worldview cannot be based on the aggregate of information potentials of individuals. Information manifestation is the result of scientific, cognitive, axiological, ethical, practical, and subjective human activity.

Morss et al. (2020), exploring the difference between individual and social worldviews, concluded that the nature of individual and collective worldviews largely depends on external influence. Given the scale of information influence (and often even pressure) on modern people and society, it is possible to affirmatively speak of the beginning of a period of information dominance in worldview constructions.

Modern society faces the need to respond to global challenges. In the face of threats of a civilizational nature, the worldview system demonstrates flexibility and dynamism by choosing effective defence mechanisms. Information significantly increases the ability to manage risks (Yuan, 2022). Awareness of the effectiveness of the information worldview becomes the last element to establish it as the dominant one.

In order to establish itself as a dominant worldview strategy, it needs to pass rather rigorous tests at the theoretical, methodological, and practice-oriented level and prove its uniqueness and viability. One such test for information is to analyse the risks it poses to human life and health (Jessop et al., 2008). In addition, information must demonstrate its ability to respond to and contribute to solving other global problems of humanity: socio-economic, moral, ethical, and environmental (Zeng et al., 2020). A worldview element that claims to be a leading or dominant one should not only influence the spiritual or intellectual dimension but also perform practical everyday functions.

By focusing on the concept of “information society,” the scientific and philosophical community to some extent ignores the emergence of the “digital society”, which is a broader concept in the civilizational dimension (Menou & Taylor, 2006). Until recently, scientists and thinkers have pointed out that the digital or electronic society does not have the proper potential to be established in the scientific and worldview paradigm. The reason for this was the dependence of the digital world on both humans and information itself as its fundamental component. Industry 4.0 with Cyber-Physical Systems and Big Data Analytics only confirms fears about the preservation of the human dimension of the scientific picture of the world (Aceto et al., 2019). At the same time, the latest news about the potential of artificial intelligence is forcing scientists to reconsider their views, introducing a technological element (at least hypothetically) as the dominant one in the process of civilization development at this stage.

A contender for the role of a dominant element of a worldview must have the effect of controlling public consciousness. Information, like mythology, religion, or science, has the necessary potential to occupy this niche in the worldview paradigm. For example, information allows people to form, transmit, comprehend, encode, and reproduce ideas, thoughts, or beliefs (Hills, 2019). That is, information has a unique ability to actualise interactions and relationships. This potential of information provokes discussions in the scientific and philosophical community about its ability to influence public consciousness on a global level.

To maintain the status of a popular worldview element, it is necessary to meet the needs of society. Information should be accessible, understandable, safe, and transparent (Felzmann et al., 2019). The dubious role of global information platforms (Facebook, WhatsApp, and YouTube) is leading to a reassessment of the status of information in human life and society (Gorwa, 2019). The negative effects of informatization include information overload and the spread of information anxiety (Soroya et al., 2021). Information anxiety potentially contributes to information avoidance (Swar et al., 2017). The modern scientific and philosophical discourse is rapidly being filled with negative reviews of the information worldview. However, this does not indicate deterioration in the prospects of information in this dimension but rather points to a global increase in the status of information in the scientific and philosophical picture of the world.

The purpose of information plays an important role in the further positioning of this element in the worldview paradigm. Practical and everyday interpretation of information due to the accessibility and functionality of the information environment is beginning to dominate the status of information in human life and society. Such realities are threatening to socio-cultural development, since information gives an idea of an object, but cannot directly affect it. This creates an existential contradiction, according to which the object is fully controlled by information, creating a false impression of its overall controllability. Therefore, there is a need to harmonise the role of information in the practical and everyday dimension. The introduction of the concept of information environment quality ensures the integrity of the information worldview (Ismagilova et al., 2019). Philosophy proposes to add an axiological dimension to the positioning of information, which will balance the status of information in the scientific and worldview paradigm. Castells (2020), notes that information systems connect the

planet in technological dimensions. Continuing this idea, it is worth pointing out the potential to connect the world community at the level of global consciousness.

Conclusions and Implications

Thus, the information worldview is gradually establishing itself in the scientific and ideological paradigm of our time and is shaping the following guidelines for its activity:

- The information environment largely depends on the level of technological support. At the same time, the ability of society to maintain a safe and useful format of ICT functioning forms the prerequisites for perceiving information as an effective tool for civilizational development.
- The philosophical interpretation of information as a dominant element of the scientific and worldview paradigm requires a holistic analysis of its epistemological, axiological, ethical, and methodological dimensions. Traditionally for cultural and historical development, philosophy not only provided practice-oriented characteristics of worldview paradigms but also determined the existential capacity, which confirmed the relevance of their existence.
- The information is intended to maintain a balance between the traditionalism of worldview beliefs and the innovation of progressive views by providing a person or society with comprehensive data on every object or process of socio-cultural activity without exception.
- Information applies up-to-date methodological principles for creating, disseminating, and storing data that is updated virtually online and meets modern requirements of mobility and dynamism. The ability of the information space to be updated, adapted, and integrated makes it a universal component of the worldview.
- Information and communication technologies were studied, researched, and used both in scientific and technological, as well as in humanitarian and scientific terms, which indicates the expansion of the worldview potential of the information space. The scale of information influence in the modern world leads to an increase in both positive and negative characteristics of information. The task of the scientific and philosophical community is to analyse (not technologically applied, but scientific, research, philosophical, and ideological) threats that directly or potentially arise in the information environment.
- Effective interaction of man, society, nature, and technology is possible only through synergistic approaches guided by the information capacity to cover all the needs for analysing these components of the worldview system.
- The human dimension of the information environment is the functioning of information activity in order to ensure human well-being and compliance with all humanistic priorities.
- The anthropocentricity of the information worldview involves the use of information tools as functional elements and the awareness of the scientific and creative potential of a person as an organizer of the information society.
- The information worldview encompasses existential philosophical dimensions of different levels - the individual, society, and civilization. Information in the hands of a person has the status of a tool for achieving individual needs; information as a social element ensures the formation of public consciousness; the role of information as a civilizational factor of development is to promote the progressive aspirations of mankind to achieve harmony at the global level.
- The information worldview has every opportunity to become a dominant element in the picture of the world, which is developing in a symbiosis of traditional human ideals and innovative technological achievements. Information reveals the meanings of human activity aimed at development and progress, achieving welfare and well-being.

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