Digital Society: The Experience of the Philosophical Understanding of a Problem

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Abstract

The focus of this study is the phenomenon of digital society which being the object of many scientific disciplines, however, still remains outside the philosophical analysis. The urgency of this analysis is dictated by the need for a holistic study of the phenomenon, its panoramic representation in the light of modern social changes. In the study, along with the "digital society", the concepts of "numerical society", "numerical world" and "digital world", "digital dimension" are analyzed, their generic relationship with the concepts "number" and "figure" is established, and also worldview grounds, features and boundaries of the use of these concepts are studied. The theoretical and methodological basis of the study is the works of ancient, medieval and modern mathematicians and philosophers on the number as an instrument of knowledge of the world and society. The author primarily uses the principle of the unity of historical and logical analysis, and relies on the principle of comparativism. The conclusion is drawn that the concept of digital society is the modern state of the information society, while the predicate "digital" reflects the final, limiting state in the development of society and the world as a whole. Thus, modern man comes to antinomy – the desire to measure the unmeasurable.

Keywords: Digital world, Measurement, Harmonization, Figure, Number, Numerical society, Digital society, Numerical world, Ordering, Space.

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Introduction

At the beginning of the twenty-first century, the concept of "digital society" was firmly embedded in the vocabulary of not only everyday life, but also of science. As a rule, this phenomenon is investigated by economists, psychologists, educators, and culturologists mainly from the point of view of the positive or negative influence of high technologies, the media, social media, the process of digitizing information on society and people [1; 2]. However, behind this, one can see the study of only some aspects of the digital dimension of social space, while the very phenomenon of the digital society remains undisclosed. Philosophical analysis of this concept gives the possibility to assume that the digital society is much more than a society immersed in digital technologies. It is within the framework of philosophical discourse that we can ask questions about the reasons for referring to the digit as a renewed universal measure of the entire universe, the newest "atom" of the universe; to analyze the socio-cultural prerequisites for the emergence of the need to measure the world in numerical terms, and in this case, the very understanding of the world, the notions of it. Through the prism of philosophical analysis we will have the opportunity to take a fresh look at the man and the modern society, to identify new qualitative changes in it; to investigate the reasons for the appearance of the next gap between reality and the person's ideas about it [3; 4; 5; 6; 7].

Discussion

The idea of measuring the world and society by number is certainly not new. The digit and number at all times acted as the most accurate instruments for measuring and understanding the world. From ancient times they were born as a result of everyday practical activities of man – the division of the whole into parts (the division of catch) and the addition of the whole of the parts (construction, manufacturing), from the knowledge of the rhythms of nature and the human body, comparative practice [8]; and as a result of the formation of person's worldview. According to the latter, the ancient Hindu texts say that a person's consciousness is a discontinuous process [9]. In the place where the sequence of acts of consciousness was interrupted by the yogan and other practices, there is an emptiness. This emptiness is a "place" free from everything but is capable of containing anything. The prolonged to infinity emptiness in the sequence of acts of thought is the path to nirvana. So we can conclude that "emptiness", or "zero" is first of all an ideological concept eventually passed into the field of its practical use [10].

Further development of the culture as a whole as well as a closer intertwining of everyday practice and worldview demonstrates, on the one hand, the possibility, and on the other hand, the need for a numerical measurement of things existent. So, the spherical representation of the universe and the social practice of the ancient Greeks allowed the possibility of an exhaustive calculation of being, and their understanding of the nature of the number made it necessary to see the world through the prism of integer proportions. In the event of the discovery of any numerical indeterminacy or infinity (like square root of 2), the ancient Greek thinkers used to come into indignation [11; 12, p.113-435]. Although there were atypical approaches to understanding the world, for example, the atomism of the ancient Greeks which, accordingly, caused corresponding nonstandard ideas about the possibilities of its numerical measurement, as something incalculable, infinite. In a peculiar form similar ideas about the infinity of the world are embodied in the ideas of the world order of the Middle Ages with the doubling of the world to the real world and the other world. Everything that is in the "sublunary" world can be calculated and learnt by the thinking and believing person unequivocally; and what is located on the other side of being requires an apophatic approach: an infinite, incalculable [13]. And, even when positive attributes are attributed to creating being (for example, 99 names of the Supreme in Islam), this does not mean that it can be truly measurable and knowable. It's just that a person is allowed from above, but the rest is either to guess or to believe. It was at this time when a certain gap, a certain feeling of a discrepancy between a
meaningful reality (and possible limits of comprehension in general) and a reality as such more clearly manifested itself. New time again gave mankind hope for the possibility of knowing the origins and mechanisms of the movement of the universe - its calculus. Being confident that the world is created with the accuracy of the clockwork mechanism (R. Descartes), and that the nature book is written in the language of mathematics (G. Galileo) [14], the modern man becomes fully capable of unraveling the riddle of life, looking at the very origins of life and its mechanisms (I. Newton), and in the future will be able to become involved in the act of creation.

Discrepancies in the "law" of interaction of parts and the whole (society and the world) in the modern world formed two approaches, two opposing worldview positions. Among the adherents of the first one can be, for example, K.E. Tsiolkovsky, A.L. Chizhevsky, N.D. Kondratiev, who studied the influence of cosmic physical factors on natural and socio-historical processes [15]. Their position is accepted by modern science (for example, synergetics) which considers society and the world as a whole, as an open system. The opposite position was held, for example, by Marxism, which generally viewed society as a closed system that depends on its functioning and development only on internal social and geopolitical conditions. Proceeding from such assumptions, it can be concluded that social, economic and political revolutions being subject to the principle of determinism [16] can be defined, i.e. counted.

Results

In the aforementioned series of attempts by different cultures to measure the world by digit, the modern stage stands out prominently. We can say that there are almost no spheres of human life that are not subordinated to the "digital dimension". Thanks to technical means, today the possibility of digital measurement of the world is widely realized, which is reflected in the global digitization of all areas of human and social life. And, as a result, the life of various groups of mankind begins to exist as an organism subordinated to a single plan (for example, an annual plan for oil production, a plan for the number of athletes to participate in the Olympic Games from different countries, etc.). Thus, the digital society is a modern stage of the development of a society in which not the information in general but, first of all, its digital format, the methods of digitization, the methods of coding and transmission of information act as the most important value.

One of the important philosophical and theoretical-methodological problems is related to the need to clarify the concepts of the digital society and the numerical society measured by number. In ordinary consciousness, the number and the digit are used as synonyms. However, further research requires strict (first of all, formal-logical) dilution of these concepts, both in terms of volume and content. The notion of a digital society refers to an understanding of the digit as that atom from which the world begins. The digit is an immaterial equivalent of everything, the fundamental principle rooted in the sources of being. The numerical society is a broader concept. It involves the possibility of counting and calculating. The number of combinations of digits is finite (a little more than \(10^{10} = 10\) billion combinations), combinations of numbers is infinite. Consequently, the digital society is limited to a finite number of combinations. The latter can find expression in the representation of society and the world as a finite, quantifiable, and ordered set, i.e. some finite volume of information that can be represented as zeros and ones. The numerical world is infinite; it is able to adequately reflect the diversity and complexity of social relations, the fullness and diversity of the reality. The digit is faceless, the number is multifaceted and is ideologically more closely intertwined in the lifeblood of reality. The numerical world formed by the desire to measure by the number the world enclosed in numerical expressions and numerical ratios (isn’t the latter the worldview of a modern scientist who tries to enclose the world into a single formula?! [17]) we can initially oppose to the digital world, a world translated into the language of zero and one. The world is impossible without the so-called fundamental world constants: the charge of an electron,
Planck’s constant, Boltzmann’s constant, the speed of light in a vacuum, the gravitational constant, and many others, which are mostly irrational numbers, that is, without rounding off not translatable into the language of numbers.

**Conclusion**

If we look at the reality through the prism of a number then we will have a world measured by number – the numerical world, and its part – a numerical society. Since the numerical world is infinite, multifaceted, diverse, limitless, the numerical society inheriting the ancestral properties of the numerical world is also multifaceted, containing all the diversity of its variants, and hence it is itself infinite and unlimited. By declaring something to be uncountable we thus, whether we like it or not, transfer this quality to another: if the society is represented in all its diversity and complexity of connections and relations then the world cannot be uniquely defined since the society is its integral part; and vice versa, if in the society the opinion about the completeness and the limitations of the world prevails then the society must inherit this feature as part of the whole.

Although the concept of "digital society" is closer to a person (which, in particular, is expressed by the idea of the number historically fixed in consciousness as an "atom" of the universe), but the use of the notion of a numerical society hides a more complete picture of reality, i.e. a multifaceted, voluminous structure. We are also told about this by the results of studies of logicism, one of the main modern trends in mathematics and the philosophy of mathematics that reduces the initial concepts of mathematics to elements of logic, essentially a binary system and operations defined over this two-element set [18]. Such attempts failed in the field of precise mathematical concepts and formulas. The depth, complexity and unpredictability of social relations and the person himself is impossible to imagine in Boolean algebra. Perhaps, the creators of artificial intelligence come across with such difficulties: one can program the behavior of the robot who sees the ball, but one cannot yet develop robot’s own attitude to football.

From an ontological point of view, the predicate "numeric" or "measurable by number" can adequately reflect the world as a whole and society, in particular, since it avoids exhaustion. And from the point of view of epistemology, we must always be in search of truth, which corresponds to the positions of philosophy as a whole and its principle of dialectical development. This is how modern science is constructed and defines the universe as a whole and calls such approaches as necessary for its study: the concept of co-evolutionary development of the world, the theory of chaos, the theory of synergetics, when the system under study is assumed to be open and containing points of fluctuations and bifurcations and is denying the existence of single-valued factors that determine all possible variants of changes in the system.

From the above, we can conclude that, on the one hand, the concept of a digital society is the modern state of the information society transformed into a new single organism in the field of global and universal time-space which exists and develops according to single rhythms, which ultimately pushes the horizons of the notion of the Earth as a general house of people. And at the same time, the predicate "digital" reflects some final, limiting state in the development of society and the world as a whole. A person who wants to imagine life as a sensible whole embodied, for example, in virtual reality, a priori represents the world as complete and limited. Such a world will always have an end (both temporal and spatial), the limit that can be reached (like the end of any computer game). On the other hand, referring to the number as a way of comprehending reality, a person not only assumes but also affirms the infinity of the world. In this way, while making his way through the corridor of worldview contradictions, modern man comes to antinomy – the desire to measure the unmeasurable. His inner intention meets the reality: the intuitive sense of the infinity and inexhaustibility of the world, and the whole variety of social relations is
confronted with technical, logical and quite ordinary limitations (as an example, the problem of creating artificial intelligence).

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Footnotes

9. For the Western tradition, this is completely unacceptable, otherwise Descartes would not be able to say his famous: "I think, therefore I exist."


References


Khazieva, N. (2017). From One Ontology to the Set of All Possible. Journal of History Culture and Art Research, 6(5), 99-104. DOI: http://dx.doi.org/10.7596/taksad.v6i5.1302


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