Research Article

METAPHYSICS AND TODAY'S REIGN OF INFORMATION TECHNOLOGY AND TECHNOLOGICAL PROGRESS

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Abstract

In today's reign of information technology and rapid technological progress, the metaphysical premises of the world of modern technique and technology have been forgotten. The opinion of the metaphysical foundation of modern science and modern technology is necessary for understanding beings and their world of reality, understanding the truth and human essence, but also man's position in the digital world and the world of modern technology. The analysis of technique, technical achievements and products of technology, as one of the phenomena of the modern world, the basic definition of which is shown in the fact that (technique) is a means for the realization of benefits means the clarification of the meaning of the phenomenon of technique from the sphere of the term *techne*, whose meaning is originally related to knowledge, what we can do on real things and what refers to production rather than use. Technology has as its source *techne* whose metaphysical foundation is in the objectification of knowledge.

Keywords: Knowledge, Metaphysics, Techne, Technique, Technology.

INTRODUCTION

How metaphysics, which is not based on empirical science, can lead to certain knowledge about the world, is the basic question of this work, to which we strive to give as concrete answers as possible, that is, settings for further reflection. The success of presenting metaphysics as the basis of theoretical science is conditioned by the analysis, understanding and determination of the fundamental tasks of metaphysics through the illumination of the phenomenon in question here. The phenomenon of technique, which is an integral part of our everyday life, can be analysed and understood in detail from the Greek term *techne*, which gives meaning to the term technique. "Metaphysics is a philosophical investigation of the most basic and general features of reality and our place in it. Because of its very subject, metaphysics is often philosophy in its theoretical and most abstract form". (Kim *et al.,* 2011). Today, in the modern world of science, technique and technology, in order to preserve the basic human essence, which is in producing, acting and participating in reality, we must return to the metaphysical foundations of being, which are reliable and immutable in contrast to physical ones. Therefore, when it comes to the overall structure of the experience of the world, in the modern world of technique and technology, the question of the meaning of technique in the thought of Martin Heidegger, as a crucial question of his entire thinking, turns out to be a question to which we should return in the determination of technique as he did in the determination of meaning the phenomenon of technique returns to the meaning of the term techne in the time of Greece.

Already in 1957, Martin Heidegger noticed changes in the sense of time. He saw the drive for technological mastery creeping into the human interior, were thought and reality meet in language. Heidegger's philosophy was neither Luddite nor technophobic. He resisted any attempt to categorize his view of technology as optimistic or pessimistic.

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Whether the glass is half empty or half full, Heidegger was interested in the essence of its content. He was a soft determinist, who accepted fate while studying different ways to absorb its influence (Heim, 1993).

Technology, technical achievements and technological development, which transform our world, are undoubtedly an integral part of our reality and everyday life. Technological progress and the reign of information technology create a new atmosphere rich in information that creates a world *polluted with information*, the files it creates grow rapidly, form electronic libraries of documents, an online connection in which *the computer stores all this information and which, therefore, we hope will help remove the mess.*

In our reality, which is increasingly flooded with technology, the importance of returning to Heidegger's *Question about technology* is shown. Modern technique and the understanding of the source and meaning of knowledge, as well as the entire human reality, have a metaphysical foundation, and it is contained in the meaning of the term techne as it was understood and used by the Greeks. This understanding of techne is the horizon for understanding the phenomenon of technique.

An essential question of philosophy: The importance of understanding the meaning of the Greek term *techne* and today's term technique

Man's ability to produce and act, then understanding his world of reality, requires knowledge, understanding and knowledge of what affects the formation of his image of the world, and this is today a question of technique and technological progress. Therefore, this question is not just one among the questions of philosophy, but a question that has dimensions that concern the metaphysical, scientific, ethical, political, structure of man's reality and his relationship, position and coping in the technical world and how he deals with technological achievements, and all with the aim of exposing an unjustifiably forgotten question in modern science, which is

the question of its philosophical premises. In this sense, different philosophical approaches are based on different views on the philosophy of technology and the use of different methods, but mostly with an accent on certain aspects of the philosophy of Martin Heidegger, they serve to understand the content and orientation in the field of philosophy of technology and man's relationship with technology. So, it is important to clarify that the problem and question of the phenomenon of technique does not belong only to the field of technical sciences, but has long been a problem of philosophy in general, and has become a problem of contemporary philosophy.

When the term technology appeared in the writings of P. Ramus (1515-1572), in the early 16th century, it appeared in a very different meaning than the Greek techne. Dissatisfied with the Aristotelian notion of techne and Aristotle's categorization of art and science in general, Ramus embarks on a systematic arrangement of art and science using a method he calls technology. He does this by establishing the relationship of "logos between all technai". Over the next 300 years, the term technology is occasionally used in different contexts. In 1615, The Oxford English Dictionary records the use of this term by S. G. Buck as "an appropriate closure of this general technology, and only 13 years later T. Venner approaches the modern definition by referring to the various mechanisms used in the design of baths. By 1829, technology acquired a comparative and identical meaning in relation to the meaning introduced by E. J. Bigelow. A botanist, professor and doctor by profession, fascinated by mechanics and not biological sciences, wrote the book "Elements of Technology" in 1829, which is the first book written in the English language in which the term technology is specifically used in the title, and where technology is defined as principles, processes and nomenclatures of the observable arts, especially those involving the application of science. (Tulley, 2008).

The aspiration to understand the term techne implies a conscious grappling with the fact that it is a very broad field of research, then a wide spectrum of meanings of the Greek term techne, furthermore that it is a ubiquitous question of today's every individual and every society, points to complexity, demandingness, the dedication and particularly difficult passage of illuminating the essential question of philosophy which is in the understanding of the meaning of the term techne, which is originally related to the term knowledge and today's term technique to which techne gives meaning. Art, mastery, knowledge, production is the basic determinants of the term techne, which gives meaning to today's term technique, i.e., distinguishes it from everything that is use and what has already been produced, which reigns in technique. ..."because techne means neither craft nor art, and especially does not mean anything technical in today's sense. Techne never means the kind of practical work. The word techne pre means one of the ways of knowledge". (Heidegger, M. (2000). Therefore, what is important to point out is that this is about knowledge, which means concrete knowledge that is useful to us on real things and in real situations in which we act and produce the world we live in. Today's concept of modern technology owes its meaning to the term techne as it was understood and used by the Greeks. The essential definition of techne that distinguishes it from making and shows that it is one of the ways of knowledge is contained in production.

The Greek term techne is properly understood as a human skill that is based on general principles and can be taught. In this sense, techne is manual work, a craft such as carpentry, but also a science such as medicine and arithmetic. According to Plato, a true techne understands its object and can give a rational account of its action. Aristotle distinguishes techne from experience on the grounds that techne involves knowledge of universals and causes, and can be taught. (Audi and Audi, 1999).

Returning to the meaning of the term techne is necessary considering that we know that techne is a term to which today's term technique owes its meaning, and whose demands and challenges are increasingly entering our daily life and performance of work tasks. Technology and new technologies are an issue that today concerns everyone (on the planet) and is an issue that is never neutral, nor should we understand and position it that way, i.e., it is the result of our technological way of relating to the world, and this attitude is nothing else rather than techne.

Philosophy's interest in technology did not arise with the philosophy of technology, but much earlier, in the opinion of Plato and Aristotle, with the use of the term techne. As stated among other things in the relevant literature that considers the meaning of techne and the determinants of the philosophy of technology, until recently this was not explicitly called the philosophy of technology, because it was always integrated into larger philosophical problems and questions from metaphysics and epistemology to ethics and politics. Therefore:

It cannot be denied that technology has not been considered at least relevant and sometimes even central to these issues. Therefore, our current blindness to this fact is a strange thing. It is strange and interesting because philosophy deals with man and the world as well as the relationship between them, and today's world is, by all accounts, a technological one, or to put it the best possible fact that the concept of technology permeates modern thought and that technology is simply applied science and that as such it is covered by the philosophy of science, at least in an implicit way. (Casey, (1986).

The metaphysical consideration of the issue of technical phenomena and new technologies is based on the very nature of man, that is, his desire for knowledge. Knowledge is the concept to which, in the first place, the term techne refers. Therefore, it is natural and necessary for us to think here of a certain essential question of philosophy contained in the understanding of the meaning of the term techne and the present term technique. Therefore, we do not think about this question in a way that it is only one of the questions of philosophy, but as an important question whose basic determinant is knowledge, which is also the basic determinant of metaphysics as a philosophical investigation of reality and our place in it, but also of every science in general. The meaning of the original Greek term techne is that it is practical human skill and the application of principles involved in the production of objects and the achievement of goals, which is the possession but also the way of knowledge by which we know how to produce, with the fact that it never means a type of practical work, but always means production according to certain rules and certain regulations. So, the originality of techne is in metaphysics and metaphysical thought of knowledge. The original meaning of the term techne refers to art, to skill, to art and as such cannot be used as the current

term technique. Techne did not originate in the sphere of technology but in the sphere of knowledge. Returning to the Greek meaning and use of the term techne means: determining the direction of understanding and not mixing the ancient term techne with today's term technique. Only in this way is it possible to reach an understanding of production and action, which are the fundamental determinants of man's being, which he practically demonstrates in reality. The term that gives meaning to today's term technique and what ensures that it is not the same as the term technique is techne in the sense of production, which distinguishes it from making and shows that it is one way of knowing. Therefore, it is necessary to point out that from the sphere of knowledge, in which it originated, techne can be transferred as a skill.

Heidegger's explanation of the meaning of the term techne, as skilful and thorough knowledge that it reveals and as a way of bringing into presence, is intended to show the concept of techne as the source of today's term technique, but not to decide for or against technique and technological development, nor is it about his opposition to technique and new technologies, digitization and improvement. Rather, it is about focusing on the question of what technology and technology can do to an individual and society, and not only on the question of what a person can achieve through the use of technology. Heidegger understands technique as a totality of devices and itself as a device.

Despite the fact that it is both demanding and dark, Heidegger's philosophical thought must always be approached when clarifying the issue of technique and technical progress that dominates our age and today's reign of information technology and technological progress. The importance of issues related to the society of technology and technological progress is shown from the perspective of our inability to bypass or not participate in issues of exposure to technology and technological advances, that is, it is a question of our everyday life. In this sense, Heidegger's intention is to show the difference between what is techne and what is technical: the production and disclosure of being is the determinant of techne, in contrast to technique, which is the making and use of ready-made, produced tools and knowledge. "Techne, in contrast to technique, explains an ability or even an aptitude that can be acquired and is related to knowledge". (Burger, H. (1979).

Heidegger's setting of the meaning of technique is determined in such a way that technique can neither create nor change by itself, and unlike technique, techne is an expression of an essential property of thinking, while technique is only a form in which thinking appears at one moment. That is why the technique remains only a means that is intended exclusively for some benefit and meaning that has yet to be fulfilled in something. Technique can convert, but it cannot do it alone. "The transformation of the essence of technique will generally require a human being. But man here in himself will need this transformation for his own essence" (Heidegger, M. (1991). Therefore, technique, as a means, does not think but is itself an expression of thought. We can freely say that Heidegger's research into the essence of technique is based on returning to the ancient teaching about the term techne and that he does not observe the phenomenon of technique in the meaning of technique, but the essence of technique is explored on the basis of the ancient teaching about the essence. "We ask about technique when we ask what it is... technique is the work of

man to use these means is a human task" (Heidegger, M. (1972). Modern technology and modern science are ways of revealing in the field of making and using what is already produced knowledge by technology. For Heidegger, the meaning of technique is in the totality of the use of devices, where the technique itself is a device, whose essence is determined from the horizon of techne. This is why technology has the character of a means to achieve goals, which demonstrates the inability of technology to be production, and the way man relates to reality is the way of producing the world, which is the basic determinant of human life. As a phenomenon of the modern world, technique is a means of achieving benefits whose source is in techne.

The result of the necessary distinction between the terms: Greek *techne* and today's technique

The result of the distinctive use of the terms techne and technique is shown in the possibility of thinking, determining the truth, understanding knowledge, the possibility of production, action and human participation in the construction of the world and reality and its place in reality, which today is a sign of the rule of information technology. Distinction, i.e. the use of the term techne as it was understood and used by the Greeks on the one hand, primarily in the opinion of Plato and Aristotle, which is the use in the sense of knowledge and skill, in contrast to today's term technique, which is only the use of already produced and ready-made knowledge on the part of techne, on the other hand, it results in the possibility of understanding the technical world in which we live as an expression of the essence of metaphysics, as well as indicating the meaning of the search for the metaphysical foundation of modern science and modern technology that takes place (the search) in order to understand the modern age as such. The significance of the distinction between the terms techne and technique is certainly the result of studying Heidegger's opinion on the phenomenon of technique in which, in order to determine the phenomenon of technique, he returns to the meaning of the Greek term techne.

From Heidegger's unveiling and illumination of the meaning of techne, it is shown that techne is not only the work of a craftsman or artist, but that it originally belongs to what is *poiesis,* which is always with the concept of *episteme*, and thus means understanding something or knowing how to navigate something. The relationship between technique and technology, as it is understood today, and techne as a term of Aristotle's philosophy, is shown precisely in Heidegger's philosophical opinion in the form of accepting the Greek meaning of the term techne and the term to which the term today's technique owes its meaning.

Machines are often employed in Heidegger's philosophy as instances to illustrate specific features of modern technology… there is a unique ontological force to the machine that can be understood when looking at distinctions between techne and mechane in ancient Greek sources and applying these distinctions to a reading of Heidegger's early thought on equipment and later thought on poiesis. Especially with respect to Heidegger's appropriation of Aristotle's conception of dunamis (capacity, power, force, potential), it becomes apparent from a Heideggerian perspective that machines provide an increase in capacity to its human users, but only so at a cost. This cost involves a problem of knowledge where the set of operations required in machine use results in the loss of

understanding our dependency on being… discussion of how this relation to machinic capacity is not merely pessimistic and deterministic, but indicates what might constitute a free relation to machines. (Mei, T. S. (2016).

Heidegger does not assign the same ways of disclosure to techne and technique, but essentially distinguishes them. He defines techne as that which essentially belongs to production, and technique as that which essentially belongs to the making and use of already existing things. So techne is the original knowledge, and technique uses that knowledge, which has already been exposed, for making. For Heidegger, the possibility of understanding and creating human reality cannot be realized through technical action. Technique is a way of uncovering, but not in the sense of producing, but in the sense of challenging and mastering nature. "To Heidegger modern technology is not one among many equally significant human activities". (Lovitt, W. (1980). Therefore, technique is not work based on production, but only one way of man's attitude towards nature. Such a way is a technical way of relating man to nature, in which Heidegger sees the danger that essentially determines technique. In this sense, modern technology, with its method of disclosure, challenges nature and determines the technical relationship to nature. Along with the question of the meaning of the ancient term techne and the meaning of the phenomenon of technique, there is also the question of the meaning and creation of human reality, or rather, with the question of the meaning of our actions and the meaning of the entire reality, it is necessary to first clearly and unambiguously determine the meaning of the ancient term techne, and then the phenomenon of technique. (More details see in: RahimićRamić, Dž. (2024).

Understanding the concept of techne among the Greeks is the horizon from which it is only possible to understand Heidegger's point of view on the meaning of techne and on technique, and returning to Heidegger's opinion on the phenomenon of technique is indispensable in matters of the philosophy of technique and our present day. Therefore, the understanding of Heidegger's position on the issue of technique can only be understood from the perspective of showing the meaning of the ancient term techne. Heidegger's position is determined and directed towards what is the correct understanding of techne, which includes and implies a return to the source of this term. All this means returning to the source of the term techne, which is also understood in the sense of returning to metaphysics as asking questions about the meaning of battle by establishing an ontological difference between battle and being.

Traditional metaphysics and ontology have forgotten the original question about the meaning of battle, which should be returned to and originally posed differently. Therefore, the definiteness of Heidegger's position by returning to the originality of the term techne ensures that the ancient term techne is not mixed with the modern term technique. The distinctive use of the ancient term techne and the modern term technique, in to Heidegger's understanding, it provides a foundation primarily on the ancient concept of techne and at the same time leads to Heidegger's original understanding of the concept of technique. By laying the foundation for the understanding of technique in this way, Heidegger ensures the necessary connection in understanding the concept of technique with both the concept of techne and the Greek concepts of *poiesis*, *episteme* and *aletheia.*

The closeness of the mentioned concepts with the understanding of the concept of technique results in the understanding of techne in the way of craft and art. Only in this kind of explanation is it possible to understand techne, which did not originate in the sphere of technique, but in the sphere of knowledge that can be transmitted as a skill. Finally, the result of the distinction is the linking of the term techne to production and to virtue, which Heidegger determines the direction of the understanding of technique. This trend points to the originality of the concept of techne and its necessarily related concepts, and in this way gives the possibility to understand production and action as fundamental determinants of human reality.

In human lives, technology holds sway in mundane and extraordinary ways, such as in the ways we work, entertain, transport, and feed ourselves, and importantly in the ways we encounter and manage health, disease, illness, and death. A significant area of Heidegger's later work is questioning technology.Unlike many current inquiries that centre on contemporary technology's function, utility, and positive transformations, Heidegger offers a radical way of thinking about technology through developing an inquiry that uncovers technology's essence of revealing. In Heidegger's view, the ordered revealing of modern technology has overshadowed other modes of revealing. Through tracing Heidegger's thinking about technology, a more critical approach to the effects and outcomes of modern technologies within health care systems can be generated. (Zitzelsberger, H. M. (2004).

DISCUSSION

The type of question and problem we ask about in our searches determines the possible answers and solutions, while the way we search directs our search. For this reason, the research in this paper is focused on the opinion of the philosopher whose metaphysical, ontological and existentialist teachings belong to the most significant philosophical endeavours of the 20th century, and whose opinion is dominated by the question of being, reality, technique and truth - Martin Heidegger. In today's world of a lot of information, the rule of information technology, the accelerated progress of technology, the constant challenges that this world presents to us and the growing availability and transfer of information, security, which we are all looking for, can be the only knowledge that "homogenizes" and unites information units in the world modern science and modern techniques, and only that knowledge which is practically useful to us and which means knowing how to navigate situations with which we had no experience until then, i.e. what is today called intelligence. All these determinants taken together are an explanation of the meaning of the term techne. Because is important considering "Heidegger's call for the recapturing of radical techne or "the original Greek essence of science" because, he argues, it reminds us of our tragic impotence in the face of nature that humans are in the throws of a fate beyond their determination. For Heidegger, our thinking, our building, our politics, and our art must be *episphalês* (precarious and prone to fall) that is, its aim must not be to protect against or hide from, but to stand firm against the collapse and confusion of Western thinking and civilization". (Tabachnick, D. E. (2006).

Identified as a problematic area in this thesis is our different relations with information technology which creates inequalities between possibilities to enjoy the advantages, or

suffer the disadvantages, of the information technological development. The first step in addressing this area is to start with our conceptions of technological development, voluntaristic or deterministic, and the first argument is that it is important to create an awareness of our relation with technology. This thesis presents a perspective which holds a possible method to create better conditions for awareness and finally, another relation. The relationistic approach highlights what sometimes is labelled the therapeutic purpose of IS which prevents some agents to be treated as inanimate objects instead of fellow human beings. And techno therapy not only for the IS researchers but for the change agents at the political level and perhaps most importantly, for the users themselves so that they will be able to formulate, communicate and mediate their needs and wishes. The aim is to come up with tools and instruments for creating opportunities for as many as possible to in an enlightened and equal way make their own choices regarding information technology use. (Lindblad-Gidlund, K. (2005).

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