

# Everyday Life and Technoscience

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The object of the current research is the relationship between everyday life and the reality revealed by contemporary science and technology. Everyday life is defined as a field of usual, routine meanings and actions, on the basis of which stable social-linguistic world, i.e. intersubjective communicational space is being created and functions. As far as science in the broadest sense (not excluding philosophy and technical sciences or engineering) transcends common understanding, it becomes not mundane. Contemporary science is intertwined with various technological processes, therefore it can be called “technoscience”. Scientists often create such theories and/or hypotheses which are not compatible with common sense and daily views of the world. The reality revealed by technoscience is available only to a small expert group of science and technology. Although the theories of technoscience are not an integral part of everyday life, a constant transformation of everyday life takes place on their basis. Technoscience transforms everyday life only quantitatively by expanding the space of daily routine practices and usual conceptions of various phenomena, but not qualitatively: everyday life remains an autonomous social-linguistic space where only a massive, not deeply reflective (a superficial) understanding of various phenomena functions.

**Keywords:** everyday life, technology, science, epistemology, common sense, philosophy of technology, philosophy of science

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## INTRODUCTION

Everyday life as any other phenomenon can be analysed from various theoretical perspectives within the sphere of one individual science and also from different points of views presented by various separate sciences, thus the complexity and multifaceted character of daily life can be revealed. Routine day-to-day life can be also discussed from the perspective of daily life so as to possibly show that it is not a complex phenomenon at all. From the ancient times everyday life and its emerging issues have been in contrast to the way of life of a theoretician as a philosopher or a scientist, and to such problems that arise during the process of exploring one or another phenomena. The world of everyday man and the world of a researcher, who is detached from daily routine problems, can be in conflict not only as distinct lifestyles represented by separate individuals, but also within one and the same person's consciousness: everyday life and routine problems are inescapable even for theoreticians.

Close and even identical to daily understanding of the world is the so called “the philosophy of common sense” which is a totality of naturally understandable or obvious concepts and

meanings of various phenomena and usual, typical or routine action strategies in the artificial, people created and natural environment. One of such obvious daily conceptions is the fact stated by “common sense” that scientific and technological achievements are inseparable from every contemporary man’s daily life: we all use electricity, the internet, medicine, public transport and many other ordinary things of our technoscientific civilization. We can ask: Is the same “common sense”, to which it is often appealed in the public discourse, able to understand the reality revealed by science and technology? The daily use of various scientific theories and concepts as well as technological innovations do not lead to the deep reflection of reality. It seems that a profound understanding of the world is achievable only for the experts of science and technology. Everyday life has its own problems and their effective solutions would be interrupted by any technoscientific researches breaking forth from daily actions/practices and conceptions.

The object of the current theoretical research is the relationship between everyday life and technoscience – between the day-to-day life and the reality revealed by contemporary sciences and technologies. This relationship is polysemous and complicated. As far as science and technology in the broadest sense (by their theories and solutions) transcend the space of common understanding, it becomes not mundane. On the other hand, in everyday life new phenomena (conceptions, things, processes, action methods and so on) constantly appear which are the results of technoscientific explorations and which in a shorter or longer period of time are able to change routine practices of daily life as well as the conceptions of the phenomena and, in general, are able to improve human’s life from various perspectives. However, is everyday life as a certain social and linguistic reality being transformed qualitatively due to the achievements of technoscience? How, or with the help of what definitions/conceptions is it possible to identify the unchangeable everyday life substrate which is unaffected by the progress of technoscience? The author does not seek to dispute with various available/existing theories of everyday life. Defining everyday life, references are made to some philosophers and sociologists’ works which belong to the tradition of phenomenology or relate to it. The author appeals a lot to the sociological everyday life conception presented by P. L. Berger and Th. Luckmann, which is combined with some elements of Hegel, Šliogeris and Heidegger’s everyday life theories. In such a way daily life is depicted as an autonomous communicational space, stable social-linguistic reality retaining its identity even when technoscience is in a constant progress. The main thesis that is being defended is that everyday life is intersubjective, but with regard to technoscience, self-contained communicational space which is constantly being expanded (transformed quantitatively) due to the scientific and technological achievements is not transformed qualitatively: concerning the reality revealed by technoscience, everyday life remains autonomous as the sphere of superficial, inaccurate or even erroneous knowledge about the world; daily life avoids problematization of the world and, therefore, on principle, it cannot attain its deep reflection.

### **EVERYDAY LIFE AS SOCIAL AND LINGUISTIC REALITY**

The activity of theorizing or philosophizing is exceptional as it often refuses to accept daily, widespread, naturally understandable attitudes towards various phenomena as well as towards the same daily life. As often as not, daily routine is described as the specific sphere of human existence oriented to concrete things and indifferent to abstractions: abstract concepts are supposedly inherent not to mundane life, but only to theoretical being in the world as for a certain kind of human activity or even lifestyle. However, Hegel resisted to such a popular opinion. According to the philosopher, to think abstractly is not difficult at all; abstract thinking is characteristic even of uneducated people; the formation of concepts in which one can abstract something

from the whole of the object of experience and to concentrate on its specific features is the part of everyday life. The philosopher gives an example when a person is thought to be “a killer”, and all other significant features of this individual would be omitted or ignored (Hegel 1966 [1808]). To think abstractly in the daily life is not only possible, but also such a process becomes one of its essential aspects. However, some significant problems emerge: it is very easy to simplify the situation with the abstractions. Instead of the whole picture, for example, only a part of an elephant can be seen and its trunk can be identified as a snake, its tail as a rope, its fang as a tip of a lance, and the like. The danger of simplification and the distortion of reality or of the observed situation constantly arises in daily abstract thinking.

Arvydas Šliogeris in his book “The Thing and Art” states that only at first sight a daily practically oriented view of things can appear as very concrete. However, not the very things matter in such orientation, but only how and in what way a certain object can be useful for a man. In the space of a daily view to the world a man deals not with the individual things, but with the schemes of things or abstractions. In everyday life a man faces the notions of things or the names of things. In everyday life a thing, above all, appears as a function, as a phenomenon with which one can do something. Therefore, Šliogeris views daily experience of things as anonomical, impersonal, and not individualized. In such way everyday life is that space in which not a concrete, but on the contrary, an abstract view of things dominates. A practical/pragmatical man sees the environment abstractly (Šliogeris 1988: 24–25).

Heidegger uses the concept of *Das Man* to name the daily existence of a human being. According to the philosopher, we read books, analyse various pieces of literature or art, and in general, we form our views of all things in a way that is usual for ordinary people, in a common way. In everyday life a man's existence is usual, average and standard. In the space of daily life exclusivity or originality is not supported. Things and actions breaking the routine and refusing to accept daily banalities constantly face the force of nivelation. Therefore, Heidegger sees everyday life as a form of an unauthentic human existence in the world (Heidegger 1962 [1927]: 163–165). The daily being in the world, as depicted by Heidegger, is transfused with common, standard opinions and usual/ordinary practices. As the researchers of Heidegger's philosophy indicate it, the concept of *Das Man* is also intertwined with the dimensions of publicity, sociality and anonymity (Kačerauskas, Vėželis 2016: 103–107).

Summarizing the already mentioned theoretical attitudes towards everyday life phenomenon, it is possible to state that it is a place of an anonymous language (of standard words and meanings) and routine actions – they all are an integral part of a social public life as a certain communicational space. Everyday life is a space of banal, or understandable in itself meanings of things and actions. The problematization of the research object (like in the case of the problematization of *everyday life*) is inherent to philosophical thinking. In this way various and significant aspects and perspectives of the analyzed phenomenon invisible from the ordinary viewpoints can be reached, as we can see them in the theories of everyday life presented by Hegel, Šliogeris and Heidegger.

In the phenomenologically oriented “sociology of knowledge”, everyday life is described as a specific social and linguistic reality. In daily life language functions as the totality of typical conceptual schemes which allow people to create common meanings of various things – common concepts of things and actions, on the basis of which ordinary conceptual structures of all social reality, or the system of social institutions is being constructed (Berger, Luckmann 1967). When people accept the meanings of words as obvious or naturally understandable, and automate – transform into common – certain actions or procedures, then stable social

structures are being created. Such a reality of social-linguistic schemes exists and starts to function autonomously. Therefore, people face such a constructed social system as external reality or reality existing independently from individuals' consciousness. In Berger and Luckmann's sociological theory, everyday life is described as a basic reality where we all constantly return as if from excursions after having wandered the other realities (Berger, Luckmann 1967: 39–40). The reality of dreams, the reality of religious experiences, various artistic and aesthetical experiences, and also the reality presented by science are the examples of exotic, esotherical, or not mundane realities. Philosophy, science, religion and art in a general sense are certain symbolical systems that are detached from the reality of everyday life (ibid: 55).

Everyday life is a social-linguistic reality experienced intersubjectively. In day-to-day life we face language in the form of typical conceptual schemes, usual, and self-understandable images that are internalized in the consciousness by every individual. Ordinary meanings of words and things are being maintained intersubjectively and also collectively advocated action methods within the cultural and natural world become a specific communicative mediator between individuals and their groups. Because of that it becomes obvious and clear what it means to be a member of a nation, to speak in a certain language, to belong to a specific professional community or social class, to play a certain role in the family, and so on. The definitions of different things and conceptions that function in everyday life do not depend on a specific person's consciousness, they even exist before the individual: we come to the world and find the language already created and used by others. Everyday life language expresses the objective, interpersonal or intersubjectively grasped social reality. One of the examples of such a reality is the borders of the states. Similarly, a socially constructed time functions in everyday life: we can turn such time one hour forward or backward. Time zones are the phenomena that exist namely as a certain social construct that is constituted and maintained intersubjectively: we all know the difference between the Vilnius and London time. Such phenomena show the objective status of everyday life. Individuals must adjust to a certain kind of daily life mechanics, they must synchronize personal steps with objective structures of social life, but not vice versa: if a person misses a train, he must wait for another one or take another means of transport. Whatever the word breaking out of the daily life or any action that disagrees with ordinary or routine practices, it becomes problematic and disturbs the automatics of everyday life at least for a certain period of time. Eventually even the problematic things find place in this typical and routine daily life. After the synthesis of the mentioned philosophical theories of everyday life presented along with the "sociology of knowledge", everyday life appears as stable, intersubjectively maintained/constituted and, therefore, objectively grasped reality which involves obvious or understandable in itself meanings of various phenomena and routine practices (modes of action) in the cultural and natural world.

### **THE TRESPASS OF EVERYDAY LIFE IN SCIENCE AND TECHNOLOGY**

If we look historically, it is possible to find in the science a constant trespass of ordinary, daily life meanings of various phenomena, and the result of such a process is the expansion of scientific knowledge, therefore, our understanding about the world becomes less and less mistaken. In the science we can also see the changes of the usual standards of research – this aspect in Th. Kuhn's "theory of paradigms" is analysed using the concept of "normal science" (Kuhn 1970 [1962]). Science progresses when researchers create new theories and/or use new research methods when explaining anomalies, i.e. such observable phenomena, which are not explainable by the ordinary modes of investigation and scientific theories which have been accepted by

a particular community of scientists in the given historical period. "Normal science" functions in the frame of a historically formed "scientific paradigm" which is a totality of conventional scientific theories, hypotheses, laws of nature, and research methods used by scientists (Chalmers 1999: 112–113). According to Kuhn's theory, science progresses not only transforming well-established, usual, typical for scientists' notions and theories, by means of which the objects of cognition are being conceptualized, but also transforming/changing ordinary research methods, incorporating new or rejecting old ones. One of the basic conditions for a revolutionary or paradigmatic alteration in science is the discovery of new research objects that are not explainable using ordinary scientific notions, theories and research methods.

One of the greatest revolutions in the sphere of thinking and exploration of the world is the creation of theoretical thinking by forms of mathematics and philosophy in ancient Greece. The first pure theories, like Leucippus and Democritus' theory of atom, differed from the usual mythical-religious world explanatory way at that time. Gods, demigods and other mythical personages were used to explain certain physical, social, psychological and other phenomena, but they were replaced by abstract notions and logically organized systems of notions – theories, which attempted to explain one phenomenon by using another one while searching for causal relations between them, as well as correlations, functional relations and others. For the first time the cognition of the world was clearly perceived as the examination of the structural and dynamical features of the phenomena. This revolutionary mode of thinking and investigation of the world laid the foundations even for the scientific and technological revolution that began in the 17th century. Before the invention of theoretical thinking in ancient Greece and even till the Renaissance, it was not obvious, understandable in itself or usual to think that theoretical statements, if it is possible, must be tested, i.e. rejected or confirmed using the experiment. Modern science was born after the reunion of theory and technology holding the attitude that we cannot understand the world's phenomena only by thinking; an active researcher's intervention into the analysed region of reality is needed too. The experiment as a scientific method of observation is necessary. Another fundamental innovation in the sphere of cognitive scientific standards along with the invention of theoretical thinking in ancient Greece was the experiment seen as a specific technological tool, a significant cognitive method incorporated in physics in the 17th century. The mathematical description of the results of theoretical and experimental researches also allowed the progress of world cognition and technological control unprecedented in history of humans. Thus modern science as the experimental mathematical science of nature is the result of a few revolutions in thinking. Ordinary or daily ways of cognition were refused; they were modified or supplemented by the new ones.

Inductivism as the science theory or philosophical explanation of the essence of scientific inquiry methods emerged and dominated in the Western science approximately from the 17th to the 20th century. At that time even scientific communities began to think about scientific theories as formulated through the generalization of sensual data. Understanding observable facts as identified independently of theoretical presuppositions was also common. Because of the over-valuation of the role of sensual experience in the process of scientific investigation, the importance of theoretical knowledge was not adequately evaluated in the experimental observation. Therefore, it was not realized that mistaken theoretical prepositions can determine the falsity of "scientific facts". The formulation of a singular statement expressing a specific observable fact is impossible without theoretical knowledge. One can explain or foresee various phenomena as well as perform a technical control of phenomena only by using universal statements: scientific theories and/or hypotheses, laws of nature. Inductivist conception of science

has become a convenient daily platitude. In the 20th century inductivism faced the criticism from falsificationism (Popper 1983), paradigm theory (Kuhn 2003 [1962]), anarchistic theory of science (Feyerabend 1993 [1975]) and other camps of philosophy of science that transcend common views towards the process of scientific inquiry.

Empiricism methodology, having excessively adored sensual observation, not adequately appreciated theories, notions or the conceptual side of science, was in conflict with rationalism, however, in the theory of knowledge both faced the Kantian transcendental methodology at the end of the 18th century. In the epistemology we can also see usual conceptions of cognition, its criticism, and the emergence of the new ones. Transcendentalism distanced itself from the forms of naïve epistemological realism – empiricism and rationalism. Regarding sensual observation, the Kantian theory of knowledge realizes that possibly only a certain part of reality is attainable for a human being by sensual channels; not all existing phenomena can be grasped by our natural senses<sup>1</sup>, what was confirmed by such discovered phenomena as radio waves, radioactivity and others. The methodologies of empiricism and rationalism did not appreciate the fact that our sensual access to reality is limited, but also they did not highlight the point that our conceptual forms by which we analyse objects of experience are conditional and subjective as human tools of cognition. These are the aspects pointed up in Kant's epistemology. Neo-Kantians from the Marburg School in their own researches and in the analyses of Kant's theory of knowledge emphasized the point that conceptual tools of cognition are historically conditioned (Sezemanas 1997). In the epistemological perspective of transcendentalism, objects of cognition appear as fully unattainable for a human being in the sense of sensual and conceptual access to reality: Kant denotes this aspect of scientific cognition by his famous notion of the *thing-in-itself* that also illustrates the incommensurability of theoretical (scientific/philosophical) discourse and daily speech.

The history of science, the history of the philosophy of science, and the history of epistemology show a constant change of conceptions and standards of cognition – this is the process when new views demolish current ordinary theoretical models which are used to describe cognitive processes of the world. Later the periods of entrenchment and expansion of these new conceptions happen, and finally the new conception becomes an old one and faces the criticism after which a new routine of a scientific activity starts to be formed. It is inherent to science to constantly transcend not only daily and widespread views of the objects of cognition, but also the views of scientific methods, principles, theories that say to a scientist what to do with these objects so as to gain scientific understanding about them. Science transcends the everyday life or daily routine described earlier as the social and linguistic word by a specific language common only for a particular community of professional researchers and peculiar action modes with the objects of cognition. Although science has its own routine with the common practices and ordinary understanding about the explored phenomena, as a specific area of a human's activity it disagrees with daily life which is a specific communicational space characterized by a usual/standard language and common socially accepted action modes within the cultural and natural world.

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<sup>1</sup> In regard to the sensual access to reality, an object can have such features which cannot be fixated, because we do not have a specific receptor or a sensual apparatus. Kant illustrates this aspect speaking about the magnetic force which is not fixed by human sense organs (Kant 1998 [1781, 1787]: 325–326). In the contemporary physics and cosmology the limitation of our sensual and conceptual access to reality expresses such hypothetical notions as “dark mater” and “dark energy”.

Close to the daily view of the world is the so called philosophy of *common sense*<sup>2</sup>. In the social contexts of everyday life (for example, in the political speeches in the media) it is often appealed to the *common sense* as the source of “good life” or even as to the basis of scientific exploration and technical creativity. However, not only the evolution of science, but also the process of the development of technology makes it doubt in such a position. The facts established by science may absolutely disagree with the daily, massively propagated view of the world which is well-illustrated by the Copernican revolution in the Astronomy and Cosmology. The heliocentric theory did not harmonize not only with Roman Catholic Church theological and cosmological dogmas describing the position of Earth in the Universe, but at the same time it contradicted to the *common sense* views about the motion of heavenly bodies. On the basis of today’s cosmology we are able to do such thought experiments: if the sun suddenly really starts to rise and fall, possibly the end of the world might come. Some technical inventions in the initial stages of creation were rejected as inapplicable, treated as useless creations of freaks. However, in the course of time these strange inventions were naturalized altogether strongly transforming everyday life. The instances of the construction of the first planes illustrate this perfectly well. The same totally not mundane was Th. Edison’s persistence to do many technological experiments that ultimately led him to the improvement of a light bulb and to the creation of the prototypes of contemporary electric light bulbs. 150 years ago it was much more compatible with *common sense* to think how to derive the species of fast running horses instead of creating cars that would be able to travel faster and to transport people and things more comfortably. Not only the scientific exploration but also the creative technological process often falls out from the solution space of daily routine problems.

There were attempts to link, to depolarize or even to connect everyday life and science: in the 20th century a positivist R. Carnap in order to demarcate science from metaphysics perceived the world view revealed by science in terms of the same daily world view but only improved, specified, and deepened by more scientific means. Scientific exploration from such a viewpoint appears as a daily but a little bit complicated activity. However, this attitude is not credible when we face totally uncontainable to everyday life and to *common sense* scientific theories and/or hypotheses: the multiverse theory, the string theory, the conception of the holographic universe, the same happens with the theories or hypotheses explaining various paradoxes of quantum physics (for example “Quantum entanglement”), as well as the theory of relativity expressing the unity of space and time and proposing the dependence of the time flow upon the speed of motion, and others. These are the theories that do not function in everyday life as a certain kind of the social and linguistic space. They are not an integral part of daily life, but they exactly violate obvious and naturally understandable meanings about the world and its various phenomena. Everyday life is not such a social and linguistic space which would be able to adequately evaluate scientific theories that potentially might be or actually are the powerful instruments allowing to explain observable phenomena, enabling to perform reliable prognoses and creating conditions for the solution to technical problems – for the technical control of the phenomena.

The need for popularization of the achievements of contemporary science and technological innovations shows that technoscience and the reality revealed by it in many cases are very far from the sphere of daily life. Contemporary science and technology are so complicated that

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<sup>2</sup> In the history of philosophy even such an intellectual movement is known to have existed in the interface of the 18–19th centuries under the title of “Scottish Philosophy of Common Sense” represented by such thinkers as Th. Reid, A. Ferguson, and D. Stewart.

only experts can orient in them. Knowledge about nanotechnology or genetic engineering as well as understanding of what and how it is possible to create a microprocessor or what problems could be effectively solved using quantum computers are the examples of such knowledge and competences that do not fit into everyday life as the common social and linguistic space of communication. Namely because of specific (not mundane) technoscientific explorations and experiments, former naturally understandable candles and oil lamps were replaced by now common electric light bulbs and other electric and electronic devices. Daily thinking transfused by ordinary conceptions or stereotypical views of them and propagating usual and standard algorithms of action, in principle, cannot be the environment in which in all cases it would be able to evaluate ideas generated by scientists and technologists. Could daily thinking help to assess the technoscientific and philosophical movement of “Transhumanism” which aims to extend or even recreate human body and consciousness? Is daily mass discourse able to understand how and in what direction the labour market will be transformed because of global computerization and automatization and, in general, how will human life change while improving the artificial intelligence? How could daily thinking answer the question: is the idea of “basic income” a good solution helping people against technological unemployment and even saving the very system of capitalism; could this idea create conditions for the behaviour of the social mechanism of “free market” when most of the products and services would be produced not by human beings but by human creations – machines, robots and computer programs? The answers to these questions cannot be given either by the investigation of public opinion or by using a democratic procedure of voting. It is impossible to solve such problems without expert knowledge which transcends a daily, common, mass, popular, superficial understanding of the phenomena. It is very difficult to analyse, assess and foresee the results of various things even for the experts of technoscience, however, a daily discourse or common thinking in regard to the mentioned and other important problems is not able to do such things in principle, because those are not the problems of a daily routine, but the problems pretending to discontinue or to totally change/transform daily life.

### **COMMUNICATION OF EVERYDAY LIFE AND TECHNOSCIENCE**

Everyday life as an intersubjective social-linguistic reality is the basic communicational space in which people propagating different values and displaying not mundane knowledge/experience meet up. Experts of technoscience must devote at least part of their time to everyday life, because even they have to solve many ordinary, routine problems at home, in the family, in the shop, at work, in the town and elsewhere on a regular daily basis. Even being distanced from the social reality, an individual would gain access to everyday life as he would think about various phenomena using standard, usual, characteristic for other people language and would ordinarily act in the world: he would solve ordinary problems in ordinary ways. A child's process of learning a language also shows that everyday life is a basic communicational space: primarily, he learns the simplest, usual, standard/main meanings of the words; in the initial stage of learning a language it is difficult for him to comprehend metaphors and other figures of speech, as well as to understand the polysemy of words, the changes of word meanings in different contexts. In order to communicate a child must learn to use everyday life language. However, technoscience oversteps the communicational level of everyday life: the space of scientific exploration and technological creativity with regard to everyday life is an esoteric world in which not mundane (theoretical, scientific) language functions, and not ordinary – not characteristic *for all* people problems are solved.

In the social and linguistic space of everyday life a simplified understanding of various phenomena functions, because such an understanding is sufficient for people solving usual/routine problems. In daily life, phenomena are comprehended insofar as it is necessary for an effective and fluent performance of automatized actions. In day-to-day life, it is not necessary to understand chemistry to find out the composition of atoms under the name/title of any drugs or the active pharmaceutical substance. Usually when someone is ill, it is enough to know the name of the medicine, to know where to buy it and to take it after consulting a doctor or a pharmacist (if necessary). Common illnesses like a cold and others are ordinary obstacles which can be overcome using ordinary means. A little bit different but also ordinary procedures would be required solving such problems as a broken car or a computer, house building or repair, and the like. Everyday life has its own unchangeable identity, which is not transformed qualitatively even by improving or changing technologies and expanding the base of scientific discoveries. Daily life is a peculiar communicational space, even the basic one, common reality, however, as the sphere of automatized actions and superficial understanding it remains unaffected by the progress of technoscience. It is good that a computer was invented and it can be used without any deep understanding about computer software and hardware. The space of everyday life is pragmatic, directed towards the effective solution of routine problems, and any complex competencies or specific knowledge cannot exist there without disturbing and interrupting the flow of daily life. Although a qualitative transformation of everyday life does not happen, we can clearly see the extensive, quantitative transformation of everyday life due to the progress and achievements of technoscience: new or improved technologies, conceptions of phenomena, algorithms of action constantly emerge in daily life as a result of technoscientific explorations. However, when these things become inseparable parts of everyday life, they will unavoidably become simplified in order to correspond with people's common requirements.

The communicational space of everyday life consists of two levels. The first level is the already discussed sphere of superficial understanding of phenomena and their automatized use; it is available for all people as a common social and linguistic reality. The second level is made up of those everyday life spaces which are common only for individuals from exclusive groups like scientists, artists and others. Such people have everyday life or routine rules that are not inherent or accessible to a common communicational space of everyday life (the first level). At this point technoscientists' everyday life space does not belong to the first level. Experts of science and technology use specific language and solve specific problems which are not understandable for all people. However, even experts' communicational space has its own daily or routine form – ordinary actions following well-established rules and standards are performed here as well. Inventions and discoveries are the main goal of technoscience, yet they are not ordinary, but outstanding events with regard to the second level of everyday life. The major part of their time experts of technoscience basically devote to solving routine problems: blood tests are being done, medical operations are being carried out, aircraft engines are being repaired, calculations are being made in order to know how much and what kind of materials will be needed for a construction of a skyscraper and to prevent it from a collapse, etc. So in the usual case technoscientific competences are used to generate solutions to technical problems.

The interaction of everyday life and technoscience ensures the communication of discoveries and inventions on both levels of everyday life and between these levels. If scientific discoveries and/or technological solutions were explained in such a language that would be totally detached or digressed not only from the common social and linguistic world (the first level), but would not disregard the language used by any technoscience experts (the second level),

then inventions and discoveries would become incommunicable: total originality or novelty in technoscience would isolate itself, and at least for a certain period of time would get no access to the space of daily life. The social and linguistic space of daily life is valuable for scientific discoveries and technological inventions as a specific area of the realization of technoscientific ideas: when scientists and engineers' ideas become on a mass scale circulated products or services, it is possible to make a huge amount of money. Financial return depends on the extent of integration of technoscientific ideas to daily life. In order to gain this financial profit, such ideas have to be turned into routine practices of certain experts' daily life (the second level), or in a common communicative space of everyday life. On the other hand, scientific discoveries changing daily views of the world or inventions solving fundamental problems which emerge in everyday life are valuable by themselves as they allow to improve the conditions of human life. Sometimes a radical position is being formulated suggesting that only technoscientific explorations which gain practically applicable results are valuable. However, very often inventions and discoveries only after a certain period of time or even after a very long period of time appeared as practically applicable, i.e. became an inseparable part of everyday life. The basic problem is that it is almost impossible to foresee how, when and what invention or discovery in its initial stages will be fundamentally applied/integrated in everyday life, and how and in what direction our daily life will be transformed. Nowadays many of everyday life practices depend on the results of technoscientific explorations: discoveries and inventions. Thus, undoubtedly, it is practical to create work conditions for the experts of science and technology, because on the basis of their discoveries and inventions, everyday life will be constantly expanded – transformed quantitatively: new typical, routine understanding of phenomena and routine modes of action will emerge because of technoscientific exploration of the natural and cultural world.

## FINAL REMARKS AND CONCLUSIONS

The aim of technoscience is to make discoveries and inventions that allow to explain the explored phenomena, to perform reliable prognoses and to technically control various things. The creation of scientific concepts and theories and their transformation, correction, elimination of the mistakes during the process of cognition, finding new objects for scientific research, the creation of new technologies and the improvement of the old ones often require to turn away from everyday life, to break the daily view of the world or ignore everything what is common, naturally understandable, usual, routine and banal.

Everyday life is a social and linguistic reality, a specific communicational space from which technoscience breaks forth, distances from, however, eventually, because of scientific and technological achievements, everyday life itself expands by replacing or deepening ordinary, daily used conceptions of the phenomena and by increasing the base of daily used technologies. Technoscience is valuable for everyday life as it expands the space of daily knowledge and practices. Everyday life also becomes valuable for technoscience primarily as a sphere where it is possible to earn money by implementing successfully various scientific and technological ideas.

The reality picture presented by technoscience is not an integral part of daily worldviews and everyday life seen as a certain social and linguistic world. It is not possible on principle to harmonize everyday life with the sphere of common meanings/concepts of the phenomena and routine modes of action with a deep or comprehensive understanding of various things which is achievable for science and technology experts only. Daily understanding of various phenomena is superficial, transfused with common sense views and stereotypical opinions about various things and actions. The popularization of technoscience can make the situation better only partially. A deeper understanding of the phenomena and comprehension of various

problems which emerge in the process of a scientific exploration of reality are not attainable for the masses. The development of technoscience creates conditions for the quantitative expansion of everyday life (constantly in the daily life a lot of new things and practices appear as a result of technoscientific investigation), but not for its qualitative transformation – the daily life on principle cannot be directly connected without comprehension damage with professional knowledge about objects of cognition that might be natural or cultural. Everyday life as a certain social and linguistic reality and communicational space sustains its own identity and remains autonomous in regard to technoscience and its development.

Received 30 March 2017

Accepted 28 June 2017

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## Kasdienybė ir technomokslas

### *Santrauka*

Straipsnyje nagrinėjamas santykis tarp kasdienybės ir šiuolaikinio mokslo bei technikos atveriamos realybės. Kasdienybė apibrėžiama kaip įprastinių, rutiniškų pasmių ir veiksmų laukas, kurio pagrindu susikuria ir funkcionuoja stabilus socialinis-kalbinis pasaulis – intersubjektyvi komunikacinė erdvė. Teigiama, kad kiek mokslas plėčiasi prasme (neiškiriant filosofijos ir technikos mokslų) peržengia savaime suprantamybės erdvę, tiek jis nėra kasdieniškas. Šiuolaikinis mokslas persipynęs su įvairiais technologiniais procesais, todėl gali būti vadinamas „technomokslu“. Mokslininkai dažnai sukuria į kasdienį pasaulį ir netgi į „sveiką protą“ netelpančias teorijas ir / ar hipotezes. Technomokslo atveriamą realybę prieinama tik nedidelei mokslo ir technikos ekspertų bendruomenei. Nors technomokslinės teorijos nėra integrali kasdienybės dalis, jų pagrindu vyksta nuolatinis kasdienio gyvenimo transformavimas. Įrodinėjama, kad technomokslas kasdienybę transformuoja tik kiekybiškai – išplečiama kasdienių rutininių praktikų ir kasdienybėje funkcionuojančių reiškinių sampratų erdvė, bet ne kokybiškai: kasdienybė išlieka autonomiška socialinė-komunikacinė erdvė, kurioje funkcionuoja tik masinis, giliau nereflektuotas (paviršinis) įvairių reiškinių supratimas.

**Raktažodžiai:** kasdienybė, technika, mokslas, epistemologija, sveikas protas, technikos filosofija, mokslo filosofija