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**SOCIO-CULTURAL DINAMICS OF RISKS THROUGH
«ARROW OF TIME»: THE NEED FOR HUMANISTIC TURN**

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Abstract. The article analyzes the postulate of «arrow of time» founded by the Nobel Prize winner I.R. Prigozhin, according to which there takes place the self-development of a matter, its acceleration and, above all – the complicated dynamics, which is extended on socio-cultural dynamics of risks. The authors trace the development of risks from their origin in the form of personal risks up to new generation of complex risks that are typical for world risk society. Respectively, the theoretical-methodological tools of risk-analysis are also changed in the context of “arrow time” through the transition from one paradigm to another. Thus, to receive the valid knowledge of complex risks, it was necessary not to improve and correct the existing tools but to create qualitatively other interdisciplinary paradigms based on integration of actually sociological theories with other sciences. So, there were turns of sociology to theoretical tools of natural sciences. For the last decade, the famous English sociologist John Urry offered the whole three new turns in sociology – complexity, mobility and resource turns, the theoretical-methodological tools of which are extremely important for understanding of the dynamic nature of modern risks. Recognizing their innovation and the scientific importance, the authors of the present article consider these approaches insufficient and suggest to add the humanistic turn focused on integration of social, natural, and also the humanities in a modern theory of risk.

Keywords: complex society; society of risk; world at risk society; new generation of risks; complexity turn; mobility turn; resource turn; humanistic turn.

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**СОЦИОКУЛЬТУРНАЯ ДИНАМИКА РИСКОВ
В КОНТЕКСТЕ «СТРЕЛЫ ВРЕМЕНИ»:
ВОСТРЕБОВАННОСТЬ ГУМАНИСТИЧЕСКОГО ПОВОРОТА**

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Аннотация. В статье постулат «стрелы времени», обоснованный Лауреатом Нобелевской премии И.Р. Пригозиным, согласно которому имеет место саморазвитие материи, ускоряющаяся, а главное – ее усложняющаяся динамика, распространяется на социокультурную динамику рисков. Прослеживается развитие рисков от их зарождения в виде личностных рисков до новой генерации сложных рисков, характерных для мирового общества риска. Соответственно, теоретико-методологический инструментальный анализ рисков также изменяется в контексте «стрелы времени» через переход от одной парадигмы к другой. При этом, чтобы получить валидное знание о сложных рисках, пришлось не улучшать и подправлять существующий инструментальный, а создавать качественно иные, междисциплинарные парадигмы, основанные не только на интеграции собственно социологических теорий, но и на синтезе социологических подходов с другими науками.

Так возникли повороты социологии к инструментарию естественных наук. За последнее десятилетие, известный английский социолог Джон Урри предложил целых три новых поворота в социологии – сложности, мобильности и ресурсный повороты, теоретико-методологический инструментарий которых крайне важен для понимания динамичной природы современных рисков. Признавая их инновационность и научную значимость, авторы настоящей статьи, считают данные подходы недостаточными и предлагают их дополнить гуманистическим поворотом, ориентируемым на интеграцию социальных естественных, а также гуманитарных наук в современную рискологию.

Ключевые слова: сложный социум; общество риска; мировое общество риска; новая генерация рисков; поворот сложности; поворот мобильности; ресурсный поворот; гуманистический поворот.

According to the «arrow of time» postulate, substantiated by the Nobel Laureate I.R. Prigozhin, the self-development of matter happens, its speeding, and, most importantly, its dynamics becoming more complex that is applied not only to organic and inorganic worlds, but also to the human communities [5]. We believe this postulate should be extended for the social and cultural dynamics of risks that are not only increasing quantitatively but become more complex qualitatively during the process of human development from industrial to a modern reflexive modernity.

The German sociologist Ulrich Beck (1944-2015), a pioneer in the creation of an integrated interdisciplinary theory of «risk society», in fact, consider in it a complex socio-cultural dynamics of risks since their inception. According to his opinion, the risks in its development passed three phases of its quantitative and qualitative complexity increase. During first phase two types of risks originate in terms of traditional and early industrial society: 1) personal risks - Columbus tried to discover new parts of the world, that in the context of existed values and norms was interpreted as bravery, courage, an accident action, which, depending on the result could bring glory or condemnation and neglect. During that historical period it was possible to choose whether to take risks or not; 2) the risks of unpredictable natural hazards or disasters, which had to be reacted somehow. The common feature of these risks is their abundance: on the one hand, there were no scales, no lines to compare the courageous deeds objectively; on the other hand, natural hazards were prescribed solely to external forces, for example, to gods or devils. Therefore, during that period the concept of risk, as such, was not used. All these risks were interpreted in a word: destiny, which acted as the force impersonating the otherworldly uncertainty.

The second stage also had two types of other risks, adequate to the first, industrial modernity: 1) the risks of a voluntary acceptance of industrialization dangerous practices (professional or everyday ones) - the driving of vehicles, the working

at factories, mines or smoking, which is associated with the possibility of health loss by specific people. But then the choice of taking a risk still retained. Such risks of professional qualification, health, could be actually calculated and financially compensated, one could be protected from them in a certain way - the institute of life and health insurance develops. These risks were understood in a new way, as a «calculated ambiguity»; 2) the risks of industrial development, but with «the insufficient provision of hygiene technologies» [1] - the dangers perceived by the senses (all sorts of poisons, fumes, dust as the byproduct of technology imperfection). They could also be more or less accurately calculated and monitored by the means of scientific knowledge and the introduction of technological innovations. At that as a whole, these risks were localized in a certain space and time. It was possible to detect the source of risks, their cause and state who is responsible for their production. The principal difference between the second period and the first period risks is the binding of responsibility for these risks with the human factor.

The third phase is a new generation of reflexive modernity sophisticated risks with new qualities. They are the side effects of a modern, more advanced modernization, they are latent, as a rule, not perceived by the senses, they are rooted in the chemical and physical formulas, radioactive materials and genetically modified food. «They are in general the product of advanced industrial technologies and they will be continuously strengthened with their further improvements» [1, p. 24]. These risks are beyond the space of specific businesses and gain a timeless character. They can't be controlled any longer by a better knowledge and more improved scientific technologies because they are their derivatives. These risks appear at «the highest stage of productive force development», which deal with the substances inaccessible for the perception by senses, but whose negative effect on plants, animals and a man has a lasting impact and is spread almost all over the planet - Norway and Sweden almost do not have industry with toxic waste, but pay by dying forests and plants, endangered species «for the toxic production of other

industrialized countries». By the virtue of knowledge dynamics these risks «may vary, increase or decrease, be dramatized or underestimated» [1, p. 25]. As you see, the sociologist talks about a non-linear socio-cultural dynamics of risk, which, in our opinion, corresponds to the postulate of «the arrow of time».

The sophisticated risks of reflexive modernity change not only the institutional structures, but also social consciousness. «In class societies being determines consciousness, while in risk society consciousness determines being» [1, p. 26]. The sociologist emphasizes an increasing role of knowledge about risks, which determines what kind of society we live in and will live. According to him, this knowledge has significant flaws: an «organized irresponsibility» takes place which reflects the following paradox: the process of natural degradation increases, new laws on the environment are adopted and at the same time, neither individuals nor institutions are not responsible specifically for the things which happen. From the point of view of a scientist, a deep essence of this paradox is that the perception of modern risks is rooted in earlier qualitatively different era of industrial modernity, where the following notions dominated: «a man is the conqueror and the master of nature» who is entitled to «exploit» it. While the visible, simple risks could be easily solved by the introduction of innovative hygienic technologies or, in extreme cases, the possibility of acting without risks remained, moving away from an industrial way of life.

However, the complex risks of reflexive modernity develop and become more complex, sometimes their threatening manifestations take on a paradoxical similarity with the consequences of industrial modernism risk. So, Beck noted: «The phase of risk threat latency comes to an end. Invisible dangers become visible ones. The destruction of nature happens in the field of chemical, physical and biological chains of harmful effects inaccessible for a man's experience, but makes a striking effect» [1, p. 66]. Sociologist cites numerous examples of this: a progressive dying of forests, the pollution of seas and lakes, smog, the erosion of buildings and monuments of art, caused by harmful substances. The barriers to «extreme values» of toxic substances are constantly revised upwards, they are often juggled that is objectively detrimental to the population security and health. For example, the poison tolerance limits by a man and nature are set for some substances. Beck notes reasonably and at the same time emotionally that «a man and nature absorb all possible harmful and toxic substances from air, water, soil, food, furniture, etc. Those who really want to determine the limits of tolerance should summarize it all ... It's just a

mockery and cynicism when, on the one hand, the limit values are determined, thereby partially open a way for poisoning, and on the other hand they do not take the trouble to think about the consequences of poison summation in their interaction» [1, p. 81]. As we see, the development vector chosen by people led to the approval of risk society that produces dysfunctional threats to a man and society.

W. Beck examines especially the risks of individualization, noting that the side effects of a reflective modern and risk society that affected people privacy generate now unprecedented biographical risks. These are not personal risks of traditional and early industrial society, when it was possible to live by the following principle: I take risk and I do not take it if I want. Due to its structural functionality new risks are born by the institutions of reflexive modernity, which leave no choice for people but make their own everyday decisions, i.e., to risk.

A sociologist identifies the following objective factors which reproduce the institutional individualization and its risks. Market and democracy institutions forcibly release an individual from the established social and class relations, from the attachment to the local cultural context, neighbors and professional colleagues. And most importantly, they release from the paternalism of marriage and family relations, from former quite predefined relationships between men and women. In the first, industrial modernity the process of individualization concerned only certain social groups an emerging bourgeoisie and «free laborers». They risked much more than other social groups. Within the conditions of reflexive modernity the process of individualization extends to everyone - all take risks when they choose a cooperation strategy (usually a short one) and competition with each other, which practically covers all social space and time. «The trend towards individualized forms and situations of existence appears that forces people to put themselves in the center of planning and the implementation of their own lives due to their material survival» [1, p. 106]. Labor activity changes radically and acquires more risk-taking nature due to the development of individualization process. This is particularly evident in the fact that the decentralized labor market is expanded, the registered and unregistered unemployment is increased, a full employment is displaced by a partial one - a flexible working day is developed, staggered working hours take place more often, etc. If in the industrial modernity social cataclysms and crises were considered through the prism of social group inequality, the current «social crises manifest itself as individual ones» and are turned into «the individualization of social inequality» [1, pp.

107-108] and accordingly, by the increase of biographical risks.

According to W. Beck, two related approaches of risk «overcoming» were developed in the context of a public risk perception: a symptomatic and a symbolic «treatment». Their essence is in the following paradox: in principle, the increase of risks with their overcoming is allowed, for they do not eliminate the sources of risk and are reduced to the «cosmetic treatment of risks». It is confirmed by the following examples: the production and installation of water purification filters at the increase of its pollution sources; civilization diseases (diabetes, cancer, heart disease) may be treated by the elimination of operating overloads, environment pollution, introducing a healthy lifestyle, or you may alleviate the symptoms only using a medical-chemical method. The sociologist bitterly states that only symptoms are «treated» but not the disease itself. Besides, the symbolic elimination of risks is performed that in fact leads only to their accumulation and complexity. Thus, all the «healers» of risks (technologically oriented scientists, anti scientists, the representatives of the phenomenon that is called «self-help», advertising agencies, etc.) actually work to «create new markets for risk sales» [1, p. 68].

However, U. Beck is optimistic about the future of human civilization. His optimism is based on the fact that «risk society is a self-critical society according to its capabilities» [1, p. 271], which results in the reflection of people concerning the plan of their future development on the subject of self threats potential reduction. However, self-criticism is not a panacea, but merely the factor which minimizes the risks of decision taking.

The fact that the socio-cultural dynamics of risks is in the context of the «arrow of time» is confirmed by the substantiation of a fundamentally new tools of risk research proposed by William Beck only a quarter of a century later. Developing their own views on the nature of risks becoming more complicated, the scientist has put forward an innovative theory of «world risk society», emphasizing that «the category of world risk society contrasts with the one that specifies risk society». According to Beck, the thing that puts a world society of risk beyond the risk society «is represented by the following formula: a global risk is the simulation of global risk reality... «Simulation» here does not imply the deliberate falsification of reality in the colloquial sense by the means of «unreal» risk exaggeration. The difference between risk as an expected disaster and an actual disaster forces us to accept the role of simulation seriously. Only through the imagination and the

simulation of a world risk a future disaster becomes the present - often the significant decisions are taken at the present time in order to avoid it. In this case, the diagnosis of risk would be turned into «a self-fulfilling prophecy»¹ ... Exaggerating a little, we can say that not an act of terrorism, but the global simulation of an act and political expectations, the actions and reactions in response to simulation - these are the phenomena that destroy the Western Institutes of liberty and democracy. The limitation of individual freedoms is noticeable on many levels - from security camera increase to the restrictions of an immigration - that is not just the effects of actual disasters (for example, the acts of terrorist violence). They are the result of such practices and their globalized expectation» [6, p. 10].

The theory of world risk society justifies the difference between the old and new risks. «The latter has three characteristic features: they are - 1) «delocalized» (their causes and consequences are not limited to one geographical space); 2) «uncountable» (as they «include «hypothetical» risks based on scientifically generalized ignorance and normative dissent»); 3) «can not be compensated» (no money may compensate for «irreversible climate change» or «irreversible interventions in a human existence», caused by a genetic influence) [6, p. 52].

In the world risk society a qualitatively new stage of individualization emerges. «Neither science, nor mainstream politics, nor the media, nor business, nor a legal system, or even military force is able to identify and control risks in a rational way. An individual is forced to trust the promises of these institution rationality. Because of this, people are pushed to themselves: the release without rootedness is a tragic ironical formula which determines the size of individualization in the world risk society» [6, p.54].

The role of ignorance factor changes qualitatively compared to the risk society in the world risk society. «The world risk society is the society of ignorance in its direct sense. In contrast pre-modern era it can not be overcome by more extensive and better knowledge, by more extensive or better science; rather, the picture is just the opposite one: it is the product of more extensive and better science. Ignorance rules in the global risk society. The life in the environment created by ignorance of the unknown means the search of answers to questions which no one may formulate» [6, p. 115]. W. Beck emphasizes that the explosion of a nuclear reactor at Chernobyl was accompanied by «the explosion of ignorance» that essentially resulted in a

¹ The things that we call here the "initiation" of risk is also discussed in terms of "social construction" or "social determination" of risk. Note by U. Beck.

«post-Chernobyl world» appearance [6. p.116]. It is noteworthy that on the issue of the ignorance role Beck does not accept the positions of other well-known sociologists. «What distinguishes my concept of reflexive modernization from Giddens and Lash concept? In short and to the point: the «environment» of reflexive modernization is not knowledge, but more or less a reflexive ignorance» [6, p. 122]. At that a sociologist stands for the nonlinear theory of knowledge, postulating that «the types, structures and effects of ignorance constitute a key problem at the transition to the second, reflexive modernization» [6, p. 125]. Thus, W. Beck stands for «cosmopolitan sociology», which makes the realities of the world risk society the subject of his study.

The turns of sociology to the tools of natural sciences, undertaken by scientists, above all became a new evidence of «the arrow of time» in the socio-cultural dynamics of risks in order to obtain a valid knowledge on more complex nature of risks. Over the last decade, a well-known British sociologist John Urry proposed three new turns in sociology - the complexities, mobilities and resource turns, the theoretical and methodological tools of which are extremely important to understand the dynamic nature of modern risks. Recognizing their innovation and scientific significance, we believe these approaches are insufficient ones and we offer to supplement them by a humanistic turn, oriented on the inclusion of humanity achievements in modern risk theory.

In particular, the following trends became the objective factors of sociology turn demand to scientific knowledge. The global transformations of the early twenty-first century brought a significant disruption of society. However, the new realities personified not only chaos, but, in essence, a «global complexity», which started to organize according to a new and specific way due to the movement to indicative information and communication controllers, as well as to the formation of global networks [7] which were approved beyond particular societies.

A complex society emerged not only under the influence of new social facts, but also due to the radical technological, organizational, communication innovations which within the joint cooperation and at the global level changed and reorganized such «universal» qualities, as space and time. The state borders and cultural barriers became relative ones: «Globalization is considered as an emerging new era, as a golden age of cosmopolitan «infinity». National governments and societies are not able to control the global flows of information» [10, p. 6]. All these processes affect the nature of risks, greatly complicating their nature.

In the development «theory rules» as the turn of complexity the scientists who combine the

achievements of sociology and the natural sciences succeeded most of all, based on the fact that they may have a common subject field concerning the multifaceted problems of risk. For example, some representatives of natural sciences, joined by sociologists (Immanuel Wallerstein, J. Urry et al.) developed a new approach to the relationship of social and natural sciences, advocating for the overcoming of their separation, based on the fact that have to deal now with the problems of risk taking complexity and they are also characterized by complexity. Recently, the whole pleiad of «physically oriented sociologists» appeared [12, p. 235]. No single science is able to encompass a subject field of integration processes of nature and society and the risks appearing at that. That's why, as Urry states, a special postdisciplinary paradigm is needed urgently: «complexity theory, which appears now in a generalized form as a potentially new paradigm for social sciences ... non-mathematical foundation, the theory of chaos, nonlinearity and complexity are considered as a single paradigm» [10, p. 12,17].

The immanence of «butterfly effect» is common to all spheres of a complex society and it complicates the qualitative nature of risks. Its essence is in the fact that even seemingly insignificant steps in a complex society may cause risk-taking snowballing effects which appear non-linearly in time and space. Under the influence of the butterfly effect clearly stable modes are in collapse suddenly [12, p. 237]. Thus, one shall consider risk-taking of even seemingly «insignificant actions» in a complex society: getting into social networks and acquiring a politically predetermined angle of perception they may be turned into risks in respect of which it is difficult to take a single «right» decision.

Particularly Urry identifies and analyzes the integrated global networks and global fluids (liquid matters) and their risks. They represent a semi-structured network (information, money, images, risks) and move in a «heterogeneous, irregular, unpredictable and often unexpected waves. Such waves demonstrate the absence of a clear point of departure, a movement in vacuum» [10, p. 60]. Rather complex risks of these networks may be studied using the tools of attractors included in a social synergy. This term usually denotes a steady state of a system, which «attracts» to itself the set of its trajectories: if the system enters an attractor sphere it begins to evolve into this steady state. There are «strange attractors,» which are called «attracting chaos» in some complex systems [2, p. 237]. These attractors are presented by unstable

space, but attracting the trajectories of dynamic systems through multiple repetitions of certain actions. In this case, a system carries out self-creation or autopoiesis, which may be observed, according to Urry, in non-linear processes of urbanization. With the help of attractor tools and strange attractors one may study the risks of an open society openness increase / decrease, the risks of social networks, etc., getting enough valid prediction about possible intentional and unintentional consequences of certain actions.

The turn of mobility gave new possibilities of risk study. In particular, it allowed to link the analysis of different forms of travel, transport and communications with complex ways of economic and social life implementation and organization in the context of time and different spaces, including «the processes of flows ... I use the term mobility - Urry says - for the reference to a broader project of social science approval, conditioned by the problems of movement» [11, p. 6, 18].

The demand for a proposed paradigm is conditioned, in his opinion, by three most important factors. First of all, the existing social sciences diminish the traffic, communication and activities which are very important for people's life (vacation, walking, driving, phone calls, flights, etc.). Secondly, the significance of these forms of motion is minimized to determine the nature of work, education, family life, politics (for example, in conventional structural analysis the importance of movement factor on social institutions is often belittled - in particular, the types of families are conditioned by the patterns of their members regular communication). Thirdly, the role of material infrastructures in the economic, political and social daily life (roads, railroads, telegraph lines, water pipes, airports, etc.) is ignored [11, p. 19]. Besides, the scientist consider that it is necessary to study not only the mobility of social actors, but also «moving spaces». As places «like ships move here - there and are not fixed within a single location. Spaces travel slow or fast, for longer or shorter distances within the human or non-human networks» [11, p. 42], which also produces increasingly complex risks.

Indeed, this very important issue prior to J. Urry was not reflected in independent studies in general and in sociological approaches to risk in particular. The turn of mobility allows to review critically the postulate on the fact that consciousness and behavior of people does not depend on the dynamics of their physical environment and also to take into account the changes in risks and risk perceptions.

We believe that the resource turn is even more important for the study of the increasingly complex nature of risks. The sociologist, talking about its quintessence, writes: «I include in the society and, therefore, the subject of sociology, the analysis of climate change, and in a more general plan - the world of objects, technologies, machines and environments. A seriously state claim is that social and physical/material worlds are extremely intertwined, and the dichotomy between them is an ideological construct that must be overcome» [9, p. 8]. And then in a more decisive manner: «I stand up for «resource turn» in sociology, which allows to analyze societies through patterns, scales and the nature of their resource dependence, as well as the effects of resource use. It is necessary to develop a more postcarbon sociology than the post-Ford or postmodern sociology ... I aspire to nothing else but to the development of postcarbon sociology, and more importantly to the development of postcarbon society» [9, p. 16].

In this regard, according to Urry, the science about climate change is particularly demanded. The scientific language was enriched by the concept of «global warming.» «But «warming» is a simplified term as the things that may happen in different parts of the world differ considerably, there is the possibility of a significant cooling in some places. In fact, the problem of warming term comes from the sheer complexity of climate future long-term prediction» [9, p. 23]. In our view, it is actually a sociological interpretation of warming that is focused on turbulence, the unpredictability of climate change, possible consequences that could become a risk-taking reality, if the politicians of the world do not create institutional and legal structures, regulating and introducing truly «innovative resource constraints». And most importantly a humanistic approach to a climate change is required.

Resource turn, emphasizing the social and environmental consequences of climate change, is important, of course, for the analysis of environmental risks. It draws attention to a sharp increase of social and natural areas in which new and complex risks appear, in particular conditioned by the inequalities of environmental character. These new inequalities are related to the change of nature status that acquires a societal character and largely becomes a man-made. These processes are essentially divided people into those who had to live in «environmentally friendly» environment, and those who are forced to live in areas environmentally risky for human health. In most cases, these spaces have were quite suitable earlier for human life, but they changed environmentally

under the influence of human activity side effects, producing risks for food safety [3]. This once again demonstrates the relevance of a humanistic turn which allows to analyze a man's innovation in the context of its life activity improvement real results.

Finally, let's note the theory of «activity on the brink» in our view, making a significant contribution to the disclosure of an increasingly complex socio-cultural dynamics of risks in the context of the «arrow of time». The sociologist Stephen Ling who studied risks proposed the theory of «edgework», i.e. an extreme activity in order to denote a voluntarily and knowingly accepted risk, which represents a challenge for the socio-cultural boundaries. The author positions it as a «general theory of voluntary risk-taking behavior» that offers «an alternative to the strict objective and constructive approaches, including the elements of both approaches» [8, pp. 109-111]. Its tools are designed for the analysis of risk-taking activities undertaken for the sake of fun and enjoyment. Today, some sociologists have expanded the scope of voluntarily assumed risk from pleasure to a number of professional activities, including the service in law enforcement, fire and environmental agencies, the participation in rescue operations and stock exchange transactions.

An activity on the verge denotes risk-taking practices, exploring the boundaries between sanity and madness, the consciousness and unconscious, life and death, ordered and disordered self-identification. However, the concept of «edge» is of fundamental importance: «an individual does not cross the line», seeking to avoid the real issues of health and life. The second component of «activity» (work) involves K. Marx sociological conceptualization, who distinguished between free activity and alienated labor, seeing in the first one the historical opportunities for human freedom [8, p. 111]. In this theory, the thing is about purely voluntary activity, involving risks and uncertainties. A number of areas of this activity involve certain skills (parachuting, car racing). Finally, the activities on the verge refer to the ability of individuals for mental and physical flexibility, improvisation, which makes them exceptional in a positive or a negative sense. However, these improvisations suggest the control over the situation without its transition into chaos.

The activity on the verge includes the following characteristics of risk taking: voluntariness; carried out in order to achieve specific objectives; it involves the abilities and skills which allow to control a situation, while avoiding harm to health and life; the desire to experience intense emotions; the aspiration, at least a temporal one, to get rid of the pressure of structures and routine practices that

may be shown during the participation in criminal and deviant activities.

A modern activity on the verge involves the use of innovative technical and technological means (new racing cars and motorcycles, sports aircraft). Its members blur the lines between themselves and the machinery according to their risk perceptions that bring out fundamentally new sensations. Therefore, fear is sublimated and turns into something positive. A typical expression of emotions: «We do it because it's fun!».

In essence, a new social type of a risk person is developed, culturally predisposed to risk. The social motivation of such people is the belonging to «chosen ones», «scanty elite». Risk taking is regarded by them not as stupidity or irrationality, but as the evidence of the highest quality, which allows to overcome the dangers without causing self-harm. The cultivation of risk taking in this context is considered as the manifestation of will, courage, valor, self-esteem, the ability to live in high-risk conditions and uncertainties. Such people tend to be admired by others. According to the author of the theory S. Ling it is very important for these people, let's call them «edgeworkers», to trust their mates on the verge of activity. Not everyone is tested successfully by risk situations, but those who passed the test are entered in the «club of chosen ones».

Some edgeworkers take downshifting risks, involving the voluntary renunciation of demonstrative consumption, the transition to a more economical way of life, usually as the awareness of the negative effects of consumerism in modern society, but as a result pursuing the long-term moral or political goals.

Some edgeworkers participate in the activities on the verge, where gender performances are used in one way or another, which are considered risk ones. So, young people are keen to demonstrate their exceptional masculinity in fighting competitions. The participation of women in such events also develops. It is intended to demonstrate the «singularity» of their gender, which is expressed in the neglect of dangers. Many women started to consider their risk-taking in a particular expression of sexuality (erotic dancing in nightclubs, flirting on the verge, «adventure vacation», some forms of sexuality related to deviation, and are accompanied by the feeling of fear, guilt and anxiety). Other women prefer to show their «singularity» in professions previously considered exclusively male ones, or taking part in risk types of sports.

In our opinion, the management of the socio-cultural dynamics of risks becoming more complex and developing in the context of the «arrow of time», is

based on the ways a humanistic turn strategy the quintessence of which will be expressed as follows.

1. In order to analyze increasingly complex risks the synthesis of natural scientific, social and human knowledge is necessary, the result of which would be a humanistic theory of an interdisciplinary complexity, implying the involvement of sociology turns to other sciences [4]. This integral theory would allow, on the one hand, to take into account the complexity of social and cultural dynamics completely, including all kinds of risks and vulnerabilities, and, on the other hand, to begin the search and adoption of new forms of humanism concerning human existential being.

2. The strategy of a humanistic turn assumes the rediscovery of a scientific postulate «knowledge is power», replacing it with the formula of an ethical, humanistic-oriented responsibility of scientists: «an integral knowledge of all sciences - a qualitative increment of innovative achievements for an active life and the health of all people». Of course, the abovementioned things shall not be limited to a simple declaration. This principle should be implemented in practice.

3. We believe that it is necessary not to «treat» obvious and latent manifestations of contemporary neoliberal policies aimed at pragmatic consumerism, inherently producing increasingly complex risks, but to perform the transition to a humanistic policy, bearing in mind the strategic focus on the humanization of society and nature, especially the prospects of access increase to healthy food and water.

4. It is very important to transfer to the new principles of complex risk management in Russia. We believe that the country enters now in such a temporary corridor that allows to enter into the epicenter of a fruitful humanistic development at the global level due to the activation of self-organization capacity and an adequate assessment of complicating risks.

5. The introduction of scientific and technological innovations should be preceded by the adaptability test to existing complex systems as the part of the humanist turn strategy. The addition of a new complex link to a rather complex system should be considered in the context of unintended risk potential production. It is important to note that even seemingly insignificant actions («butterfly effect») concerning the production change in a global scale within the terms of a developing complex society may cause the risks that appear nonlinearly in time and space.

6. Humanistic turn strategy takes into account the fact that society and nature, its resources become an integrated whole, forming a super complicated socio-ecological system. We reached such a

threshold of complexity and interdependence, when the activities in social, scientific and technical aspects generate socio-natural turbulences. We believe that the negative effects of these realities may be minimized with the help of humanistic ethics, as well as by the transition to the «realm of human mind» (V.I. Vernadsky).

7. Basically modern risks are man-made ones and conditioned by the following of scientism, formal rationalism and mercantilism principles. They could not be understood or minimized by previous rational-pragmatic approaches. Humanistic turn strategy assumes that super complex socio-ecological systems and the global risk society are created objectively on a real planet. However, they can be changed using a humanistic oriented responsibility of scientists, politicians and ordinary citizens. At that the strategy of humanistic turning involves the principle of risks and safety indivisibility for all peoples of the world.

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