

## **INDEFINITENESS, UNPREDICTABILITY AND SUPER-DEFINITENESS**

It's impossible to live if you don't know what will follow after this or that action. This knowledge is acquired already in the first days or months after birth and then supplemented during the whole lifespan. It's known that it is possible to walk on the ground but it is not possible to walk on water, and in order to jump on the leaving bus, you have to accelerate your step and may be even run. Each of us knows that it's possible to count on one person in difficult situations and not possible on the other. If I know someone well, I can approximately guess his response to my address to him (though I can't definitely predict his behaviour). Elementary perception of the surrounding world is only possible in case there are memories of the preceding moment (as well as memories of the perceptive pattern for research of the situation) and anticipation of the nearest future included in the process of sensory information's extraction from the world at every certain moment. A world with constantly changing features would be unsuitable for live creatures to dwell in it.

But indefiniteness and unpredictability accompanied human life in all times, endangering the man's existence. They were the forces of nature (bad harvests, earthquakes, volcanic eruptions, floods, etc.) and social conflicts (wars, uprisings, etc.). There was always a danger of unexpected death. Development of science and technologies based on it helped to manage with numerous natural threats and predict the course of a number of complex processes: movements of man-made satellites, rocket trajectories, thermonuclear fusion, etc. Just recently it was possible to think (and a lot of people thought) that a scientific technological civilization will be able to fully control the forces of nature, that a man will become a unique master of nature, that with the help of his mind he will be able to avoid risks related to actions of the forces of nature and transform nature in his interests. In particular, such an idea was the basis of V.I. Vernadsky's idea of the future noospheric civilization. Other thinkers thought that it will be possible to create a sapient society with the help of science of society and man, and that it will

make human behaviour predictable and transparent. K. Marx was sure that it could be done with the help of the social development theory created by him. The classic of American psychology B. Skinner suggested an idea of rational society's creation based on programming human behaviour.

Life did not confirm these expectations. Today, there is an established idea that nature and society should be understandable like an aggregate of complexly arranged and self-developing systems, the special feature of which is many processes taking place in them that are indefinite and because of that unpredictable, especially in the points of transfer from one such system to another (the so-called bifurcation points). Because of that possibilities to affect processes taking place in such systems have important limitations.

But this refers to any social system – both in the past and the present. At the same time, it's clear today that there is something that distinguishes the contemporary social life from what took place recently. Though indefiniteness, unpredictability and connected with them risks always accompanied human life, there were some stable rhythms typical for it over millennia and centuries. The fate of parents determined the future of children and grandchildren to a considerable extent (and it was absolutely impossible in the class society to get beyond the previously laid social track). Everyone knew what was good and what was bad, what should be done, what to strive for, how to evaluate your own behaviour and behaviour of others.

Currently, that state of affairs has changed principally. Developed countries and the whole world after them entered the stage, which is sometimes called “post-modernity” and sometimes “liquid modernity”. It means that social structures start changing quicker and quicker, they are becoming more ephemeral and flowing. Communication flow is complicating very much, at the same time people are frequently getting such information that is controversial internally. “Post-modernity” coincides with what was called information society and later knowledge society. It turns out that multiplication of knowledge, in particular and

first of all scientific and technological did not make human life easier, on the contrary, it created a lot of new problems. The idea of conquering nature turned into an environmental crisis. Use of modern information and communication technologies not only created a possibility to obtain information from various sources but also generated a giant disinformation flow. At the same time, in contrast to what we had recently, today it's difficult to tell information from disinformation in many cases. The "post-truth" term was thought up not long ago. It means a possibility of such messages' wide spreading via mass media, television and social networks, in which grains of truth are included in the mass of deliberate lies. There are information (really disinformation) wars going on in the world, frequently determining political and social actions and generating events, on which lives of people depend. Today, people live in virtual reality (the Internet, cell phone) more and more, in many cases it does not help to deal with real reality but separates an individual from it. Today's technostructure increases a possibility of such technogenic disasters (accidents at nuclear power stations, breakdown of computer systems serving the population of a big city, etc.) that are incomparable in their scales with those malfunctions and failures that took place in the past. To put it simply, development of science and technologies based on it generated civilization, in which indefiniteness, unpredictability and risk are the most important factors.

Individuals had to act in indefinite situations in the past as well, and not infrequently, when they had to take a decision and there was not enough knowledge to guess the results of the action. There could be not enough knowledge because of a principal impossibility to get all knowledge required for success beforehand (that happens), and as a consequence of insufficiency of time in some cases to get all the required knowledge and the necessity to act quickly (the so-called "bounded rationality"). In such cases the subject's belief that his actions will be successful, his assurance that he does what is necessary to do play an important role. And not infrequently such actions lead to a desired result. This is explained

by the fact that in social life the very subject's assuredness becomes a real factor, included into the situation, and completes the definition of indefiniteness that existed before that. This is the most important phenomenon of social life, which was analysed by Popper under the name of the "Oedipus Effect".

But today social indefiniteness is much more dramatic. I already said about much increased indefiniteness of social processes and structures in the environment of information civilization (also called "liquid modernity"). A most important fact that a contemporary individual more and more loses ideas of what he is, what standards and rules of life are, what is good and what is bad, should be added to the above. Ideas of human identity, unshakable before, are diluted in information-disinformation flows, in the environment of social structures' and processes' ethereality, in the global world of interaction and struggle of various cultural senses. Individuals with blurred identity, with poly-identity appear (and there are becoming more and more of them). The topic of identity crisis has become one of the most discussed today by philosophers, psychologists, sociologists. An individual with firm convictions, sure of himself and his values could successfully act in indefinite situations. His own definiteness could complete the external for him indefiniteness. But an individual with a distorted identity being indefinite himself, cannot resist external indefiniteness. As a result, social indefiniteness, unpredictability, risk increase many times.

Various behaviours are possible in such an environment. It's possible to orient people not to fear of risk but the skill to take non-standard decisions in unexpected situations. It's possible to cultivate adventurism, readiness to recklessly jump into a whirlpool of unpredictabilities, fraught with a fatal outcome (there are such people now as well). It's possible to take a completely different stand: try to give oneself definiteness by hiding behind some system of unshakeable values and fanatic beliefs. Today, this is in particular the way of Islamic fundamentalists, including international terrorists.

But another idea is becoming more and more popular today: that it is possible to take natural, social and human indefiniteness under control (and even turn into definiteness) with the help of modern NBIC technologies (nano-, bio-, information and cognitive).

Genetics and genetic engineering allow “editing” the human genetic system. In the not far-off future it will be possible to “order” children to your liking: cleverer, more emotional, stronger than other children, with big musical talents, etc. There is a whole movement (with many scientists participating in it) the goal of which is “human enhancement”. Some go even further and think that it’s necessary to start designing a “post-human” creature that should replace humans living now. This “post-man” will be not only without a number of human flaws and imperfections but can become immortal in principle. Release from death is a millennia-old human dream. The ideas of “post-man” and “immortality” proceed from the fact that currently humans have an opportunity to experiment freely with their bodies, brain and psyche, they can recreate and create themselves and even infinitely prolong their lives.

The idea of conscious evolution management is also presented in connection with the idea of human designing. Until now, the evolution process was spontaneous and uncontrolled. At the same time, we are speaking not only about biological and social evolution but also about evolution of the whole nature, starting from the origin of atoms and then the first molecules (the so-called concept of “Global Evolution” worked out by many scientists, in particular academician N.N. Moiseev). Today, the idea that humans with the help of modern technologies based on research and development, can create such formations, which nature has not managed to create till now for certain reasons, is popular in some circles. This is called “exiting beyond natural limitations”. We are speaking not about going beyond the laws of nature (it’s impossible) but about a man performing as some space force basing on these laws, like a kind of space demiurge. This is going back to famous I.V. Michurin’s slogan (which was in keeping with the pathos of

socialist transformations in our country): “We can’t wait for favours from nature, our task is to take them from it”. It’s thought that the artificial can recreate or even replace everything given naturally. Nature will be artificially recreated according to a certain program.

It’s possible to control human behaviour from the outside in risky situations in the society of indefiniteness, when an individual is incapable of taking the right decision. It’s enough to send a signal to his gadget. Most people in the risk society can agree to such a control and management from the outside. Meanwhile, a very particular question is: in whose interests will this control be? This can be a force pursuing one’s own interests.

Division of “personal” and public space is burring more and more. A cell phone has now become a part of a man, it does not give a chance to be alone: calls and e-mail letters will be regularly received, and it’s necessary to answer them. Even if you switch your cell phone off for some time, inquiries will continue, and sooner or later you’ll have to respond.

And here is another idea: “smart house” or “the Internet of Things”. In the near future, things in such an imagined house will inform you themselves as to what you should do: buy certain food and put it in the refrigerator, call a doctor as your body requires treatment. And even better if these “smart things” order the food required for the fridge and call a doctor, without informing you, as they know better what you need. You won’t be the master of “smart” things, you’ll be fulfilling their orders. What autonomy of yours can be spoken about in this case?

In such cases an individual and the outside world acquire a new definiteness as spontaneously originating natural processes from this point of view can in principle be pushed out by artificial processes and a man can be turned into some sum of technologies, into a creature controlled by his own technological devices and controlled from the outside – by external to him forces.

However, this idea is really unfeasible. And that's for the best. As its bringing into life would have meant the end of humans.

The matter is that a man cannot turn into a sum of technologies. Today, it's clear that even in cases of natural phenomena we cannot always predict the course of some processes and the results of our affecting them – for example, when we are dealing with systems having a complex structure. And all the more so it refers to social processes. The most interesting thing is that origination and development of such phenomena in our life, which we especially appreciate as they are related to high human essences and values, are not programmed. Because of that such phenomena can't be controlled from the outside and managed. They are such phenomena like love, communication, dialogue, creative work, moral act. There is no “love technology” and there can't be. It's possible and important to apply all efforts to keep it, but love itself is not actions according to some rules and set program. All the more so acts in the name of love are not such actions – they may be absolutely reckless. It's possible to create the environment for a fruitful dialogue. But its value lies in the fact that its result is not known beforehand and can turn out unexpected for each one of its participants. It's impossible to manage the creative process. It's possible to create favourable conditions for it – social and interpersonal (a number of such conditions were revealed in research of sociology of knowledge and psychology of creativity). But creativity itself is discovery of what was unknown before. The dream of many philosophers about discovery of the “logic of creation” turned out unfeasible in principle (use of the so-called “heuristics” does not predetermine a creative process). There is no and can't be a technology for performing a moral act.

Had a man been able to become immortal and turned into a “post-man”, such fundamental values as courage, selflessness, love would have lost sense as they are tied with such actions, which suppose a possibility of death. If death loses its meaning, life loses its meaning as well.

So, an individual finds himself between two poles today. There are social and human indefiniteness, loss of identity, unpredictability, risk, fear of death from external threats on one of them. There are super-definiteness of the world and individual himself in case of loss of one's autonomy and consequently oneself on the other. In both cases it means death of an individual.

Meanwhile, getting into the new world of information, nano- and biotechnologies, an individual must preserve his subjective world and his autonomy. It means knowing how to take risky situations under control (including with the help of state-of-the-art technologies) to the extent it is possible to do, and at the same time be ready to find non-standard solutions where it's impossible to avoid risk. This also means that it's required to preserve those values that make a person human, and at the same time be not a slave but the master of any technologies.