# Lecture 7. Postmodernism and doubts in reality

***The emergence of non-classical rationality and the First Solvay Conference. Einstein, Bohr, Heisenberg. — World wars and radical projects of totalitarian states: how the myth served the law. — Achievements in science and technics: the first space flight and decryption of DNA. — How representations of power of science and technics changed. The “fear of technics” phenomenon: Heidegger, Scheler, Spengler, Canetti. Existentialism as a doctrine of man in a hostile world. — Postpositivism and postmodernism: the main concepts and approaches. “We have never been modern”: how is it possible to rethink all the achievements of humanity on the threshold of XXI century? Apocalypse or Brave new world? The phenomenon of dystopia. — Course conclusions.***

1. *The* ***classical******type*** *of rationality was dismissed by the* ***non-classical*** *one. Mainly it was connected with radical revision of the foundations of physics by the leading representatives of XXth century science —* ***Albert Einstein****,* ***Niels Bohr****,* ***Werner Heisenberg***

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**А. Einstein** (1879—1955) was a German-born theoretical physicist. He developed the general theory of relativity, one of the two pillars of modern physics (alongside quantum mechanics). Einstein is best known for his mass–energy equivalence formula *E* = *mc*2; he received the 1921 Nobel Prize in Physics for his "services to theoretical physics", in particular his discovery of the law of the photoelectric effect, a pivotal step in the evolution of quantum theory.

**N. Bohr** (1885—1962) was a Danish physicist who made foundational contributions to understanding atomic structure and quantum theory, for which he received the Nobel Prize in Physics in 1922. Bohr was also a philosopher and a promoter of scientific research.

**W. Heisenberg** (1901—1976) was a German theoretical physicist and one of the key pioneers of quantum mechanics. He published his work in 1925 in a breakthrough paper. In the subsequent series of papers with Max Born and Pascual Jordan, during the same year, this matrix formulation of quantum mechanics was substantially elaborated. In 1927 he published his uncertainty principle, upon which he built his philosophy and for which he is best known. Heisenberg was awarded the Nobel Prize in Physics for 1932 "for the creation of quantum mechanics".

1895 — Wilhelm Conrad Röntgen discovered X-rays.

1896 — Antoine Henri Becquerel discover evidence of radioactivity.

1900 — Max Planck coined in the term of quantum energy.

1905 — А. Einstein published three papers, among them *On the Electrodynamics of Moving Bodies.*

1911 — Marie Skłodowska Curie was awarded the Nobel Prize for her works on radioactivity. E. Rutherford demonstrated that there is a core in the center of atom.

1913 — N. Bohr offered a new model of hydrogen atom.

1915 — А. Wegener published his theory of continental drift.

1919 — А. Einstein published his papers on the general theory of relativity.

1923 ­— E. Hubble demonstrated the existence of the other galaxies besides ours.

1927 — G. Lemaître  proposed the theory of the expansion of the universe.

1928 — А. Fleming discovered that a special substance, penicillin, kills the bacteria.

1929 — E. Hubble demonstrated that galaxies remove from one another. The Big Bang theory receive its basis.

1953 — F. Crick and J. Watson discovered the DNA structure.

1957 — the first artificial satellite was orbited (USSR).

1961 — the first space flight of the man (USSR).

1969 — the first step of the man on Moon’s surface (USA).

It is a commonplace that the non-classical type of rationality provoked radical changes in the fields of philosophical and epistemological foundations of physics, the categories of necessity, contingency and causality had been strictly revised, as well as ratios of the whole and its parts. A new sense the category of research subject-matter had obtained, and it began to be studied as a dynamic process rather than the object equal to itself.

***NB!*** In ***classical science*** the picture of the world must have been the one of the studied object as such; in ***non-classical science*** the scientific description includes the instruments and equipment of the research as well as the very act of measuring. In other words, ***the universe is considered to be a net of the related phenomena and events*** in which the active part and involvement of the subject in the process of studying are emphasized. Any quality of this or that element of this net ***cannot be characterized in absolute terms*** but it depends on the qualities of the other elements.

1. *Two world wars questioned the very foundations of classical and non-classical rationality, science and humanities, as well as the notion of human reason. The mythologemes originated in the ideologu of totalitarian states made many projects of classical Modern civilization become radical, and this provoked severe reaction to it — from the protest social movements to epistemological anarchism.*

***Existentialism*** is a term applied to the work of certain late-XIXth- and XXth-century European philosophers who, despite profound doctrinal differences, shared the belief that philosophical thinking begins with the human subject—not merely the thinking subject, but the acting, feeling, living human individual. While the predominant value of existentialist thought is commonly acknowledged to be freedom, its primary virtue is authenticity. In the view of the existentialist, the individual's starting point is characterized by what has been called "the existential attitude", or a sense of disorientation, confusion, or dread in the face of an apparently meaningless or absurd world. Any existentialists have also regarded traditional systematic or academic philosophies, in both style and content, as too abstract and remote from concrete human experience

***Postpositivism*** is a metatheoretical stance that critiques and amends positivism. While positivists believe that the researcher and the researched person are independent of each other, postpositivists accept that theories, background, knowledge and values of the researcher can influence what is observed. However, like positivists, postpositivists pursue objectivity by recognizing the possible effects of biases

***Postmodernism***describes both an era and a broad movement that developed in the mid to late 20th century across philosophy, the arts, architecture, and criticism which marked a departure from modernism. While encompassing a broad range of ideas and projects, postmodernism is typically defined by an attitude of skepticism or distrust toward grand narratives, ideologies, and various tenets of Enlightenment rationality, including the existence of objective reality and absolute truth, as well as notions of rationality, human nature, and progress. Instead, it asserts that knowledge and truth are the product of unique systems of social, historical, or political discourse and interpretation, and are therefore contextual and constructed to varying degrees. Accordingly, postmodern thought is broadly characterized by tendencies to epistemological and moral relativism, pluralism, self-referentiality and irony.

1. *As the genre of utopia became popular in the period of Renaissance and Modern age, so the genre of dystopia appeared in the period amid two world wars. The main theme of these writings is pessimistic prognoses on the human existence in conditions of future totalitarian society, which controls their will and mind absolutely.*

The most famous writings of the genre are: *We* by **Е. Zamyatin** (1920), *Brave new world* by **A. Huxley** (1932), *Animal Farm* (1945) and *1984* (1949) by **G. Orwell**. They also mention here *1985* by **A. Burgess** (1978), *Lord of the Flies* by **W. Golding** (1954), *Planet of the Apes* by **Pierre Boulle** (1963), *Invitation to a Beheading* Вby **V. Nabokov** (1935), *Fahrenheit 451°* by **R. Bradbury** (1953) etc.

Анализ и критика социальной организации рационального общества потребления производится также и со стороны философов и футурологов. **Эрих Фромм** (1900—1980), **С. Лем** (1921—2006), **Э. Тоффлер** (1928—2016), **Д. Бэлл** (1919—2011), **Ж. Бодрийяр** (1929—2007), **Ю. Хабермас** (род. 1929) осмысляют важнейшие перспективы дальнейшего технологического прогресса в рамках глобального мира.

Philosophers and futurologist also developed the analysis and critique of the social organization of rational consumer society. E. Fromm, S. Lem, A. Toffler, D. Bell, J. Baudrillard, J. Habermas focused upon rethinking of the further technological progress perspectives in the frameworks of global world.

**Post-Script**

Albeit the obvious changes and developments in science, medicine, applied and industrial human activity, and space exploration, we cannot say that philosophy has changed its image comparing to the works of Plato and Aristotle, Bacon and Descartes, Kant and Hegel. Moreover, philosophy cannot claim for principle growth of knowledge and solvation of principle problems.

It does not however mean that philosophy should be abandoned in the present conditions, as “ballast”; on the contrary, it is such a discipline that has power to bring the investigators back to the absolute foundations of being and knowledge as well as to doubt in inherent progressivism and optimism in the positive knowledge.

*Philosophy is not a pleasant form of leisure with smart however mainly dead people. Philosophy is the keeper of human lifeworld*.

***Key figures***: А. Einstein, N. Bohr, W. Heisenberg, J.-P. Sartre, А. Camus, К. Jaspers, М. Foucault, J.-F. Lyotard, J. Deleuze, J. Derrida, К. Popper, Т. Kuhn, P. Feyerabend, J. Baudrillard, E. Fromm, E. Toffler, J. Habermas.

***Key words***: non-classical rationality, post-non-classical rationality, theory of relativity, utopia, dystopia, simulacrum, postindustrial (information) society, consumer society, research programmes, paradigm, epistemological anarchism.