SCIENCE – SOURCE FOR TECHNOCRACY AND POLITICAL POWER

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Abstract: *Technocracy represents a political and sociological orientation of use in the general interest of established elites based on which the leading role in society must be assigned to engineers, technicians and specialists from the various fields of science. In other words, technocracy would be a form of government whereby political decision-making power belongs to technicians and scientists called technocrats. Technocracy thus appears as a notion of maximum generalization that suggests that leadership positions at different organizational levels be entrusted on the basis of scientific competence criteria and not on political criteria. This notion has its origin in the Greek language where the word "tekhne" means skill and "kratos" - decision-making power, and William Henry Smith guaranteed that the 1929s would not have had catastrophic consequences if society had been led by a scientific elite.*

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1. Science – as a notion of maximum generality.

In a broad sense, science is a widely used word that suggests, as appropriate: a sphere of human activity whose function consists in acquiring and systematizing theoretical knowledge about everyday reality; all knowledge in a certain field; knowledge about something or the totality of knowledge in a subject of study; totality of knowledge accumulated by mankind over time.[1]

Of course, not every knowledge can acquire the status of science. Therefore, for those who study science as a human activity with a specific purpose, science is the systematic body of truthful knowledge about nature, society and thought, and the practical applications of science include the

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[1] Source: NODEX- 2002; DCR2 – 1997; DLRLC (1955-1975).

development of material production, the security and defense of the human being and social groups, the transformation of social relations, etc. As such, science differs radically from empirical knowledge in that it aims to study the laws that govern facts and on the basis of which scientific predictions can be made.

The knowledge related to a certain field of reality is combined into a science only when they are brought together, based on recognized principles and legalities, in an independent theory, within which the following elements are distinguished, as follows: factual material - result of observations and experiments; hypotheses - which can be confirmed or disproved; the results of the generalization of the factual material – expressed in notions, principles, laws and theories confirmed by practice; general theoretical interpretations – foundations of scientific results; the general conception of a certain sector of reality; own methodology of reality research.

Both science and art or practice attempt to reproduce and generalize objective reality. While science focuses on eliminating any element of subjectivity, art and practice reflect reality related to humans, and therefore human subjectivity is found as an imprint in any work of art and practical transposition of the laws of science.

The development of science was and is determined above all by the needs of existence, security, association, representation, etc., which are found around the needs demanded by material productions, as well as those specific to social practices. The progress of science is stimulated or inhibited by the organization of research, by the level of technique, as well as by the level of education. The general path of the development of science is that of passing from phenomenon to essence, going through different steps of depth.

Contemporary science is characterized by its development at an accelerated pace, by its progressive transformation into a direct force of production, science becoming a general criterion of competitiveness on the market. By employing science to solve the problems of the future, it began to appropriate management concepts such as: forecasting, planning, organizing, coordinating and motivating, making it the subject of future science, futurology. From this perspective, science does not predict the

future, but investigates possible transformations, with varying degrees of probability, ensuring the rational framework for putting it into operation.

With the involvement of science in the design of the future, science has become a basic component of the scientific and technical revolution, a complex process of accelerated development of contemporary science and technology, an important production force, shortening the distance between theory and practice as much as possible.

Theory and practice represent, in turn, broad philosophical categories. Theory, in a broad sense, represents a philosophical category that designates the conceptual reflection, with the help of abstractions, of objective reality, and practice suggests the application and verification in the field of the knowledge acquired in a certain field. Between theory and practice there is a dialectical unity, an obvious interaction, in the sense that theory has its source in the needs of practice, especially material production, materializing as a generalization of practice. At the same time, theory and practice are relatively independent, the independence from practice allows scientific theory to go beyond simple empirical knowledge, to develop laws of anticipatory and transformative influence on practice. In the narrow sense, the theory expresses the set of true propositions that describe and explain a certain field of activity specific to reality. The main functions of scientific theory are: explanation, prediction, systematization, cognitive-informational function, etc. Scientific theory represents a moment in the development of scientific knowledge and, closely related to the experiment, it confirms or develops the hypothesis of work and research, to which it gives certainty and generalization. The development of scientific theory is done by bringing it into line with newly discovered facts and empirical data that contradict old theories.

As theory, science appears as a set of principles that serve as a guide for practice, and as practice, science appears as field verification of knowledge acquired in a field. Practice is ultimately the starting point, the source of all knowledge, because man comes into contact with objective reality in the process of practice. As such, practice represents the fundamental driving force of knowledge and at the same time its goal, and

science provides quality added value to knowledge[2]. Consequently, science, along with theory and practice, is a broad concept, a source of knowledge for all areas of human activity.

Science – cause and effect of human development.

Now, at the beginning of the third millennium, science is no longer the concern of lone geniuses, but a deeply coordinated activity designed to define visions and strategies for well-defined goals. Development is the concept that fully subordinates science. The development of humanity is a planned process, to which science is fully committed. The practical use of nuclear energy, sending people to the moon, conquering outer space, diversifying food sources, generating new energy sources, etc. constitute directions of social development for which science has received concrete missions.

The vision and awareness of the great novelty products and phenomena of the last decades have become more and more accurate. Currently, there is a specialization in research methodology and in the representation of results, first in the descriptive and experimental sciences and then in the humanities and those of nature. The deepening knowledge of matter, physiology, energetics and genetics contributed to this, but which also gave rise to a fragmentation and diversification of the sciences due, mainly, to the mandatory mechanism to obtain the predicted results, as concrete and effective as possible. Biochemistry, bioenergetics, biotechnologies, nanotechnologies and other combinations constitute a broad process of fragmentation of the sciences, but which cannot depart from Aristotelian thinking about the whole and the part.

In social development, science is subject to moments of strict specialization that sometimes lead to the separation of the scientific whole into parts, but the reintegration of the components thus identified defines an independent field of knowledge of the parts to the whole, a higher category of science, but also of culture . If not many years ago one moved from the knowledge process to the technical one, now and in the future the transition is the opposite, from technique and practice to knowledge. For example, the

[2] Ideas from Didier Julia, Filosophy Dictionary (Larousse), Univers Enciclopedic Publishing House, Bucharest, 1996.

construction of space shuttles required the use of technical processes of great complexity, a true technology managed by experimental science. The implementation of science through technology has transformed and continues to transform society on multiple levels. For example, discoveries in the field of cybernetics, materials with special properties, etc. they made possible the huge leap in the field of communications, we are already talking about the progress of the information society.

Of course, technical and social progress depends on fundamental research in science and technology, scientific discoveries are what feed technical innovation, which in turn manifests itself through efficiency and effectiveness, by improving living conditions even for those at the bottom of the pyramid social. Science is making progress and thus can offer broad perspectives for future generations, an ever more complete understanding of the universe and a beneficial direction of the evolution of the human species.

Therefore, science is more and more imperatively engaged in the processes of finding solutions to the increasingly complex problems that plague society. Thus, biological sciences and technologies already produce and will produce in the future new achievements of human knowledge in the problems of health protection, food provision and environmental control, with implications on general relations in society regarding family structure, legislation and moral values .

The changes in the relationship between science and society are evident in nuclear physics, in virological medicine, in the management of the microscopic world, in the management of remote robotic therapies, in the mastery of hypersonic phenomena, in the integration of conscious and unconscious aspects, in the mastery of the virtual world, etc. For example, nuclear physics was indexed by its decisive contribution to the manufacture of nuclear bombs, but had to be revised by its commitment to the generation of new sources of electricity, now already a third of Europe's electricity is obtained by nuclear energy. Scientists discuss in their circles the new course of scientific activities in tangent with the principles of utility, efficiency and effectiveness. But what is happening at the social level is no longer a commitment of individuals, but a political decision, pursuing goals that are no longer fully aware of the democratic forces. For the scientist there is a

double challenge – intellectual and technical – which requires the courage to face the risk of failure, but also the ambition to respond to the challenge wherever it comes. In this way, human society asks science to expand the limits of knowledge, as a fundamental law of solving problems not yet solved, but whose solution gives society new degrees of freedom and security. That is why, at the current stage, the call to science is a priority of the decision-making bodies for shaping the environment, so that it offers better and better conditions to human society.

In general, human society needs in its development a responsible management that, by involving science in all spheres of activity, directs them on the paths of progress and competitiveness. For the Romanian society, the country's management was primarily concerned with the component of defining and taking responsibility for the past. As such, Romanian science and scientific research were neglected. Along with these, the Romanian education also started to stop performing. Thus, if the futurologist appreciated by all humanity, Alvin Tofler, believes that "The illiterate of the future will no longer be the one who does not know how to read, but the one who does not know how to understand", we are obliged to note that "the statistical figures of recent years clearly show that Romanian education is collapsing: a third of young people aged 18-24 do not manage to graduate from gymnasium (41% in rural localities), the functional illiteracy rate of those who manage to graduate from high school is over 40% (the highest in the EU), but even though it has the most inefficient basic education cycle, Romania allocates more and more money to the university system (above the European average). In a country where there are only 6000 schools and about 160 bookstores, 42% of Romanians do not read even a single book a year, 69% never borrow books from the library, and 61% never access the digital archives of libraries or download books from the Internet. According to the 2017 Cultural Consumption Barometer, carried out by the National Institute for Cultural Research and Training and subtitled "Culture on the threshold of the Centenary of the Great Union: identity, heritage and cultural practices", only 4% of Romanians pick up a book every day, only 9% read once a month and only 6.8% go to the library only once a year to borrow books. Practically, almost half of the young people who go through the pre-university system do not manage to understand and comment on a read text, nor do they know what the benefits

of reading could be, so that once they finish secondary school, the overwhelming majority never pick up a book again , bought or borrowed on your own account. Even more painful, "In this year's tenure exam (2022 s.n.), 4753 teachers didn't even get a grade 5"[3]. Of course, the quality of management in the success of the action is decisive, but the absence of a clear strategy to push forward Romanian science and scientific research, as Nicolae Titulescu argued, left these sectors of activity prey to unpredictable but damaging events.

Science – source of technocracy and political power.

Technocracy and political power also represent notions deeply embedded in the everyday communication system, having the meaning, extremely diluted, of leadership, management, administration, etc. The basic dictionaries enshrine technocracy as a sociological and political orientation, to be used in the general interest of established elites, according to which the leading role in society must be assigned to engineers, technicians and specialists in the various fields of science. More concretely, technocracy is a form of government in which decision-making power, at the executive level, belongs to technicians and scientists, called technocrats. And technocracy thus appears to us as a word of maximum generalization, which suggests that leadership positions at certain organizational levels be entrusted based on criteria of scientific competence, not on political criteria. Etymologically, the notion of technocracy originates in the Greek language, where the word tekhne means skill and kratos, decision-making power, and the use of the term technocracy in a political context seems to belong to William Henry Smith, an American engineer, who guaranteed that the years 1929 in the USA would not have had the catastrophic social consequences if the society had been led by a scientific elite.[4]

In turn, political power is a power exercised in society or groups of people. The exercise of political power is normally done through political means. Accordingly, political means are means by which individuals or groups will, or succeed in dominating others in society, define and seek to

[3] From Paul Balogh, „Porții mici și gustoase“, article, Dilema file, no. 956, p.10.

[4] Widely, Wikipedia, free enciclopedy and Didier Julia, Filosophy Dictionary (Larousse), Univers Enciclopedic Publishing House, Bucharest, 1996.

achieve their predetermined objectives, goals and particular interests, even if they face some form of opposition or resistance. The phrase in question mainly refers to the sources, means and relations of dominance, control and subordination as they operate in specific social processes and situations.[5]

In essence, technocracy and political power must be viewed systemically: political power ensures the evolution of technocracy, and technocracy watches over political power. That is why, in an eventual systematization of the themes that, over time, have been the subject of lively confrontations and not only theoretical debates, democracy has placed itself, indisputably, at the forefront. Each individual, each current of thought, each political regime must relate to the issue of democracy, because democracy, in its particular way of realization, also expresses the vision of the nature of technocracy and political power. Although most points of view embrace the preeminence of democracy, attacks on democracy are inspired by all kinds of arguments, mainly resulting from the exercise of power, from the alleged lack of efficiency and effectiveness of democratic regimes, to the idea of the monopolization of power by an unworthy elite, which exercises its power over increasingly impoverished and falsely schooled social masses. Indisputably, however, the field that has recently provided solid arguments for these attacks is the impact of the scientific and technical revolution on the management processes of society.The almost unanimous emphasis on the perennial values of democracy does not absolve democratic regimes of a series of dysfunctions that call into question the correlation of political messages of power with obvious demagogic tendencies. Some technocratic elements mercilessly criticize liberal democracy, especially for its moral lapses, as well as for the continued impoverishment of the masses. People of action began to be replaced by people of empty promises, and to the latter a real literature of personal success began to be devoted. It all seems to have started with Dale Carnegie's fame in the 1930s through his public speaking course and book How to Win Friends and Influence People, which was a striking symbol of the shift from what history cultural Warren Susman called "a culture of character" to "a culture of personality". If in the past Americans praised people who were serious, disciplined and honorable, the new ideal that was born was that of having a good "personality"... The idea

[5] *Ibidem*.

that emerged was that only people with a sales personality would do well in "the real world"… students were urged to "Speak with conviction. Even when you believe in something only 50%, say it as if you believe in it 100%".[6] Such encouragement led to the emergence of a veritable army of "political pundits who provided predictions on TV shows and news channels, who were found to be much weaker forecasters than ordinary people - well, in fact, the more famous or the more vocal the pandits in question were, the poorer their record."[7]

These thugs turn themselves into politicians, worthless technocrats in all fields of activity, education and training specialists, political, economic and national security doctrinaires, promising real miracles as long as they ask for the votes of the masses and leave behind a desert of unfulfillment, for which others are guilty.

For Romania, the concentration of responsibilities in education, science and research led to the affirmation of a recognized defense industry, which had transformed the country into a regional and international seller. Since the science and technocracy of the field have been ignored, the competitive ability of the defense industry has visibly diminished. That is why there are numerous public positions that try to hold the political power and the mass of technocrats responsible for the removal from their own production of many technical combat components of Romanian production. Thus, it is considered that "The first Romanian tank has its own, downright heroic story, taking into account that in such a colossus more than 75,000 parts are assembled and that it was brought, in a few years, to modern levels at that time of the TR-850 tank, still in possession of the few remaining armored subunits. The IAR-93 aircraft, which equipped two aviation regiments, was on its way to becoming one of the best performing aircraft in its class, but just after 1989, 75 aircraft that equipped the regiment were cut in a murderous fury of aviation from Craiova and the one from Ianca. …But the MiG 29 squadron also disappeared or was donated to others, just as they disappeared, cut with the welding machine or thrown in the trash, and the

[6] From Tom Butler-Bowdon, Psihologie, Litera Publishing House, Bucharest, 2019, pp. 104-105.

[7] Philip Tedlock, Expert Political Judgement, 2005, apud Butler-Bowdon, Psihologie, Litera Publishing House, Bucharest, 2019, p. 106.

howitzers of 122 and the two tank divisions and the tanks that equipped the training centers for tank crews from Roman and Buziaș and many, many others."[8]

During the cold war, Romania was part of one treaty, but it was a state that sold military equipment everywhere, and now, Romania is part of the other treaty, but it destroyed its own defense industry, becoming an impoverished buyer of equipment imported military. It seems that the political power and the adjacent technocracy have enough reasons to believe that the country can strengthen its security, sovereignty and independence by purchasing tanks, armored cars, artillery pieces, even airplanes, from imports.

When political power is supported by scientific foundations and principles strengthened by morality it creates its own support in technocracy. When such qualities are deficient, political power dissolves its technocratic base and makes decisions that undoubtedly lead to the weakening of defense power, to impoverishment and dependence. While for countries where science is stimulated by political power, the technocrat, as a specialist, was and "is in fashion today, without knowing him personally, you hear about him every time, expressing his plans, his ideas, his doctrines. He is the one who leads the activity in enterprises, indicates what must be done; there is no sector of national life where he does not exercise his power..."[9]

Political power dominated by scientific principles rests on technocrats. Where politicians tend to become "pundits", technocrats are perceived as animated by scientific competence; therefore, the qualities of technocrats are perceived to be at the opposite of those of politicians: if the politician is talkative and declarative, the technocrat appears taciturn and closed in on himself; if the politician is touched by corruption, the technocrat is portrayed as embodying the honest citizen's temptation toward order, rational calculation, and increased efficiency; if the politician also takes into account the post-mandate opportunity options, the technocrat is presented as subject only to the harsh laws of progress, etc. Thus, political

[8] From Gheorghe Văduva, Somnul de moarte al unei rațiuni în metastază, articleNațiunea, 30 november2020.
[9] Quote by Boisdè Raymond, Technocratie et democratie, Paris, Plon, 1964, p.31.

power and technocracy support each other or deconstruct each other, but the initiative always belongs to political power.

Conclusions.

Political power and technocracy constitute the basic elements of the consolidation of social success, especially when both parties are interested in the fundamentals of the science of the moment. The decision-making right and the substantiation of the decision-making process are elements that give content to business management, but also to country management. But when science and scientific research are peripheral activities of political power, technocracy destructures and decisions become increasingly pointless, generating impoverishment and multiple dependencies. The drying up of scientific sources in support of power, of any kind, just like in agriculture, any field of activity is seen to be reduced more and more, it faces a specific desertification, towards the increase of social dissatisfaction.

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