### Artículo de investigación Elitology of education and challenges of the 21st century

Elitología de la educación y retos del siglo XXI Elitología da educação e desafios do século XXI

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Written by: Karabushchenko P. L. (Corresponding Author)<sup>100</sup> Ponedelkov A. V.<sup>101</sup> Vorontsov S. A.<sup>102</sup> Danilyan O. G.<sup>103</sup> Vronskaya M. V.<sup>104</sup>

### Abstract

The object of this research is the elitology of education which represents a new character and a new meaning of elite selection according to the principle of high-quality professional knowledge. The article analyzes the key categories, approaches and directions, as well as the problems of changing attitudes towards elites and the elite in the context of the upcoming information society. In turn, the subject of this work is the challenges that the education system will have to face in the conditions of early postindustrial society. In the content of the work, the authors substantiate that the challenges of the 21st century will lead to a change not only in the system of elite (qualitative) training of specialists but also affect the very study of elites, making it more humanitarian. Nanotechnologies, the development of which has now become particularly accelerated and relevant should play a special role in this process.

**Keywords:** elites, personality, nanotechnologies, post-industrialism, globalization, education, challenges of the time, quality, values.

#### Resumen

El objetivo de esta investigación es la elitología de la educación, que representa un nuevo carácter y un nuevo significado de la selección de élite de acuerdo con el principio de conocimiento profesional de alta calidad. El artículo analiza las categorías clave, los enfoques y las direcciones, así como los problemas de cambiar las actitudes hacia las elites y la élite en el contexto de la próxima sociedad de la información. A su vez, el tema de este trabajo son los desafíos que el sistema educativo tendrá que enfrentar en las condiciones de la sociedad postindustrial temprana. En el contenido del trabajo, los autores corroboran que los desafíos del siglo XXI conducirán a un cambio no solo en el sistema de entrenamiento de élite (cualitativo) de especialistas, sino que también afectarán el estudio mismo de las élites, haciéndolo más humanitario. Las nanotecnologías, cuyo desarrollo ahora se ha acelerado y es especialmente relevante, deben desempeñar un papel especial en este proceso.

Palabras	claves:	Elites,	personalidad,
nanotecnologías,		post-industrialismo,	

<sup>&</sup>lt;sup>100</sup> Doctor of Philosophy, Professor of the Department of Political Science and International Relations. Astrakhan State University. 414056, Astrakhan, 20a Tatishcheva Street. Email: Pavel\_karabushenko@mail.ru

<sup>&</sup>lt;sup>101</sup> Doctor of Political Sciences, Professor; Merited Science Worker of the Russian Federation, the Head of the Department of Political Sciences and Ethno-Politics of the President's Russian Academy of National Economy and Civil Service, Moscow, 119571, Russia. Email: ponedelkov@skags.ru

<sup>&</sup>lt;sup>102</sup> Doctor of Law, Professor of the Department of Procedural Law of the President's Russian Academy of National Economy and Civil Service, Moscow, 119571, Russia. Email: raven\_serg@mail.ru

<sup>&</sup>lt;sup>103</sup> Professor, Head of the Philosophy department, Yaroslav Mudryi National Law University, Kharkiv, Ukraine. Address: 61024, 77 Pushkinskaya St., Kharkiv, Ukraine, Email:odana@i.ua

<sup>&</sup>lt;sup>104</sup> PhD in Law, Associate Professor, Associate Professor of the Department of Civil Law Disciplines of the Vladivostok State University of Economics and Services, Email: m.vronskaya@mail.ru



globalización, educación, desafíos del tiempo, calidad, valores.

### Resumo

O objetivo desta pesquisa é a elitologia da educação, que representa um novo caráter e um novo significado de seleção de elite de acordo com o princípio do conhecimento profissional de alta qualidade. O artigo analisa as principais categorias, abordagens e direções, bem como os problemas de mudança de atitudes em relação às elites e à elite no contexto da próxima sociedade da informação. Por sua vez, o tema deste trabalho são os desafios que o sistema educacional terá que enfrentar nas condições da primeira sociedade pós-industrial. O conteúdo do trabalho, os autores confirmam que os desafios do século XXI vai levar a uma mudança não só no sistema de treinamento de elite especialistas (qualitativos), mas também afetam o mesmo estudo das elites, tornando-o mais humano. As nanotecnologias, cujo desenvolvimento agora se acelerou e é especialmente relevante, devem desempenhar um papel especial nesse processo.

**Palavras-chave:** Elites, personalidade, nanotecnologias, pós-industrialismo, globalização, educação, desafios do tempo, qualidade, valores.

### Introduction

Modern education is no longer struggling for quantity (universal literacy) but for quality. The problem of mass education was acutely faced by mass education throughout the 20th century, which became the pinnacle of industrialism (mass production and mass consumption) and the mass society. The realities of the 21st century are such that now everyone is talking about the change of industrialism by the information (or postindustrial) society, about the crisis of democracy and that, unlike the 20th century as the century of "mass uprising" (OrtegayGasset, 1989), the present one will be an era of "uprising of elites" (Lasch, 1996). Under these conditions, the system of education will have to undergo significant changes and, as it seems to us, they will be connected with the fact that society will need elite (i.e., high-class) specialists, the professionals of the highest level. By virtue of this, there will be an inevitabe elitization and the liberalization of education, the transfer of the former elite system (education for the rich) to a meritocratic new principle - education for the gifted. In the information society, the meritocratic principle should finally supplant the oligarchic principle, when a quality education directly depended on the money supply of the student's parents, and not on his personal abilities.

Changes in the education system will affect not only one pedagogical science but the interests, first of all, of all humanitarian and social areas. That is why an interdisciplinary approach to the analysis of post-industrial trends in the system of vocational education is needed. It is high-quality education that becomes the main element in the selection of elites, and the requirement of continuous education is already the norm of their professional activity. On this basis, the object of this work is the elitology of education which explains to us the new character and new meaning of selection of elites according to the principle of high-quality professional knowledge, and the subject is the challenges that the education system will have to face in the conditions of the early post-industrial society. Already today, the humanities should take care of what their format will be in these new conditions and what problems they will have to solve.

#### The Main Approaches and Areas

Before we talk about the real criteria for elitizing an educational institution and an individual or a group of individuals, we should clarify what the elite and elitology (the science that studies its quality) will be in the 21st century; what basic parameters of an information society will be; and which research areas are likely to receive the highest priority and the highest impact on public minds and individuals. Answers to these questions will actually lead us to the analysis of the challenges of the 21st century. To begin with, we will try to clarify the essence and significance of elitology, since we are talking about elite education, and it is important for us to know the features of the scientific position on which we take in our research.

## - Elitology – the science of creativity, culture and philosophy of the elites:

Elitology is a complex science that concerns the development of elite and elitism, in all its diversity, the manifestation of the phenomenon of selectness ("better"). The central problem facing elitology is the problem of researching creativity, culture and philosophy of elites. All these categories lead us to the manifestation of the essence of the most important (central) category - the category of the spirit. Therefore, elitology begins with the ontology of elites, and ends with the elitology of the spirit. For the elites are the leaders who, in terms of their intelligence and strength of mind, would be able to mobilize society to fulfill strategic and tactical plans (Ratner and Ratner, 2004). If elitology is not a science of creativity, culture, and the philosophy of being selected ("best"), then it will never be able to give an intelligible and satisfactory answer to the question "what is elite and elitism"?

When the subject of elitology is exclusively one "elite" (form), then the research itself has most often a formal character. But it is worthwhile for elitology to come to clarifying the essence of "elitism" (content), as we immediately fall from the field of formal knowledge into the sphere of concrete knowledge, since we are directly confronted not with the forms (material manifestations) but with the ideas. When the elite exists without elitism, and political science together with sociology turn out to be unable to rationally explain why this happens with frightening constancy, then it is time for philosophy itself to take on this explanation. Philosophy is much broader in scope and much deeper than sociological and political research (Hayes, 2013).

The elite should always have its own idea, otherwise its existence would be meaningless. Only an anthropological elitology can find and define this idea, because each elite is a group of individuals endowed with some elite qualities, or the ones imitating them. Elitology should (simply must) understand not only the reality of a particular elite but also numerous imitations for it, as well as the mythology that the elite creates about itself or that is created by mass consciousness about it. As a science, elitology as a research object has a clearly outwardly marked phenomenon but with very blurred semantic boundaries. This is both its "plus" and "minus". The paradox of the elite is that everyone is extremely sensitive to understand what it is, but no one can adequately explain this phenomenon from a rational point of view. Elitology is precisely designed to deal with this rational interpretation. And the farther, the more humanity will need for objective knowledge of this subject (Avdokushin et al, 2015).

But without the philosophy, cultural studies and the psychology of creativity, elitology itself may not be in the future. If it slows down its development of only the analysis of the sociopolitical being of the elites, then over time it can turn into applied research, and not science. That is why we focus our attention on the need to develop anthropological elitology which has now received the least development in comparison with the sociopolitical elitology. But after all, these two sections of the big elitology should, in theory, develop synchronously, helping each other in their research.

The problem of personality should be the main problem of all elitological thought. That is why it is so important for modern elitology to develop a new theory of personality, to create a new philosophy of personality (neopersonalism or the elitology of personality). The elitology of personality will be the pinnacle of all elitological thought, if all the efforts of all the humanities in it converge. Psychology (personalism) is the closest to the philosophy of personality.

The psychology of elites is "deep elitology," since its main goal is to decipher the personality code of the subject of elites. Neither sociology, nor political science cope with this task without psychology. Such a position brings psychological elitology closer to its philosophical concept (Karabushchenko, 2006). At the same time, it is important to note the change of emphasis in determining the basic categories of elitology themselves. In relation to a person, the term "elite" should be used very carefully (delicately) by constantly collating it with ethics.

Elitology tries to calculate the elite mathematically, but most often it (the science) slips on the subjective swamp of particular cases of elite practices. Therefore, at present, subjective knowledge about the subjective and objective being of the elite prevails in elitology.



The objective knowledge of elitology about the elite is only beginning to emerge from the still scattered studies of this phenomenon.

If we proceed from the semantic content of the term "elite", then these are the best among the best and among the best of everything. But the question arises: what is "the best"? This is where the difficulties appear. It turns out that no one is definitely able to determine this very "best". For Plato, "the best" is a blessing and if we proceed from this, then everything hierarchically stretches towards it. At the same time, this very category should be understood primarily from the ethical and axiological side and in every way should be protected from invading its meaning of utilitarian and nihilistic assessments.

Why is the elite necessarily the best ones or the best? Because the best is a quality which has a sign of domination over quantity and, therefore, occupies higher positions in the hierarchy of values. It is by quality that we appreciate a particular thing, an idea, or person at their value. It is quality that we use to determine their elitism or non-elitism. But every definition is preceded by our choice (as an act of freedom of conscience of our spirit). We choose (select) the best because it is superior to everything else in its quality. And "the best" (according to philosophy) is Truth, for what can be better than Truth?!

The term "elite" is a core concept. For the political elite, the main criterion and basic value is power, for the intellectual elite - knowledge, for the religious elite - holiness, for the elite of art - beauty, and for business elite - money. If a person masters these categories better than others, then he is an elite in that particular sphere. But one cannot be "the best" in everything (somewhere better, somewhere worse). There should be no monopoly on the elite. Even elitology does not have such a monopoly, since, irrespective of it, a number of other sciences are independently engaged in the same problem. The concept of "elite" should not be considered in the "the elite-the masses" dichotomy (as the classical Western theories of the elites propose to do this), but in the triad of the "the masses-the elite-the leader" (as suggested by our domestic elitological science). In the latter case, the range of elitological research becomes much wider and more voluminous than when it comes directly to the elite alone.

In the ordinary view, the elite are those who own elite things. But from the point of view of elitology, the elite must be those who produce by themselves an elite quality. Therefore, there is "the elite of consumers" and "the elite of producers". The first enjoy the fruits of the second. In the history there are cases when consumers had such real power that they did not allow the producers themselves to use their own works. "The elite of consumers" is a social elite. It is the elite of social egoism and parasitic attitude. In the past, it was the clan aristocracy ("blood elite"), now it's a social-political beau monde ("the elite of wealth"), all kinds of "VIPs", glamorous individuals of "idle professions". "The elite of producers" is the elite of talent, the intellectual elite, meritocracy ("the elite of knowledge"), the aristocracy of the spirit. The basic value for it is the presence of any talent and its creative implementation. Such elite is manifested mainly in its work - in the creation of a new elite quality.

"The elite of consumers" has always parasitized on "the elite of producers". The latter, engaged in constructive creation of a new one, often allowed violence from consumers, since it was always in a social and temporal time pressure (it sorely lacked the resources and time to consume the fruits of its own labor, as well as how creativity required to mobilize all the efforts, leaving neither strength nor time for other activities). "The elites of consumers" proved their elitism by concentrating in their hands all possible material wealth – money, immovable property, works of art, political power. "The elites of producers" consolidated their elitism due to the fact that they produced all new spiritual values and therefore turned out to be especially socially vulnerable. But "the elite of consumers" was even more vulnerable – it was constantly tormented by a demon of lack of spirituality and idleness. It was on it, moreover, that the curse of social inequality and slavery hung, which did not contribute to the growth of its socio-cultural authority. For "the consumers", the form (status, label, packaging) was always important, for "the producers" - the content (quality, idea, ideal). These are essentially two different types of elites - those who parasitize the achievements of humanity, and those who produce these achievements. "The elite of parasites" is a historical dead end of anthropogenesis. It has no future. The future belongs to the elite of producers, the aristocracy of the spirit.

### **Key Terms and Categories**

The essence of the term "elite" can also be revealed through the analysis of its derivatives. In this regard, we have the right to build a whole semantic terminological chain: the elite – elicity – elitization – elitism – elite.

- The elite: (form) is an external expression of elicity and elitism: it is a social status (socialization of an individual), indicating the objective side of the realization of elicity and the achievement of elitism. The elite is a quality that, through its dominance, has been gained by hierarchical superiority. The elite is, first of all, a personality, and then, a status. The status must be confirmed, i.e. it must be legitimate.

- **Elicity:** (content) is the intellectual and moral quality of a person; it is the sum of personal merits having found their meaning (idea) and having the volitional potential to express this spiritual superiority in the process of elitizing the personality.

- Elitization: (process) is the formation of the elite qualities of a person or of any social structure, as a result of which the main feature of the elite arises – its eliticity. "Elitization" is represented most often as a process of self-education of an individuality and a gradual ascent to the rank of a unique personality. The essence and significance of elitization is revealed in the concepts, such as creativeness, wisdom, neopersonalism, self-actualization, socialization, creativity.

- Elitist: (evaluation, recognition) – the concept is primarily axiological in nature: it is an external assessment (recognition) of the quality of elite Idea, Person, Event or Thing.

- **Elite:** (the result of an activity; a product produced by an elite) is a word or action (deed), or some material product produced by an elite and considered to be a sign of its elite activity and confirmation of its elite status. Elite is a recognized quality, having undisputed superiority, the product of the labor of eliticity, thanks to which it receives an assessment of elitist and by status elevates its creator to the elite.

It is clear that these categories are of some conditional nature and can be refined as the development of elitological research. But each new clarification should proceed from the fact that the elite as a phenomenon is a living and creative phenomenon that cannot be put into the crusty bed of any one theory or system. As a phenomenon, the elite will always be more than what we can say about it at all. Therefore, elitological research is endless, as well as the very process of elitizing our spirit is endless. But at the same time, they should be subordinated (always and without fail) to "the principle of frugality", better known as "Ockham's Razor": "One should not say more until it is necessary" or "What can be explained though the least should not be expressed by means of the most" It is this principle by which the elitology of education is guided when it analyzes a new type of elite (Berezhnova et al, 1998).

Above, we have already said that the postindustrial or information society will require a person to master high practical and scientific technologies which will automatically introduce the need for restructuring our entire consciousness and reorienting the education system from the mass (secondary) school to elitist one, forming the basis of elitist consciousness (elitist thinking and commitment to elitist cultural values). Already today we are witnessing an increase in the quality of education and there is no need to be a prophet here in order to see how these processes will develop in the future.

Already today a large-scale elitization of the educational process is taking place and many higher educational institutions are forced to pay more attention to this process in order to maintain their high status. Without the elitization of the educational process, no higher education institution can survive in the 21st century. If the heads of modern universities do not understand this, then, according to A. Toynbee, they will be doomed to a historic "way out", since they could not adequately formulate a response to the "challenge of their era".

But the elitology of post-industrialism will also have its own characteristics: first of all, it will not be political elitology, and its main subject of research will not be political elites (as we are observing now) but elitology will "humanize" on the problems of anthropology of elites, i.e. the proportion of elitology of education, the psychology of elites, neo-personalism and elitist culture will increase.



# The Main Problems and Contradictions of Education in 21st Century

One of the key realities of the 21st century should be the change of so-called industrialism. post-industrial or information society. If nothing prevents it, then Western civilization will enter the initial stage of post-industrialism already this hundred-year anniversary. The growth rate of the quality of material and information production and the number of scientific publications on this topic increasing in geometric progression witness this. Intellectuals intensively prepare for the arrival of post-industrialism and create the necessary information space for this purpose.

In order to understand what post-industrialism is, it should also be described, as Marx described capitalism and industrialism in his famous work "Capital". The oncoming post-industrialism demands of us something like this. Let's try to imagine the scale of the accomplishment to be ahead.

The present epoch creates a kind of new "Bible" of post-Indus-Creativeism, or rather, to say, writes the new "Capital", justifying the conditions for the reality of the information society to come into our reality. The first two chapters of "The Capital of Post-Industrialism" were written in the middle of the 20th century by M. Young and D. Bell: The first chapter is titled "The Utopia of the Post-Industrial Society", the Second - "The Theory of Primary Accumulation of the Post-Industrial Capital" (Bell, 1999). The third chapter of this book can be titled: "Systematic Outline of the Basic Principles" and it already belongs to the composite author (Inozemtsev, 2000). We should now expect an exposition of the final part of this work which would have an analytical conclusion about what nevertheless represents post-industrialism in its real form and what is its historical purpose. Who will do it? The question for today and the hour remains open. We can only assume that it will not be any single work of one author, but many works of different authors. We have the right now to formulate several theses relating to these conclusions. All of them can be reduced to a statement of the following principles:

In the field of public relations. A change of ownership will occur - private ownership of the means of production will yield to the dominant positions of personal property; the principles of civil liberties will be pushed to the sidelines, letting the freedom and dignity of the individual being ahead.

In the field of political organization. The main conclusion of all post-industrial theories is that the traditional political systems will be replaced by meritocratic ones. Just as in their time, democratic principles in politics and political science proposed new ways of recruiting the ruling elites (not through a client-based, feudal system of appointment on the principle of personal loyalty to the monarch but via open and popular elections), and meritocratism will bring a completely new look at who and how should rule in society. This will inevitably lead to a change in the democratic principles of recruiting the ruling elites by meritocratic (aristocratic) criteria of their recruitment.

In the cultural sphere. The proportion of elite education will increase, as education cultivates high scientific technologies. Replacement of the dominants of the values of mass culture by the values of elitist culture.

In the scientific field. Here, one should first of all expect an increase in the number of research projects in the field of elitology and related disciplines. There is a serious need to move from approximate assessments of elites and eliticity to accurate scientific measurements.

The domination of knowledge or meritocracy in all spheres of social and cultural life of the elite will inevitably entail the intensification of the socalled living pace of the so-called intellectuals, the activities and decision-making of whom too much will now depend on. With the departure of the industrial society into the past, many social and political institutions which are now almost considered to be the basis of the contemporary social and political structure should become the rudiments of history.

The elitology of post-industrialism is no longer a theoretical pluralism that is not only "the classical theories of the elites" that agree with each other, but a complex science with an already developed methodological system and an already established conceptual apparatus. In the system of this science, each of the previously emerging theories, in accordance with "the contribution" made by it to "the common cause", has its place strictly reserved for it. Post-historicism is thought to many today precisely as the rule of meritocracy, which inevitably generates the aristocratic culture and the aristocracy of the spirit in its progressive development (Hartmann, 2008). The above changes cannot but leave their mark for the very man. The growing demand of a person as a person and the elitization of the education system will inevitably entail a change in anthropological domination - the priority of individual freedom will come to the first place which will eclipse the civil freedoms that have already been achieved in the age of industrialism. The anthropological metamorphosis will entail an upheaval in philosophy - the classic and somewhat outdated personalism will be replaced by neopersonalism (hierarchical or elitological personalism), which will put the need for full study of the elite personality type on the agenda.

The general elitology (including the political one) marks the process of increasing interest in the problem of personality, as a consequence, the emergence of a new type of personalism oriented towards comprehending the nature of an outstanding personality, i.e. the personality in which the maximum development was the elitization of process of the spirit. Neopersonalism through the process of elitist education goes to the analysis of the essence of creating an elitist culture. Its main research subject is creativity which leads to the elitization of a personal qualities of man. In other words, neopersonalism is concerned with how a person's natural abilities develop within it to the level of his personal merits.

# Elite Education of the Epoch of Nanotechnologies

If, according to N.A. Berdyaev and H. Ortegeand-Gasset of the 20th century was the "century of the revolt of the masses" (OrtegayGasset, 1989), then the 21st century is likely to become the century of "the revolt of the elites" (Lasch, 1996). But "the revolt" is most likely to be of a cultural and humanistic character rather than social-political one. And it will primarily concern the education and science systems, which in the conditions of the information society will have acquired a slightly different status than before. According to the theory of post-industrialism (Bell, 1999), not "the elite of wealth and blood" but "the elite of knowledge" will become the hegemon of the information society. Creating a meritocracy is possible only in the system of high-quality education. Therefore, in order for this change of elites to take place in the world, it is necessary to replace the closed type of elite education (education for the rich) by the open type of elite education (education for all talented people).

In such conditions, eliticity will mean not so much the social status of a person, as a certain quality of his spirit (the so-called "human capital"). Quality can only be achieved through a specific education system. The era of new elite education will come. This formation is not for the already existing and self-reproducing elite ("closed type"), but education, during which a new intellectual elite emerges, regardless of its previous social status ("open type"). Such elite education is of high quality according to the system of knowledge it provides, and not according to payment for the services rendered. In this type of elite education in the first place are exactly the knowledge, not money. And a similar approach in understanding the essence of elite education just corresponds to the basic principles of the information society of the 21st century. "The revolt of elites," in our opinion, should begin with the restoration of the prestige of an open elite entity. This is indicated by many factors, in particular, the increasing requirements for the quality of higher education of persons engaged in planning and leadership in the field of political, social and economic relations.

In the conditions of the information society, elite education should be open, i.e. accessible to all who elitize their spirit exclusively with the help of their own spiritual qualities, and not at the expense of their parents' thick wallet. The society and the state of the future will be primarily interested in the development of this very type of elite education and in the emergence of this very type of elite. The closed type of elite education and the elite, based on the advantage of exclusively one social status, will be considered a bad form, which is already observed in our time.

We pointed out the prospects for the development of elite education in Russia and in the world in the first monograph on this topic (Berezhnova, 1998), in which they formulated the "pro et contra" problem under consideration. Over the past time, such issues have not diminished, and the topic of elite education has only actualized. In particular, they added the topic of the influence of high technologies on educational structures and the very training of elite personnel.



Currently, NT is recognized as the science of the future, which has a tremendous potential and unlimited possibilities (Balabanov, 2009). In order for the scientific community to adequately perceive new nanoideas, of course, they need to be popularized and widely disseminated. But nanoscience will remain esoteric knowledge (knowledge for the initiates), if it continues to develop exclusively within the scope of technical and natural science disciplines. In order for NT "to seize a strong hold on the scientific masses", it is necessary for the Humanities to be connected to the process of cognition of NT. this happens, nanotechnology Until will constantly face difficulties of both ethical and ideological nature. The Humanities have shown little interest in this scientific direction so far, but time will show how harmful this delay can be. Lack of humanitarian knowledge in the field of scientific and technological science increases the gap between humanitarian and natural-technical knowledge, which does not contribute to the adequate development of a single scientific space. Moreover, the West has already begun the process of merging science and higher education in advancing nanoideas (OrtegayGasset, 1989; Ratner and Ratner, 2004; Hartmann, 2008; Vorontsov et al, 2017).

Western scholars have noted that "in recent years nanotechnology has become very popular in academic circles, as well as in higher education institutions, which can be explained by the sudden need for skilled personnel. Along with specially created and extra training courses, new textbooks and training or staff development programs are being created urgently. In higher education institutions in Germany and other developed countries, a whole series of new training courses and elective courses of lectures in various areas of NT have already been created" (Ratner and Ratner, 2004; Hartmann, 2008).

"New technologies such as NTs require new knowledge and new skills from workers at all levels of production and creation of extra cost" (Ratner and Ratner, 2004). It is very important, notes W. Hartmann further, that "fundamental technology require changes in the transformation of the education system at all stages of education, i.e. adaptation to new ideas should begin at school and then extend to universities, higher specialized educational institutions, etc., up to various programs of further and additional education ... Competition should increase in universities and research centers for attracting young talented researchers to work" (Ratner and Ratner, 2004). At the same time, we especially emphasize that it is the point not only of the changes in educational programs only for technical specialties but also for humanitarian ones. After all, future changes will also affect social, political, cultural and other areas of human activity. Therefore, the humanities must be prepared in advance for these new challenges of the future and meet them fully armed.

Apparently, development the of high technologies will continue according to the principle of increasing the power of quantity while the development of human abilities will demand of the personality to strengthen his spiritual qualities, i.e (Ratner and Ratner, 2004). elitization. Elitization of an educational institution without the development of NT is impossible. NT is becoming one of the most important criteria for such elitization of education. Recall that "elitization" is a process of development of the elite (form) and eliticity (content).

NT is ahead of all other scientific projects by the dynamics of its development. In part, it can be compared with nuclear physics and cosmonautics of the era of their scientific and technical heyday. "NT has a very high significance for the development of science and society in general, both because of the diversity of its applications and interdisciplinary nature, and simply due to the rapid dynamics of quantitative and qualitative development. Therefore, it already seems necessary to define strategies for the technological and economic development of NT at different levels" (Ratner and Ratner, 2004). Not taking this circumstance into account in the strategic planning of the education system of the 21st century means to make a strategic mistake in the project in advance.

These arguments indicate the need to take into account the influence of NT on higher education systems. Moreover, the social and humanitarian sciences should already be connected to this educational process. It is necessary to create a political science, sociological, economic, cultural and psychological approach in the process of understanding and carrying NT into public and private life. But, apparently, the most important is the philosophical approach to the analysis of the problem of NT. In our opinion, it should precede all other social and humanitarian approaches mentioned above, since they are not possible without prior philosophical examination.

In general, along with nanoscience, there is already a long-felt need to seriously talk about parallel existence of nanophilosophy with it, before which you can already set several tasks at once: 1) to be a philosophical accompaniment of NT development; 2) to timely make the necessary changes in the scientific picture of the world; 3) to develop new methods and techniques of scientific and philosophical analysis of NT reality; 4) to develop new philosophical concepts, taking into account the achievements of NT and the degree of their influence on public and private life.

It is nanophilosophy could rally and direct in the right direction the development of the Humanities being interested in the study of NT phenomena. But it is necessary for the very nanophilosophy to be developed at least as a special area within the scope of the philosophy of science. In fact, in order for NT-philosophy to present itself as a special kind of philosophical and scientific knowledge, it needs to go through several phases of its own internal development: NT-philosophy as а philosophical I) understanding of the NT-problems of the special sciences; 2) NT-philosophy as a special section of the philosophy of science; 3) NT-philosophy as the philosophy of the era of nanotechnology. In turn, these "phases" of the genesis of nanophilosophy can later become its constituent sections because it is always important to keep abreast of the development of special science, it is always necessary to introduce amendments into the area of the science of philosophy and always expect qualitative breakthroughs.

Therefore, it is not the matter of strictly going through these phases but of their possible parallel development. And this means that all the indicated phases must have a continuous development, - to develop in the "on late" mode, in order to coordinate and complement each other in a timely manner. To sit and wait for philosophy to somehow turn into the philosophy of the nanotechnology epoch means to criminally waste time and plunge the future of this scientific field into time pressure. Only an integrated approach is able to ensure even and progressive advance of all these phases (parts) of the genesis of nanophilosophy. At the same time, the very elitology (in any case, its anthropological section) can become an integral part of the very nanophilosophy, especially in terms of the

problems that are associated with the doctrine of overman, neo-personalism and the elitization of education.

It seems to us that one of the important tasks of nanophilosophy is to adapt the humanities to the above problem. It should not only find and formulate for the humanities the issues and problems associated with NT but also try to develop a special conceptual apparatus in a timely manner, and what is more –build up a dialogue with the technical and natural sciences that have already been actively developing this topic.

Nanophilosophy, in our opinion, should "drill a window" to the social sciences and humanities in the world of nanotechnology. And since, according to the current forecasts, the very NT will soon begin to actively enter the social and everyday life, then the social and human sciences will be faced with the question of analyzing the changes that will occur on the basis of this deep innovation. Such science and philosophy is at the forefront of the development of scientific and philosophical thought, i.e. in the end, it is this knowledge that forms a qualitative leap in the progressive development of mankind.

The ultimate goal of elitization of personality is the emergence of an independent creative unit, capable of solving original complex problems in an original way and producing a high-quality scientific product. This quality leads such person to the number of scientific elite or even the leaders. It is elitization brought to a certain level makes the potential elite the real elite. Elitization is not just the development of elite quality but also the harmonization of the form (status) and the content (quality of spirit) of such a person.

### Summary

Today we can say that those scientists who are engaged in NT are the elite of the research community. The elite of not only in terms of obtaining fundamentally modern and strategically important scientific knowledge but also in terms of financial support for their projects from states and private corporations. It is difficult not to be a leader in modern science having such resources as NT. Therefore, when we say that the humanities should concern this topic, we thereby point to the possible leadership that potentially opens before them in the way of the promotion of this project. Maybe the humanities scholars should even discuss the need to create within the



community of their own sciences a special NT-GUMANUS which project, bluow comprehensively and in real-time analyze the impact of nanotechnology on public and special development. In the end, it is necessary to understand that the ultimate goal of the development of NT is man. He is also the main scientific subject of this activity. Therefore, the participation of the social sciences and humanities in this project is not only desirable but necessary. The matter depends on the interested representatives of the humanitarian community, who should seriously address not only the identification of the problem area of a new scientific field but also the development of an appropriate conceptual apparatus and research methods. This can be done by both academic and university science. Fortunately, this requires resources 10 times less than those that are spent today on the development of the very NTs.

It is through the humanization of NT that one can talk today about the elitization of the educational process itself. The "NT-HUMANUS" project can give a new impetus to the scientific development of the entire block of social and humanitarian knowledge. Now it is possible to have an early edge in preparing in advance a future platform on which the grandiose construction of a new scientific building may soon take place. And NT will be the very architect that will develop and approve the project of this building. The problems associated with the development and widespread introduction of NT can generate such fundamental changes that mankind has never faced before.

We intentionally link the process of elitization of the educational process (aimed at creating the scientific elite of a new generation) with nanoscience and nanophilosophy. Promotion of the last two types of knowledge will mean the process of elitization of modern science and education. Tomorrow there may appear some new, still unknown areas (like, for example, in the recent past, no one except specialists has heard of NT and their capabilities) that will pose the same fundamental problems to philosophy so the NT does. The fact that today NT is becoming the main determinant in the development of modern science is unobjectionable. But at the same time, there should be no doubt about the need for timely diagnosis and examination of NT on the part of humanitarian knowledge, and first of all, philosophy. That is why we raise the question of the need not only to humanize NT but also to create a specialized philosophy – nanophilosophy which would accompany modern science in its research projects.

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