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The Idea of Scientific Elite and the Mission of the University

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Abstract: For the past four centuries there has been a marked increase in the influence of the scientific elite on the socio-political processes, formation of ideology and the operation of the contemporary axiological system. Science has generated the kind of elite, whose activity is responsible for the strategic development of the humankind, providing it with reliable system of strategic security. Elite scientific communities have always been at the forefront of social progress, conditioning both a vector and dynamics of its development. Elite has been selected through the activities of the University as well. The study describes a problem of the influence of elite university education on the selection process of political elites. It also provides forecast of competitive development of meritocratic and oligarchic principles of forming the world system of elite education.

Key words: Scientific elite, university, meritocracy, oligarchy, post-industrialism, elite education

INTRODUCTION

Currently, all the actors of the political elites tend to have higher education which means that the university and specific scientific elite participated in their "production". In the past, the university played a shadow role in breeding elite, acting as the initial stage of the development of elite quality. In the future, it should come out from the shadows and take full responsibility for the production of this kind of "goods". The university is already beginning to play the role of engineering, forming criteria for those qualities that are involved in elite breeding.

In the present research, we have to figure out how the modern scientific elite influences national security through formation of cultural and professional level of subjects of the ruling political elites. The working hypothesis lies in the assumption that in the context of increasing post-industrial trends the quality of elite and personal but not community is changing status-related qualities are gaining ponderable meaning. In this regard criteria of person-based evaluation of elite are growing. Against the backdrop of this growth business qualities of modern elite seem to be understated and not professional and their actions-incompetent. The objective of this research consists in identifying and establishing common diagnosis of potential development of elites as senior professional communities of the coming post-industrial society. For these reasons as the object we

have scientific elite and as the subject-formation of professional elite community ensuring strategic security.

MATERIALS AND METHODS

To address the identified problems, we intend to use both traditional methods and techniques for the study of elites (participant observation, statistical method, structural and functional method of system analysis, etc.) and not quite traditional for elite theory historical and dialectical methods, comparative studies, hermeneutics and person-based approach. In our research we mean to implement the thesis of contemporary American sociology that describes the present state of social development as "revolt of elite" (Lasch Ch, 1995) substituting "revolt of masses". This change takes place in the background of post-industrial development which is described as innovative industry based on knowledge industry (-Young, 1958; Bell, 1976; Toffler, 1970). At the same time scientific development has become the main driving force of the economy. Development of knowledge industry base leads to the fact that education level, professionalism and creativity of employees are becoming the most valuable qualities. Apart from that, we are using a well-known thesis of classic elite theories that implies the influence of elitist principle on the division of any community on elite and masses (Mosca, 1939). Let us now describe some fundamental in our view, provisions which reveal the essence of the stated issue.

RESULTS AND DISCUSSION

Oligarchy and meritocracy

New axiological confrontation: The modern era is characterized as a dispute of oligarchic and meritocratic elite breeding principle which results in a discussion about a new value system in assessment of their professional activity. Classic elite theories of the beginning of the 20th century covered mainly elites of the first type. But at the beginning of the 21st century their research capacities were clearly not enough in order to describe fully and adequately the parameters of the current ruling elite communities. The fundamental difference between contemporary evaluation of elite quality and classical elite theories lies in the fact that we have to apply principles of personalism on and on classic theories of elites obviously lack methodological basis for diagnostics of modern state of the ruling elite groups and establishing the true meaning of their elitism.

approach Person-based suggests considering elites primarily community of elected personalities-autonomous (i.e., self-contained) professionals of the highest level, tackling critical challenges of modernity and perceiving themselves fully responsible for this decision. Ideally, elites of meritocratic type are not just an enlightened political officialdom (Confucius), imbued with the spirit of humanism and progress but also professional community acting in the spirit of creative positive, responsible for its historical era (Toynbee). It is creativity what contemporary political elites lack (new ideas, solutions, etc.).

Even Plato criticized contemporary sophists because they made money a means (criterion) of human access to knowledge. Democratic egalitarianism (represented by Thomas More and Jean-Jacques Rousseau) also expressed their indignation at the oligarchic principle of breeding elite. Communists generally made oligarchic capitalism their main target of their ideological critics and political struggle. And this struggle had its own truth. After all, the oligarchy has sought to control not only finances and economies but also politics, culture and education. In this control they went too far, ignoring means and victims.

All the world's top high schools of the West tend to have superiority in their financial security to those who occupy subsequent sites in this ranking. It's finance that defines their rating. In fact, the competition of finance rather than the scientific elite takes place. The tycoons, rather than a scientific elite "reign". Therefore, the ratings of such universities resemble ratings of oligarchs from the Forbes list. Not surprisingly, that we see mostly Anglo-Saxon Universities among the best ones. Their

rating reflects the rating of countries themselves which host these universities. Such differentiation could face global inequality, deepening the divide between rich and poor universities. Such breaks are not allowed in the scientific community. Science does not tolerate "social privilege". Science is a democrat by its nature. And its main measure (criterion) is talent not a bank account. It is clear that they are not mutually exclusive. But meritocratic era defines the priorities that are only suitable for it alone.

Elitology is based on "the iron law of hierarchy": the world cannot exist without hierarchy. Scientific elite creates its hierarchical system which is in conflict with the principles of the oligarchic system of world order. The dispute of oligarchy and meritocracy takes global historical character. This is a dispute about axiology and the future of humankind. Oligarchy and meritocracy are guided by their own quality assessment systems and these systems do not match. Each has its own "supersupera" "Super-supera" Every subject of elite that has stressed ambitions, tries to prove that he or she has acquired the status of "super-supera" and had reached the limits of their exclusivity. In fact, the more often it happens that they are only on top ("akme") of their professional development. Only a genius is able to go beyond the "super-supera", forcing, thus, the review of canon of existing quality assessments of elitism) and each side understands it as the source of its power as its treasury. The reproach of oligarchy sounds as "If you are so clever why so poor?" (Christopher, 2012). In response, we hear the reproach of meritocracy: "If you are rich and smart, then why do you buy someone else's ideas and need professional advice?" For oligarchy form is important for meritocracy-content. Therefore, oligarchy is always based on status and meritocracy-on personal identity. Oligarchy is known for its crimes, meritocracy is famous for its creative achievements. The main task of oligarchy is to install power over meritocracy; the main task of meritocracy is to make oligarchy safe for mankind. The essence of meritocracy, ultimately is translated into solving creativity issues which means activating the role of the individual and the mainstreaming of fundamental provisions of the person-based philosophy. The world of meritocracy represents systematic use of advanced scientific knowledge. Oligarchy is elitism (privilege security); meritocracy is exclusivity (permanent proof in practice of superiority of personal dignity). The dispute of oligarchy and meritocracy is the argument about what will prevail in the elite-elitism or exclusivity.

The mission of the university is the idea of scientific elite: The true creators of meritocracy were and still are

scientific elite and their leaders. The primary mission of the University is the creation and reproduction of scientific elite. The very idea of scientific elite was formulated by Plato: to go ahead of humanity and see what others are not able to see, understand and appreciate. Scientific elite produces an incremental product to existing knowledge. It owns the ideas, so, the very idea of scientific elite is the sum of all critical ideas existing in our world. Scientific elite is the top scientific community which combines the potential of all the prominent scholars (leaders), leading scientific schools and laboratories. Its idea lies in absorbing the best and most valuable in the rational existence of mankind. Uniting into academic community, scientific elite creates professional "stuffing" for all the other elite groups.

In fact, such concepts as "university" and "scientific elite" can be used as a synonym. Merging of higher education and science having started back in the 19th century to date has found already quite a complete format. Science and education constitute a single unit. The emerging paradigm shift in elite education system may signal the completion of the merging process. Speaking of modernity, it should be noted that scientific elite is an academic community of universities, solving important policy challenges that are associated with the production of new knowledge. Scientific activity lies in finding the right words truly reflecting important entities. Therefore, scientific elite is a real prototype of meritocracy. The key difference between scientific elite and meritocracy is a measure of influence on political power: scientific elite exerts relative influence whereas meritocracy-absolute. From this we derive our first thesis: Whoever controls the university, controls the future.

The University is a research and educational universal system, actively participating in socialization, cultivating it ideals of humanism, creativity and intellectualism. The university can be the last refuge of cultural community in the absence of other cultural centers. Today, any self-respecting city-state must have a university which serves as an incubator for local elite communities. From this we may formulate the following thesis: The university is a laboratory of elitism. Exclusivity is a qualitative superiority (dignity) of personality, expressed in creative activity and given recognition by the professional community. Exclusivity is the content, elite is a form. Ideally, they must match each other. In reality, we often observe them incomplete. Hence, if the mission of elite universities in breeding a certain type of elite with strong oligarchic ties in politics and corporate style of thinking, then, the mission of elite universities is research and development of talent.

The mission of the University is to stay ahead of society in the development and mastering of postmodern ideas. The University must just be the place where the realities of post-industrialism must manifest themselves first and fully. Scientific elite is increasingly prepared to this reality because it was not just able to forecast (anticipate) it but also managed to model it and begin its implementation. Roughly the same incubator of progressive ideas was at one time the Academy of Plato which was left by many outstanding people, thanks to whose work the era was called "classical antiquity". The name of this new type of person of elite-meritocracy or "elite knowledge". The university is a nursery of meritocracy. Forming meritocracy means planning well in advance. The foundation of meritocracy lies in self-contained identity, that realized their creativity in their professional activities. Meritocracy will save the world from the scourge of oligarchy and tyranny of democratic pseudo-liberal minority that increasingly begins to mimic democratic values and manipulate them in their limited interests.

In the past, elite education was exclusively for children of existing elite, i.e., it was a closed caste. Contemporary elite education implies the openness and accessibility of the system for the education of persons of all social groups, depending on their mental abilities. The latter questions oligarchical principle of elite selection and corresponding to the spirit universities which usually appearon top of the world rankings.

The tradition of elite (open) education dates back to Confucius, Pythagoras and Plato and elitist (closed)-to the Sophists. Education is referred to as open because it is open to all talented people and "closed" because only wealthy individuals can obtain prestigious education. Money served as a measure of success or failure. And it was purely an oligarchical approach. In his research "The Idea of a University (1852 and 1858) a famous English philosopher and educator J. Newman (1801-1890) stated that the mission of the university is to be a school of universal education" ("studium generale"), whose goal is to educate gentlemen, i.e., the potential elite. A large part of such universities was aimed particularly at reproduction of the oligarchic tradition.

Paradigm shift of elite education: Elites of oligarchic type reproduce themselves. So, they impose special artificial barriers (filters) in order to prevent random elements from falling into their caste. It is well known that the cost of education itself acts as one of the main restrictions of a caste. So, the cost of education at the elite University of the United States of America-Massachusetts Institute of Technology (MIT)-comprises around 77 thousand dollars.

per year (the average tuition fees for foreign students: 38-40 thousand dollars). Anglo-Saxon ratings include in the list of the most elite universities so-called Ivy League educational institutions: Harvard University, Yale University, Princeton University, Columbia University, Penn (University of Pennsylvania), Dartmouth College, Cornell University and Brown University.

In the year 2013 the largest endowment in the world was owned by Harvard that comprised 37.7 billion dollars (Mendilo, 2013). Such figures can be compared with the budget of several African countries. A degree received in these elite schools makes an impression on a potential employer and provides access to "the high and the mighty". In general, those graduating from private universities have a more prestigious and well-paid job, than those who attended public universities. American sociologist Hayes states that the oligarchic lawlessness washed intellectuals away from the American elite, flooding the political highs newcomers from wealthy oligarchy families. Meanwhile, actively unsuccessfully imitates meritocracy, hoping to convince the democratic community.

Anglo-Saxon Universities of VIP-super level are actually branches of their banks and transnational corporations. Oligarchs are well aware that elite universities are the most successful investment that brings them up to 1000% profit. Oligarchy cares about prosperity of elite universities as a drone cares about honey obtained from bees. They support the development of advanced scientific technologies in order to then use their achievement in their own enrichment. All advanced Anglo-Saxon universities are "a hive" from which oligarchs pump "honey" of their financial and economic power. Tycoons raise scientific elite obedient to them, noting with alarm the increase in its meritocratic relations. It is scientific elite in our opinion that should be the basis of the formation of meritocracy of the future.

Those who try to imitate and reproduce this elitist experience, suffer continued failure, due to the lack of tradition, economic capacities and experience in solving similar tasks. Russia tries to play host to the oligarchic principle of development of elite education, investing considerable public funds in as it seems, breakthrough research. But as a result it receives an elitist feeder for officials and all sorts of shady dealers from science. A classic example is in our opinion, here is the story of the development of Skolkovo. Skolkovo is the Innovation Centre (IC) which was established in 2010, according to the Decree of the President of the Russian Federation (2008-2012) D.A. Medvedev to promote breakthrough research.

Officially IC Skolkovo is a geographically isolated complex with privileged legal regime of activities. It is managed by the Fund for development of the Center for elaboration and commercialization of new technologies. Both the fund and subsidiaries are funded almost 100% (according to the audit Chamber, 93.8% of total expenditure for years 2013-2015 are funded from the federal budget). During this time Skolkovo spent a total of 65.5 billion rubles. "The structure of the fund expenditure during 2013-2015 comprised labor costs in more than 8.9 billion rubles, representing 13.7% of the total amount of expenditure "(which 13.8 times exceeded the comparable figure in the whole economy of the Russian Federation). The research activities at the same time have funded two times less. "Taking into account that Skolkovo was created precisely in order to support research and turn it into commercial projects, rather than to generously pay for the serving staff researchers. In Skolkovo power was actually "captured" by officials who are trying to play the role of both oligarchs and meritocrats. But they are equally unable to handle either role (Ulkfotte, 2014).

CONCLUSION

Overall conclusion: Oligarchic elite reproduction principle loses capacity and starts to enter into the mode of systemic crisis. Frequent failures in breeding in particular political elites have resulted in quite mediocre persons in power who are unable to cope with the challenge of their time. And this problem is becoming a world trend: from Washington to Tokyo from Oslo to Cape Town we see growth in critics of the ruling elite groups and their mediocre career.

New challenges to national security: The crisis of oligarchic elitism and apparent weakness of meritocracy elitism form a particular system of threats and challenges of the present era. If national security is referred to interests of individual states then strategic security regards the level of inter-ethnic relations and affects the interests if not of all mankind then of a substantial part of it. And here we also see the growing role of universities and scientific elites who increasingly define the political appearance of their states.

The problem of confrontation between politics and science is reflected in the novel "The first circle" by A.I. Solzhenitsyn. In his opinion, it is the scientific elite that carries the responsibility of spiritual security of all mankind. It is scientific elite that must become "the first barrier" to the spread of political totalitarianism. The 20th century showed the world community how irresponsible

politicians can use the latest achievements of science and technology (the tragedies of Hiroshima and Nagasaki, 1945). Scientific community immediately reacted to these manifestations of political and military brutality by demonstrating their meritocratic tendencies. Since then, pacifism became the ideological basis of its momentum. In comparison to oligarchy, meritocracy possesses more humanism and pacifism. To protect its "national interests," elite of wealth (oligarchy) has to spend far more effort than elite of knowledge (meritocracy). What is protected by oligarchy is located in banks and stock exchanges. What is protected by meritocracy is in the minds of the best people.

Currently, national security is guaranteed not so much by external factors (Army, Navy and Allies) but by an internal triad-culture, science and education. It is assumed that the richer the state is the more it has to spend on education. We are talking about public policy in the sphere of science and education. By how much GDP (%) the state spends on education, you can judge the quality of the ruling elite. In 2000's the highest costs for 1 student on higher education in the EU were recorded in Sweden-13490 Euros. In Belgium, Denmark, Germany, the Netherlands, Austria, Finland, Sweden and the United Kingdom there was spent over 10, 000 Euro per student. In Bulgaria, Estonia, Latvia, Lithuania, Malta, Romania and Estonia these costs have not reached 4,000 euro. However, even EU countries with the highest cost of education per 1 student lagged by almost 2 times behind expenditure per 1 student in the United States (20949 Euros). In 2005 for all EU countries costs per 1 student represented less than 40% of similar expenses per 1 student in higher education in the United States. If we exclude the costs of higher education institutions on research developments, the differences between the EU and the United States become even more (in the United States approximately 18500 Euros in EUapproximately 5700 Euros or 31% of expenditure in the United States).

Historical examples show that a systemic crisis often passes through science and education system. Stability in education and science is the guarantor of national security. The so-called "Soviet industrial miracle" of the 1960's was determined to a large extent by previous investment into education by Soviet elite. It was at this time that the ruling Stalin elite initiated the increase in financial expenditure to education. So, in 1950 The Soviet Union spent 10% of national income on education against 4% in the United States in 1988, these figures have already swapped and were respectively 7 and 12% and in 1992 in Russia the share of national income aimed at education fell below 4%. Scientific development is directly

influenced by education. In the middle of the 1990's Russia began to spend on research only 0.52% of GDP (Israel-3.5%, Japan-3.05%, United States-2.75%) while the experience of advanced countries in terms of technology shows that the proportion of public spending on science may not be lower than 2% (Karabuschenko, 2000). It is generally accepted in global practice that if spending for science does not exceed 2% of GDP, society degrades and if education expenses do not exceed 5% of GDP, the society is doomed to extinction. In Russia in 1994, expenditure on science amounted to 0.5% of GDP (according to other data-0.3% of GDP). At the same time, expenditure on education amounted to 4.4% of GDP (according to other data-0.8% of GDP) (Illarionov, 1995) The systematic lag of the USSR began precisely when the political elites have ceased to pay due attention to the development of education and science. Not all political elites recognize the importance of the scientific elite in their own selection and searching for the answer to the challenges of its time.

Forecast in relation to competitive struggle of oligarchic and meritocratic principles of formation of global system of elite education relies on the dynamics of post-industrial society components. Those countries will be breaking forward whose systems are most closely adapted to this latest reality. A new differentiation of countries according to the post-industrial principle is brought up. Advanced countries will appear in the postindustrial technologies and those that are "stuck" in industrial formats. Strategic security will directly depend on the depth of technological gap. Having lost the competition in developed post-industrial societies, oligarchy will go as usual into its zones of industrialism, arranging in them "defense" of its weakened positions. Humanity could face the new challenge of the coming era the war between post-industrialism and industrialism, as a continuation of the confrontation of meritocracy and oligarchy.

The threat of systemic crisis of the oligarchic elite reproduction type is not an empty phrase but rather the fact of our reality. Oligarchic elite is increasingly starting to show us its pre-default state. Default of elite lies in the deficit of elitism. When the deficit increases, the power of elite is falling sharply and its size is rapidly declining. Default elite refuses to fully discharge its professional duties and in all ways it is trying to evade responsibility. The latter can be observed in the accumulation its unfinished projects whose handicap it tries to compensate by new, more bright and loud, as it feels, projects (whose fate is doomed in advance to be unfinished). Contemporary political elites are a product of activities of leading universities 20-40 years ago. It is high time to

understand that the poor elite presents the number one threat to the national security of any state. Therefore, if you want to destroy any country, destroy its system of university education.

The issue under consideration has led us to certain conclusions, the most important of which is that not oligarchy but civil society should take control of the system of training and selection of elite. The major role in this process should be given to the university. By means of training adequate personnel for political elites, the university (scientific elite) has a direct influence on the national security of its states. But it faces a much more serious and global task of preparing society and elite to the realities of the post-industrial age. The final challenge is global in nature and has the fundamental roots of cognition of the essence of this newest era. For the successful implementation of this new project the university (scientific elite) has to become a mainstay of these advanced ideas and do elite engineering and selection of meritocracy, gradually limiting the role of the oligarchic laws of social arrangement.

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