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SCIENCE, EDUCATION AND ACADEMIC COMMUNITY SHOULD BECOME GENERATORS OF SOCIETIES IN TRANSITION

Between knowledge and creation, there is a huge gap, over which a bridge needs to be constructed.

Summary:

The development of science and education, and constant improvement of the scientific and cultural education of the population is considered to be one of the most important factors of progress of mankind. Improving science and education, enrich the spiritual life of the individual and allows them to take advantage of culture, science and art.

Improvement in science and higher education in the Republic of Srpska needs to be regarded as the main factor of economical development, while the other factor is related to the increase in knowledge, i.e. the enrichment of education with new technological achievements. The main questions here are how to stop those educational institutions whose sole goal is profit, and not quality education? Investing in man, from my point of view, includes much more than formal education. There is no quality education without the control of the state, serious, modern, legal, democratic state. Those who are not enlightened need to be enlightened, and those who are immoral in higher education need to go back to human, moral frames of correctness, fair play. Educators must educated, history shows where uneducated and immoral need to be.

Keywords: education, science, academic community, development, intellectuals, immorality.

1. GENERAL CONSIDERATIONS

The contribution of science to the development of transition societies is the topic of today's scientific conference. This topic has been imposed by the practice in this area, a practice that is very bad, and is conditioned, inter alia, by the impoverishment of transition societies, the impoverishment of the Republic of Srpska, but what is even worse is that there

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is not enough love, desire and respect for development, progress and communion in us and around us. The young and brave people defended the homeland, and the development and progress of the Republic of Srpska should be carried out by highly moral intellectuals in cooperation with all other layers of the society of the Republic of Srpska, and certainly with its institutions that are sacred to the citizens and which are the requirement of continuity of the modern legal state. Creation of a rich and happy Republic of Srpska requires the engagement of every individual, no matter what kind of job it performs.

In order to understand the theory in science in general as well as in other sciences, particularly social ones, it is necessary to specify and define the meaning of some basic concepts such as: scientific knowledge, science, division of sciences, science law, etc.

The history of scientific knowledge begins in its rudimentary (initial) form with the appearance of the first class society - slavery. This is preceded by a religious and, in some cases, a common sense explanation of the world.

The religious type of knowledge, ie. the religious understanding and explanation of the world, is not based on rational knowledge in the sense of empiric (facts that have been proven by some method) but on "divine revelation". These are "eternal truths" and they are not subject to change. They are not subject to review. It can be said that they represent a kind of religious axioms that are a matter of choice for every man.

Common sense - type of knowledge is built on the practice of a man and its experience. This experience allows and facilitates the elementary orientation of its practical activity. On the other hand, it is based on one-sided facts so it is not complete and systematized. Therefore, it is not theoretically grounded.

Scientific knowledge, unlike the previous two ones, has coherence, systematicness and objective verifiability. The essence of scientific knowledge is not only in describing the phenomena, but also in discovering the relationships existing between parts of a phenomenon as well as in the interconnection of different phenomena. The science provides this knowledge in the form of scientific laws. Knowledge about something is not just a pure purpose. It is related to a man's relationship to environment, nature and society. It helps a man to know more realistically the reality in which he/she is and to use or adapt it to his/her needs. **The science must be meaningful ie. useful. We do not seek our own victories in life, but victories in search of the truth.**

There are many different understandings and definitions of science. Science is the sum of objective truths that have been checked in practice or are subject to check. It should be noted that the criterion of practice can never in its essence fully confirm or deny any human perception. Science can be defined also as a set of all knowledge that has been collected methodically and systematically. Knowledge can be general and specific. That's how we make difference between sciences. The conditions for such knowledge in order to really justify the name of science are often the questions, „Is these knowledge empirically provable?“, and „Is this making the world more predictable?“ From this, one can conclude that certain knowledge, although being provable, is still beyond the scope of science if one has no practical benefit from it. Also, useful knowledge that is not provable in a scientifically prescribed manner cannot be classified into the category of science. "Science, as an area in which new knowledge is created, is a fundamental driver of development, an activity that allows meeting a large number of social needs, especially those in the field of education, economy and the general quality of life. Science is a set of systematized and reasoned knowledge, ie. cognitive facts, concepts, principles, data, information, theories, laws, and lawfulness in a particular historical period about objective reality, ie. nature and society, to which we came by applying

the objective scientific methods and which have the basic purpose and aim to understand laws and legalities about the past, the present and the future of natural and social phenomena and increasing the efficiency of work in all areas of human activity "(Government of the Republic of Srpska, 2012, 2). "Science, as an organized research activity of cognition of facts, ie. the phenomena in the field of nature, society and human opinion, possesses the appropriate methodology of research - the richness of methods and techniques, techniques and instruments of research work - through which the phenomena are known, explained, revealed and predicted, and mutual relations are determined that govern, both within and among phenomena. Methodology deals with the issues of methods and other research facts. It has the task to discover and show ways and manners of coming to the scientific truths and legitimacies that exist among the objects, phenomena and processes "(V. Stefanović, 1981, 7)

2. LEGALITIES AND LAWS IN THE SCIENCE AND HIGHER EDUCATION

The aim of scientific knowledge is not less or more exact description of the studied phenomena and processes, although there are such considerations as well. The aim is, with assistance of theoretical knowledge and explanation, to determine certain legitimacies that express and guide studying of phenomena and processes. The result of such knowledge are scientific laws. Law and legality in science have different meanings (unrelated to, for example, the legal science where they again have some special meanings). Legality is a kind of relationship between the phenomena and the processes that exists and is independent of the knowledge and will of the people. The law is the intellectual and linguistic creation that states or expresses objectively existing legalities as interpreted and understood by a man. They are, however, subjective and it can be said that they are human subjective expression of objective legality. The law is conditioned by the degree of knowledge acquired, that is, by the ability of a man to formulate it. Therefore, the law is a subjective creation of a man. It cannot be identified with relationships in reality. It is necessary to differentiate the theoretical and empirical form of the law. In professional literature, the law is often formulated as an indication of objectively existing, general, necessary, essential and relatively permanent relations and relationships between phenomena. It allows their prediction. **The basic features of the scientific law are: objectivity, generality, necessity, and relative stability.** Objectivity is an essential feature of a scientific law that suggests that links and relationships formulated by law can be checked by certain methodological methods. Generality presents a form of displaying scientific laws, and it is expressed in the fact that the laws are not valid for individual phenomena but for sets of phenomena. Exceptions do not call into question the laws. Necessity is a trait by which the scientific law differs from the general attitude or empirical generalization. It is expressed through causality. Causal link among phenomena exists when one of them causes or affects another, initiates some changes to it. Necessity appears as the most likely option and relates to the term of probability. Relative stability (constant) exists as long as there are the same conditions in which the phenomena exist whose relationship is expressed. The presence of a link between phenomena is not a condition for it to be treated as a law. Every law applies to certain conditions.

The basic function of science is the development of human civilization which has two most important components integrated - ethical and technological. Certainly, the ethical component is the one that follows the technology and often is not given particular importance. In this sense, science researches follow wrong (harmful) paths for human society. Science should be used in the right way and should increase the quality of a man's life,

without endangering in any way the intangible and non-technological human values. **In the operational sense, the science has the functions of informing, predicting, explaining, understanding, predicting certain phenomena that are being studied.** These functions are again divided into sub-categories in the domain of scientific research theory and concepts such as induction, deduction, synthesis, analysis, etc. Apart from the mentioned basic functions of the entire science, each particular science has its own specific functions. **"Those who learn, but do not apply their science, are like a peasant who ploughs but does not sow."** (Rabindranath Tagore)

The significance of the division of science is that it determines the specificity of certain sciences and the relation to other sciences. There are different divisions of science, depending on the criteria. **As a criterion of division of science, Plato has taken the elements of the human soul: mind, sensory perception, will.** According to him, dialectics is built on mind, physics is built on sensory perception and ethics on will. In philosophy, Aristotle has distinguished special sciences that he put in **theoretical ones** (dialectics, metaphysics, psychology, biology, etc.) and **practical ones** (politics, ethics, music, etc.). However, the basic and most important division of science is division into natural and social sciences. It is logical because it presumes the difference between nature and society. Natural sciences study the nature in the narrow sense including the flora and fauna as well as natural phenomena. These include: physics, chemistry, geology, medicine, biology, zoology, botany, etc. Social sciences deal with studying society, culture and a man as a social being. The subject of these sciences are social phenomena. Social sciences are: law, history, pedagogy, defendology, demography, ethnology, linguistics, social psychology, economics, sociology, etc. Social sciences, for a while, used to be called humanistic ones because of the perception that they serve the humanistic mission of elevation and enlightenment of individuals and societies. When this understanding was overcome, this name was largely abandoned and is rarely used today. Some of the historical messages of the great minds are eternal for the doctrine, such as: "The day science begins to study non-physical phenomena, it will make more progress in one decade than in all the previous centuries of its existence" (Nikola Tesla). "The saddest aspect of life right now is that science gathers knowledge and ideas faster than society gathers wisdom" (Isaac Asimov). "The books that caused the loss to the publishers were more beneficial to the science." (Graham Fuller). Science and education are naturally related. The role of higher education (university) is to improve knowledge by increasing its boundaries and to seek truth by examining critical beliefs and truths, defining the exact boundaries of the ideologies of acquired interest, the parties, and the government. The members of the higher education (academic community) are obliged to publish the findings and conclusions of the researches. They have **the freedom to move around the university universe** for consultations and exchange of research results. Academic freedoms and autonomy at the university are a prerequisite for successful education. The academic freedom of members of the academic community is individual and is related to study, learning, lectures, research, discussion, writing and creative work. **Autonomy** is independence from the state and other pressures of society in decision-making in internal organs. **A real intellectual** seeks the truth about those who strangle the truth in a way that is invisible to ordinary human eyes. He seeks the truth about those who give to their interest a lofty name of theory, seeks the truth about those who live by lies. **Let us try with scientific methodology to explore where the problems are in science and higher education? Let us try that because the development of science and education and the constant improvement of the scientific and cultural education of the population is considered one of the most important factors of mankind's progress. Let us see if we have the personnel that we need today and**

whether we create the personnel that we will need tomorrow. It is commonly known that the interdependence of education, technical progress and employment is a key triangle in directing of economic development, since education represents the process of creating human capital. Education should be understood as investing in people, and knowledge as a result of educational services is the most significant engine of production, which allows us to govern the economy and to satisfy our needs. Knowledge is collective social good and it increases the quality of both physical and human capital. Knowledge has to be known, it cannot be bought, diplomas can be purchased, ignoramuses are certified, this is a big problem. Science is ruined by such behavior as well as higher education and as such, they cannot become the source of new productive resources and quality of living standard and the source of future gains and benefits. With ignoramuses, they cannot become social good with economic values. Some educational interest groups and individuals do not want to realize that knowledge is a source of income, wealth and well-being, and all investment in human capital through certification of ignoramuses will have a very low social priority, and historically viewing and through other activities, they end up mostly as cheating rather than creating. That is why requirements for improving the state in science and higher education in the Republic of Srpska are as important as the need for food. Uneducated man has little needs, he/she is a bad consumer. Progress in science and higher education in the Republic of Srpska should be considered as the first factor in economic development, while another would be what is called a rise in knowledge, ie. enriching education with new technological achievements. How to stop those educational interest groups whose basic motto is profit rather than quality education? Investments in people, as we understand them, involve far more than formal education. There is no quality education without state control, serious, modern, legal, democratic state. The unawared must be awakened, and the immoral ones in higher education must return to the human, moral frames of fairness, fair play. Teachers need to be educated, historically it has been known where the place is for the uneducated and immoral. Let us not allow that better suffer from worse, the normal ones from the freaks. The consequences of the deviation in higher education will be catastrophic. Knowledge is not a cheap resource because it is acquired by expensive paths. In the knowledge society, knowledge is not impersonal as money. Knowledge is borne by a human, it is created, enlarged or promoted by a human, applied by a personality, taught and given by a personality, used by a personality. In order to be so, we must have knowledge and knowledge cannot be bought. Formal degrees do not really mean real knowledge. Educational personality is the argument, the temple, the emblem, and the symbol of the knowledge society. How can we find better solutions in the Republic of Srpska for higher education that has to be reputable again? The solution is in revolutionary organizational changes, changes in laws, changes in patterns and behavioral styles of everyone in education, but also in state institutions. We should strengthen control, responsibility, standards and quality of education. It is important to invest in people who will contribute to the overall progress with their knowledge and motivation. Initiators of development should be the most capable and honest individuals, teams, institutions, collective minds of the community, because without a better insight into the state of higher education and around it, we will lose ourselves in chaos, as an entropy measure, which is inevitably due to technological, economic and political changes.

3. ACADEMIC COMMUNITY – GENERATOR OF DEVELOPMENT, HOLDER OF LIBERTY FOR CENTURIES

The academic community, universities, higher education must become generators of overall development, including the Republic of Srpska and BiH (Vejnović, 2010; 11-16 (in Serbian and English)).

Talks have to be held with competent people and higher education to be returned to the level that it belongs to. India and China today are the countries that lead the progress because they have high-quality higher education. In our region, it collapses, and what has been good falls to a lower level. Educational reform focuses our attention on formal elements, and we miss the essence. Some colleges and university institutions have contributed to the collapse of higher education without any criteria, without standards. The Republic of Srpska and Bosnia and Herzegovina are tired of them, because they have been created on the wave of an unhappy age for the peoples in this region, they carry out the promotion of form without content, the promotion of the lack of culture of knowledge and aggression, the philosophy of education as a business, ie. they count the days. Peoples are left only to recognize that to give the chance for their future to the real and not false value.

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Education should be the instrument of positive social changes as well as to affect the transformation of the current state of affairs towards all rights and freedoms with permanent evaluation. Academic freedoms and autonomy at the university are a prerequisite for successful education. The academic freedom of members of the academic community is individual and is related to study, learning, lectures, research, discussion, writing and creative work. **Autonomy is independence from the state** and other pressures of society in decision-making in internal organs. Students have the right to choose a field of study based on existing subjects. Institutions of higher education should guarantee the participation of students in the management bodies that need to be elected freely. **Students are at up to the task** because they are brave, honest, have inexperienced moral, and "professors" are not "up to the task ...", why?

In order to meet the needs of the environment, university education and research must be morally and intellectually independent of all political authorities and economic powers. The intellectual community should have the right to express its opinion freely in the media, as well as to establish its media and the way of communication.

The government and the public should respect the right of the university to seek freely the truth and have a critical relationship and an active role in shaping the society it serves to. History has shown that violence over the academic freedoms and autonomy of the university has a high price in terms of intellectual decline, social deprivation and economic stagnation. The improvement of higher education is necessary for positive social and economic changes, and the professors should participate in the process. Open communication about knowledge,

hypotheses and opinions are in the very center of university education. **The status of a professor** must have security in relation to possible wrong decisions. This is clear to the openhearted and the aware. It is not clear only to profiteers, careerists, and imprisoned minds who do not think with their heads, and work in universities, hence in higher education. To be a **critical intellectual** means, first of all, the willingness to pay the hardest price to live in the truth and freedom. Only in that way, someone could belong to the movement of critical intellectuals. That was the time when the ideals of human freedoms pervaded intellectual activity. The intellectual as a worker in the field of spiritual sciences, if he has already chosen to be a cleaner of society, should first of all be a cleaner of language spoken by powerful social groups. The language of the "mighty" reveals and conceals what matters to them only – the interest. In the name of interest, they are able to spit the truth into the eyes. A real intellectual seeks the truth about those who strangle the truth in a way that is invisible to ordinary human eyes. He seeks the truth of those who give the lofty name of the theory to their interest, seeks the truth about those who live from lies. A sociologist, if he is not a social eye that sees what the majority does not see (or does not want to see), can stop working. However, if he sees it, and does not want to notify what he sees in clear terms, then he is spoilt, and does not deserve the name of a peer, intellectual, educational, scientific, academic citizen. To many, lack of knowledge and general culture does not present a problem to judge publicly what they do not understand and condemn those who are morally superior, and who show their wickedness by giving it the supreme name of criticism. **Criticism** should be a lasting intellectual struggle against "the anarchy of the spirit and the regime of stupidity itself. "I did not take personal belief to be a scientific truth, but I accepted the scientific truth to be my personal belief. The task of science and the academic community is to gain knowledge of human behavior in various circumstances (natural, social, cultural) and not to manipulate people (demagogy in a bottle). In the pedagogical field, manipulation of students takes the form of indoctrination (ie. sociology of knowledge). Social reality (usually) is not defined by those who know it best, but those who rule it. In the academic community, those who know the theory usually do not know how to manipulate, those who know how to manipulate usually do not know the theory. Victor Hugo pointed out "I will take over over the cleansing of your mind." Being the members of the academic community, our only weapon is a word. We must not allow that the understanding of reality is suppressed in favor of the rule of reality. We must not allow that love for truth gives way to the will for power. Devastated academic community is governed by the organized minority, and the unorganized majority obeys. Intellectual wage workers should not poison the innocent souls of students, and lose their souls. The academic community and its members should not be a means of ideological strengthening of a governing interest, but it must function so as to develop the autonomic, intellectual, moral and social opportunities of people. Intellectuals in the academic community are obliged to enlighten the young spirits with their research enthusiasm and to encourage them with the language of criticism to spiritual adventures. Pedagogical staff should not be allowed to be replaced by pedagogical police. Let the fight continues of the principle without force with the force without principle. **The intellectual community is ruined today.** Technological consciousness dominates, philosophical spirit is suppressed, and the absence of anthropological rebellion can be explained. There is a lack of elaborated conception and struggle for modern values in the situation when large value systems have collapsed and when in the vacuum of values the anomy becomes the general characteristic of the spiritual climate. From the analysis of the spiritual climate of our time, which is marked by the decline of philosophical thought and rational mind in the rush of formalism, pragmatism and utilitarianism, it can be concluded that the position of intellectuals is disadvantageous in terms of fulfilling their authentic role: therefore, the increasing number of

intellectuals are engaged in the role of political party leaders, in the function of the ideological messiahs of certain political powers, blunting its critical function. Nevertheless, the voice of an independent intellectual has not completely died, and many of these and other authors are constantly working to illuminate the path to the truth in opposition to new authoritarianism and moral and value relativism and nihilism, seeking to revitalize the struggle against dogmatism, scientism and all forms of fundamentalism in order to revalorise the meaning of life.

4. SCIENCE, EDUCATION AND ACADEMIC COMMUNITY ARE TIRED OF EMPTINESS OF THEIR REFORMISTS

People in the academic community should strive for the ideal of justice and freedom. An open fundamental question remains: Can a society develop itself as a democratic community if there is no constant flow of new ideas and political alternatives? That is why we must never give up from creation of a new intellectual community, no matter how anachronistic and utopian it could look like. Only the reaffirmation of true intellectual engagement can create the prerequisites for returning to the fundamental ideals of freedom, justice and democracy. Only as personalities, we are moral persons, because responsibility is linked to a personal conscience: therefore ... „the mass, the institution cannot be held responsible." The academic community must become a spiritual community of free and responsible people, in which everyone needs to be what it is, he defends its personal attitude with passion, love and affection, and to receive from others what is different from his with an open spirit, to stretch out his hand to another and different. By the scientific methodology, which is a game between theory and experience, in times of today's storms when the winds and waves of evil are blowing, when the good people suffer from bad people, when the good suffer from the worse, should struggle that the smart, moral and wise should win and not the powerful, arrogant and immoral. This result is a scientific discovery and it cannot be known in advance. That is why the academic community needs to keep a constant conversation (from the Greek, the world is taught to talk and from the Romans, to speak) as a spiritual game, not the talk of superiority and subordination. Players come and go and the game remains. In the game, everything is known (place, time, players, rules, judges, etc.) – except the outcome of the game. If the outcome of the game would be known, then it should not be played, the game would lose any charm and meaning. In the academic community, it is always bad when the concepts of deep meaning are interpreted by the unintelligent heads. Baudelaire told that the readers compared to the writers are the watches that are late, and I would dare in Dante-like manner to say that professors at some faculties and universities are like **thin writers of thick books** with the dominant so-called mechanical teaching, the watches that are late in comparison to readers, compared to students. The consequences of this situation in the academic community, at the faculties and universities are and will be huge, catastrophic, for society, for the state, for civilization, for development. Organized production of ignorance and ignoramuses, among other things, is an essential determinant of intolerance. Our history, unfortunately, is a story of migrations and divisions, and intolerance produces hatred, essentially anticomunication. Antipode of hatred is tolerance, and it has no alternative and seeks a reasonable, minded, versatile educated personalities, that is, all subjects of society and the state. That is why the academic community has to constantly initiate and conduct conversations as a silent call to the way to truth and meaning, because these peoples do not have spare sons and daughters, to be a lock from conflicts, migrations and divisions. The

academic community as the "**academy of invisible thinkers**" should pass through time more courageously in Dante-style, tirelessly working on the truth and keeping the memory of it. People in the academic community „are not" and must not be connected with slogans and badges, their community needs to be a community of spirit, they should belong to the spiritual order, **which took the book as its flag instead of the other symbols**. They must not be the servants of small interests and immediate desires, but should direct all their will to a higher goal, opinion, knowledge of truth, fairness, morality, and not to forgive lies, manipulation, fraud, etc. **They must build bridges** by interpreting and speaking, **connecting the opposite shores**. This is how every problem can be solved, and by violence and fraud nothing is solved. Law and morality are the alphabet of all security, and **the need for order** is the alphabet of every academic community, ie. culture. To confirm that this is true, we will remind us to the well-known fact that some of the dead are still alive today, more than many who are still living, whose presence does not seem to be necessary because present burden rather than joy of the community. We think it is better for the academic community to be a hot spark than a ceased fire. It must not forget its sins, but it must understand them and forgive them, which is almost the same. We struggle to gain power over our tongue in vain. No virtue is needed the medal, but sins need forgiveness. In the academic community, most of the time **the words of wise men and intellectuals cannot be heard from the noise of the crowd**. It is necessary to treat it from poor, profitable higher education, and to pursue a comprehensive, humane, modern education, where first of all the teachers, educators will be educated, upbrought, which today is not the case. Also in the academic community, conversation with the past is continuous, and in the field of ideology, almost all truths are fake. Nietzsche said, "Where the state ends, a man begins." We invite all the reasonable and mindful to improve the state and responsibility in the academic community, by dialogue as the only way to abolish the relationship of power and supremacy and the only path to the common life of all creatures. That's the only that the thought is not closed in the system and life in prison. It should be remained open for differences and competition in the academic community as a wealth, not a handicap, equality of opportunity for everyone, but also responsibility. Time will turn out the ignorant and the irresponsible, the immoral. **Existentialist philosophy** at all costs in the academic community, ie. at the faculties and universities, should give way to culture of learning and gaining own experience, **shared responsibility**, and harmonizing the rights and responsibilities of individuals and communities. The government and the public should respect the right of the academic community to seek the truth freely and to have a critical relationship and an active role in shaping the society they serve. The academic must not, by its actions, to lead the students and their parents, therefore people, to tremendous confusion and misunderstanding. Higher education needs to be brought back to the level that belongs to him historically, and not to allow it to collapse, and what has been good to be dropped to a lower level. **In education reform, attention is focused on formal elements, and the essence is promoted**. The essence of resistance and rebellion in the academic community should be contained in the painstaking creation of the intellectual and human community of critical intellectuals as academic alternative to today's deeply demolished, partially sinking and profitable interest polarized academic community.

4.1. The Bologna process in higher education in the context of globalization

“We are witnesses that globalization of the planet is in action, which means that certain processes in the world are acquiring a cosmopolitan connotation, independent of national, geographical, regional, block and other barriers. When it comes to globalization, the ubiquity of which nobody is questioning today, it, in its manifestations, appears in multiple dimensions: (Tramosljanin, 2013; 17).

- a) **Economic globalization** implies organizing of production in planetary relations behind which are economically strong multinational companies;
- b) **Political globalization** negates the role of national states in regulating of commodity- monetary relationship of protection of human rights, natural and the social environment;
- c) **The cultural dimension of globalization** is intentionally directed towards the creation of a uniform world culture by homogenization of national cultures;
- d) **IT globalization** implies globalization of communications thanks to the invention of electronic media, satellites;
- e) **Globalization of science and technology**, considering that they are, by their nature, a universal product, because they are incorporated in knowledge and experience of mankind as a whole and as a rule are of utilitarian significance for all peoples;
- f) **Globalization of a language**, where the English language is acquiring the status of a world language, especially in the domain of education and the business world;
- g) **Globalization of inequality** where the minority of rich people in the world is becoming richer every day, and the gigantic mass of poor people is becoming poorer;
- h) **Globalization of conflicts** in its various forms including class, ethnical, religious, cultural, civilization, ideological, political ones;
- i) **Globalization of integration processes in the world** whose protagonists are technologically developed countries;
- j) **Globalization of higher education** within the Bologna process directed towards the creation of a European zone of higher education. Globalization of society and globalization of education are in a symbiotic relationship. In fact, **globalization of education is a subsystem of globalization** as a wider process which is reflected not only in the sphere of education, but it has seized all segments of society.

The Bologna declaration was signed by twenty-nine ministers on 19th June 1999. All the signatory countries have unanimously accepted the process of standardization in the sphere of higher education and its normative regulation. In doing so, we need the funds in order to improve the system of education of all countries, independent of the level of their economic, technological, cultural and civilization development. In addition, emphasized are the common goals such as the openness of schools and faculties with common standards. In relation to that, in meticulous manner, Nenad Suzic PhD, has elaborated the main aspects of application of goals which are planned by the Bologna declaration (Suzic, N. (2007) p. 76-82).

- a) The European system of higher education will be transparent and understandable for everyone with a two degree education: graduate (bachelor) and postgraduate (master);
- b) Diplomas acquired in one part of the European higher education region will be recognized in other parts of the European higher education region, which is valid for continuation of education and for employment;
- c) Graduates will be able to find a job throughout the European labor market;
- d) Students and teachers will be able to move freely throughout the European higher education region and they will be able to use their abilities efficiently;
- e) Lifelong learning will no longer be isolated from higher education. Knowledge and abilities acquired during lifelong learning will be able to be formalized through credits and qualifications, through modules and educational courses;
- f) The European system of higher education will be connected to the global market and production. After signing of the Bologna declaration, intensive activity has began on the reorganization of national systems of education in countries who are the signatories of this Declaration. At the abstract level, the vision and the long-term goal which wants to be achieved by the Bologna declaration is not disputed. However, during its actual operationalization on the terrain, many problems have arisen.

When it comes to these problems, they include the following:

1. Concerning the syllabus for realization of the curriculum per subjects, their most significant lack it that they are expansive because they have an encyclopedia connotation. Wide thematic entities are included in them which are hard to be realized during one semester in twelve to fifteen working weeks. Therefore logically posed is the question why would we plan a syllabus in an ideal form if we know *a priori* that its realization will stay on the level of a utopia. That is why we set as a priority task their rationalization and a serious reduction, to adapt them to intellectual and psychological abilities of students.
2. Are we in the higher education of the Republic of Srpska **for a University of thinking or memorizing?** If we look at it from the normative aspect, we are all unanimous that we want a University of thinking. In reality it is the other way round, because the University of memorizing dominates and not the University of thinking. The entire teaching process is directed towards passive memorizing of facts and its mechanical reproduction. That implies the conclusion that the creative and critical thinking is insufficiently developed and that the values are not affirmed, as well as nations, nationalism in the form of patriotism, ethos of work and the freedom of personality. The mentioned lack can be corrected under the condition that in the teaching process we cultivate students to be thinking beings and not to turn them into an information warehouse.
3. How to transcend the classical model of teaching where the teacher is the inviolable subject of the teaching process, and the students are lethargic and they have a contemplative position in the teaching process. That is why in accordance with the Bologna process, now it is insisted on a dialectic structure of the teaching lesson. In other words, it is necessary to establish a dialectic relationship between

the teacher and the student. A teacher is only a guide of the teaching process and the teacher is the *primus inter pares* (the first among equals). Therefore, within interactive teaching which is inaugurated by the Bologna process, students should show their creativity, primarily, through the production of original seminar paper, and not to download them from the internet and by constant copying from each other. In addition, they are enabled to participate in discussions on all questions for teacher presentations in class and to ask concrete questions during lessons or after. For now, students rarely use these possibilities. They are still indifferent towards teaching and thereby give consent to an established Oblomovian position in the teaching process which has as a consequence that they are creatures of the mentioned process instead of being its creators. Therefore, we are witnesses that the classical model of teaching has not been changed. It skillfully perpetuates and it continues to stay dominant. That leads us to the conclusion that the Bologna process is in stagnation and it is practically hard to implement it.

4. Bologna has contributed to the fragmentation of exams, because there is mechanical division into pre-exam obligations and oral exam. That is how the holistic dimension of examinations is lost. The pre-exam obligations of students are of a formal character. In tests, measured is their quantum of memorized facts, and not their understanding and logical interpretation. Seminar papers are not authentic, but are copied from the Internet. There is no creativity, intellectual curiosity in them, where emphasized would be their “personal equation” (own point of view) during the production of the seminar paper. When speaking of the oral exam, it is marginalized, although it should be crucial in determining the final mark. Only in an oral exam the teacher can competently evaluate the knowledge of the student, interpretation of facts, their logical explanation, bringing into a functional relation the causal explanation too. Even though the oral exam is compulsory, teachers often transform it into a written exam as its opposite. They, because of the large number of students in exams, resort to a written exam as a substitution for an oral exam. From a pedagogical aspect, it is absolutely unacceptable because that is how its value is devalued. **Exit from all of this is possible if the oral exam is reaffirmed as primordial during grading of students, and pre-exam obligations are redefined, and set into rational frames and valued less then it has been the case until now.**
5. How to establish a fruitful coordination between interactive and classical teaching? Lately, there is a dogmatic viewpoint because interactive teaching is set on a pedestal of exalted value, and classical teaching is anathematized and tried to be put into an “antiques museum” as something that is anachronistic and has completely lost its value. This kind of Copernican turn does not lead to anything and if we follow such unreasonable logic then we are “throwing out a child out of the bathtub together with the dirty water”. This implies the statement that we have to keep positive elements of classical teaching (teaching method) at all costs and update them with elements of interactive teaching in order to create a fruitful dialectic synthesis.
6. **The knowledge that students adopt is neutral in value and it is absolutely separated from moral and moral values to which this knowledge should be subordinated.** One can be a top doctor, economist, lawyer, construction engineer, sociologist, politologist upon completing education. However, if that knowledge is not used for the wellbeing of society, but, on the contrary, it is misused for own

egoistic goals, the society will have more harm than benefit from such knowledge. **This misuse of knowledge is happening to us today, because on the one hand we have an atrophy of social, and on the other we have an expansion of the individual which in its wrath does not have limits. In other words, in reality we have the “zero situation” of sociality considering that the modern post-industrial society consists of many Leibniz’s monads between which all direct connections and relations are torn. Thereby, solidarity has abdicated in front of a desire for personal power as the hardest human vice.** An exit from this diabolical situation, in which we are currently, is possible if we enhance through the concept of humanistic education (which the Bologna concept of education abstracted) to the extent that knowledge which we adopt during education we do not use exclusively for our particular goals, but also for the wellbeing of the social community.

7. **The upbringing component of education is repressed.** It is a known fact that educational institutions (from primary to higher education) in the Republic of Srpska, in the normative respect, are binary defined as educational and upbringing ones, which means that they are at the same time achieving an educational and an upbringing function. However, in the existing educational system of the Republic of Srpska there is a dissonance between an educational and an upbringing function of all educational institutions. **In the teaching process, an accent is put on the educational component, while the upbringing component is left *ad acta*.** That the educational dimension of educational institutions has not been set as a priority goal is also verified in the fact that the national group of subjects (Serbian language and literature, history, geography) does not meet upbringing goals because they are impregnated with extreme positivism. Namely, the entire teaching process is overly directed towards adopting of a big number of information and only its reproduction, and insufficiently is developed creativity, intellectual unrest and **values of the national state, homeland, patriotism, fairness, truthfulness and solidarity are not affirmed.** Examining of students is mainly valued to what extent they have learned by heart and reproduced a big number of information. Such teaching is stereotype, useless and deprived of purposefulness. That is why it would be necessary in teaching, to insist, not on the adoption of unimportant facts but essential ones and their understanding. In that way, students would be disburdened from a pile of unneeded facts that exclusively train memory. This would contribute to the creation of enough free time to reaffirm the upbringing function of university especially in this crisis period and traumatic social circumstances, when family cannot play a significant role in the process of socialization and forming of the personality of students.
8. **Over-emphasized spread of technology and quantification of the teaching process** in the era of an IT revolution. It is, in the manifestation respect, is becoming the subject of mass installing of technical means in teaching. In that way, established is the nihilistic relationship towards the quality side of education and it is being put in a “bracket”. In this way, adopted is the reproductive knowledge, which, when observed from a pedagogical point in the value respect, is the lowest degree of knowledge. Also, left is the world of fantasy, creative and discursive thinking and thereby students are transformed into machines. On that basis disputed is the idea that **a man is a “cane that thinks”** and he is becoming a robot without imagination and intuition. From everything that has been said until

now, the conclusion arises that it is necessary to introduce technique into a teaching process flexibly and it must be approached **in a** differentiated manner. In technical faculties, it is justified, while in those faculties which have a social and humanistic connotation it is very questionable and it should be applied to a rational extent, and not literally. Hence, **technique should not be a goal in itself but a means to achieve good results in teaching.**

9. **The Bologna process favors a reductionist approach to education which bears the stamp of pragmatism.** We are witnesses of commercialization of higher education dominated by the Anglo-Saxon concept of education in preparation of experts. It is completely certain that it has a range of consequences:
- a) Direct dependency of higher education on private capital;
 - b) Giving educational services where we have a payment form of education;
 - c) The management of a university is getting a central place and it is intentionally directed towards marketing of educational institutions, attracting students and searching for investments;
 - d) Knowledge is becoming a commodity where there is a purchase relationship between teachers and students;
 - e) Dislocation of teaching staff from state faculties to private faculties for the purpose of greater profit.

This over-emphasized **commercialization of education** is one-dimensional, since it has a utilitarian connotation and as such, it is, from a humanistic aspect, absolutely unacceptable. It should be wider directed towards affirmation of personality, preserving and enhancing of culture, religion, language and tradition of the nation that it belongs to.

10. The Bologna process in higher education, is in the function of its unification in Europe through unique standards of education. Occurrence of universal standards, in the sphere of education, is meeting resistance in small countries, since they see it as a danger to their identity. They would therefore have to give up their culture, language, religion, tradition which determines their national identity.

Therefore, it is about a potential possibility which tomorrow can be an actuality, because in case of a violently implemented globalization of the world, nations would be melted, national cultures in the planetary pot for melting for the purpose of creating a uniform, colorless mankind. Thereby all identities: national, cultural, religious and educational would be simply assimilated in favor of a single educated humanity that the protagonists of the new world order led by the United States of America want to install. In order to oppose this, the Republic of Srpska in its educational system, beginning from the primary to higher education, **must put an accent on the national group of subjects** (especially history) and increase the number of lessons which is currently minimal. This would strengthen a healthy Serbian patriotism, which was substituted in the period of communism by self-governing socialist patriotism. Preference was given to the communist internationalism as a more advanced awareness than patriotism pronounced anachronistic, primitive and as something that should be treated as nihilistic and something that should be ignored and dismissed. **If we want to strengthen national awareness and preserve the individuality of Serbian national corps, then the national component of education must be reaffirmed for the purpose of preserving historical remembrance of who we are and what are our roots. Otherwise, in the era of globalization, we will experience a destiny**

that our identity is substituted by a European identity and therefore we will annul ourselves as a nation.

11. Bologna, in the sphere of education, is promoting a natural scientific positivistic view on the world in which a dominant position is taken by the natural-scientific disciplines. Thereby the humanistic sciences are underrated. On that basis hypostatized is the role of technical intelligence, and minimized is the role of humanistic intelligence. That is how the possibility of democratization of society is blocked, because only humanistic intelligence can fight for it, which has a critical distance towards the existing world, and not technical intelligence, which is more prone to conformism. All of that is in the function of world globalization, tailored by the most powerful Western powers, which strive to establish economic, political and military dominance in the world. Certainly, this is easier to achieve if we have machines in society who do not know how to critically think and are not revolutionary, but, if there are those personalities in society which are more autonomous, free-minded and ready to take risk in society, in order to achieve its transformation through a radical redistribution of economic and political power in favor of deprived social groups (workers, youth, intelligence).
12. Having in mind the circumstance that the **Bologna concept of education abstracts the humanistic approach to education**, then we cannot expect its democratization. We should not overlook the fact that we live in a society where the rudiments of the patriarchal are perpetuated and are tried to be conserved at any price. Therefore, it is completely understandable why authoritarian education dominates in us as a psychological training which serves for directing of youth to a uniform and conformist view of the world. This view of the world coincides with Nietzsche's insight "that the formula for human greatness is *amor fati*: that one wants nothing to be different, not in the future, not in the past, not for all eternity". It is necessary not only to put up with it but, Nietzsche says, we need to like it, be engaged in it and cultivate idolatry towards it. It is completely clear that this view of the world is in absolute collision with the humanistic concept of education in which emphasized is the need for creativeness and critical thought. It means that man should never agree to a fetishization of the factual situation, to unavoidable necessity, but he must enter into them elements of dialectic negation, for the purpose of realizing of Marx's humanistic project of general human emancipation. It implies that a man must be free and that he independently makes decisions on all matters of his existence, economic, political, social, cultural and educational.
13. **Bologna process in education proclaims the idea of lifelong learning.** It acquires a universal connotation because it is no longer cut off by time during full-time schooling until we acquire a diploma, but it extends throughout life. We live in a time of spectacular technological changes where **new occupations** emerge "overnight" for which we have to educate ourselves additionally. With respect to that, actualized is also the significance of general culture (which is ignored by the Bologna concept of education) which should be acquired during education, considering that it enables us to more efficiently realignment for new work roles which we have to undertake in the workplace. It is understood that it implies the need of openness of the social community for the idea of permanent education and investment of great funds in order to achieve something like that.

In that respect, there is no understanding of the social community because a traditional viewpoint is dominant that education is a burden and a loss for the economy (expenditure segment). In that, people do not want to understand **that education for a certain society is the basic production force which contributes to its development and that investment into education is investment into the future with an aim to achieve social progress and prosperity of the social community.**

14. Exchange of students and teaching staff between states signatories of the Bologna declaration has stayed symbolic and did not acquire frequent connotation.
15. Implementation of the Bologna process, in higher education, implies the need of its compatibility with economic possibilities, which is in correlative dependency on the degree of development of the economic base of society. Our society is poor and is not able to set aside enormous funds necessary for its objectification in reality.

Since there is a discordance between high requests set by the Bologna declaration, in the sphere of higher education and material possibilities, then it is no surprise that, in essence, it is a manifest where proclaimed are numerous desires and optimistic unrealistic expectations. **That is why we should not be surprised if it stays in the domain of utopia.**" (Tramosljanin, 2013; 19).

Conclusion and recommendations

In the intention of constant development and improvement of science and education, as a significant segment of universal state capacity, present is the influence of the state on the planning and organization of scientific institutions, in other words science and education. This is interesting if we begin from the aspect that the state finances the majority of scientific projects and the majority of higher education institutions, makes laws in this area etc. However, current legal provisions and treatment of science, scientists and valuation of their work, their promotion, ie. their attitude towards them by the state, creates conditions for the occurrence of various forms of misuses, even the occurrence of criminal actions in this very significant area for every democratic and modern state.

There is no doubt that the reputation of science and education is disrupted, in other words the system of evaluation of scientists, educational workers and scientific contribution. Therefore, science is significant for the state but the science also very much depends on the attitude of state towards science. One of the basic necessary (priority) tasks of the state towards this significant field would be that significantly better regulate this field legally in order to primarily avoid the increase of different forms of misuses, crime ie. decriminalization of science and education. That is how scientific research is already becoming a production force of a howled post-industrial society with a vision of a third technological revolution in the epicenter of which the top science and top education are standing.

Development of science and education and constant improvement of scientific and cultural education of the population is considered one of the most important factors of progress of humanity. Knowledge enables man to understand the laws that govern the development of the world that he lives in, to control the laws of nature and to achieve a greater level of living standard. Improvement of education enriches the spiritual life of an individual and enables them to use the advantages of culture, science and arts. That is why the characteristic of our time exerts itself through an increasing aspiration of people for greater education and use of knowledge acquired during a long history of mankind. That is why requests for education are important as much as the need for food. Education affects the change of man's needs. An educated man expands the circle of his needs, desires and possibilities. However, an uneducated man reduces his needs to basic, exemplary, existentially related to his biological survival. "An uneducated man does not have needs, he is a bad consumer" (Roselo).

Two approaches to education are evident in theory and practice: **the first approach to education takes education as consumption, and the second approach to education takes education as an investment.** Education as consumption contributes to the improvement of the living standard of an individual. Education as an investment contributes to the increase of national income and social wealth. People invest all their abilities, knowledge and experiences into insurance of their material existence, into economic potential and its prosperity, because the level of economic development is a basis which determines the progress of human society and the individual. Improvements, modernization of production and increase of productivity of work require that personnel issues become an integral part of the general economic policy and get an equal place both in plans of a company and in plans of social communities. In economic development of every country, nothing is more important than personnel, the process of their acquiring of knowledge and skills and creative ability, ie. creation of personnel potential for movement and rational use of material sources and creation of material goods.

Activities directed towards the creation of wealth are no longer work, nor capital, nor land. The basic economic resource is only knowledge...The sole transition from knowledge to knowledges gave knowledge the power to create a new society, a new economy, a new policy. What we today understand as knowledge is an information effective in action, focused on results. Those results can be seen outside of personality – in society and economy, or in the improvement of knowledge itself. **An educated person is an argument, emblem and a symbol of a knowledge society. The educated person of tomorrow is a professionally prepared person for life in the global world.**

Edification of youth in the spirit of the highest humanistic values is the task of education, ie. our task.

Scientific research work characterizes the condition and the attitude towards science in the whole of the Republic of Srpska which can briefly be characterized as:

- attitude towards science as towards "consumption", and not an "investment";
- improperly little funds for scientific research work,
- funds for realization of projects are for the most percentage spent on fees,
- small number of world-renowned scientists and works;
- weak connection of the scientific research sector and the research development sector with the production sector;

- lack of motivation of the scientific personnel for scientific research activities;
- small degree of utilized opportunities offered by European and other financing funds;
- lack of modern research equipment.

The following can briefly be singled out as possible directions of advancement of scientific research work:

- development of human resources through the selection of quality young associates, inclusion of students into research projects, active mentorship and moral support and the application of the EC Charter and Codex during the selection of researchers;
- development of a favorable environment and cooperation through the development of directions of scientific research which suits the requests of global science and the cultural and economic requests of the country, strengthening of the social awareness about the significance and role of science and technology, more active involvement in international projects and connecting with the “scientific emigration”;
- provision of the material basis which is necessary for carrying out of scientific work;
- introduction and acceptance of unbiased scientific criticism.

Concrete recommendations should be directed to the following topics:

- it is necessary to set aside more funding for science and education;
- there is a need to strengthen to a greater extend the role of the Republic’s Administration for Inspection Affairs – Educational Inspection for the purpose of consistent application of the Higher Education Act and other laws and by-laws by all higher education institutions (colleges, faculties and universities);
- a lack of teaching personnel has been noticed in higher education institutions when it comes to admissions into titles, insufficiencies when it comes to documentation (adoption of curricula, list of teachers in charge, register of issued certificates and books of graduated students, decision on enrollment of part-time students, records on lectures and exercises held, registries are kept disorderly etc.);
- when it comes to teaching and exams, it is noticed that not all have two appointments in examination periods or there are so-called pre-deadlines which are not envisaged by law. In some faculties, exams are taken outside of the head office of the faculty in classrooms that do not have a work permit. Students take seven or more exams during one month;
- in some higher education institutions, the biggest problem when students enroll into the third year from faculties which are main in completely different scientific areas from those that are being enrolled, they are being recognized previous education, and in a few months for example a person which has previously acquired a diploma of a mechanical engineer at the Faculty of Mechanical Engineering, obtains a diploma of a manager or an economist in some other faculty. It is a mistake that the enrollment of students in some higher education institutions is carried out during the whole winter semester, all up until the end of

January. Enrollment of candidates is carried out who do not have a validated secondary school diploma or which do not have any documentation on completed previous education;

- when we look at the state of the management organs in some colleges and universities, we can notice that the director is a member of the Managing board, the Rector is employed part-time, many higher education institutions have fictive organs of management (teaching council, senate) which do not hold sessions and instead all decisions are made by the dean or the director;
- the number of permanent employees in many faculties is insufficient;
- many higher education institutions hire professors on the basis of a contract on carrying out casual jobs, which is contrary to the Labor Act and the Higher Education Act. Some professors teach in seven or more faculties on the basis of these contracts. These are just some concrete observations, weaknesses which need to be removed, but also proposals for improvement of scientific research and educational work. Our generally known goal is that we should all together take increased measures and actions to restore the image to the education...

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