Abstracts of Papers Presented







Twenty-Eighth World Congress of the SVU

The World In a Time of Change

Bratislava, Slovakia 1-4 September 2016



ABSTRACTS OF PAPERS RECEIVED

TWENTY-EIGHTH WORLD CONGRESS OF THE SVU

Bratislava, Slovakia, 1-4 September 2016

The booklet you hold in your hand contains the abstracts of the presentations submitted by the participants in the 28th World Congress of the Society for Arts and Sciences SVU, held in Bratislava, Slovakia from September 1 to September 4, 2016. The SVU is grateful to the Bratislava branch of the SVU for being the local hosts the event, and to the Vysoká škola zdravotnictva a sociálnej práce sv. Alžbety, Bratislava for providing the venue. We also thank the Slovak Academy of Sciences and the Comenius University in Bratislava for lending their sponsorship. Abstracts are organized in alphabetical order by surname of the presenter (or

first presenter if there are multiple authors for the presentation). With exceptions noted, abstracts submitted in Czech or Slovak were translated into English by Hugh Agnew. It is hoped that conference participants and attendees will find these abstracts useful in making the most of the opportunity this congress presents to sample the wide range of intellectual and cultural pursuits that members of the SVU on multiple continents engage in, as we all face a world undergoing rapid and sometimes confusing changes—the theme of this year's congress.

On behalf of my colleagues Eva Hanušovská, Cecilia Rokusek, and Peter Ujházy, I would like to express thanks to all participants for providing such an intriguing and multi-faceted program.

Hugh Agnew, Program Co-Coordinator, 28th World Congress of SVU

Music Therapy in Music Education

Marie Bobková SVU Moravian Section, Brno, Czech Republic

We discuss the topic of musical ability, general intelligence, and some other personality characteristics in the context of music education. We report the application of elements of music therapy in certain learning disorders. We present training methods for improving concentration and memory, with special emphasis on the rhythm. Through music therapy exercises we can contribute to the overall harmony of personality, especially for developing perception and empathy. Furthermore, we describe the current trends in music therapy, again in relation to music education.

Missa posoniensis

Vladimír Bokes Academy for Performing Arts, Bratislava, Slovakia

It is needless to explain all about the decision to write music using liturgical texts involved in the period until 1989. I thought of such a piece for a long time, but the final decision came after 25 March 1988, which has gone down in history as Bratislava's Good Friday. The all-day-long noise of the riot police cars was just what evoked the memories of the

Soviet tanks in 1968, and in retrospect its recognition as a sign of the looming collapse of the regime which was to end in same way as it had begun. And there came the idea, yet for me it became a source of motivation to work on the Mass: to connect the central movement of the Mass cycle *Credo* with sound effects reminiscent of the day (police car sirens, whistling, and water cannons). After some preceding works yet another absurd piece of evidence is presented, which has turned out to be true. Those people were able to follow the Christ, I felt my duty was at least to capture in music this historic occasion.

Kyrie. Chorus remembers at once breath and Gregorian chant. The text is gradually shifted from the chorus to all instrumental groups: the orchestra also "cries" *Lord, hear our prayer.* The solo voices deliver the section *Christe eleison.* The concluding Kyrie is a four-voice fugue. On a background of a fugue and instrumental framework emerges.

Credo. Just at the time when I finished writing this movement, a substantial change took place - 17th November 1989, the Velvet Revolution. An unbelievable experience based on seeing what happened under the windows of my study to be nothing but what I had just been writing. The people stood up with a prayer on their lips, against the superiority of police force. Nothing more or nothing less is here in this part: there comes an orchestral "chaos", an image of the times that have ended. In 1990, to the occasion of first journey of Holy Father John Paul II in Czechoslovakia I wrote *Pater noster* and included it later to the Mass.

Agnus Dei. The calm expression of freedom dominated in the final choral fugue "Dona nobis pacem". The clean copy of the composition is dated 22. 2. 1991. Missa posoniensis (Bratislava Mass) was first performed 14. 1. 2016 with Eva Šušková (soprano), Eva Garajová (alto), Maxim Kutsenko (tenor), Martin Gurbal' (bass), Slovak Philharmonic Choir and Slovak Philharmonic Orchestra was conducted by Leoš Svárovský.

Art of Music at the Turn of the Millennium in Europe

Klára Bokesová Bratislava, Slovakia

Music in churches at liturgy has heightened spiritual experience. It has bestowed glamour upon festivities in castles, palaces, and stately homes, being the source of joy and entertainment. In the cities of the 19th century, philharmonic halls were founded; the art of music became available to wider sections of the public. In the 20th century, in times of conflict and totalitarian regimes, music has been a place of refuge for the silent majority. Here, in Slovakia, it has become commonplace over the past couple of decades to come across people in dire social situations. Anton Srholec, member of the Society for Science and Arts (SVU), former political prisoner, priest, and charitable worker, founded Resoty - a refuge center for the homeless. It does not take long until the project faces financial difficulties; even its very existence is threatened. Eva Fischerová, professor of piano, a SV U member herself, suggests organizing a benefit concert before Christmas in order to collect contributions as well as raise awareness among the wider public and potential sponsors. So it happens that musicians ranging from small children learning music as an extracurricular activity to professional players have for the past 20 years in the time of Advent regularly performed under the auspices of the SVU for Anton Srholec's Resocialisation Community, for our poorest brothers, and their charitable helpers; music and charity have gone hand in hand. The opening concert of the 28th World Congress of the SVU on September 1 in Bratislava, in the Mirror Hall of the Primate's Palace, presents an opportunity to listen to some of these musicians.

Crisis of Contemporary Civilization and Challenges of Modernity

Ivo Budil Metropolitan University Prague, Czech Republic

The question of the rise and fall of civilizations is highly complicated because it requires knowledge not only from various scientific fields such as history, archaeology, anthropology, geography or natural sciences, but we have to understand some essential concepts, or categories such as civilizations, the basic building blocks of our understanding and interpretation. To deal with some phenomenon of social, political or historical nature we need some useful and relevant intellectual tools to understand it. In my contribution I would like to focus very briefly on the question of the special nature of our civilization and its resilience to all unpredictable challenges it should face in the near future. The term civilization was used for the first time by French scholars in the first half of the eighteenth century. It designated the human society that should be able to promote and force justice. To be civilized meant to be just, in the first French conception. Later, the definition of the concept of civilization gradually changed. When the British settled in Bengal in India in the last decades of the eighteenth century, the men like Warren Hastings, William Jones, or Charles Wilkins were fascinated by local Indian tradition, religion and literature and they were even convinced that Indian society was spiritually superior to the Western one. However, at the beginning of the nineteenth century this first Western generation of orientalists was replaced by a group of administrators educated in the spirit of reformism, rationalism, enlightenment, and British imperial patriotism. Jeremy Bentham, James Mill, or Charles Grant coined the concept of civilization as a moral mission, as a task of superior nation to dominate, lead and transform the inferior one. Arthur Gobineau defined in 1853 civilization as "a summary of all moral and material forces" we could dispose.

Roboethics

Ivana Budinska Slovak Academy of Sciences, Bratislava

Recent technology development brings new challenges for the application of ethical principles. Generally accepted ethical principles can not be easily applied to situations involving robots and autonomous devices. Robotics recently seen a tremendous boom. Today's robots are equipped with advanced mechatronic systems, complex sensor systems and particularly with sofisticated software. Robotic devices help us in many areas - medicine, manufacturing, search and rescue operations, etc. The aim of researchers in robotics is to increase the autonomy of robots, as it expands the scope of their applicability in real life. It is not just about autonomous vehicles, unmanned air, and underwater vehicles, but also about a number of service robots. Researchers in robotics have to solve a moral responsibility towards the robots already in stage of their developments and construction. There are relatively welldefined areas, where the use of robots is appropriate and desired. According to statistics, people in Europe accept the use of robots in environments, where it is dangerous to humans, where people can not get, where robots can perform strenuous and routine work (space exploration, manufacturing), search and rescue operations, military and security purposes). On the other hand, it is a widespread perception that robots should not be used, even that their use should be banned in childcare, elderly and disabled people care. Another dilemma faced by researchers in programming robots is, how robots should resolve the border situation, where decisions about people's lives comes into consideration. Is it or is not ethic, if features of human behavior, affective perception and decision-making are incorporated into robots' software? The answers to these questions are not known and we cannot expect, robotics experts will be able to solve them. It is certainly not the right solution to stop the progress that brings the development of artificial intelligence and robotics. It is important to raise questions and stimulate discussion on an interdisciplinary level. This paper reports some views on ethics from the perspective of a researcher in the field of robotics.

Cleveland Agreement of 1915 - A Seed That Blossomed Into a Flower That Was Czechoslovakia

Paul Burik SVU Chapter, Cleveland, OH, USA

An event took place in Cleveland, Ohio on October 22 and 23, 1915, that —though little known—was the fundamental stepping stone to the formation of Czechoslovakia. The Government in Exile, led by T.G. Masaryk, relied heavily on support from America during the formative years prior to 1918. Masaryk traveled to the U.S. frequently, including two instances when he lectured in Cleveland. It was imperative that the Czech and Slovak communities in the U.S. were working together to support the émigré movement. The pivotal moment occurred in Cleveland, Ohio, USA at the Bohemian National Hall. There, a document known as The Cleveland Agreement was conceived and approved by the Bohemian National Alliance, headquartered in Chicago, and the Slovak League of America, based in Cleveland. In this Agreement the delegates agreed to work in unison to pursue independence for their respective peoples by collaborating in the effort to form a new, free union of Czech and Slovak states. The five points of the agreement were: 1. Independence of Czech and Slovak Lands, 2. Federal union of Czech and Slovak nations with full autonomy of Slovakia with its own government, use of Slovak language and cultural independence, 3. Free elections, 4. Form of the government to be democratic, similar to that of Great Britain, 5. These items form a basis of mutual agreement and can be altered only by agreement of both parties.

This document was the first formal agreement between the two nationalities. Later the Pittsburgh agreement of May 31, 1918 augmented the Cleveland Agreement and became the call for independent Czechoslovakia, which materialized later that year on October 28, 1918. The presentation will examine and document the circumstances in Europe and in U.S. that led to this pivotal agreement.

Anton Srholec – Documentary Film

Alena Čermáková, Mario Homolka, Dávid Čorba, Ivan Čermák Bratislava, Slovakia

ANTON SRHOLEC is a documentary film about the life of an important man—a Roman Catholic priest and member of the Salesian order who was rejected by his own Catholic hierarchy. He was also a writer, charity worker, political prisoner, lover of people and devoted follower of Christ. Despite the difficult circumstances of his life, Anton Srholec never gave up his principles of love for humanity and God and always fought for a better world. This film will be presented during a special session of the 28th Congress of the SVU, of which father Srholec was a member. It complements the opening concert described on p. 2 of this booklet.

Producers: Mario Homolka, Dávid Čorba; dramaturgy: Mario Homolka; sound: Marek Lacena, Martin Macko; sound mixing: Dušan Kozák, Bohumil Martinák; music: Ivan Čermák; editor: Peter Kotrha; cinematography: Henrich Bródy, Mário Homolka, Alena Čermáková; director: Alena Čermáková

Global Media versus Ethnocentrism in the Internet Revolution: Some Reflections on the Possibilities

David Chroust Texas A&M University, USA

The Internet revolution has given us access to the world's media ... and with it the possibility to overcome our ethnocentricity, see the world through the media of other countries, develop ourselves in other language communities, become more critical and tolerant, and practice a self-globalization independent of states and elites. States and the elites who operate them confine us with their media, biases, self-centeredness, nationalisms, imperialisms and other ideologies and interests. The Internet offers us an escape, a portal to the many different views and narratives on offer around the world in digital media. By connecting elsewhere, we can see much that is hidden to us where we live. American media doesn't tell us much about Europe or its transformations by migration and integration, but German digital media does. Western media reduces Russia to clichés and dismisses Russian state television as propaganda, but Russian state television is a rich medium for learning about Russia and the world, and much of it is available in YouTube. Monolingualism also confines us to the media in our own country or language, but the new and enormous access to the world's digital media can motivate us to (re)discover and develop our multilingualism. Languages learned at school, in transnational families and in other ways suddenly dazzle us with access to digital media somewhere else in the world. Our knowledge of other languages may be from long ago and may not reach far, but it can be enough to make some sense of texts and broadcasts, and it can develop quickly as we read, listen, watch and learn. We can do all this as individuals for our own intellectual development and other personal reasons, but we can also influence people around us, and we can become better non-state actors in a world whose elites make and abide much conflict, division and loss.

Jan Viktor Mládek a Společnost pro vědu a umění

Antonie Doležalová Institut ekonomických studií, Fakulta sociálních věd, Univerzita Karlova, Praha Bye-Fellow, Robinson College, University of Cambridge

In the Czech lands there is a sort of post-Velvet tradition that ignores people who went into exile and their unique experiences. That is the case for Jan Viktor MI ádek, today practically forgotten, but from a certain perspective a key figure in Czech economic thought. Yet J. V. MI ádek was not merely an excellent theoretical economist, he was for many years a director of the International Monetary Fund, a patron of Czechoslovak and Central European art—and above all president of the Czechoslovak Society for Arts and Sciences in America/Společnost pro vedy a umění, SVU).

The SVU as an institution grouping together Czechoslovak scientists, artists and specialists from a whole range of disciplines living in American exile had as its original purpose to assist the younger generation of émigrés in their scholarly careers in the USA. On the one hand this was done by establishing a scholarly journal published in English, and on the other hand by the more mature specialists supporting the younger scholars in their search for employment — above all through personal references. In the field of economic sciences, besides the important theoretical economists of the First Republics uch as Jan Maria Novotný, former professor at the VŠO, in the US a professor of economics at Rockford College in Illinois,

or Vladislav Brdlík, economic specialist of the Czechoslovak Agrarians and professor at the ČVUT, living in Phoenix, Arizona, it was especially J. V. Mládek who fulfilled this role. He assisted a whole series of young Czech economics with finding positions, he read their works and helped shepherd them into print. He strove with all his effort to fulfil the mission of the institution. During his time as president of SVU (1970-72) and afterwards he also worked to uphold the traditions of Czech economic thought, to which he was connected as a student during the First Republic of the well-known Czech economist Karel Engliš. This presentation will focus on a concise summary of Mládek's many exile activities with emphasis on his work with SVU and his connections with other Czechoslovak economists in American exile.

Natural Dynamic Systems and Sustainable Lifestyle Perspectives in the Changing World

Ima Dovinová and Zlatica Plašienková
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Faculty of Arts, Comenius University, Bratislava, Slovakia

The aim of this contribution is to refer to the relationship between nature and human beings in the changing world. Natural dynamic systems should be understood as a wisdom for human life. We can find it in physical, biological and ecological systems. For instance in biological systems loss of homeostasis leading to final damage of whole organism and in ecological system loss of integrity leads to far-reaching changes in ecosystems. During the last three hundred years, western science was dominated by Newtonian-Cartesian radical paradigm in combination with monistic materialism, and all other disciplines such as biology, medicine etc. they were also controlled by this pradigm. Today world has many scientists, who leave the outdated paradigm and are not afraid to speak out against it and to introduce new holistic perspectives and therapeutic approaches. They somehow link and collaborate across disciplines. The new paradigm builds subject and object, spirit and matter, on the same level.

Acceptance of relationships in ecosystems, understanding the whole, the awareness of the need for social harmony and natural being and the whole of nature includes condition for the existence of life. Today we need a new life style, which should reflect the ecological crisis and other pathological phenomena; therefore we need holistic and evolutionary vision of the universe. We live in a dynamic reality where the basic element is our experience, which is not only empirical, but also spiritual. The reflection on this experience implicates other relevant questions such as meaning of life and the problem of values such as responsibility, frugality, diversity, respect for life, justice on which sustainable development must be based and respectful. At the same time we can indicate these values as eco-values which we need to accept for sustainable life in the changing world. These tasks require radical changes in our mind and to understand and recognise our unity and integrity with all nature and Universe.

Development of Aberrant Redox Regulation in Cardiovascular Diseases

Dovinová, I., Kvandová, M., Majzúnová, M, Bališ P, Barteková M, Barančík M. Institute of Normal and Pathological Physiology SAS, Bratislava, Slovakia Institute for Heart Research SAS, Bratislava, Slovakia

Redox homeostasis dysruption and aberrant redox regulation are one of the most important phenomenon influenced cardiovascular diseases and hypertension. In experimental animal models we studied several target mechanisms involved in such redox regulation. The

main pathways were connected with AT1R-NADPH oxidase-superoxide level, antioxidant and detoxification response activated mainly through Nrf2 and with NO-synthase isophorms involved in heart and blood pressure regulation. The age for development of cardiovascular pathologies can be important, so we focused on age - depentdent changes between young and adult rats. Different cardiovascular models with exogenous agents for development of cardiovascular diseases (NO-inhibitors(1), cardiotoxic anthracyclin doxorubicin DOX(2) were observed. On the other hand we focused also on treatment of hypertention (SHR animal models (3)) treated with PPAR gamma agonists. In these models we studied radical and antioxidant signaling in brain, vessels and heart. Systolic blood pressure was measured by non-invasive plethysmography or telemetry. Gene and protein expression were identified by real-time PCR and Western blot analysis. Superoxide level were determined by lucigenine enhanced chemiluminiscence. Enzyme activities were detected using radioactiv and spectrophotometric assays. In NO-deficient models (1) we found that hypertension and antioxidant response in young rats were regulated mainly through peripheral regulation (vessels and heart), while in adult rats the main changes were observed in neuronal regulation of brainstem and RVLM. In DOX model of cardiomyopathy (2) we found that increase in superoxide level corelated with development of hypertension, Akt kinase activation and antioxidant response and SOD activities decrease in animal hearts. Finally in SHR model (3) of adult rats there were no effects influenced blood pressure level and redox signaling, while in young SHR blood pressure decrease and improvement of redox-sensitive regulation was observed.(Supported by APVV-0348-12, VEGA 02/0129/14 and VEGA 2/0108/15.)

The Gamma and Delta Left-Prefrontal Oscillators in General Anaesthesia with Volatile Anaesthetics in Open Thoracic Surgery

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Jessenius Faculty of Medicine and University Hospital Martin, Armed Forces Academy of General M. R. Štefánik in Liptovský Mikuláš, Slovak Republic

There are many theories that attempt to explain the mechanisms of the effects of inhalation anaesthetics – from simpler, pursuing individual effects of anaesthetics on the level of the ion channels, to more complex that are looking for uniform global changes in brain activity common to several agents. However, we still don't have satisfactory and adequate conclusions. The main objective was to indicate sufficient general anaesthesia (GA) inhibition for negative experience rejection in GA.

Patients and methods: We investigated the group of patients (n=17, mean age 63.59 years, 9 male - 65.78 years, 8 female - 61.13 years) during GA in open thorax surgery and analyzed EEG signal with power spectrum (pEEG) delta (DR), and gamma rhythms (GR). EEG was performed: OPO - the day before surgery and in surgery phases OP1-OP5 during GA. Particular GA phases: OP1= after premedication, OP2= surgery onset, OP3= surgery with the one-side lung ventilation, OP4= end of surgery, both sides ventilation, OP5= end of GA. pEEG registering in the left frontal region Fp1-A1 montage in 17 right handed persons.

Results: Mean power of DR in OP2 phase is significantly higher than in phase OP5 and mean power of DR in OP3 is higher than in OP5. It means one-lung ventilation with increased minimal alveolar concentration gases does not accelerate decrease in mean DR power. Higher mean value of GR power in OP0 than in OP3 was statistically significant. Mean GR power in OP3 is statistically significantly lower than in OP5 correlating with higher gases concentration in OP3.

Conclusion: Our results showed DR decreased since OP2 till the end of GA, it means inhibition represented by power DR fluently decreasing is sufficient for GA depth. GR power decay near the working memory could reduce conscious cognition and unpleasant explicit experiences in GA.

This work was supported by the project *Consciousness and its changes during general anaesthesia in thoracic surgery*. APVV 0223/12. Basic research. Slovak Research and Development Agency.

Management of Hemoglobinopathies in Slovakia

V. Fábryová, P. Božek, M. Drakulová, A. Kollárová, Z. Laluhová Striežencová, M. Macichová, J. Netriová

Nemocnica sv. Michala, Bratislava; Dérerova nemocnica, UN Bratislava; ÚLM, laboratórium lekárskej genetiky, FN Nitra; OHT, Detská fakultná nemocnica, Bratislava; OHT, FN L. Pasteura, Košice

The Study Group for Search of Beta-Thalassemias and Other Hemoglobinopathies was operating in Slovakia since 1993. Its activities are distributed among the following hematological centers: St. Michaels's Hospital, University's Derer's and Children's Hospitals in Bratislava, Department of Hematology at the Louis Pasteur University Hospital in Košice, and Institute of Laboratory Medicine, Laboratory of Medical Genetics at the University Hospital, Nitra. Besides these institutions, more than 70 physicians from accross Slovakia participate in the activities of the Study Group. Here, we present the summary of accomplishments by the Group:

The diagnostics of hemoglobinopathies was extended by electrophoretic evaluation of hemoglobin at many centers, by high performance liquid chromatography, and by reverse hybridization at genetic centers. Currently, the registry houses data from 540 patients with suspected hemoglobinopathy, including 32 foreign citizens (5.5%). Genetically, 213 (38.5%) patients were confirmed, including 188 (33.9%) with confirmed heterozygous betathalassemia. We have diagnosed 13 distinct mutations, all of which except of one are of the mediterranean type. In 25 patients the mutation was unknown. We have diagnosed also 3 unrelated patients as heterozygots with sickle-cell anemia (HbS), two of them with a father of African origin, one is a black female. A patient with a rare instable Santa Ana hemoglobin type is also in our observation.

Recently we have also studied mutations of hereditary hemochromatosis that may cause problems of increased iron in hereditary hemolytic anemias. The incidence of these mutations in a heterozygous form seems to by higher as predicted for the Slovak population. All registered patients are followed by the respective center. The patients are treated with vitamins and, occasionally, with erythrocyte transfusion. We provide genetic counseling to the patients and their relatives.

One important outcome of our work is a higher public awareness of hemoglobinopathies, which leads to the periodic disclosure of new cases of the disease. These studies are timely in light of the political changes in the world that may lead to an increased immigration of people from countries with an increased incidence of hemoglobinopathies to Slovakia. (Abstract translated by Peter Ujházy).

Two Prominent Personalities of Veterinary Medicine in Brno

Ludmila Faldíková SVU Moravian Section, Brno, CZ

Prof. MVDr. František Král, considered the founder of veterinary dermatology in the United States, was born in 1892 in Albrechtice, district of Písek. He graduated in veterinary medicine in Vienna, where he worked at the Clinic of Internal Medicine and also as an assistant at the Farrier Institute. He was summoned to the Veterinary University in Brno where he was in charge of building the Clinic of Internal Medicine. In 1948 he emigrated to Germany and then to the USA. He died in 1990 in Lima, Pennsylvania (USA). He was a devoted and leading official in the Rotary movement in Czechoslovakia.

Prof. MVDr. Emanuel Král was born in 1911 in Kutna Hora. He was a close relative of JUDr. Milada Horáková, who was executed by the communist regime after a trumped-up trial. He was fortunate that they were able to conceal this relationship. In 1929, he began to study the Veterinary Faculty in Brno. After completion the studies he became an assistant at the Clinic of Surgery and Ophthalmology. This faculty became his lifelong workplace. He elaborated the classification and terminology of disease of hooves in cattle, issued by ÚVTIZ in 1981, with Latin, Russian, German and English equivalents.

Peaceful Conflict Resolution within Democracies: A Theoretical Note

Ivo K. Feierabend San Diego State University, San Diego, California, USA

Modern democratic nations in contrast to the rest, are the least likely to experience political instability, violence, coerciveness in their internal affairs, the result of systemic frustration (Feierabend) relative deprivation (Gurr). Rather, they practice constructive problem solving i.e., peaceful conflict resolution (Russett et al.). Such practice is possible ex/hypothesis of the social proximity/distance theory which modifies the frustration -aggression nexus. Social proximity avoids aggression, distance may promote it. (In a graphic illustration of the insight, Black suggests that it is easier to kill a stranger, an ethnic enemy than a friend and a conational). In democracies social proximity is achieved by the relative proximity of the elites and non-elites. (In Dahl's most parsimonious definition, democracy is a system where all citizens have the right to vote and hold office). Such a vertical proximity of status equality is enhanced by the crucial horizontal proximity of citizens' common national identity. In mature, stable democracies, it is civic nationalism (Greenfeld) which is constituted by civic culture (Almond & Verba) and civility. The triad of civic culture -- which is the internalized faith of democracy-civility, which comprises its moral virtues, and civic nationalism is the indispensable sociopsychological precondition of modern, stable democracy and together with political status equality are the guarantors of peaceful conflict resolution.

The Cleveland Agreement

Gregory C. Ference Salisbury University, Maryland, USA

Just over a century ago, Czechs and Slovaks living in the United States found themselves in an almost unique situation in world history. With the outbreak of the unpopular, for the American Slovaks and Czechs, First World War in July 1914, they began

looking for alternatives to remaining in the Austro-Hungarian Empire after the war ended. Despite being immigrants and largely cut off from the co-nationals in their homel ands due to the global conflict, they were positioned to influence great power politics in their quest for an independent state carved out of the Habsburg monarchy. In October 1915, representatives of the Czech and Slovak émigré communities in the United States met in Cleveland, Ohio, to discuss plans for a common independent state. The result was the Cleveland Agreement, one of the first formal accords about a union of both peoples in a common state.

The Cleveland Agreement, issued by representatives of Czechs and Slovaks in America, called for the independence of the Czech Lands and Slovakia in a joint republic. This agreement showed that a significant number of Slovaks and Czechs, although abroad, were politically mature enough to decide their futures that supported the destruction of Austria-Hungary. The pact became a major factor in legitimizing the Czecho-Slovak National Council in London and securing Allied support for the cause of an independent Czechoslovakia. Although superseded by the 1918 Pittsburgh Agreement, this document forms a basis for Czechoslovak statehood. This paper discusses the history behind the Cleveland Agreement from the side of the American Slovaks and takes a detailed look at the document.

Effects of Long Term Human Exposure to Pollution and Radiation Studied at Microscopic Level

Viktor Foltin, E. Neu St. Elizabeth University of Health and Social Work Bratislava, Slovakia Umweltmedizin Institut, Feucht bei Nürnberg, Germany

This work investigates effects of long term exposure of human organism to aerosols or dusts containing heavy metals from industrial pollution, and to radiation used in medical diagnostic or from industrial sources. Thanks to the use of modern spectroscopic and microscopic techniques, we were able to follow a sequence of morphological changes caused by these pollutants, and discuss health degradation mechanisms. Two cases of primary exposure are discussed: a respiratory system, and the trans-placental transport. Mucocilliary clearance in respiratory system is studied as marker for various types of pollution or irradiation, employing structural changes visualization and qualitative evaluation. Transplacental system is studied on excisions from placenta and umbilical cord. Presence of heavy elements (e.g., lead) manifests exposition history of mothers. Our results are compared with statistical and time profile studies of lead contamination and its consequences. We show that analysis of heavy metals in placenta can be used as a noninvasive screening method to help predict predisposition of child to neurological illnesses linked to heavy metal exposure

Natural Gas Hydrates – A Promising Fuel of the Future

Viktor Foltin St. Elizabeth University of Health and Social Work Bratislava, Slovakia

This work provides an overview of recent research progress in extraction, control, and applications of natural gas hydrates. It is well known that methane hydrates have potential to become a significant source of clean energy for 21st century as well as a medium for safe storage of natural gas. Increase of world fuel consumption over time and gradual depletion of fuel reserves lead to transition to new unconventional fuel sources — oil and gas from shale, hydraulic fracturing, and extraction of natural gas hydrates from ocean depths and permafrost

regions. At suitable conditions (pressure, temperature and water presence), methane molecule is entrapped in a clathrate crystal cage formed by water molecules. Thanks to water encapsulation, high density, and no need for deep cooling, hydrates represent a promising new way how to safely and cheaply store natural gas. However, hydrate formation at ambient temperatures also represents hazard in natural gas transport systems. We discuss current understanding of hydrate formation and stability. A novel method of hydrate formation inhibition in gas pipelines is proposed that is based on metastable state between structure I and II clathrates by changing partial pressures of methane and ethane in natural gas flow. A move towards environmentally friendly hydrate inhibitors is also discussed.

Laboratory Medicine in the Twenty-First Century

Štefan Galbavý Ústav súdneho lekárstva LFUK Bratislava, Ústav zdravotníckych disciplín VŠZ a SP sv. Alžbety Bratislava

Introduction: Contemporary diagnostics is very complicated. A final diagnosis considers clinical manifestations, radiological, biochemical, and molecular-biological findings, on the basis of which it is possible to diagnose the process of a disease with great accuracy. A final diagnosis includes also evaluation of cytological and microarchitechtonic aspects of the disease. Clinical pathology is a part of the teamwork in which diagnosis resembles a "jigsaw puzzle" method of evaluating several analyses, including biopsy.

Objective: To demonstrate contemporary biopsy diagnosis, which does not merely determine what the disease is, but, through the evaluation of multiple parameters, is capable of providing also prognostic-predictive information important for determining the prognosis of the disease, selecting therapeutic strategies, and predicting outcomes of chosen the rapeutic methods

Materials and method: The authors demonstrate, using sections of bioptic material prepared in the standard way, evidence of diagnostic or prognosis-predictive markers with the aide of immunohistochemical techniques, and also identified chromosomal or genetic alterations with an impact on their functional state with the aid of *in situ* hybridization methods (Fluorescent Interphase *in situ* Hybridization – FISH; Chromogenic *in situ* Hybridization – CISH, etc.).

Results: We demonstrate with the samples more sophisticated methodologies such as microarray technology, laser micro-dissection, comparative genomic hybridization, and the like. Using biopsy material prepared in the standard ways it is possible to obtain high-quality DNA from a tumor. Less successful isolation of m-RNA ("messenger" ribonucleic acid) from archival materials for other molecular-biological analyses, such as polymer chain reaction (PCR), mutation analysis, and the like, was also possible.

Conclusion: The authors present the place of clinical pathology in the twenty-first century in relationship to laboratory medicine as a whole.

Exhibition of Creative Visual Art during the Congress of the SVU

Anna Galková, Anton Galko Creative Artists, Bratislava, Slovakia

In the works on display by the artistic couple Anna Galková and Anton Galko an intoxication with color and emotional shading predominates. Colorful music, speech,

intonation and tuning in harmony and meditation—the portraits of women and men in their quiet solitude and contemplation by the author Anna Galková bear these qualities. In the broader polarity of Anton Galko's artistic inspiration there are paintings of earthly landscapes and the universe, flowers, and the symbiosis of blossoms and butterflies, human desires and hopes, and the shared faith of both artists, that the values of truth and beauty of art are yet part of today's complex and contradictory postmodern world. In that world the Galkos develop and build variations on references to the artistic *moderna*, postimpressionism, symbolism, secession, certain principles of expressionism, fauvism, orphism, abstract impressionism, and tachisme. And they do it all in a lively, authorially authentic and unique creation and sincere painting.

Examples of their works will be on display in the premises of the aula of the VŠSvA during the course of the SVU Congress in Bratislava. More about the artists can be found in the work by Bohumír Bachratý, *Anna Galková Anton Galko, výtvarné dielo 1953-2011*, FO ART, s.r.o, Bratislava 2012.

New Laboratory Technologies Used In the Diagnostics of Hemophilia on the Molecular Level

Eva Hanušovská, Stanislava Hašková Vysoká škola zdravotníctva a sociálnej práce svätej Alžbety v Bratislave Klinická genetika, Medirex, a.s., Bratislava

New technologies and innovations have an important influence on the laboratory diagnostics in medicine. Hematology, biochemistry, genetics and other life science fields are met on the molecular level.

Hemophilia is a hereditary bleeding disorder. Hemophilia A or B arises mostly from the congenital deficiency of the coagulation factor protein VIII or IX, respectively. Both types of the disease are X-linked recessive disorders, almost exclusively affecting males, whereas daughters and mothers are carriers of the gene defects. In the past, men with hemophilia were likely to die in their youth. According to the progress in the diagnostics and treatment of affected individuals their life span is prolonged to the average population.

The most common mutation of the factor VIII gene (F8), responsible for at least 45% of cases of severe hemophilia A, involves the inversion of intron 22 of the F8 gene on the X chromosome. Inversion of the intron 1 of the same gene has been reported in up to 5% of cases. Big deletions, or duplications and many different mutations of the F8 gene were also observed. Laboratory methods like Lab-on-chip micro fluid electrophoresis of PCR product, MLPA (multiplex ligation-dependent probe amplification) and sequencing by Genetic analyzer are used to confirm different types of congenital or somatic mutations on the DNA level.

Geopolitical Changes that Affect the Transport and Storage of Natural Gas in Slovakia

Miroslav Hanušovský Bratislava, Slovakia

Natural gas storage is of great importance for the steady gas transport for commercial and private consumption in Slovakia. The stability and security of supplies of natural gas can be dramatically affected by geopolitical events. Some examples discussed in this presentation include: Political changes in Ukraine; tension in gas transport from Russia to Europe; Europe an effort for secure gas supply; Russian effort of Ukraine bypass; Nord Stream pipeline construction for direct gas transport from Russia to Germany and Western Europe; Russian effort to construct Nord Stream II pipeline system to reduce gas transport from Russia to

Europe through Ukraine; Russian effort to construct South Stream for gas transport from Russia to South Europe to bypass Ukraine.

In addition to the regional geopolitical climate, there are world-system level changes that also have a direct impact on the safety and security of Slovakia's supplies of natural gas. Among these forces, difficult for any policy-maker to control, are: Changes in crude oil and natural gas prices; Shale oil and gas effort around the world, especially in North America, and its effect on the world gas and oil reserves and the prices; Crude oil and liqid natural gas import decreasing from Arab oil countries into North America; Oil and gas overspill around the world; Opportunity to purchase oil and gas for spots actual low prices during the whole year; Flexible demand of natural gas storage facilities.

Prognosis Becoming a Self-fulfilling Prophesy Kills

Petr Hausner
University of Maryland Medical Center, USA

Patients, whose chance of recovery is slim, are often steered towards palliative care or hospice. Their physicians may be asked by palliative services about the patient's prognosis. If poor, and the patient lacks desire to continue fighting, active treatment is withheld. Yet in patients who are eager to continue to fight, a statement that the patient has a poor prognosis often becomes a self-fulfilling prophecy. An uncertainty about recovery is traded for the near certainty of failure with treatment withheld. Self-fulfilling prophecies are known from the oracle of Delphi. In a self-fulfilling prophecy, the pronouncement of the prophecy is not neutral, but it has a profound impact on the fate of its target. With the onset of individualized, precision medicine, subgroups of patients with advanced disease are being identified in which nonstandard measures lead to unusually good outcomes. This fine nuance cannot be understood by palliative teams, who often act on previous experiences rather than knowledge of modern medicine. Thus, some cancer patients lose their lives because of the misunderstanding in which a statistic, often poor, drives causality. Here I will analyze this problem and offer solutions.

Women In Medicine: When Did Women Become Medical Doctors?

Eva Hausnerová, Navneet Kaur, Rubinder Toor, Mojmír Tyrlík George Washington University School of Medicine, Washington DC USA Hausner Cardiology Center, Chevy Chase, Maryland USA

It is 14.7 bilion years since the Big Bang, our planet is 4.5 bilion years old. Life on Earth started 4 bilion years ago. Hominoids have existed for 15-20 milion years, *Homo Sapiens* has walked the Earth for 195,000 years. First medical advice is documented in writing about 3,500 years ago, the first women healer is documented 2,700 years ago. The Hippocratic oath is 2,500 years old. The first western medical school was established in Bologna in the year 1200. The first medical school in the Czech Republic, Charles University in Prague was established on April 7th, 1348. The first woman to graduate from medical school in the USA was Elizabeth Blackwell, who graduated in 1849. Women were admitted to medical schools in the Austro-Hungarian Empire only on 15th September 1900. The first Czech Medical Graduate was Bohuslava Kecková who graduated from Medical School in Zurich. The first female physician graduating a Czech medical school was Anna Honzáková, who graduated on 17th of March 1902. Currently more than 50% of medical students are women both in Europe and in the USA.

This will guarantee continuation of high dedication, carrying attitudes and also progress in the field of medicine.

Socialism Realised: Life in Communist Czechoslovakia, 1948-1989

Karina Hoření, Čeněk Pýcha, Vojtěch Ripka, Ilana Seelinger Department of Education, Institute for the Study of Totalitarian Regimes, Prague

We are at a very volatile state in world history. It's possible to see progress in many areas, regression in others, but change in all of them. In times like this, it becomes more and more necessary to draw lessons from the past, not to impede progress, but to learn from the successes, mistakes, and experiences of the people who lived in earlier times. The Czechoslovak past, specifically 20th century Czechoslovak history, offers innumerable lessons for the world -- but the problem is finding a way to share them with audiences who don't speak the languages and who likely don't have any background in the countries' history or culture.

In order to remedy this problem, we at the Department of Education at the Institute for the Study of Totalitarian Regimes in Prague have developed Socialism Realised, an online learning environment that is meant to help teachers, students, and the interested public address contested history, using the Czechoslovak communist past as an example. This web portal offers video clips and primary sources that are understandable for international audiences and that speak directly to the experiences, feelings, and problems that people in the past had. Instead of portraying the communist past strictly through the lens of political history, it provides a glimpse into what life was actually like for the people living at the time of the Cold War, revealing the nuances, complexity, and diversity that textbooks all too often miss.

Socialism Realised, however, doesn't merely open up Czechoslovak communist history for discussion; through it, users can learn about more far-reaching and imminently relevant issues such as human rights, the relationship of people to government power, and resistance to totalitarianism. By opening up Czechoslovak history to the world, Socialism Realised gives the world a chance to learn from Czechoslovakia's collective experiences.

Foreign Language Competence of a Young Generation as a Gate to Cognition and Challenges of the Contemporary World

Katarína Horváthová Vysoká škola zdravotníctva a sociálnej práce sv. Alžbety Gymnázium Bilíkova, Bratislava

"As many languages you know, that many times are you a human being." This well-known saying points out the importance of mastering not only our mother tongue but for us, the Slovaks living in a European multilingual environment, learning foreign languages is one of the basic conditions for communication, understanding and perceiving the culture, traditions and customs of our neighbors in Europe and the world.

In today's world where everything has been changing much faster than it was just a few decades ago, the need for mutual communication is more and more important. If we look several centuries back, communication between scientists, explorers, monarchs or religious representatives was provided by the Latin language being the *lingua franca* of those times. But later the great changes in the political, social and economic spheres passed this function to other languages. Nowadays, English serves as the most widespread language in the world.

If we, and especially young people, want to take an active part in what is going on in

the modern world, we do not have any other choice than to master at least one, or better two, international foreign languages on the highest possible level. Foreign language teaching and learning have undergone essential changes over the last fifty years. New series of course textbooks prepared by native linguistic specialists are now available and affordable worldwide, modern communication and information technologies, frequent foreign stays and globalization of our world have brought many possibilities for young people to gain top competence in all four language skills — reading, writing, listening and speaking — and for collecting life and customs information about different foreign countries. In this way they have higher chances to be successful not only in their studies and work but in facing the challenging tasks of our contemporary world as well. The secondary school in Bratislava offering both German and English bilingual studies can be just one example of these developments.

More Slovaks in the U.S. than Czechs? Who Says? Where and When?

Kenneth Janda Northwestern University, Illinois, USA

This paper grew out of the author's research into the story of his wife's grandfather, a Slovak who died at the Piave in World War I. It also reflects the experience of an American of Czech/Bohemian ancestry who, growing up in Chicago, had never met a Slovak until he was a graduate student at Indiana University. Later research suggests that while Slovak immigrants clustered in relatively few states (such as Pennsylvania, home to half the Slovak immigrants at the time) it was the Czech immigrants who predominated in the large cities such as Chicago and New York. The presentation will explore the nineteenth century history of Austro-Hungarian immigration to the United States and the problem of identifying specific ethnicities of immigrants, an issue that lasted into the 1900s—culminating in the "mother tongue" question introduced in the 1910 Census and its subsequent modification. The presentation will trace who (Czechs and Slovaks) settled where (states and cities) by displaying maps and graphs based on decennial census data.

The Family Blaho Through and Through

Helena Jurasová-Blahová

According to the encyclopedia the word "blaho" (good) means a condition or situation in which one experiences traces of pleasant feelings. For the family tree of the Blaho family, such pleasant feelings were created over the vicissitudes of time through culture, serious opera music, folklore, song, and dance. Dr. Pavel Blaho of Skalice accomplished the most in these areas. Besides his political contributions (he stood beside the cradle of the first Czechoslovak Republic in 1918), he also loved to be in a society that enjoyed singing and dancing. He was a prime mover in creating the Secession-style Catholic Circle Cultural House, where we can see paintings by Frolík, Uprka, and Aleš. After all, Skalice lies just between Slovakia and Moravia. One of his sons, Dr. Janko Blaho, during his studies at the Faculty of Law in Prague, became the first professional Slovakio pera singer in the Slovak National Theater.

The baton for the family is now carried by the well-known folklore ensemble "Vienok," which recently celebrated 50 years of many-sided cultural activity. The director of the ensemble is the daughter of Dr. Janko Blaho, Helenka, and she draws on his six collections of songs from all around Záhorie. The children of ensemble "Vienok" have appeared along with their leader, choreographers and teachers in television films, on the radio, in festivals at home and abroad, where in yearly competitions they regularly achieve high results. They also do not

lack appearances on "the boards that mean the world," that is in operas, musicals, and in stage plays. In these various genres there are 15 members of the Blaho family who have been or are now active. Three family members travelled the world with the renowned folklore group "Lúčnica." They youngest granddaughter currently studies ethnomusicology and cultural studies at the VŠMU (University of Musical Arts). Recordings of excellent contemporary and classical operas, symphonic compositions, and especially valuable folk songs in versions by various members of the "Blaho clan" are part of the book by Helena Jurasová-Blahová, "Janko Blaho in Memories: Or, Tragic-Comic Confessions/Tales of a Half-Skaličanka." Several excerpts will be presented at the SVU congress in CD recordings. Music, song, and dancing have been the occupation of the family Blaho and their wards for their entire lives: "Life is movement, joy, and sorrow" (Karel Plicka); "Who sings, prays twice" (Tranoscius); "Where there is song and dance, death does not come soon" (Popular saying).

Computing: New Prospects for Programming in School

Ivan Kalaš Comenius University, Bratislava UCL Knowledge Lab, London

In recent years there has been a remarkable renewal of interest in introducing programming in schools in many countries around the world. Examples at all stages move from mostly informal after school 'coding' clubs towards regular *computing* as a formal, mandatory subject with a proper curriculum. Slovakia is one of very few countries which set off on this bumpy journey of integrating computing into primary and secondary school a long time ago. Based on my experience from being involved in this process — both nationally and internationally — for many years, most recently as lead developer of the new programming content for English primary schools (years 5 and 6) in the ScratchMaths project of the UCL Knowledge Lab, London, in my presentation I will specify programming and its potential benefits for modern education, formulate an emerging *conceptual framework for primary programming* and identify some *key design principles* which I believe should be respected when developing and implementing sustainable educational programming for children. I will illustrate my thoughts by examples from the ScratchMaths project and our on-going development of Thomas the Clown, a programming environment for 5 year old kindergarten children.

The Czechoslovak Pavilion at the World's Fair in New York 1939: Site of Frustration, Hope and Human Fate

Iva Knobloch Museum of Decorative Arts in Prague, J. W. Fulbright Foundation alumna

The World's Fair in New York 1939 is considered to be the most progressive and expensive interwar international exposition. Subtitled "Building the World of Tomorrow," the Fair organizers' vision was to confront other European utopias: communism and fascism. According to ideas of sociologist and philosopher Lewis Mumford, "tomorrow" should be based on technological progress serving local communities, social reconciliation and prosperity. The objective of the exposition was not only to demonstrate the results of science, art and civilization, but to show how humanity could prevent the alienation of the human being to him or herself, the family and the community under the condition of accelerated

technological and scientific progress. An appeal to democracy and its institutions was embedded in all American pavilions.

The Czechoslovak Pavilion was the only place where at the time of the fair an independent Czechoslovakia still existed, since three months before the opening of the Fair Hitler proclaimed Bohemia and Moravia a Nazi Protectorate. The "Orphan Pavilion," as the American media dubbed it, was completed thanks to New York's Mayor Fiorello La Guardia, his committee of assistance and American Czechoslovaks. How was this modest, modernist pavilion viewed amidst the other pavilions and how did it fulfill the vision of the organizers of a world of tomorrow, based on prosperity, social peace, and technological progress? How did the functioning of the pavilion imprint itself on the fates of those who under the guise of the World's Fair were able at the last moment to escape from the Protectorate? The lecture is based on the research of the new materials from Czech and American archives.

The Role of the Compatriot Press in the Slovak-American Community's Struggle for Change

Zdena Kráľová and Michaela Bakay-Záhorská Faculty of Education, Constantine the Philosopher University in Nitra Institute of Foreign Languages, University of Žilina, Slovakia

The Slovak-American fraternal societies had unified the early Slovak immigrant community in the USA and their publications helped to encourage the Slovak immigrants to speak up for their rights under many turbulent circumstances, to take responsibility for their conditions in a multinational environment and to get involved in the struggle for better life. The paper contains a combined content analysis of the compatriot periodical *Jednota* throughout the whole period of its circulation (from 1891 up till now) in terms of the topics, structure and language. The periodical *Jednota* has been the main periodical of *The First Slovak Catholic Union* and has one of the longest histories of the Slovak-American periodicals. It represents a highly valuable source of information about the life of the Slovak communities in the USA, mapping their life in change.

Was Antonín Dvořák the Creator of American National Music?

Radoslav Kvapil Prague, Czech Republic

When Jeanette Thurber, director of the New York Conservatory, offered the position of director of the conservatory to the Czech composer Antonín Dvořák in 1891 (he became director in 1892), it was a definitive step in the training and cultivation of native composers and the establishment of an American tradition of serious music. American composers at the time were highly imitative of European, especially German, models, and Mrs. Thurber wanted to change that situation. She turned to Dvořák who, as the "founder" of Czech national music could be assumed to know what creating a national music required. Though originally attracted to native American ("Indian") music as the source of a genuine American national idiom (he had intended to write an opera based on Longfellow's "The Song of Hiawatha"), he soon turned to the music of street minstrels and especially African-American spirituals. He concluded prophetically that the future of American music was in the music of its African-Americans.

Dvorak completed nine works while in the USA—works which differ from those composed before 1893 and after 1895 in their character. Dvorak intentionally sought to capture the character of the music of the "New World," and we can find popular, especially

African-American traces in many of them. In contrast, Gustav Mahler, though he was active in the USA from 1908-1911, simply did not reflect American influences in his works. We may not say that Antonín Dvořák was the creator of American national music—that honor goes above all (according to Dvořáak's own prophecy) to American jazz—but his works and his reflections of American influences inspired his American contemporaries and followers to drop their fear of including American music features in their classical works and to work from them.

How Voltage Operates Calcium Channels

Lubica Lacinova
Institute of Molecular Physiology and Genetics, Slovak Academy of Sciences

Voltage-operated calcium channels represent one of principal routes for entry of calcium ions into cells. According to an activation threshold they are classified as high-voltage activated (HVA) and low-voltage activated (LVA). LVA or T-type calcium channels are best recognized for their negative voltage of activation and inactivation thresholds, which is more than 30 mV lower than the activation threshold of closely related HVA calcium channels. Negative voltage threshold for activation enables unique physiological and pathophysiological functions of these channels. On a positive side they participate in maintaining cardiac pacemaking and they initiate action potential bursts in neurons. On a negative side they initiate certain type of epileptic seizures. It is possible that gating and kinetics of T-type channels are regulated by a mechanism distinct from that regulating HVA channels. This mechanism is a focus of our research.

The structure of voltage-gated calcium channels (VGCC) consists of four homological domains I - IV. Each domain contains a voltage sensor and a quarter of a conducting pore. Activation of VGCC proceeds in two steps. First step represents an activation of the channel voltage sensors, which is measurable as a gating current. Opening of the ionic pore follows in the second step, which generates the ionic current.

Our analysis of ionic and gating currents revealed more efficient coupling between the activation of voltage-sensors and the pore opening in LVA channels compare to HVA channels. Further, we identified specific structural determinant of LVA channel activation located between domains I and II. All four voltage sensor must be activated prior to the pore opening in HVA channels. We suggest that pore of LVA calcium channels may open after activation of a single voltage sensor and that the key domain for channel activation is the domain I.

Seventh Generation (Sedmá Generace) and Earth and Era (Zem a Vek) - Journals for Environmentally Conscious Citizens?

Lubica Lacinova Institute of Molecular Physiology and Genetics Slovak Academy of Sciences

There is a significant portion of people in both the Czech and Slovak republics who are concerned about environmental problems. When seeking reliable source of information and/or self-education they may reach for a paper journal.

In the Czech Republic a bimonthly journal Seventh Generation (Sedmá generace or 7G) has been published for 25 years. It started in 1991 as a monthly paper with just a few pages providing rather radical views. During the years it developed into serious A4/60 pages journal addressing issues related to the environment, social politics, education, economics, religion, etc. Its target group is people with high school education interested in environmental activism, human rights, state and communal politics. Left-wing and/or liberally oriented readers will

appreciate it more than conservatives. The journal sells about 1000 copies. It is financed from sale revenues and from multiple grants. Some of the published articles may be considered radical; nevertheless, none of them could be marked as extremist.

In the Slovak republic a similar paper journal is missing. The monthly journal Earth and Era (Zem a Vek) is published since May 2013. With B5 – 132 pages its extent is somehow bigger than that of 7G. It does deal with similar issues, e.g., environment, social politics, education, economics, religion. Therefore the journal may have similar group of readers. Zem a Vek prints about 25,000 copies of each issue. It claims more than 7,400 subscribers; it is sold in bookstores, general stores, and newspaper stands. Allegedly it is financed from sale revenues. While opinions on problems addressed by both journals substantially overlap, virtually each article published in Zem a Vek extends its conclusion into realms which could be marked as extremist. Considering the wide reach of this journal it could be considered a security risk for society.

How to Preserve What's Essential in a time of Change in Family Life

Terézia Lenczová Bratislava, Slovakia

Family life has undergone profound changes in recent decades. Several scientific disciplines are exploring this phenomenon, searching for a way to preserve in this unique society those fundamental things that make a family a family. In this presentation we'll review what various sciences have to say on this topic, drawing from psychology, sociology, economics, theology, to consider what has worked successfuly to preserve: 1) Marriage between a man and a woman for their entire lives; 2) love and children – honorable, respecting their freedom – as a condition of the development of their identity and their calling to love, and as a source of treasured value for every country in the form of human potential, 3) common life within the family, spending time together as a family, 4) inter-generational solidary and its economic and social dimensions.

The Motivations for Migration of Young Slovak Women to London

Dagmara Majerová Katedra sociálnych štúdií a etnológie, Filozofická fakulta Univerzity Mateja Bela v Banskej Bystrici

This paper analyzes the fundamental motivations of young female Slovaks migrating abroad, to the world megalopolis, London. Against the background of contemporary social theory and through data gained during repeated field research using the method of semi-structured interviews, the contribution explores the individual impulses that led these young migrants to their decision to leave and settle beyond the borders of their native land. In the social sciences the accent is increasingly placed on theories that do not limit the decision to emigrate solely to rational economic calculations. The goal of this paper is thus to demonstrate how structural conditions of society influence individual behavior, and how extra-economic factors decisively influence the decision of these young women to emigrate.

The Identity of the City and Contemporary Urban Development

Dušan Mellner STU v Bratislave, Stavebná fakulta, katedra architektúry

The identity of the city and its experience is closely linked to the personality and individuality of its particular perception of space. Existing values (subjective) can be described as a result of common experiences and feelings of a particular location. The main problem of these values is their intangibility and thus that they are not quantifiable. For the investor and the economic background they thus become marginalized. Ever more frequently development activity that bends the category of identity to economic demands predominates.

The city should be for the people, their housing, rest and work and should be a result of the creative inter-communication of individual spheres! Constructing the city is associated with building the overall image of the city, which in the long run is also linked with the economy. The search for a compromise in the formation of our cities and especially in the historical core is a difficult issue because of the lack of a clear and quantifiable economic calculation. The ratio of investment in new structures and the restoration of original buildings can be balanced, but in terms of long-term sustainable trends the original structure should be victorious. What, then is currently going on in Slovakia?

A prominent example is the urban historical reservation, which is becoming a hindrance to current realizations. Among the important factors again are finance and the pursuit of a quick return. With few exceptions, we see the slow disappearance of individual historic buildings and their replacement by contemporary architecture. The image of the city is slowly changing, and therefore the preservation of any historical house or historic quarter is important for the very important value of **identity of the city**.

Slovak Emigration to North America: More Aspects of Slovak Lexicographic Works Published in North America between the 1880s and 1980s

Dalibor Mikuláš

Department of English Language and Literature, Faculty of Humanities, University of Zilina, Slovakia

Emigration of Slovaks to the United States of America and Canada represents a remarkably significant stage in the history of this nation. In this context, special attention needs to be paid to Slovak-American press, which was previously carefully analyzed for instance by Konštantín Čulen or Marian Mark Stolarik. This contribution, however, focuses on the formation of the Slovak lexicographic works published in North America between the 1880s and 1980s. These one hundred years of Slovak immigration to North America correspond in the USA with the following specific immigration periods in the country: Open Door Era (1776-1881), Era of Regulation (1882-1916), Era of Restriction (1917-1964), and Era of Liberalization (1965-). In each of the epochs the issue of English language acquisition was of immense importance, nonetheless, it logically referred to particular political, social, institutional and other specificities and circumstances of a period. One of the goals of this paper is to enlarge the scope of the observations recently provided by the author either in *Slovakia* published by the Slovak League of America or *Knižnica* published by the Slovak National Library in Martin, Slovakia.

Publication Activity of the Slovak Chemical Society in the History of Chemistry

Viktor Milata
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Slovakia

Slovak chemical society (SCHS) is the oldest and biggest scientific society in Slovakia, in existence from 1929, genetically linked to Czech, Austrian and Hungarian societies previously active in the territory. The society is now being active in 27 workgroups centered in Bratislava, Košice, Nováky, Banská Bystrica and Trnava.

The same importance has publication activity of SCHS especially with those reflecting history of chemistry. There is a currently running project about Important Slovak chemists (9 contributions, last one about A. Ruprecht in preparation, other portraits include: Kossaczký, Tomeček, Belluš, Tomko, Marko, Stankoviansky, Jambrich), another project titled Chemical industry mirroring history of Slovakia (7 parts from 13 planned has been published: History of alimentary (3 volumes); pharmaceutical; fiber; rubber; leather; petroleum chemistry and pilot chapter) and a running project in collaboration with the Faculty of Chemical and Food Technology STU in Bratislava titled Outstanding personalities of FChFT STU (39 parts published up to date: Fuska, Baxa, Kellö, Antoš, Tölgyessy, Gašperík, Görner, Veselý, Kozmál, Macho, Vašátko, Valentín, Blažej, Nemec, Tkáč, Koman, Gregor, Jambrich, Kossaczký, Alexy, Príbela, Kováč, Škárka, Surový, Garaj, Gažo, Horáková, Krutošíková, Ilavský, Šorman, Strmiska, Betina, Augustín, Miko, Valko, Drobnica, Hrivík, Lodes, Jesenák). Special attention has been given to Tradition of the scientific work at FChFT STU presented in 3 chapters up to date.

For this activities in 2013 professor Uher has been awarded with the Diploma of the Slovak national library of the Slovak biographical institute. Those interested in so far published works can contact the Secretariat of SCHS, most of the publications are also available as pdf files at www.schems.sk. This work was supported by the Scientific Grant Agency of the Ministry of Education of Slovak Republic (Project VEGA 2/0042/16).

Women in Traditionally Male Industries

Veronika Misunova Bratislava, Slovakia

Why are some industries called "men's worlds"? Are women not interested in being managers, working in investment banking or in the IT environment?

This presentation is based on a year-long experience working as a Client Office Analyst for UBS in New York City. The job was located on the Fixed Income trading floor among traders and salespeople. The environment is unique and impossible to compare with any similar industry in Slovakia.

From the global point of view, each woman should have the right to study, have a proper job, be independent and retain the choice to either build her career or be a home maker on a full time basis. But even in the developed first worlds of Europe and the United States of America, it is still difficult for women to develop their careers in male dominated industries and simultaneously be mothers. They miss "a little push" from their managers to show how this world is full of opportunities. The investment banking industry is typical for gender inequality in a ratio of about 70:30. The reasons why are not so obvious. Working in the industry is about personality, having a competitive nature and being smart in various ways. The general opinion about female managers is that if they want to be a success and be promoted, it is necessary to be strong and behave like men. But as both the industry is changing and generations of graduates willing to work for investment banks, this situation may be changing.

The personal experience and research of the presenter and support provided by her colleagues allowed her to identify the biggest challenges of the inequality in terms of hiring female graduates, maternity leave, how to combine working with family and promotion.

Ukrainian Literary School of Prague

Alena Morávková, President, Prague Branch of SVU, Prague, CZ

Czechoslovakia and particularly Prague proved to be the most supportive environment for those representatives of Ukrainian intelligentsia who appeared in exile following the Bolshevik revolution in 1917 and the subsequent development in their country. Besides several scholarly centers of excellence (incl. the Free Ukrainian University) the Ukrainian writers, forming the Literary School of Prague, proved to be the main bearers of Ukrainian intellectual life and its continuity abroad. The members of the Ukrainian Literary School were: Jurij Darahan, Andrij Harasevyč, Maksim Hryva, Ivan Irljavskyj, Ivan Kolos, Olha Ljaturynska, Jevhen Malanjuk, Halja Mazurenko, Leonid Mosendz, Oleh Olžyč, Oles Stefanovyč, and Olena Teliha. This paper, beside a brief portrait of Jevhen Malanjuk, contains a sample of his work and of his style, and contains also a brief portrait and a sample of the work and of the style of Oleh Olžyč and a brief portrait, a sample of the work and of the style of Halja Mazurenko.

IFRS versus U.S. GAAP

Simon Muller

The purpose of this presentation is to introduce the two most important standards in the domain of accounting. There are two major accounting systems used by companies around the world. In the USA, the Generally Accepted Accounting Principles (US GAAP) is used while the International Financial Reporting Standards (IFRS) are mostly taken on by international companies (in about 110 countries in the world). The differences between these standards may seem like a nitpicking. In reality, these differences are of key relevance. Significant effects are visible on business and investor's decisions all over the world. The balance sheet, financial covenants, financial ratios, taxes, and other financial measures are influenced by differences between IFRS and US GAAP. A major difference is that US GAAP is rule-based, while IFRS is principle-based. In this context, the IFRS vs. US GAAP question matters. The need of global accounting standards is accelerated by world globalization and its economy. International harmonization of accounting standards is going to be inevitable. Its ultimate goal is directed to set up a single accounting system for corporations implementable on the global field. Nevertheless, the objective of this presentation is more modest, i.e. comprehensibly to describe and make a comparison of these two standards.

The Czech-American Periodical Amerikán Národní Kalendář

Layne Pierce University of Nebraska, Lincoln, USA

The Czech-American periodical *Amerikán Národní Kalendář*, published by August Geringer in Chicago, from 1878-1958 was a widely read and influential periodical for Czech Americans. Written in Czech it contains a wide range of contributions. Its original articles

review the yearly news, give space to political and ideological essays, news about planned Czech cultural events. It also publishes short stories and poems. It not only gives accounts of Czech settlers in America, both individual stories, and accounts of settlements in different states; but historically it presents an account of the so-called "national"life of Czechs in their new country over this time, as well as present stories, significant to the American context, but from a Czech-American perspective.

In this paper I will present an overview both anecdotally and statistically of the content, compare it to some of the other similar periodicals, suggest areas of research, and summarize its availability for use in genealogy.

Changing Landscapes for Slovak and Czech Muslims

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The present contribution provides some basic data on Islam in Slovakia and Czechia and explores the social climate between Muslims and the non-Muslim majority after the unprecedented rise in religious violence on a massive scale committed worldwide by Muslim radicals in 2015-2016. Simultaneosly, historically unparalleled mass migration to Europe from the countries of the Middle East has reopened numerous questions as far as their future integration is concerned. The talk also reflects on the attitudes of Muslim converts in both countries by putting the whole issue into the broader Central-European context.

Possibilities of Museums and Galleries in Accountability and Involvement Support in Recent Times

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The contribution analyses educational possibilities of gallery and museum focusing on accountability and involvement support in recent times.

The role of gallery and museum in connection to this intention is dealing with new tendencies in gallery and museum practice not only to fulfill the traditional functions of preserving, managing and presenting substantial records of culture and nature. Recently the educational function is coming to the fore increasingly. Museums and galleries are in connection to the actual sociocultural changes affected by information age, new knowledge in perception and advanced consumerism considered as institutions of knowing. Creators of accompanying educational programs naturally take advantage of exhibited objects, but furthermore they attempt to shift the themes of programs to various sociocultural interferences. The purpose of these programs is mainly to support relations among several items of sociocultural reality – social groups, individuals, cultural artefacts and surrounding environment. Out of mediating an information about arts and culture the intention is moving to attempt at contribution to accountability for acting, social awareness, involvement and accountable life mindset.

In the space of Slovak museums and galleries this approach to creating programs is still a relatively low reflected field. Many of the galleries and museums rather understand their roles in a more traditional way, with tendencies to mediate the information. The contribution is therefore also pointed to outline various possibilities and particularities in creating educational programs with sociocultural inferences illustrated with individual examples from the Slovak national gallery.

Czech Artists in the USA during the Second World War

Anna Pravdová Národní galerie v Praze, CZ

This presentation investigates the activities of Czech artists in America during the Second World War, concentrating on Adolf Hoffmeister, Alén Diviš, Maxim Kopf and Antonín Pelc, who arrived in the US in 1941 after successfully fleeing occupied France. Hoffmeister and Pelc continued their work in propaganda and art. They creating paintings and anti-fascist caricatures that they displayed in 1943 in the Museum of Modern Art in New York and in other galleries around the continent, they contributed to many journals and joined in activities of the Czechoslovak colonies in America. In his work Alén Diviš returned to the traumatic experiences of his imprisonment in Paris and Max Kopf supported himself mainly by painting portraits of significant individuals, compared by contemporary critics to the portraits of Oskar Kokoschka.

On the basis of archival documents and reviews in the contemporary press, this presentation will reconstruct their period of stay, their creations, their exhibition activity, and the reception of their works by the American public.

Émigrés in Interwar Czechoslovakia: The Case of Ukrainian Refugees

Anna Procyk
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After the armies fighting for Ukraine's independence were defeated by the Bolsheviks, thousands of military men and civilians found a refuge in the newly established Cze choslovak Republic. Among them were political and cultural activists, academics, officers and common soldiers. Cordial ties of friendship between the Ukrainian political leadership and the future president of Czechoslovakia were established during Masaryk's stay in Kiev in the winter months of 1917-1918. The fact that Masaryk and the leader of Ukraine's independence, Mykhailo Hrushevskyj were academics with related intellectual interests and common political ideals may have paved the way for the generous aid the Czechoslovak government extended to the Ukrainian refugees. In the 1930's when Ukrainian scholars and writers were subjected to severe repressions under the Soviet regime, Ukrainian education and culture blossomed in the émigré circles in Czechoslovakia, especially in the fields of literature, art and political thought. The paper will focus on this cultural resurgence and examine the claim voiced by some Russian émigrés that President Masaryk had a predilection for the Ukrainians.

Physical Development and Changes In Proportionality of Body Constitution in the Young Population of Slovakia in the 21st Century

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Dramatic socioeconomic, demographic and environmental changes during the last 40 years have influenced life and also had health consequences such as civilization diseases and

obesity as well as changes in physical development. Overall body size, or body mass index (BMI), and also body build and/or dimensions are important markers of physical efficiency, especially during growth and adolescence. However, such analyses on a population level are very rare not only in Slovakia, but also worldwide. The present study characterizes the main indicators of somatic development and their proportionality, consisting of body height, weight, and circumferences of head, chest, waist, hip, arm and fat percentage in relation to age and gender using nationwide survey anthropometric data obtained during the last 40 years.

Data were obtained from the national anthropometric surveys (NAS) Slovakia in the years 1981, 1991, 2001, and 2011 (the original data) from 7-18.9 year old boys and girls, living in urban and rural areas, with altogether 171,755 participants. Proportionality of body composition was evaluated using anthropometric indexes (BMI, Rohrer, Brughs, Pignet etc.). Body height for age increased by 3–6 cm in boys and in girls by 2.5–4 cm, but their final height at 18 years was not changed since the year 1991. Age increases of body weight and circumferences were adequate to height and matched the appropriate developmental milestones and gender until the year of 2001. Excessive weight gain (about 5–10%) significantly modifies the proportionality of body building during the last decade. The prevalence of overweight and obesity depending on the age and gender doubled to a level (8-15%) and (5–10%) respectively. Moreover we identified a remarkable proportion of children (5%) with hidden obesity (increased fat percentage in normal weight categories). Hip circumference increased disproportionately to other parameters (height, chest, arm), mean values of Pignet index to robustness patterns, and worsening of physical fitness. These results show that a rise in the prevalence of overweight and obesity, as well as disproportionality patterns of body composition reflect inappropriate diet and reducing physical activity in youth. Most often physical activity is caused by subjective preferences regarding leisure time of children and/or sedentary behavior. (Supported by APVV-0348-12, VEGA 2/0084/14

The Double-Edged Mirror of Vitězslava Kaprálová's Song, Sbohem a šáteček (Waving Farewell)

Louis J. Reith Georgetown University, emeritus, and University of Nebraska-Lincoln

In October 2015 BBC Radio 3 devoted five hours of text and music to commemorate the centennial of Vitězslava Kaprálová (1915-1940), arguably "the most important Czech women composer of the twentieth century," according to The Kaprálová Society, a Canadian based arts organization founded in 1998 in Toronto to promote interest in the composer's brief life and music. Among her approximately fifty musical compositions were a number of the songs which she freely admitted were her greatest love. Remarkable too was her choice of texts, representing the best Czech-language poets of the interwar period. Among her finest songs is Sbohem a šáteček [Waving farewell], Op. 14, which she set to music in June 1937, to a poem written in 1934 by the Prague Surrealist poet Vitezslav Nezval (1900-1958). The song, for mezzo-soprano and piano, was intended as a farewell to Prague, when Kaprálová was leaving for Paris in 1937 to study with Czech composer Bohuslav Martinů (1890-1959). The Nezval text hints at a sorrowful farewell: "It was beautiful, but unfortunately, everything must come to an end." In Paris, an awkward romantic triangle developed when she and her older alreadymarried teacher improbably fell in love. From February to July 1938, Martinů helped her to orchestrate the song. This time the text took on added meaning for her. Martinů and his French-born wife managed to flee by ship to safety in New York City. Kaprálová, left behind in Paris, married Jíří Mucha, son of the famous art nouveau painter Alphonse Mucha, in April 1940, two months before her fatal illness and death due to miliary tuberculosis. The song's

concluding lines summarize her desperate situation: "Do we want to meet for one last time, or is it better so? Goodbye, and a farewell wave. Drink to the dregs our common destiny."

The Brief but Monumental Life of Composer Vitězslava Kaprálová (1915-1940)

Louis J. Reith Georgetown University, emeritus, and University of Nebraska-Lincoln

Although Vitězslava Kaprálová (1915-1940) remains virtually unknown today outside her native country, she has been called "the most important Czech woman composer of the twentieth century" by The Kaprálová Society, a Canadian-based arts organization founded in 1998 in Toronto to promote interest in the composer's life and music. As a child prodigy, she started composing at the age of nine, and at the age of fifteen, she entered the Brno Conservatory. Her musical studies were continued with Vitezslav Novák and Václav Talich in Prague, where she also conducted the Czech Philharmonic. In 1937 she accepted a scholarship to study In Paris with Czech composer Bohuslay Martinů, Nadia Boulanger, and Charles Munch. As the political skies darkened over Europe, Kaprálová and her teacher, Martinů, improbably fell in love. An awkward romantic triangle was ultimately resolved when Martinů and his French-born wife escaped to New York City, leaving the desolate Kaprálová behind in Paris. There she married Jíří Mucha, son of the famous art no uveau painter Alphonse Mucha, in April 1940, two months before her fatal illness and death due to miliary tuberculosis. Her approximately fifty musical compositions include some highly regarded art songs and music for keyboard, cello, and violin, a string quartet, two piano concertos, two orchestral suites, and a sinfonietta. In 1947, Kaprálová was inducted into the Czech Academy of Arts and Sciences as one of only ten women (out of 648 members). A grief-stricken Bohuslav Martinů wrote a glowing posthumous recommendation on behalf of his illustrious former pupil.

Alice Masaryková, American Social Work, and Hull House

Mila Saskova-Pierce University of Nebraska at Lincoln, USA

This presentation deals with the interactions between Midwestern social activists at the turn of the nineteenth to the twentieth century, and their cooperation with nascent Czechoslovakia. The US Midwest, at the end of the 19th century had a strong Central European ethnic population, including Czechs. Its rapidly growing cities offered industrial jobs to the arriving immigrants. The conditions for the new emigres were often appalling. In response, notably in Chicago, a group of young activists developed a service network even before there was the concept of social work. They founded the Chicago Hull House, an institution that became the model followed in many other cities and countries, including the newly founded Czechoslovakia.

The leadership of Hull House included such names as Jane Adams, the US recipient of the Nobel Prize, Edith and Grace Abbott, Mary E, Dowel and others. Among the collaborators were several women from the US Czech communities, namely Dr. Olga Šťastný, from Nebraska; Marie Novotný and Francis Gregor (Františka Gregorová) both from Chicago and others. Through Dr. Edith Abbott, the Hull House became tied to the newly founded School of Social Service Administration at the University of Chicago. Later Olga Šťastný and Šárka Hrbek were involved in the US Red Cross, and worked with its Czechoslovak counterpart.

The contact point between the Chicago Hull House and Chicago University social services movement and studies was Alice Masaryk and her father Tomáš Masaryk. Among their

collaborators was Olga Šťastný, with whose family Masaryk stayed when he visited Nebraska in 1906. Alice Masaryk, in the name of then already President Tomáš Masaryk, asked several personalities from the Chicago Hull House to help with the establishment of modern social services and social medicine in independent Czechoslovakia. Their work was rewarded with high national awards.

The Role of the Slovak Cancer Research Foundation in Oncological Research in Slovakia

Ján Sedlák on behalf of SCRF governing board Cancer Research Institute of the Slovak Academy of Sciences, Slovakia

The main objective of the Slovak Cancer Research Foundation (SCRF) is to encourage, promote and implement oncological research at all its levels—basic, translational and clinical—aimed to exploit results in clinical praxis. SCRF wants people, both laymen and professionals, to accept oncological research as an integral part of the fight against cancer, to promote awareness about the importance of the study of medical and natural sciences among students in high schools (gymnasia) and at universities with the perspective of research careers. In addition, SCRF supports research projects so that tumors can be treated repeatedly and encourages cancer survivors to take part in participatory research.

Since 1993, when SCRF was established, it has organized many fund-raising campaigns in close cooperation with the Cancer Research Institute, Slovak Academy of Sciences. These campaigns have enabled it to get 16 unique scientific devices to improve infrastructure for oncology research in Slovakia. SCRF has supported young researchers to attend conferences more than 60 times and financed 7 research projects. Moreover, SCRF actively participates in the World Cancer Day campaign via Scientific Workshops in Oncology which has taken place already for the sixth time; it has become a principal partner of Run for Life Tesco campaign and co-organizer of On the Wheels against Cancer project. Due to its leading position in advocating the importance of cancer research and its sustained financing, SCRF has established March 7 as Cancer Research Day; on which scientific conferences, discussions and the Young Oncologist Award are held. Currently SCRF develops activities in tertiary prevention research and reinforcement cooperation with cancer survivors.

The Grand Finale: the US Presidential Election, 2016

Matúš Štefanovič Political Scientist, SVU Bratislava branch, Slovakia

The 2016 presidential primaries of both parties, republicans as well as democrats, brought several surprises, when we think of candidates. It was surprising to many republicans, how succesful became D.J. Trump, real estate mogul, selfmade man politician of sorts and former talk show host and celebrity. On the other hand it was shocking how poorly did Marco Rubio or Jeb Bush as well as seasoned politician and a man with broad political view governor John Kasich. On the side of democrats, there was no surprise, that Hillary Clinton entered the campaign with Big expectations, big Money donors as well as many years of experience as a First lady, senator and later Secretary of State.

All in all, U.S. citizens will soon face to choices- one that represents very modern America with new views and more colorful environment for different people and different races, one that Corresponds pretty well with the changing world and a choice of an antiestablishment president, businessman whe will try his own domestic and foreign policy experiment, that was created in his own cookbook. Even though he had pretty long business

experience, in the U.S. foreign policy there hardly was a president with so little political experience.

The stakes are high, the rivalry and tensions as well. The world and U.S. citizens are waiting for the next elections with hope, but also with some fears and uncertainty. The leader of a global superpower is an important figure and can be the beacon for democratic, modern people around the world. As a European I wish, that America will play an important role in the future as it had in the past and that it will be responsible, strong and empathic at the same time.

Russia's Vision of the New World Order

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The Russian Federation has repeatedly criticized the supposedly unipolar post-Cold War world order, disproportionately dominated and shaped by the United States. Historically oscillating between periods of power and weakness, Russia has always struggled to clearly define its place and role in the global community. Moreover, the Kremlin's approach to – and influence in – the world have always reflected Russia's evolving character: From an isolated and backward empire, to an alternative civilization, to a post-nationalistic ideological hegemon, to a liberal experimenter.

The twenty-first century has seen a gradual but steady revival of Russia's role in world affairs. Not only that Moscow participates in the established mechanisms of power—it actively seeks to alter them. These efforts are inspired by a coherent, revisionist view of the New World Order. The current global governance should be increasingly multipolar, with multiple centers of power collaborating in concert, but remaining largely independent on their own territories and in their own regions. Calculable interests and unique historical and cultural attributes should take over universal values and ideas. In such a world, Russia would have a stronger role than it has today.

Understanding the characteristics, fundamentals, and implications of Russia's vision of the New World Order will allow social scientists and policy-makers to better understand and predict Russia's behavior. It is the aim of this research to facilitate such understanding.

Man And Civilization

Anton Uherik Bratislava, Slovak Republic

The paper is directed towards analyzing the man as a human being from the historical, psychophysiological, psychological and philosophical point of view. There is also shown his connection to the nature emphasizing his outstanding creative properties of a genetic essence. Good examples are people from antiquity like Egypt and China. Here the civilization process and culture were created by genetical (including inserutable) properties of a man in conditions of the real existence and interation with the cruel nature. This man as a human being created spontaneously not only tools as a necessity of his existence but also art artefacts and scientific knowledge as a part of human civilization admired even in the 21 century. The aim of this paper is to show the human being as something unique where at the very beginning the state formation had no impact while it arised only later in the phylogenesis process. The human being has not changed in principal since the very beginning of his existence. This fact has to be respected even nowadays. Many highly developed countries use this human potential but only

selectively in line with state interests (creating information technologies i.e. Silicon Valley in the United States). Results are also seen in astronomy and military industries. People in a long-term process formed state institutions and not vice versa. Therefore the state as an institution should be simple in a way to use the above-mentioned human specific properties. The state is to represent the human will while a man as a human being should informally be an active part of it.

Physical Exercise Can Prevent Cancer

Peter Ujházy and Steven C. Moore National Cancer Institute, USA

Physical exercise accompanied most of human activities throughout the evolution of mankind. It is only a very recent development that humans are becoming less dependent on their physical endurance and more on mental skills. And there is the pitfall. Our bodies are built to function well simply if we expose them to periodic physical activities. Lack of exercise leads to many diseases including cardiovascular, hormonal, motoric, mental, and last but not least, cancer. A recent study by a team led by Steven C. Moore from the National Cancer Institute, USA revealed that leisure-time physical activity was associated with lower risks of up to 13 different types of cancer. The study is so far the largest of its kind following 1.44 million participants in cohorts in Northern and Central Americas, and Europe. Even if data are adjusted by body mass index as a measure of obesity, the preventive effect holds for 10 types of cancer. Ongoing studies explore the possible mechanisms by which physical activity is beneficial. Colorectal cancer for example, may be prevented by increased gut motility during exercise. Positive effects on hormones, metabolism, immune system, and neural plasticity were observed after exercise which in turn may mitigate the onset of breast, lung, esophageal, and some blood cancers. The main message of the presentation is to include periodic leisuretime physical activities in our daily lives.

Logistics Calculation for Exhaust Gas Reduction — From the Scene of the Actual Data Collection

Asako Umezu

Data management design consultant and SVU member, Japan

In Japan, there is a rationalization policy of energy use that has been in force since 2006. The transportation volume of more than 30 million ton-kilometers in-house a year, has been required to reduce CO2 emissions of more than 1% annually. Ministry of Economy, Trade and Industry has developed several exhaust gas calculation methods of transport data. This study shows how to collect the transport data, the method of calculating the data and the calculation results by large companies. It is difficult to collect data, because most of big companies are using more than 300 of the shipping companies and lack experts for calculations.

Women in Migration

Ivana Vršanská Vysoká škola zdravotníctva a sociálnej práce sv. Alžbety, Bratislava, Slovakia

Migration has become a phenomenon of the current times. While it brings many positive effects, it usually tends to highlight socio-economic problems of the society and causes increased societal tensions.

Women now make up nearly half of all international migrants, but they are also more likely than men to migrate internally. While many women accompany or join family members, increasing numbers of female migrants migrate on their own. Most women move voluntarily, but a significant number are forced migrants who have fled conflict, persecution, environmental degradation or natural disasters. The mobility of women has an impact on the roles of both female and male migrants, as well as families left behind. It also raises a number of challenges to immigration and refugee policies that address such issues as family reunification and formation, labour migration, trafficking and smuggling, and forced migration.

This paper focuses on the increasing vulnerability of women migrants to discrimination, exploitation and abuse is also likely to increase. It will discuss possibilities of improvement of protection and alleviate discrimination.

The paper will focus on the following issues: 1) Why are migrant women more vulnerable? 2) What are the main forms of discrimination, exploitation or abuse? 3) How can discrimination, exploitation and abuse be redressed?

The paper will try to answer these questions and show how the seemingly gender neutral process of migration, is in fact highly gender specific and may result in different outcomes for men and women. Understanding the complexities of gender and migration can result in better programs and policies that can benefit not only female migrants but the migration flow as a whole.

Public and Private Support of Medical and Biological Research in the USA and Denmark

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Medical and biological research contributes significantly to improving the health and wellbeing of citizens, while it also leads to significant savings of taxpayer money and it even creates profits. Well known and publicized Human Genome Project, which has been funded mostly by public funds from the governments of US, UK, France, Germany, Japan and China, provided a knowledge which is available publicly and which during the first 10 years was estimated to bring more than \$140 return-per-dollar spent. It has been however documented that in most cases, the time from new discovery about disease to its clinical application takes 15 – 25 years. This long lag probably is one of the main reasons why public funding of research is among areas hardest hit during the times of financial hardship, such as the market crush in 2008. The funding of biomedical research in US however did not mirror economic recovery. While the amount of taxpayer dollars devoted to research between 1998 and 2004 has gradually increased, in total by 30%, it has been declining ever since, with the purchasing power in 2015 coming back down to what it was is 1999. This reduction does not mean that the research decreased by a third, the reality is much worse than that. In Denmark, the proportion of GDP spent on the research has been increasing steadily. The proportion private funding of academic, non-commercial biomed research is approximately double of that coming from the taxpayer money. While government funding has recently declined, between years 2007 – 2013 the private funding has more than doubled with the funding for research exceeding 3% compared to 0.8% in US. Danish private foundations provide annually more than 440 mil £ in support of research, compared to 0.6 mil € in Slovakia which has the same population.