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Hamburg, Forty Years Later

For the 40th Anniversary of the CSCE/OSCE Scientific Forum

In February 2020, it will be 40 years since the Scientific Forum of the Conference on Security and Co-operation in Europe (CSCE) was held in Hamburg. Although the Cold War escalated sharply, scientists from 35 countries participating in the pan-European process worked out recommendations for governments, many of which not only remain significant today, but even appear particularly timely and relevant. Today, scientists' warnings regarding the possible unpredictable consequences of scientific and technological progress (artificial intelligence military use, artificial prolongation of the human life span, deforestation, desertification, unlimited urbanization etc.) are becoming more and more alarming, and the indifference of politicians and diplomats towards them is increasingly obvious and intolerable.

The history of the CSCE (now Organization for Security and Co-operation in Europe, OSCE) is a long series of large and small events on the way to victory over the Cold War. When this victory was won, the hand on the Doomsday Clock[1] was put back seven minutes from the fatal midnight line, and many thought that the CSCE had served its purpose. The events of recent years, however, show the opposite: There is a clear need for a sober and unbiased analysis of the global situation, and a discussion on a respectful consensus basis, with no subordination of the views of one party to those of another. In this context, one of the half-forgotten, but exceptionally interesting events in the history of the CSCE, namely the Hamburg 1980 Scientific Forum, merits attention.

The decision to hold the Forum was taken at the first CSCE follow-up meeting in Belgrade in order to objectively analyse the global situation and challenges threatening humanity. The German delegations played a significant role in making this decision, in particular Egon Bahr, who at that time occupied a prominent position in the political hierarchy of the Federal Republic of Germany.

However, in the course of the preparatory meeting in advance of the Forum held in Bonn in 1979, the diametrically opposed goals pursued by various

1 The Doomsday Clock was launched in 1947 by the "Bulletin of the Atomic Scientists", which was founded in 1945 by University of Chicago scientists who had helped develop the first atomic bomb. Periodically, the cover of the magazine features an image of the clock, with the hour and minute hands showing a few minutes before midnight. The time remaining until midnight symbolizes the tension of the international situation and the progress in the development of nuclear weapons. Midnight symbolizes the moment of a nuclear cataclysm. The decision to move or not to move the minute hand is made every year by the Bulletin's Science and Security Board in consultation with its Board of Sponsors.

parties had already come to light as they prepared to send their representatives to Hamburg. For the United States and its NATO allies, the Forum was designed to be exclusively related to the "third basket" of the Helsinki Final Act (co-operation in the humanitarian and other fields), and was to be used primarily to promote the ideas of free scientific creativity and unhindered exchanges between scientists. The Kremlin, however, was inclined to view the Forum as related to the "second basket" (co-operation in the field of economics, of science and technology, and of the environment), designed to help overcome the technological gap between the USSR and Western countries that became apparent at the beginning of the 1980s.

Besides the main political forces that determined the atmosphere and character of the Hamburg Forum, however, there was also the world academic community. They saw the Hamburg Forum not as a place for opportunistic debates, but as an occasion to freely exchange views with colleagues on global problems and the prospects for the development of civilization in the context of globalization.

On the eve of the Forum in December 1979, the global political situation became even more aggravated due to Soviet troops' invasion of Afghanistan. Two weeks later, the Soviet leadership decided to exile Andrei Sakharov, a nuclear scientist with a worldwide reputation, to Gorky, which caused legitimate indignation both within the broader scientific community and beyond. Letters of protest against the persecution of scientists and fighters for peace streamed into the Kremlin.

Under these conditions, there was a real danger that the Hamburg Forum would be disrupted. On Capitol Hill, there was growing support for rejecting the very idea of a scientists' meeting due to fears that it could be used by Moscow to feed Soviet researchers with information about the latest scientific achievements of the US and its allies. At the same time, the Soviet decision-making bodies were seriously questioning whether they should go to Hamburg if the Forum was likely to be used to criticize Moscow's human rights policy.

At a meeting in the Soviet Foreign Ministry on this issue, one of the leading designers of the USSR's position on the pan-European process, Ambassador Alexander Belonogov, asked a question that was crucial to the Forum's fate: Would the event take place in Hamburg if Soviet scientists did not attend? After some silence, the experts replied that the Forum would still take place without Soviet scientists and Soviet diplomats, and the USSR would not be able to prevent the publication of materials condemning the Kremlin's position on both Afghanistan and Sakharov on behalf of the CSCE. Consequently, they had to go to Hamburg in order to hinder the adoption of anti-Soviet documents.

At the same time, prominent renowned Soviet scholars in the field of natural sciences were included in the delegation. Among them were academics who were well known in the West: Evgeny Velikhov, Mikhail Styrikovich, Anatoly Dorodnitsyn, and Alexey Sozinov, amongst others. Instead of Jermen Gvishiani, son-in-law of the head of the Soviet government and known for his

proximity to the Kremlin, and therefore politically vulnerable, it was Nikolai Blokhin, an oncologist with a worldwide reputation, who was appointed as head of the Soviet delegation. Thus, the two greatest delegations at the Forum, those from the USSR and the US, were headed by an oncologist and the President of the US National Academy of Sciences, Philip Handler, who was fatally ill with cancer. The fact that Blokhin was a native of the Gorky Region and had for a long time worked in the city of Gorky – the place where Andrey Sakharov was exiled – certainly played a role in his selection.

The US candidates for Hamburg faced similar problems. They certainly wanted to attend in order to talk with their Soviet colleagues and exchange views on the subjects of their research, but some decision-makers in the US opposed scientific exchanges because they feared the USSR would learn about the achievements of American scientists in the field of technology. By that time, the US advantage in developing a new type of nuclear warhead delivery system – cruise missiles with high-tech computer software – had become a tangible one, which the decision makers in the Kremlin well understood.

This contradiction between the professional interests of scientists and the fears of political decision-makers was reflected in the statements of the head of the American delegation, Philip Handler. In seeking a positive decision on a trip to Hamburg, at a joint hearing before the Subcommittee on Science, Research and Technology of the Committee on Science and Technology, the Subcommittee on International Security and Scientific Affairs of the Committee on Foreign Affairs, and the Commission on Security and Cooperation in Europe, held on 31 January 1980, he stated: "We will go to Hamburg, not because, as scientists, we need this opportunity to talk shop. That never was the case from the time the forum was first discussed. The scientific agenda is but another opportunity and catalyst for discussion of enhanced international cooperation and of the status of the human rights of scientists. And we know that there are delegates from other Western countries who feel quite as strongly as do we."[2]

This statement helped to overcome the doubts of some congressional representatives about the appropriateness of American scientists participating in the Forum. All doubts were thus dispelled, and on 18 February 1980, scientists from 35 countries met in Hamburg. As expected, political officers and professional diplomats from all delegations very soon turned the plenary sessions of the Forum into a venue for a collision of directly opposing assessments of the global political situation. It seemed that the scientists became the hostages of their political puppeteers.

2 The Helsinki Forum and East-West Scientific Exchange, Joint Hearing before the Subcommittee on Science, Research and Technology of the Committee of Science and Technology and the Subcommittee on International Security and Scientific Affairs of the Committee on Foreign Affairs House of Representatives and the Commission on Security and Cooperation in Europe, Ninety-Sixth Congress, Second Session, January 31, 1980 [No. 89] (Committee on Science and Technology), Printed for the use of the Committee on Science and Technology and the Committee of Foreign Affairs, U.S. Government Printing Office, Washington 1980, p. 101.

Nevertheless, in the working groups of the Forum, the scholars managed to bring the discussion round to professional issues. Of course, there was an understanding among Western academics and among their Eastern colleagues that the actions of the Soviet government against Andrei Sakharov and other dissidents in the USSR were not only illegal and immoral, but also politically shortsighted and clumsy. However, neither the Soviet scientists nor their colleagues from Eastern European countries had the opportunity to state this openly.

One episode in the working group on food and agriculture was a classic case. The author of this contribution was involved in drafting the final document of this group. Initially, the text included provisions on the need to respect human rights and civil liberties. The experts "guilty" of this "mistake" were severely criticized. Ultimately, these provisions were still included in the text of the final document, despite initially being blocked by political officers of the Soviet delegation.

Admittedly, Moscow did not use all available opportunities to counteract Western propaganda. Even before the Forum, in a democratic Belgium, the gerontologist known as the "vitamin doctor" Herman Le Compte was fined and imprisoned for his bold predictions and ideas about the possibilities of artificially increasing human life expectancy. The Soviet delegation did not use this fact, apparently because, in comparison with Andrei Sakharov, Le Compte's personality seemed excessively eccentric. Just as in the case of Sakharov in the USSR, in the West, all accusations against Le Compte were subsequently disavowed by the European Court of Human Rights, and the verdict of the national court, on the basis of which he was imprisoned, was declared unlawful. The Belgian authorities pledged to pay the victim 77,000 francs in compensation.

Meanwhile, the Forum was in full swing. Meeting with their long-standing acquaintances, scientists from different countries, naturally, could not escape their professional issues and expressed concern regarding the increasingly acute global problems – environmental pollution, population explosion, energy and food shortages, urbanization, etc. The Swedish representatives were particularly active, insisting on including recommendations on the need to increase attention to the safety of nuclear power stations in the final document.

Twenty years later, the Executive Secretary of the Forum, a German scientist and diplomat, Professor Klaus Gottstein, correctly described the atmosphere of the concluding part of the Forum: "All along it was doubtful whether it would be possible to reach consensus on a final report of the Forum. Surprisingly, consensus was reached after all. A list of concrete proposals for cooperation was produced. Western scientists, after having expressed their dismay at Soviet violation of human rights, and Eastern scientists, after having dutifully repudiated these reproaches with accusations of their own, were at

last united in their desire for an improvement in international co-operation in science."[3]

Gottstein rightly pointed out that this success was greatly promoted by the "congenial atmosphere" created by the German organizers of the Forum. Thanks to their efforts, it was possible to salvage something like "a serious scientific enterprise"[4] from a political squabble. But knowing the situation from the other side, the author of this contribution is of the opinion that the Soviet delegation did not deviate in the least from the instructions from the Kremlin, ordering them to give their consent to the text of a constructive final document, provided that there were no allusions to Sakharov and Afghanistan. As a result of two weeks of discussions, a document that did not contain any politically controversial statements, and no mention of Sakharov or Afghanistan, was born. Although it was with these words that Philip Handler completed his speech at the Forum.[5]

On the other hand, however, the text included actual recommendations on a number of practical issues. In particular, in Annex 1: Alternative Energy Sources, it was stated: "All aspects of the nuclear fuel cycle will require continuing efforts to assure its full reliability and safety, in order to ensure public acceptability."[6]

Unfortunately, what should have been a guide for action for governments (primarily that of the USSR) in practice turned out to be nothing more than a gloomy and accurate forecast: The Chernobyl tragedy affected Sweden in particular, whose delegation was especially persistent in promoting this provision in the text of the Hamburg Forum Report. Should this sad lesson not finally lead us to appropriate conclusions? It must surely now be the time to follow the scientists' warnings regarding the dangerous exacerbation of new challenges and threats associated with the triumphal march of globalization and the spread of the achievements of the technological revolution.

In the forty years since the Hamburg Forum, the world's population has almost doubled, from 4.35 billion to 7.7 billion. At the same time, the ethnodemographic structure of the population has changed dramatically. Such transformations are fraught with increasing conflict and the danger of war. Despite the deterioration in the international situation in February 1980, the hand on the Doomsday Clock showed seven minutes to twelve. In 2019, it stood at only two minutes from the fatal midnight line. The risk of a thermonuclear catastrophe has not been so great since 1953. This is due not only to an escalation in

3 Klaus Gottstein, Catastrophes and Conflicts: Scientific Approaches to Their Control, Aldershot 1999, p. 221

4 Ibid.

5 Cf. Statement of Philip Handler, President, National Academy of Sciences, before the Committee on Security and Cooperation in Europe, the Subcommittee on International Security an Scientific Affairs, and the Subcommittee on Science, Research, and Technology, 31 January 1980, in: The Helsinki Forum and East-West Scientific Exchange, cited above (Note 2), pp. 102-105, here: p. 105.

6 Report of the "Scientific Forum" of the Conference on Security and Co-operation in Europe, Hamburg, 3 March 1980, p. 5, available at: https://www.osce.org/eea/14068.

the confrontation between global nuclear powers, but also to the general unpredictability of the development of the international situation and the weakening of the regime of non-proliferation of weapons of mass destruction.

Over the same forty years, measured in terms of the earth's ecological carrying capacity, humanity worldwide exceeded the permissible load as early as the mid-1980s; at the beginning of the 21st century, the ecological footprint of humanity is now almost 50 per cent higher than the environmentally compatible level.[7] According to the UN, "there is alarming evidence that important tipping points, leading to irreversible changes in major ecosystems and the planetary climate system, may already have been reached or passed. Ecosystems as diverse as the Amazon rainforest and the Arctic tundra, may be approaching thresholds of dramatic change through warming and drying. Mountain glaciers are in alarming retreat and the downstream effects of reduced water supply in the driest months will have repercussions that transcend generations."[8] To restore the ecological balance, it is necessary, according to estimates by Swiss scientists, to immediately plant young trees on an area equal to the territory of the United States.[9]

However, even before the gloomy predictions in the context of human interaction with nature can come true, people are more at risk of destroying each other in social and interethnic conflicts due to the frightening growth rates of socio-economic disharmony.

Rising inequality leads to escalations in tension. The measure of inequality within the world community usually takes the ratio of the incomes of 20 per cent of the world population living in the richest countries to those of the 20 per cent in the poorest countries. In 1980, this index was about 40; by the beginning of the twenty-first century, it had doubled. To date, according to experts at the authoritative Oxfam fund, almost 82 per cent of the world's wealth was owned by just one per cent of the world's population. At the same time, from 2016 to 2017, the number of billionaires grew unprecedentedly, which, according to experts, indicates not a flourishing economy, but a collapse of the economic order.[10] The dynamics of the corresponding model make it possible to predict the social "explosion of history" in 2022-2025. This calculation coincides with the forecast of the Club of Rome in the 1960s.

The pace of all aspects of human activity increased dramatically in the last century. This means that natural physical limits of vital activity will be

7 Cf. Lebensqualität dank Ressourceneffizienz [Quality of life thanks to resource efficiency], Neue Zürcher Zeitung, 15 May 2012, at: https://www.nzz.ch/lebensqualitaet-dank-ressourceneffizienz-1.16896799.

8 United Nations, Climate Change, at: https://www.un.org/en/sections/issues-depth/climate-change/.

9 Cf. How trees could save the climate, *Science Daily*, 4 July 2019, at: https://www.sciencedaily.com/releases/2019/07/190704191350.htm.

10 Richest one per cent bagged 82 per cent of wealth created last year – poorest half of humanity got nothing. Cf. Oxfam International, 22 January 2018, at: https://www.oxfam.org/en/pressroom/pressreleases/2018-01-22/richest-1-percent-bagged-82-percent-wealth-created-last-year.

reached by the middle of this one. An example could be the improvements in the field of weapons technology, which has the potential to destroy life on earth several times over. According Nobel laureate Ilya Prigogine, upon reaching this point of bifurcation, any dynamic system, including humanity, must undergo some qualitative transformations (transitions to a new stage of development) – or face collapse.[11]

Under these circumstances, politicians and diplomats alone cannot find the way to ensure the sustainable development of the world community. In 2000, the Millennium Summit adopted the United Nations "Millennium Development Goals" programme, which included eight goals to be reached by 2015.[12] None of those goals was achieved. Sustainable development remains only a dream of the global intellectual elite. The picture of contemporary international relations is increasingly beginning to resemble quarrel between children, arguing over who has the most matches while standing in a puddle of petrol. With regard to all of this, remembering the 1980 Hamburg Forum is not nostalgia for the past when the international community managed to put an end to the old Cold War, but as an incentive for a scientifically based search for a way out of the impasse of a new one.

There is a need for a new Scientific Forum as an opportunity for the international academic community to elaborate a clear and reasonable forecast for humanity's development in this century, and to paint a reliable picture of the challenges that threaten our civilization.

For the sake of survival, the OSCE should give this opportunity to the scientific community to address the entire world community – without political intermediaries – with a clear-cut appeal for unification under a democratic global governance. It is necessary to put an end to the dangerous delusion that the fourth industrial revolution is no different from the first three, and that the twenty-first century is the same as all other centuries in the history of mankind. The information technology revolution, or the convergence of nanotechnology, biotechnology, information technology, and cognitive science known as the NBIC-convergence, made us far more different from our ancestors than they themselves differed from our common ancient forebears.

Scientists have long recognized that technological advancement goes hand in hand with mankind's own destruction. For example, the great Italian physicist Enrico Fermi theorized that technological advances should make interstellar travel possible, and remarked on the puzzling absence of extra-terrestrial visitors on earth in the light of this observation. One possible explanation is that we are still not developed enough in technological terms, and they – our extra-terrestrial brothers – destroy themselves as soon as they reach this level of development. It is worth mentioning that the huge Hubble radio telescope,

11 Ilya Prigogine/Isabelle Stengers, Order out of chaos: Man's new dialogue with nature, London 1984.

12 Cf.. United Nations, Millennium Summit (6-8 September 2000), at: https://www.un.org/en/events/pastevents/millennium_summit.shtml.

which allowed us to probe the most distant segments of the universe in search of alien life, was created exactly at a time when the danger of a thermonuclear conflict between the USSR and the US was especially high.

However, the designation of danger should not be the evidence of its inevitability. There is no fatality in global threats and challenges. They can be pre-empted, eliminated. Humans can survive and global civilization can continue. German philosopher Karl Jaspers indicated that Homo sapiens would not be able to survive in the conditions of a technological revolution if he did not transform himself.[13] The knowledge of the mechanisms of artificial intelligence allows individuals to transform themselves, to create, instead of Homo sapiens, a new material carrier of the mind. What will this new material carrier be, its ideals and motives for existence? To address these questions, a systemic programme (goal-setting) is required. Such a programme cannot be worked out by a layperson or even by a highly educated, enlightened politician, and should not be any ordinary prognosis, of which we already have plenty. As Einstein famously said: "I want to know God's thoughts – the rest are mere details."[14] To elaborate such a programme would require comprehensive, systemic, synergistic brainstorming by a team of competent and ethically impeccable scientists. Only such a team could correctly evaluate the place of our civilization, and the future of mankind and of the planet.

The paradigm of views presented by Konstantin Tsiolkovsky, Vladimir Vernadsky, Alexandr Chizhevsky, and Nikolai Fedorov offered a systemic, albeit schematic, presentation of such goal setting. Their world view, known nowadays as "Russian cosmism", promised eternal life and unification now and for all. Their guiding principle – "to turn all instruments of destruction into instruments of salvation"[15] – could also find resonance today. Their ideas are indeed also used by "transhumanists", who, however, emphasize the achievement of technological benefits for people in the future – an ideology which is mainly attractive to oligarchs who pay billions of US dollars to hire "biohackers" to put into practice their dream of individual immortality. Incidentally, one of the leaders of modern transhumanism, Zoltan Istvan, even ran in the 2016 US presidential election campaign and is planning to repeat his attempt in 2020.

These are all interesting issues for scientific discussion about the future of mankind, but even by stating them, we arrive at the answer to one central question: Is our civilization doomed to self-destruction, or does it have a chance of survival and continuation?

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13 Cf. Karl Jaspers, Philosophie und Welt, Reden und Aufsätze (Philosophy and the World: Selected Essays), Munich 1963, p. 133.

14# BBC, Part 1: Einstein's Unfinished Symphony, 17 September 2014, at: http://www.bbc.co.uk/sn/tvradio/programmes/horizon/einstein_symphony_prog_summary.shtml.

15 George M. Young, Jr., Toward the New Millennium: Ideas of Resurrection in Fedorov and Solov'ev, in: James P. Scanlan (ed.), *Russian Thought after Communism: The Recovery of a Philosophical Heritage*, New York 2015, pp. 62-73, here: p. 66.

An authoritative positive answer to this question from the international academic community would be an important factor in the process of building a new harmonious world order, freed from political rivalry for spheres of influence, markets, and sources of energy. The new Scientific Forum should bring together academic voices across this divide, defining both the advantages and the pitfalls of technological advances overall, as well as opening up debate on more specific topics and pressing issues such as climate change, nuclear and chemical weapons and artificial intelligence.

In 1947, Albert Einstein called for the creation of such a world order in his famous open letter to the United Nations.[16] This world order should be based on raising the level of global governance. Unfortunately, the ambition of some states to extend their spheres of influence and the opposition of other states to the limitation of their sovereignty have served as obstacles to raising this level up to now.

Approached by the academic community, the issue of global governance loses its political content and is filled with functional significance as a means for the survival of the international community and humanity in an unprecedented scientific and technological revolution. The role of the OSCE in raising this issue is unique, since for the first time in world history, at the Scientific Forum, the CSCE made human rights a higher priority than the national sovereignty of states. This was a first important step towards realizing the dream of the world's best minds regarding democratic global governance.

From the nostalgic memories of forty years ago, it follows that the time has come for the second Hamburg Scientific Forum. However, it should be remembered that one of the most pressing issues in the preparation of the first Hamburg Forum was the question of the status of the participants, and whether they could take part in the discussion in their personal capacity. This question is far from procedural. Truth is born in a scientific dispute only when scientists express their point of view, regardless of any external influences. Scientists should not be held hostage by political ideology, and it is only under these conditions that a Second Hamburg Forum could be the starting point for the sustainable development of the international community.

16 Cf. When Albert Einstein Championed the Creation of a One World Government (1945), *Open Culture*, 6 September 2017, at: http://www.openculture.com/2017/09/when-albert-einstein-championed-the-creation-of-a-one-world-government-1945.html.