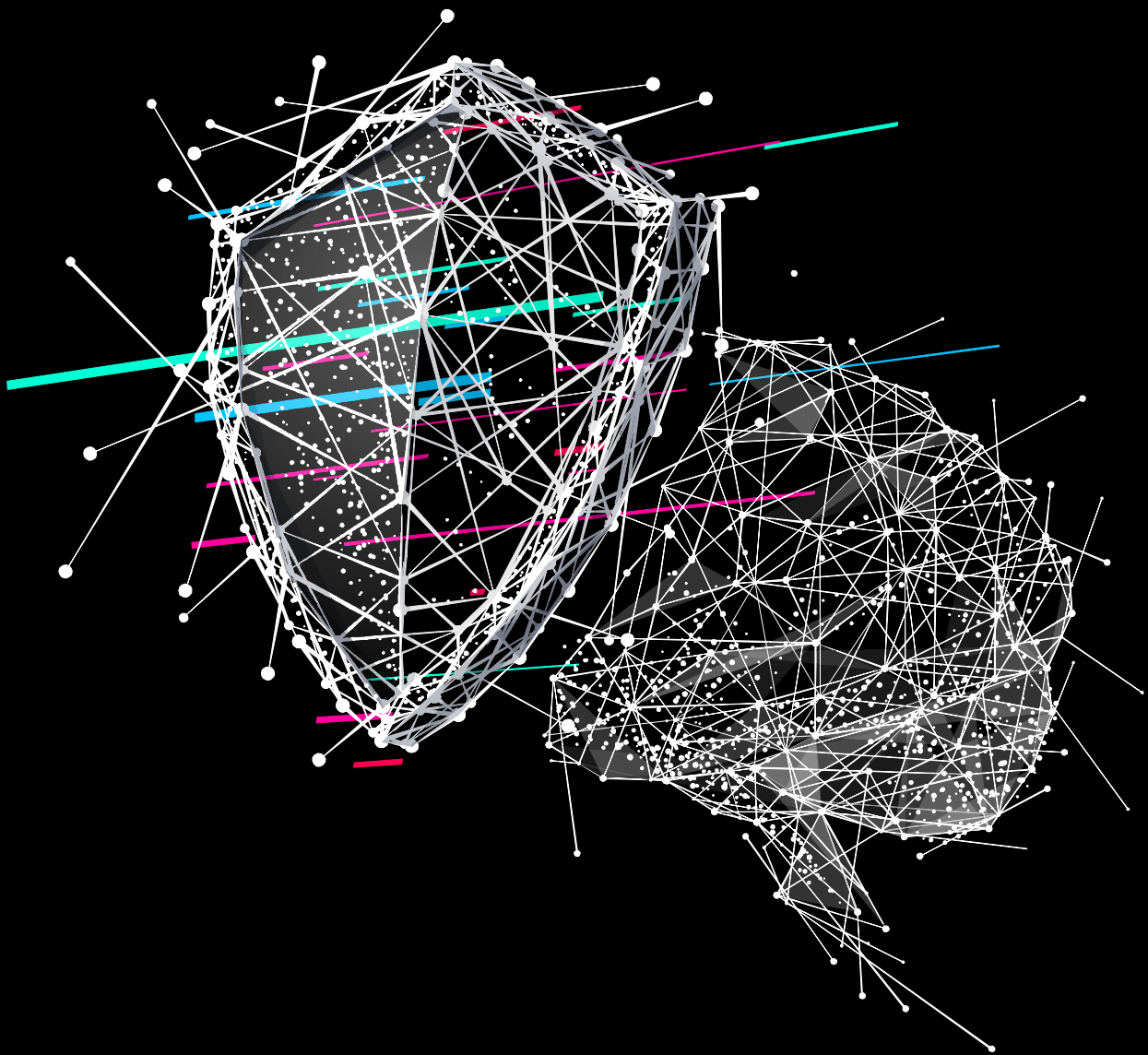


Experts on the Malicious Use of Artificial Intelligence: Challenges for Political Stability and International Psychological Security

Report by the International Center for Social and Political Studies and Consulting
June 2020, Moscow



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The International Center for Social and Political Studies and Consulting (ICSPSC) was founded in March 2002 as an association of researchers and consultants from different countries. Over the years, ICSPSC has organized hundreds of international academic conferences, round table discussions and workshops concerning the issues of national and international security, and strategic communication, published about thirty books and different reports.

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Introduction

The capabilities of artificial intelligence (AI) are growing at an unprecedented rate. AI can be used in many areas for public benefit, ranging from machine translations to medical diagnostics. The next few years and decades will bring immeasurably more opportunities for that. Investment in AI in the next two decades may reach trillions of dollars. According to a PricewaterhouseCoopers Middle East (PwC) report released at the World Government Summit in Dubai, 14 percent of economic growth in the world (US \$15.7 trillion) will be due to the use of AI. PwC believes that the greatest gain from AI for economic growth will be in China (up to 26 percent of the country's economic growth rate by 2030).¹ Researchers in various countries and leading international organizations pay a great deal of attention to these positive aspects of using AI.

The positive aspects of the use of AI have attracted attention from research teams in different countries of the world and leading international organizations. Much less investigated are types of malicious use of AI (MUI), which should be given special attention because of the possible global catastrophic consequences of such use. MUI is acquiring great importance in the targeted psychological destabilization of political systems and the system of international relations. This factor sets new requirements for ensuring international psychological security (IPS). It is possible to define IPS protecting the system of international relations from negative information and psychological influences associated with various factors of international development. The latter include targeted efforts by various state, non-state and supranational actors to achieve partial/complete, local/global, short-term/long-term, and latent/open destabilization of the international situation in order to gain competitive advantages, even through the physical elimination of the enemy ([Darya Bazarkina, Evgeny N. Pashentsev](#)).

In 2019, an international group of experts on research of IPS threats through MUI was formed to collaborate in conducting joint research, international conferences, and scientific seminars. The group members formed a panel group, "The Malicious Use of Artificial Intelligence and International Psychological Security" at the Second International Conference on Information and Communication in the Digital Age: Explicit and Implicit Impacts. The conference was held as part of the UNESCO intergovernmental Information for All Program and the Eleventh International IT Forum with the participation of the BRICS and SCO countries in Khanty-Mansiysk, June 9–12, 2019. The final document of the conference, the Ugra Resolution on Information and Communication in the Digital Age, took into account the most important results of the group (International Scientific Research Institute 2019).

The discussion of the problems of MUI continued on June 14, 2019 at the research seminar "Artificial Intelligence and Challenges to International Psychological Security". The seminar was organized by the Center for Euro-Atlantic Studies and International

¹ Rao, A. S. and Verweij, G. (2018) *Sizing the Prize. What's the Real Value of AI for Your Business and How Can You Capitalise?* New York: PWC. P. 3.

Security of the Diplomatic Academy of the Russian Ministry of Foreign Affairs and the International Center for Socio-Political Studies and Consulting with the academic support of the European-Russian Expert Network of Communication Management and the Department of International Security and Foreign Policy of the Russian Presidential Academy of National Economy and Public Administration. The participants adopted a final document, [“For Cooperation between Countries, Expert Communities and Civil Society Organizations against the Malicious Use of Artificial Intelligence and the Destabilization of the International Psychological Security and Democratic Institutions”](#), and formed a working group on its implementation (Association for the Geopolitics of the East 2019).

The theme of AI, MUAI and IPS is the key one in books, prepared for publishing by the leading international publishers. The monograph [“Strategic Communication in EU-Russia Relations: Tensions, Challenges and Opportunities”](#) (edited by Evgeny Pashentsev, Palgrave Macmillan, 2020) among others issues analyzes the common risks of AI development. In the book [“Terrorism and Advanced Technologies in Information and Psychological Warfare: New Risks, New Opportunities to Counter the Terrorist Threat”](#) with the participation of 18 experts from 11 countries (edited by Darya Bazarkina, Evgeny Pashentsev, and Greg Simons, Nova Science Publishers, 2020) and numerous articles in peer-review journals, interviews, expert surveys etc.

The implementation of the projects to prevent or minimize negative effects of MUAI on IPS requires an interdisciplinary approach, and the formation of research teams of specialists in various fields: political scientists, historians, mathematicians, and specialists in various areas of computer science, and of course law enforcement officials. The cooperation of different countries in the defense of national and international security from antisocial, antidemocratic forces, such as corrupted influential groups, organized criminality, and terrorist organizations, seems very important.

The experts from Cuba, France, Italy, Romania, Russia, Vietnam, focus on the risks of the malicious use of artificial intelligence (MUAI) by asocial state and non-state actors to destabilize the psychological stability of society as well as on relevant activity to neutralize such threats.

The Levels of MUAI Threats to IPS

Evgeny N. PASHENTSEV (Russia)

Objective and subjective negative factors and consequences of AI development may actually threaten IPS. The possible increase in mass unemployment, the possibility of losing full (in the fairly distant future) or partial (in the present and near future) control over AI and other problems are in focus of attention of specialists, government agencies, and the public. But in themselves they do not constitute MUAI. However, the deliberate underestimation or overestimation of these threats, such as targeted distortion of information (for example, “horror stories” that in a few years robots and AI will deprive people of work) have certain political and economic goals and are not as harmless as it may seem at first glance. Artificially created hypertrophied negative reaction to the development of AI can slow down the introduction of this progressive, almost all-encompassing technology and cause socio-political tensions and conflicts; these in turn will produce a socioeconomic drag on the country. Underestimating the negative consequences of the introduction of AI (including a progressive reduction in the need for non-innovative labor) can turn into serious problems at a certain stage. This may not necessarily incite the rise of “new Luddites” (though that may be possible over time), but it will cause serious socio-political tensions.



Thus, at the first level, MUAI threats to IPS are associated with *deliberately distorted interpretation of the circumstances and consequences of AI development for the benefit of antisocial groups*. AI itself in this case is not involved in the destabilization of IPS. A destructive (open or hidden) impact has a false image of AI in the minds of people. This impact can arise for various reasons, for example as a result of erroneous information policy by authorities or negative consequences of the implementation of AI, but these errors and real or imaginary problems are maliciously used by certain antisocial groups. Such use is particularly dangerous within strategic psychological warfare (SPW) as it poses a great threat to national/international development on a long-term basis. We can assume that targeted, long-term, cross-border manipulation of the image of AI in the minds of the target groups is in process, because at stake is potential revenue exceeding that from trade in energy resources, and those already are in the area of acute political and psychological warfare.

Much of the concern, however, stems from the real threat posed not by AI per se, but by MUAI. And this anxiety is quite justified. The rapidly growing introduction of AI in public life, as well as the opportunities and the increased practice and number of ways it can be abused, makes it difficult to keep up, whether through legal regulations in

individual countries or international law or existing control mechanisms. The field for malicious use is wide: unjustified use of drones, threats of cyber-attacks on vulnerable infrastructure, the reorientation of commercial AI systems, and much more. It is no coincidence that many studies and analytical reports on the perception of AI by society indicate a high level of public concern about the social consequences of its introduction. *Where MUAI is aimed primarily not at managing target audiences in the psychological sphere but at committing other malicious actions (for example, the destruction of critical infrastructure), we can talk about the second level of the MUAI.*

Professional use of the means and methods of psychological warfare can raise the perceptual level of threats above or below what is appropriate. Moreover, the use of AI in psychological warfare already makes hidden (latent) campaigns of perception management more dangerous; this will only increase in the future. *Therefore, MUAI, which is aimed primarily at causing damage in the psychological sphere, deserves independent and very close attention, representing a special third level of threats to the IPS.* The malicious use of deepfakes, targeted image transformation, deranking, amplification and agenda setting using smart bots, sentiment analysis, predictive analytics etc. can have a synergistic effect with a comprehensive impact on the target audience. MUAI increases the efficiency of psychological operations, social engineering, phishing and other ways of perception management. The impacts of the first two levels of threats to the IPS affect human consciousness and behavior to varying degrees. However, the impact of the third level can at a certain stage of development facilitate the influence or control by egoistic groups over public consciousness; this can result in sudden destabilization of the situation in a particular country or the international situation as a whole, especially in the time of coronavirus pandemic and its more and more dangerous consequences on global economy, social stability and international security.

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New Reality: A Wide Range of MUI against Psychological Security

Darya BAZARKINA (Russia)

The MUI represents a wide range of threats to IPS. For example, in the new reality, AI can be used by fraudsters to write and send phishing messages that people will be unable to recognize. In 2016, a Japanese AI program co-authored a short novel that passed the first round of the national literary award competition. This is a positive experience, but ultimately, when AI is increasingly used to create texts that are indistinguishable from those written by humans, it will increase the psychological component of phishing.



The personalization of phishing attacks can be achieved by applying sentiment analysis-AI mechanisms that recognize the user's emotions by the tone of their messages on the Internet (the technology is a class of content analysis methods to identify emotionally loaded words in texts in which blogs, articles, forums, and surveys are analyzed). Having obtained the usernames and passwords of people who make important decisions at enterprises, criminals can not only steal funds but also implement a number of threats to psychological security by sending false orders or distributing messages that discredit the victim. In the case of instant dissemination of such messages on online platforms, the official reaction of the victim (and it may be the state leader) may be delayed, and in an unprepared society, the provocation will have the most destructive consequences.

The risk of MUI is significantly increased due to the use of these technologies by hackers. As the ability to generate all sorts of fake data grows, the threat of AI products learning from them will grow. Predictive analytics tools, chatbots, and sentiment analysis systems may also be exposed to this threat. However, we should not forget that the threat of the MUI is primarily anthropogenic (at least at the current stage of AI development). Therefore, to avoid many threats, society itself needs to improve its knowledge of AI, while simultaneously recognizing and accepting collective responsibility for the common future.

In the context of the widespread adoption of AI by both citizens and organizations, it is extremely important to open public discussion on its further development, including the MUI aspect. Using as much data as possible is important for AI training, so the availability of comprehensive assessments of technological progress is important for the development of a society that is responsible for technology. In addition, at a critical moment, state structures, public institutions and international organizations can draw

new ideas from this discussion. The security of humanity is its common cause. This simple truth is more important than ever in the comprehensive analysis of threats to national and international psychological security, especially in today's very difficult and dangerous international environment.

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AI Threat Escalates

Alexander N. RAIKOV (Russia)

During its 70 years of existence, AI has developed in waves and with increasing amplitude. Faith in it is growing and falling. However, after the fall, it is quickly reborn, like a phoenix from the ashes. At the same time, financial expenses increase and its scope expands. The risks of its use for society are growing; the depth of its penetration into personal life and human consciousness is increasing.

Computing and transmitting information are accelerating and virtual collaboration is developing. However, the function of AI to realize the human's ability of consciousness has not progressed.



The developers of AI continue to have the belief that thinking can be represented using logic and artificial neural networks. Scientists build semantic networks, develop classical logic, create systems of deductive and inductive inference, produce fuzzy knowledge bases, and improve visualization. The result often remains unexpected—the computer does not understand us, we cannot achieve creativity from the machine. The computer does not have a natural sense of meaning, insight, attraction, desire, or free will.

The stereotypes of AI are based on the following points: a person thinks with the help of the brain; language and logic are the main tools of human communication; and a neuron is the base cell of a human thinking tool. At the same time, AI is already becoming dangerous. It is enough to evaluate the activity of scientists in the development of the ethics of its use, addressing national security issues.

An important phenomenon is an increasing counteracting MUI, which is made for destabilize the psychological stability of society. Evgeny N. Pashentsev, a leading researcher and professor at the Diplomatic Academy of the Russian Ministry of Foreign Affairs, in his paper titled “The levels of MUI and IPS (International Psychological Security),” suggests that some negative factors and consequences of AI development may actually threaten IPS. He identified three levels of threats: 1) MUI threats to IPS are associated with a deliberately distorted interpretation of the circumstances and consequences of AI development for the benefit of antisocial groups; 2) MUI is aimed primarily not at managing target audiences in the psychological sphere but at committing other malicious actions, for example, the destruction of critical infrastructure; and 3) MUI aims primarily at causing damage in the psychological sphere. This level deserves close attention because it threatens IPS.

However, everything is changing in the world. Things, words, concepts, thoughts, and states of particles are in motion. This movement has not only a logical, but also a relativistic, non-causal, quantum, and thermodynamic nature. AI has not yet mastered these “gifts of nature.” Perhaps this is why we are experiencing a crisis not only in economics, finance, and trust but also in physics, virology, and so on.

For example, physics has for many years limited its scope of research. The sizes of the observed objects are measured from 10^{-33} m (the Planck length) to 10^{27} m (the radius of the universe). The observed lifetimes of the universe are on a scale from 10^{-43} s to 10^{20} s. There is no doubt that the dimensions are large and the scope for research is huge. However, something is wary of an inquiring mind. After all, the sphere is limited, the science is developing in this closed sphere, and for more than a hundred years, it has been unable to overcome its border. There is a lot of knowledge accumulated in electronic libraries; a lot of information comes from telescopes looking into the cosmos and from the Large Hadron Collider. However, it is becoming increasingly clear that a person cannot analytically process it yet. The AI inherited from the last century, although accelerated and deeper, is not able to analytically capture this data stream in full.

For a breakthrough of this universal blockade, the era of a new, artificial general intelligence (AGI) must come. This arrival may be completely unexpected. Apparently, AGI will be able to break through the walls of a large but still closed space of science. At some point in the singularity in the development of AGI, this breakthrough must occur. Then, AGI behavior will increase in meaning, its power can grow to infinity, and it will obtain the ability to have creative breakthroughs and generate insights. The question of the malicious use of AGI will rise with a new force, though the risks will depend on to whose hands it falls. These risks will be disproportionately high.

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“Mediamorphosis” of Terrorism and MUA

Arije ANTINORI (Italy)

The transition process from the 20th to the 21st century constituted the shift from the analogue to the interconnected digital world. This globalized revolution gave life to the “mediamorphosis” of terrorism, which gradually affected terrorist groups. Indeed, it has profoundly and definitively marked the real nature of traditional terrorism, therefore creating “performative” terrorism. The key elements of that process are the rise, spread, and use of new and social media instead of old media, the many-to-many communication model that substitutes the one-to-many model based on a hierarchical relationship between the producer of the message and people, such as consumers. As a result, the “prosumer”—contextually producer and consumer—is the main “new” actor of a cyberspace populated by user generated content (UGC).



The new terrorist actors and groups born in the digital communication system come to life firsthand in the (cyber-)social ecosystem and the massive spread of the online terrorist narratives, and media across the (cyber-)social environment is becoming more and more pervasive, persuasive, and seductive, especially for younger generations. The spread of digital convergence and mobile culture are blurring the lines between real and “virtual” life.

The exploitation of the Internet and new and social media for terrorist purposes rapidly became one of the main security threats and challenges. The daily life of innocent people, as soft targets, living in major cities around the world is constantly threatened by the multidimensional nature and asymmetric *modi operandi* of terrorism. In this regard, in recent decades, an increasing number of violent extremist and terrorist actions and attacks were carried out by groups and/or individuals in different countries around the world, highlighting the pervasiveness of such multidimensional factors.

As it is clear that the current landscape of individual vulnerabilities is complex, it is imperative to be prepared for the evolution of this situation in the near future. Furthermore, four billion interconnected people attests to the dawning of the “onlife” age characterized by new vulnerabilities both at an individual and social level. This implies that “traditional” terrorist propaganda is evolving into “propulsion,” based on mobile globalized individualization that is re-shaping reality to motivate, inspire, and trigger vulnerable individuals to attack.

The main actors involved in creating, implementing, and disseminating propaganda to foster violent radicalization throughout the (cyber-)social ecosystem, such as floating

platforms, content stores, aggregators, and circumventors, will be enhanced and integrated in the hybrid arena of threats as a result of the malicious use and/or criminal development of AI technologies.

One of the greatest challenges in terms of security is that we are quickly moving from the cyber domain to (cyber-)social domain, then to the social domain in the “onlife” in the near future. Thus, it is clear that, in the near future, the impact of increasingly sophisticated DeepFakes may lead, both on a symmetric and asymmetric level, to the development of post-truth warfare exploiting audience-centrism, characterized by generations upon generations of screenagers. Therefore, the potential malicious use of AI-based technology highlights the high risk of exploiting the vulnerabilities of individuals in such a way as to deeply compromise the social ecosystem.

Observing this scenario, we must develop a multi-level strategy, based on a comprehensive approach, combining civilian, educational, political, and security instruments to prevent young people from “propulsion,” a key factor in the “onlife” radicalization process that leads to violent extremism and terrorism. With regard to the development of AI-based technology to counter the phenomenon in analysis, it is necessary to develop specific “algor-ethics” that comply with human rights standards to avoid any kind of discrimination as well as the possibility of this technology to be maliciously used by hostile entities, proxy-actors, and terrorist groups.

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MUAI in the Political Area: the Case of Deepfakes

Konstantin PANTSEREV (Russia)

Contemporary psychological warfare has a number of instruments, including deepfakes, in which the human image is synthesized, based on AI-algorithms. At first, deepfakes appeared for entertainment. Special software based on artificial intelligence offers the opportunity to create clones that look, speak and act just like their templates. However, today the potential for deepfakes to be used maliciously is growing, whereby one creates a clone of a well-known figure and manipulates his or her words.



Thus deepfakes offer great opportunities for persons of ill will and terrorists to make politicians and other officials say and do things that they have never said or done. Fake videos could place them in meetings with spies or criminals; soldiers could be shown murdering innocent civilians in a war zone or a white police officer could be shown shooting an unarmed black man while shouting racial epithets. Such videos can end the political careers of any politician, provoke deep political crises or protest movements, or even worse, disrupt relations between countries and thereby undermine international stability.

That's why it becomes evident that this technology bears a wide range of malicious use and it seems extremely important to think about how it is possible to stop the further distribution of the toxic content.

In my opinion, solving this challenge will only be possible by combining technological and legislative methods. At the legislative level, it is necessary to elaborate a legal understanding of the malicious use of deepfakes and who (for example, service providers or social media platforms) should be responsible for detecting and blocking the toxic content. At the same time, a workable AI-based algorithm aimed at quickly identifying and blocking deepfakes created for malicious purposes should be developed.

Given that this technology has only existed for two years, we do not expect a quick solution to this problem, although some algorithms aimed at identifying deepfakes have already been proposed, and major social media platforms such as Facebook are conducting studies on this issue and try to block this content as soon as it is identified. But the problem is that there still does not exist any workable algorithm which is able to detect the deepfake with 100% accuracy and people will continue to face the serious challenge of distinguishing true information from fake while navigating around the information space: even video scenes that look very realistic could in fact be fake.

Dr. Konstantin PANTSEREV is a full professor at the Department of Theory and History of International Relations at St. Petersburg State University, Russia; coordinator for African studies at the International Center for Social and Political Studies and Consulting; and a member of the Scientific Council of the Russian Academy of Sciences for economic, social, political and cultural development of African countries. He has been a member of the following research associations: International Studies Association (ISA), International Political Studies Association (IPSA), African Studies Association (ASA), European Society for Fuzzy Logic and Technology (EUSFLAT), Russian – Latin American Strategic Studies Association, the International Research and Expert Network on the Communication and Media Management of the EU and Russia Relations – EURUCMNET. He is the author of over 70 research articles and a participant of more than 80 international academic conferences and seminars in Russia, USA, China, Czech Republic, South Africa, Singapore, France, Ghana, Bulgaria, Italy, and Tanzania. His main research interests include the problems of ensuring international psychological security and countering terrorist propaganda. Konstantin has several publications on malicious use of deepfakes.

MUAI in Electoral Campaigns: Psychological Manipulation and Political Risks

Marius VACARELU (Romania)

In the last 300 years, the number of people who can influence the attainment of the supreme functions in a national or local community has grown, with a new type of political language emerging that has to be accepted by whole national communities. In other words, what could be solved in a classical paradigm of traditional power and influence (aristocratic or royal) had to be changed in the direction of convincing large masses of people.

Today the voting rationale manifests itself in different ways – some of a psychological nature, not related to the objective calculation – and the candidates must expect to answer real and difficult questions sometimes, from any area of political-administrative leadership. Contemporary politicians must combine a broad spectrum of qualities, and their intellectual strengths must be enhanced both by the campaign team and by a number of tools to help formulate more persuasive messages, as well as building strategies to effectively prevent the opponents' attacks.



The emergence of the Internet and subsequently of AI has simplified the problem at the generic level, but it has created risks, because the use of these two 'weapons' is not always in accordance with the great principles of humanity. The election campaign in the USA in 2016, in France in 2017, in the United Kingdom in 2019, etc. was held under strong pressure from the presence of AI. In fact, many reports underlined the 'machine presence' – as a simplified name for Artificial Intelligence – in the documentary presence (first) and 'online persuasive-talking', thousands of bots being involved in the opinion forming of voters. Cambridge Analytica is not just a company name, it now represents the reality of today's political campaigns, where candidates are able to spend a billion dollars (US presidential campaign of 2016). Certainly, accusing a state – or several – of interfering in political elections will not be a one-off event, but an everyday one in the coming years, and has already been the subject of investigations in the US – with the publishing of a public report in 2019.

At the same time, AI tends to become the main political weapon in elections and their campaigns, even if its future development is not clear. Since antiquity, wise men have warned that the battle for power is waged with every possible tool. In a pragmatic analysis, we must note the strength of this new political instrument, capable of adding billions of items of information by the minute and of creating a separate strategy for

every conversation of a bot with every voter – day and night: the biological capabilities of the human brain are not able to keep in mind every word said and every nuance used in conversation. Whoever controls AI in a political campaign can realize their dreams for a continuous action towards their chosen goal.

The consequence of such disproportion – between the huge capacities of AI to use information and the human brain – favours strong psychological manipulation, because AI never tires, is always ready to find the best argument to convince every mind, no matter its level of education. Psychological manipulation seems to become a habit for the AI–human brain relation, favouring the ‘wishful thinking’ approach of voters, who will discover in a conversation with a bot that their ideas are totally shared with one political candidate. If “partir, c'est mourir un peu” (to leave, means to die a little), *mutatis-mutandis* convincing a voter is manipulating a little. On one side we have the whole of human wisdom in one machine (AI), on the other side is just a human brain, influenced by all its biases and constraints... who will win? In this equation, we must conclude that convincing and manipulating can become synonyms and the use of AI mostly malicious.

The coronavirus crisis will have an important effect on the political systems of European countries, speeding up elections. In such cases, the use of electronic instruments will grow to avalanche proportions, because political campaigning always used the most modern techniques to convince and influence potential voters. Every year of progress made in the AI domain will be recognised in 2021 and 2022, having as a floor the global economic crisis. The lack of economic progress will amplify the political passion of voters, and for the bots it will be a more complex task to convince angry and poorer voters about a specific doctrine, ideology or leader.

Unfortunately, a lot of people associate AI with the fake-news phenomenon, only seeing its negative side, and some countries have created special units to act against fake-news, which means they will be forced to adopt an attitude about the use of AI. To this perception is added the complex relation between the US and China on 5G technology: involving speed of data-transfer, money and global supremacy. To such a complex prize, the participants in any kind of political operation will be from any country, and the examples from one place will be closely studied and used to develop new techniques for electoral campaigns.

All these dimensions are active, but the human brain is present too. There are risks, there are also new opportunities for re-inventing politics. In the global and complex paradigm of AI, the fight for power in an election campaign can become a transformation from genuine to “*homo homini lupus*” (man is a wolf for man), from sophistication to manipulation, where everything is just a tool for achieving the big prize. In such case, AI will be considered as the “divine instrument of manipulators”, and in such case, the future of human morality is blocked.

Hoping for the best outcome for humanity, we must push the ethical dimension of life and AI more strongly, because only morality can protect people against the abuse of power. Scholars must lead the march on the ethical road, creating new techniques for the genuine use of AI.

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AI and Geopolitical Competition: What is the new Challenge and Role for Europe regarding MUI and IPS in a Context of Great Power Competition?

Pierre-Emmanuel THOMANN (France)

The world is facing an increasing geopolitical fragmentation with the multiplication of actors, the reinforcement of the power gap between states and the changing of previous geopolitical hierarchies. Moreover, geopolitical confrontation is increasingly playing out in the theatre of hybrid warfare including psychological warfare. In this context, digitalization associated with the emergence of AI is being used as a geopolitical weapon through the destabilization of IPS. It might contribute to determining the international order of the coming new century, accelerating the dynamics of the previous cycle in which technology and power mutually reinforce each other. It will transform some paradigms of geopolitics through new relationships between territories, spatio-temporal dimensions and immateriality.



From the European point of view, it is admitted that the US and China will dominate AI and digitalization in the international geopolitical arena in the years to come. The main focus of the European Union regarding AI is to date the ethical and economic aspects and this is reflected in its main communication strategy. This is in line with the EU promotion of 'multilateralism' as an international doctrine, and is supposed to foster international cooperation at the European and global level. But is this sufficient to deal with MUI and the threats to IPS in a context of great power rivalry?

Behind the EU main communication strategy as an 'ethical actor', the perception and strategies of individual member states differ greatly. France for example would like to build strategic alliances to avoid 'cyber-vassalization', while Germany focuses more on the economic aspects. The new EU commissioner for the Internal Market (French nationality) has stressed he will defend digital sovereignty and the use of digital technology in the EU to be able to compete in the international race for the exploitation of data collected from communication technology. Facing the risk of exacerbating geopolitical imbalances due to unequal access to AI and the collection of data, is international cooperation possible for a more balanced distribution of AI research results using common international platforms? How can EU member states (and is diversity an advantage or an obstacle?) contribute to international cooperation to counter MUI and protect IPS with other global actors like the US, China and Russia but

also secondary actors? Will international cooperation based on inclusiveness, respect and reciprocity be better achieved with a better geopolitical balance regarding IA and digitalization between global actors like the US, China, Russia and EU member states?

The coronavirus pandemic is also demonstrating that big data is crucial to combat public health risks. How can AI and big data in the future also contribute to a positive outcome regarding international cooperation in times of global acute crisis involving the destabilisation of societies confronted with natural, industrial or biological risks and also threats from hostile actors? The crisis scenarios in which AI together with a parallel change in paradigm in societies can contribute to greater international solidarity when confronting a common and more asymmetric threat or risk will also be under focus.

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MUI and Psychological Security in Northeast Asia

Cao Nhat Anh PHAN and Van Nhich DAM (Vietnam)

Northeast Asia includes Japan, North and South Korea, Mongolia, China and Taiwan. There is no regional security system in this region that would protect and serve all the countries of the region. The old rigid constructions oriented to the interests of the USA and its allies remain.

Recently, the problem of IPS has become much more current, since negative informational and psychological effects associated with various factors of international development are increasingly affecting international relations. At the same time, the use of artificial intelligence (AI) to destabilize international relations through targeted high-tech informational psychological impacts on people is an obvious danger. The AI threats for IPS in this region may include the following: terrorist repurposing of commercial AI systems; using deepfakes and fake people technology; bots; sentiment analysis; prognostic weapons; etc.



Currently, China, Japan and South Korea are considered the countries with the fastest pace of development of AI technology in the region, as well as in the world. And the fast pace of development entails unforeseen risks. Xinhua's virtual presenter, China's unmanned tanks, or the robots of Japan and South Korea are controlled by AI systems, and if terrorists can capture these systems, then we can imagine the consequences. Also at the beginning of 2020, bots were used on the Internet to spread fake information about the coronavirus: coronavirus is a Chinese weapon or coronavirus is a weapon against China, etc.

To avoid the above possible threats, all countries in the region should closely cooperate in the field of AI in order to control, prevent and minimize the risks of MUI. The AI researchers and engineers must master the dual nature of the work they perform, that is, AI technology creates technological breakthroughs for people, and also creates tools against people. Therefore, researchers and engineers need to consider the use of technologies that affect relations between countries in the region. It is also necessary to identify priority AI industries for research in order to minimize the risks of MUI, for example, information security.

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Dr. Van Nhich DAM holds a PhD and is a researcher in AI. He graduated from the Moscow Institute of Physics and Technology (MIPT) in 2018. Van Nhich Dam is teaching AI at the Higher School of Economics (HSE) since 2019. He holds courses on neural network theory, neuromathematics and neural network applications. As a researcher in AI, his research interests are the AI technologies, for example, image classification, image generation (GAN), semantic segmentation, time series prediction. Recently, he has been interested in MUAI and international psychological security.

Cross-Cultural Approach to MUAI in Latin American Regional Balance

Raynel BATISTA (Cuba)

AI is active in many aspects of our society. The data revolution is pushing the information-based society to a cognitive new era. AI-based predictive analytics and prognostic weapons have led the public to consider AI and geopolitics as a single entity. Data is creating a global cross-cultural society, supporting the idea of cultural competency as a mechanism of social influence, and setting the distribution of power as an indication of security from a socio-cultural perspective. The age of analytics has come with benefits as well as threats. Disruptive technologies are also shaping a new world order and democratic institutions are witnessing the rise of a new way of governance.



Cyberspace is a new realm of knowledge, and cyber culture refers to the set of material and intellectual techniques, practices, attitudes, ways of thinking, and values that are expressed and developed in cyberspace through data.

Cultures drive technological development and technologies are absorbed into the lives of people, affecting their culture and way of life. Perceptions and understandings of AI are likely to be profoundly shaped by local cultural and social contexts. The critical role of culture in technology transformation allows one to understand how AI-driven technologies are used as geopolitical weapons targeting culture to influence regional political stability. Cultural competency provides international relations and the distribution of power with the capacity to encourage an actor's cooperation and create a sense of belonging and identity.

If technology and culture together create a circle of influence or circles of sustainability, could a cross-cultural competency be the same for the global distribution of power? The rise of fake news, cyber-attacks, and social media manipulation in Latin American politics and national economies are changing the regional balance. Most companies in the region have suffered a cyber attack. The most recent national election campaigns in the region have been a lesson on the effects of digital disinformation strategies on political stability. Few countries have a cyber national security strategy, which exposes them to possible attacks, and the companies that sell cybersecurity services are mostly from an outside region. Could this be a new kind of colonization? The cybersecurity industry in Latin America expects to receive

investments increasingly over the next few years, meaning that markets (and not cooperation) are still leading regional options to face MUAI challenges.

Safe AI requires cultural intelligence and changes in cultural codes, behaviors, and fields of knowledge based on a sociocybernetic approach to analyze the phenomena of societal transformation and historical change of knowledge cultures.

Raynel BATISTA is a researcher and associate professor at Universidad de las Ciencias Informáticas, Cuba. He is member of Artificial Intelligence research lab and the Cuba Association of Pattern Recognition. He was Chief Editor of Futuro Publishing House, Editorial Board of *Revista Cubana de Ciencias Informáticas* – RCCI (Cuban Journal of Computer Science) and collaborator of International Sociology journal. Books publisher and Springer promoter. AMBA Certificate at International Management Institute- IMI (New Delhi, India). Chief Executive of Digitalization Centre. International Relations Advisory for Europe and Asia. He has published various academic articles and organized local and regional conferences. He participated in international projects *Chilenische-Deutsch Jugend Kulturtreffen* (Germany), *Philosophischen Fakultät der Universität Zürich* (Switzerland), *Social Work* (Venezuela), *Social network analysis* (Cuba). Lecturer at Cuban postgraduate master programs. His main research areas are Big Data Analytics, Cognitive Automation, Data driven innovation, social network and social media analysis. His PhD current research is based on sociocybernetic and anthropology, assuming cross-cultural competency to understand the influence of artificial intelligence on global distribution of power and regional balance.

Prerequisites for the Potential Threats of MUI for Psychological Security in Mexico

Kaleria KRAMAR (Russia)

Taking into account the rapid development of AI, there are more and more concerns about the possible consequences of using such technologies. There are already real cases of using existing technologies to monitor the characteristics of a potential audience and also to exert psychological pressure. It is important to analyze this question through the prism of various humanitarian knowledge to understand how AI can strengthen “traditional” levers of influence on public consciousness and what new threats it can pose to IPS (international psychological security). At the very least, we should be aware that such threats are quite real.



Mexico ranks 32nd in Government Artificial Intelligence Readiness Index and the most likely driver of innovation will be the private sector, which includes foreign companies, often located in Mexico, but focused on the U.S. market. On the other hand, Chinese high-tech companies, including AI, are increasing their presence in Latin America. Huawei's announcement of the introduction of innovative AI-based technologies and cloud solutions in several countries in the region can be one of the examples of Chinese companies' activity.

An important factor for potential MUI may be the U.S. strategy of retaining technological leadership by providing product demo-versions. On the other hand, modern Internet capabilities allow us to borrow products from all over the world. The growth of the low-code product segment is also becoming one of the trends, that can have a great influence. Thanks to the creation of low-code digital applications, technologies become more accessible to the average consumer. Socio-political stability will be one of the factors affecting the prospects for the psychological security of the population. It will also depend on the level of satisfaction with the AMLO's policy, whose popularity rating is gradually declining. There is an influential political opposition in Mexico: the competing PAN and PRI parties, which are already actively working, organizing mass demonstrations, and creating new political brands that are more attractive to the younger part of the population. Since mass protest is a popular form of expressing discontent in a Mexico, any interference in the political process in the form of influence campaign using AI tools can bring serious consequences.

The existence of the drug cartels and other criminal support organizations can also have a negative impact on the situation. Today, cybercriminals are collaborating with

drug cartels across the region, that raises the threat to psychological security in Mexico too.

The implementation of AI and the high level of Internet penetration make the threat of MUIAI in Mexico really possible. Due to economic, social problems, the upcoming negative effects of the pandemic, on the one hand, and the low level of media literacy of the population on the other hand, most likely MUIAI threats will not be perceived as something urgent or even real in the near future. It is quite probable that in case of their occurrence there will no ability and sufficient resources to counteract such risks and provide the necessary level of psychological security of the population.

Kaleria KRAMAR holds an MA in Public Relations and Advertising (2019) from Lomonosov Moscow State University, the School of Philosophy. A researcher at the International Center for Socio-Political Studies and Consulting (ICSPSC). She is a prize-winner of the XVI Russian competition of student projects in the field of developing public relations, advertising and media technologies “Crystal Orange” for the team project in the section under the auspices of Mayoralty of Moscow “Moscow – a City Convenient for Life” as part of the development of the city policy of Moscow in 2016 – 2018. The area of her current research is strategic communication and cultural aspects of psychological warfare. Kaleria is the author of several academic publications on different aspects of building communication strategies for product promotion in cultural sphere and brand development and of an article on the analysis of psychological aspects of countering ISIS in information space in comparison with European experience in Russian and English. Recently Kaleria has been researching the role of MUIAI in Mexico's political processes.

International Center for Social and Political Studies and Consulting (ICSPSC)

The International Center for Social and Political Studies and Consulting (ICSPSC) was founded in March 2002 as an association of researchers and consultants from different countries. Over the years, the ICSPSC has organized hundreds of international academic conferences, roundtable discussions, and workshops concerning the issues of national and international security and strategic communication, and published about 30 books and different reports. Monographs and collections of articles published by the ICSPSC in Russian and English include:

- *Armies and politics;*
- *Russia and Latin America;*
- *Russia and India – strategic partners;*
- *Public relations training courses;*
- *Avenir Khanov – a person, a citizen, and a diplomat;*
- *India – Russia: A dialogue between civilizations;*
- *India – Russia: Trade and economic relations;*
- *Genesis of Russia's market reforms;*
- *Mass media and PR in Bulgaria;*
- *Hugo Chavez and the Bolivarian Revolution;*
- *Communication management. Consulting in public relations;*
- *Public relations and communication management: The foreign experience;*
- *The foreign policy of the USA: The communication aspect;*
- *Communication management in world politics and business (in two volumes);*
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- *Ultraleftist terrorism in Germany: Major trends in the activity of the Red Army Fraction (RAF) and its communication maintenance;*
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- *Communication management and strategic communication;*
- *Crisis, army, revolution;*
- *The presidents in media focus: The practice of psychological warfare in Latin America;*
- *Hugo Chavez and psychological warfare in Venezuela;*
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- *"Ukraine" strategic provocation;*
- *Communication and terrorism,*
- *Strategic communication in EU-Russia relations: Tensions, challenges, and opportunities,*
- *Malicious Use of Artificial Intelligence and International Psychological Security in Latin America*

Among the authors of these books are more than 91 researchers from 24 countries in Europe, Asia, and North and South America.

One of the most recent projects of the ICSPSC is the development of international associations that work in various fields of strategic studies and strategic communication. Leading scholars, CEOs, and employees of public and private structures and non-governmental organizations from Asia, Oceania, Africa, Europe, and South and North America are taking part in the activities of these associations (See more at GlobalStratCom: <http://globalstratcom.ru/globalstratcom-eng/>).

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GlobalStratCom

Russia is developing cooperation with different regions of the world. The GlobalStratCom platform aims to develop five associations in various fields of strategic studies and strategic communication. The following are currently in progress:

- [European – Russian Communication Management Network \(EU-RU-CM Network\)](#)
- [Russian – Latin American Strategic Studies Association \(RLASSA\)](#)

Leading scholars, heads, and responsible employees of public and private structures and non-governmental organizations from Asia, Oceania, Africa, Europe, and South and North America are taking part in the activities of these associations.

Research Areas

• Challenges and threats to national and international security: joint interests and possible areas of collaboration between Russia and other countries;

- Armed Forces and politics;
- Conflict resolution and crisis management;
- Participation in peace missions;
- Malicious use of artificial intelligence and psychological security
- Participation in wars and military conflicts;
- Prospective models of social and political development;
- New technologies and their influence on social development and security issues;
- Activities of law enforcement agencies;
- Terrorism and communication;
- Armed Forces, State, and Society;
- Strategic communication;
- Military history;
- Strategic studies as an area of cooperation between Russia and other countries;
- War and peace studies.

For more information, see the website of [GlobalStratCom](#).

**Experts on the Malicious Use of Artificial Intelligence:
Challenges for Political Stability and International
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