# 1NC Finals

## FW

### 1NC---T/L

I agree with their framing---you should prioritize extinction.

## OFF

### 1NC---1

C1---mining

#### Space platinum mining is better for the environment.

Hein et al 17 [Andreas Hein, Laboratoire Genie Industriel, Michael Saldani, Laboratoire Genie Industriel, Hortense Tollu, Laboratoire Genie Industriel, “Exploring Potential Environmental Benefits of Asteroid Mining,” 69th International Astronautical Congress, <https://arxiv.org/ftp/arxiv/papers/1810/1810.04749.pdf>] /Triumph Debate

If we compare these rough estimates with the CO2eq values for Earth-based platinum mining, **we immediately see that the global warming effect of Earth-based mining is several orders of magnitude larger,** even for secondary platinum. Table 2 shows the ratio between the Earth-based platinum mining emissions and the space-based mining emissions. **A difference of two orders of magnitudes for primary platinum and one order of magnitude for secondary platinum is observed. For a mixture of primary and secondary platinum, we get values with two orders of magnitude difference.**

#### Allowing companies to pursue stellar mining makes further exploration much more possible and also decreases asteroid risk

Ursul & Ursul 20 [Arkady Ursul, Ecology @ Academy of Sciences of Moldova, Tatiana Ursul, Philosophy @ National Research Technical University, “On the Path to Space Mining and a Cosmic Sustainable Way of Socio-Natural Interaction,” Philosophy and Cosmology, <http://ispcjournal.org/journals/2020/02/PhC_25_UrsulUrsul.pdf>] /Triumph Debate

The beginning of **the interaction between mining engineering, mining, and astronautics did not come by accident** at the present time of space exploration. It became obvious that **space activities would not continue to develop effectively without the “support” of the mining industry and its emergence beyond the terrestrial atmosphere. Along with this, both further space exploration and geospace safety promotion**, i.e., protection of the planet against threats from space, **will be impossible without the development of space mining**. It is appropriate to recall that Konstantin Tsiolkovsky proved the necessity of space exploration proceeding not only from the demands of social and economic development but primarily from the need to ensure the safety and preservation of mankind. He also reckoned the emergence of an “industry in the ether.” Therefore, **the development of mining,** and through it, the other industries, **is in line with the reduction of anthropogenic pressure on the biosphere** under the conditions of the population growth. **The development of space resources and their processing outside the Earth**, directly in space, **drastically changes the principles and trajectories of space missions**, as well as the ways of creating space technology, bringing this technological process beyond the biosphere. **The priority of space resources is water. It can be found in circumterrestrial asteroids in the amount of several trillion tons. If it becomes possible to extract water from natural cosmic bodies** (which decomposes under the influence of an electric current to oxygen and hydrogen) and other necessary products for space technology and to produce fuel outside the planet on the basis of hydrogen**, it will reduce the price of further space development by twenty times**. It is believed that the first space field is likely to be not asteroids (which may contain rare earth elements, platinoids, and other rare and precious metals) but the Moon, where the priority extracted resource will be the water used to provide life support to people and fuel for rockets and space vehicles. The need to use lunar natural resources for the creation of lunar bases, the construction of space infrastructure for the purposes of further space exploration, including mine shafts, tunnels and other underground structures, especially for refueling space vehicles, attests to the early development of the Moon (Krichevsky, 2020; Krichevsky & Bagrov, 2019; Mayboroda, 2018; Slyuta, 2017). However, **more than a thousand asteroids are flying near the Earth**, and they can be achieved much more easily than the Moon. At the same time**, some of them represent a very serious threat to our planet, which is often reported** by the media. However, the Moon still does not significantly affect the problem of geocosmic safety, while some asteroids and comets constitute a threat to the planet on a short-term horizon. **It is evident that the asteroid-comet hazard has to be prevented, and it can fundamentally affect the choice of further ways and methods of space activities since security is always more important than commercial and other activities.** In fact**, it is also necessary to stand secure in order to develop the economy.** The basic idea of SD in its terrestrial and space variants is to ensure the safe existence of mankind (Ursul, 2016). It is important not to place in jeopardy the ability of future generations to meet their needs and, **above** **all, the basic need for a safe existence and sustainable development on the Earth and in space.** After all, the more space and objects of space will be mastered on a larger scale, the greater the chance of a further continuation of mankind existence (Ursul & Ursul, 2019).

#### Expansion to space is necessary to avoid energy shortages and climate change,

Ursul & Ursul 20 [Arkady Ursul, Ecology @ Academy of Sciences of Moldova, Tatiana Ursul, Philosophy @ National Research Technical University, “On the Path to Space Mining and a Cosmic Sustainable Way of Socio-Natural Interaction,” Philosophy and Cosmology, http://ispcjournal.org/journals/2020/02/PhC\_25\_UrsulUrsul.pdf]

**In the near space future, mankind will have to massively ship the production of energy and materials outside the planet**, instead of deploying this industry in undeveloped territories, for example, in deserts, the Arctic, the Antarctic or in the oceans and seas. **The main reason for the relocation of the energy and some other industries outside the Earth is related to** the transition to SD and especially with a number of environmental issues, such as **global warming and depletion of the world’s fossil fuel and energy resources** with the increase of energy consumption. Therefore, **the development of any new terrestrial territories, for example, the ocean, is economically inefficient and environmentally impractical**. In the case of the development of space bodies, a new anthropogenically-space method and a method of preserving the terrestrial biosphere, as well as the creation of it of the most favorable conditions for the existence of mankind and other forms of life, appear. Therefore, those projects that in the acceptable future can be implemented in space are hardly worthwhile to implement on the planet. **A fundamental conclusion about the need for the future to “split” production into terrestrial, mainly agricultural and space, mainly industrial**, between which the products of activity can and will be exchanged **has already been made** on the basis of an analysis of current trends in the environmentalization of economic and other anthropogenic **activities in the context of achieving global sustainability. Agricultural production in the perspective of the transition to SD should fit into the biosphere**, using intensively-ecologized methods of economy management (Bazaluk et al., 2020). **The strategic perspective of the global-space production split is the most natural and effective one and is understandable in terms of ensuring eco-and geo-security of the civilization’s existence** (Zhuchenko & Ursul, 1983)

#### Warming causes extinction

**Garrison 21** (Dr. Jim Garrison 21, PhD from the University of Cambridge, MA from Harvard University, BA from the University of Santa Clara, Founder/President of Ubiquity University, “Human Extinction by 2026? Scientists Speak Out”, UbiVerse, 7/1/2021, https://ubiverse.org/posts/human-extinction-by-2026-scientists-speak-out)

This may be the most important article you will ever read, from Arctic News June 13, 2021. It is a presentation of current climate data around planet earth with the assertion that if present trends continue, rising temperatures and CO2 emissions could make human life impossible by 2026. That's how bad our situation is. We are not talking about what might happen over the next decades. We are talking about what is happening NOW. We are entering a time of escalating turbulence due to our governments' refusal to take any kind of real action to reduce global warming. We must immediately and with every ounce of awareness and strength that we can muster take concerted action to REGENERATE human community and the planetary ecology. We must all become REGENERATION FIRST RESPONDERS, which is the focus of our Masters in Regenerative Action.

## Case

### AT: Space Exploration

#### 1--- Private companies are more efficient are accomplishing more than NASA

**Follett 21** [Andrew Follett, Andrew Follett previously worked as a space and science reporter for the Daily Caller News Foundation. He has also done research for the Congressional Committee on Science, Space and Technology, the National Aeronautics and Space Administration, the Cato Institute, and the Competitive Enterprise Institute. He currently conducts research analysis for a nonprofit in the Washington, D.C., area., “Private Firms Are the Key to Space Exploration”, 08/21/2021, The National Review, <https://www.nationalreview.com/2021/08/private-firms-are-the-key-to-space-exploration/>] /Triumph Debate

**But NASA’s troubles are, depressingly, likely to get even worse. In November the James Webb Space Telescope (JWST) will finally launch,** after taxpayers have forked over $9.7 billion. **It was originally supposed to launch in 2007 on a budget of $500 million. That means the project is over a decade behind schedule and costing almost 20 times its initial budget.** Perhaps the telescope, meant to locate potentially habitable planets around other stars and perhaps even extraterrestrial life, could instead search for a calendar . . . or fiscal sanity . . . in the stars? JWST isn’t the first NASA space telescope to suffer cost overruns and setbacks. The Hubble Space Telescope (HST) was originally intended to launch in 1983, but technical issues delayed the launch until 1990 because the main mirror was incorrectly manufactured. JWST is very likely to fail because it is supposed to unfold itself “origami style” in space in an extremely technically complicated process. If difficulties arise, JWST lacks HST’s generous margin for error because of its location far beyond earth’s orbit at the Sun-Earth L2 LaGrange point. NASA currently lacks the capability to send a team of astronauts out that far to fix any problems. Even if NASA could get out to JWST, the telescope doesn’t have a grappling ring for an astronaut to grab onto and thus could potentially kill astronauts attempting to fix it. **It is hard to imagine a better example of the private sector’s amazing ability to outcompete government bureaucracy and mismanagement** **than NASA’s planned Shuttle replacement, the Space Launch System. It** **is estimated to cost more than $2 billion per flight. That’s on top of the $20 billion and nine years the agency has already spent developing the vehicle. Contrast that with the comparatively inexpensive $300 million spent by SpaceX to develop the Falcon 9 in a little over four years, and the fact that each Falcon 9 costs around $62 million. One SLS launch could pay for over 32 SpaceX launches**. **Private ventures such as SpaceX are more efficient because they have a lot more incentive to avoid excessive costs and focus on solutions: Their own money is at stake, and people spend their own money more carefully than they spend taxpayer dollars collected from others. Multiple private American space firms are currently pursuing accomplishments beyond those of NASA, and they are more advanced and ambitious than the entire government space programs of China and the European Union combined**. So one possible solution to NASA’s woes would be to greatly increase its reliance on commercial launch providers. And one way to do that would be to return to the system that made civil aviation great: prizes to reward private-sector innovation. Charles Lindbergh flew across the Atlantic Ocean in pursuit of the privately funded Orteig prize, valued at almost $395,000 in today’s money. Another famous example was the X Prize, which rewarded Burt Rutan’s company Scaled Composites with over $14 million in today’s money for becoming the first nongovernmental organization to launch a reusable and manned space vehicle, SpaceShipOne. The X Prize succeeded in creating over $100 million in investment by private corporations and individuals. Aerospace experts expect that establishing a $10 billion prize for successfully landing a crew on Mars and returning it safely to earth could very well lead to a successful landing. That’s a bargain compared with the $500 billion cost estimates NASA puts out for the same objective. And of course in the worst-case failure scenario for a prize program, taxpayers would pay nothing until the mission was complete. **A system based on private enterprise incentivized by a fixed prize would end government cost overruns and waste. The cause of space exploration is simply too important to leave to the public sector.**

2---NASA obviously wants private corporations to lead the way, that’s why they empirically gave them millions in grant funding for R&D.

#### 3---Space innovation leads to life saving technologies – commercialization is key

**Raghavan 21** [Seetha Raghavan, Seetha Raghavan is a professor in UCF’s Department of Mechanical and Aerospace Engineering, “The Impact of Innovation in the New Era of Space Exploration?”, 08/04/2021, UCF Today, <https://www.ucf.edu/news/the-impact-of-innovation-in-the-new-era-of-space-exploration/>] /Triumph Debate

Every once in a while, a confluence of discoveries, events and initiatives results in a breakthrough so significant that it propels the entire world to a higher level, redefining what is possible in so many different fields. **This breakthrough is taking centerstage now, as the new era of space exploration — catalyzed by increasing launch access — dawns upon us.** **The surge of innovation that comes with this will create new opportunities and inspire the next generation of doers.** When this happens, boundaries between scientific and social impact are blurred. Innovation leading to scientific discovery can benefit society in the same way that social innovation can diversify and support scientific innovators, who can contribute to global progress. **To ride this wave of progress, we must all participate and innovate in the new era of space exploration.** **The intersection of space exploration, innovation and impact isn’t a new phenomenon. In the past, technology developments and spin-offs from space research have consistently found their way into communities worldwide sometimes with lifesaving benefits.**

**The International Space Station supports experiments that have led to discoveries and inventions in communication, water purification, and remote guidance for health procedures and robotic surgeries.** **Satellite-enabled Earth observation capabilities that monitor natural disasters, climate and crops often support early warnings for threats and mitigation strategies.** Space exploration has always been relevant to everyone no matter the discipline or interest. **Commercialization of space has been key in many ways to the current boost in “firsts” over the last few years. It has spurred innovation in launch vehicles and related technologies that led to firsts in vertical-takeoff-vertical landing rocket technology, reusability of rocket boosters and privately developed crewed missions to orbit.** Concurrently, NASA has continued to captivate our imagination with the first flight of a helicopter in another world, a mission to return an asteroid sample to Earth and sending a probe to make the closest ever approach to the sun. While we celebrate the scientific progress, there is a vastly important question that we all need to focus on: How can we drive the surge in innovation offered by increased access to space, to benefit humankind? Access to low-Earth orbit, and eventually human exploration of space, is a portal to achieve many impactful outcomes. The numbers and completion rate of microgravity experiments conducted by scientists will be greatly increased as a range of offerings in suborbital flights provide more opportunities to advance critical research in health, agriculture, energy, and more. Lunar, planetary, and even asteroid exploration may lead to discoveries of new materials — busting the limitations now imposed on capabilities for energy, transportation, and infrastructure or creating new sensors and devices that enhance safety on Earth. **Space tourism —one can hope — has the power to potentially create an awareness of our oneness that may lead to social change.** But much like all scientific endeavors, we cannot ignore the importance of pre-emptively identifying and mitigating negative impacts of new ventures some of which may have already taken shape. We need to consider space debris that threatens the very access that facilitates it, safety and rescue readiness to support increased crewed missions and space tourism, national security, and effects of light pollution on astronomy. Much of these can be approached and mitigated with new concepts and ideas that have already been set in motion. One thing is for certain, space has always been the inspiration for the next generation of innovators and creative thinkers. Architects of new ideas in this era will inspire many more. Ingenuity must also come from academic and research institutions building a new space-ready generation through innovative curriculum, scholarships, and research opportunities for key fields at all levels. Most of all, engaging participation is a responsibility anyone can take by steering the conversation and gathering ideas on how we can make this era one of positive benefit for all, while making opportunities inclusive to all.

#### \*\*4---Space privatization spur innovation

**Daly 2020** [James Daly, Business & Technology Journalist, “How space exploration is now being fueled by business innovation”, 10/27/2020, IBM, <https://www.ibm.com/blogs/industries/ibm-space-tech-business-innovation-space-exploration/>] /Triumph Debate

**Camera phones. Wireless headsets. Scratch-resistant lens. CAT scans. The portable computer. They’re just a few of the enduring technologies the space program helped create, and which made their way into improving everyday life on earth.** **Now the business world is returning the favor. Innovations in the terrestrial corporate world—both in products and practices—are spurring the exploration of our solar system and beyond.** In recent years, technologies like edge computing, artificial intelligence, quantum computing, Internet of Things (IoT), digital twins and blockchain have transformed the business world with new efficiency and insight**. Soon they will have a similar effect on how we expand our knowledge of outer space, reducing costs while gathering and processing critical information with expanding speed and scale. “**A new space age is dawning, and the business world is helping drive it,” Naeem Altaf, the CTO for space industry tech at IBM, told Industrious. “One great thing about technology is that an innovation focused on one area or problem can sometimes impact another in wonderful ways.” Want to create your own out-of-this-world innovations? In addition to business process innovation, **technological advances by the private commercial sector are modernizing traditional and costly space practices by reusing rockets and building more efficient spacecraft, reducing per-launch costs**. **The global space industry is expected to generate revenue of $1.1 trillion or more in 2040, up from the current $350 billion**, according to a recent report by Morgan Stanley. “This entrepreneurial space age will change the course of human history,” Altaf said. **Arguably no innovation is having as cosmic an impact on space exploration as cloud and edge—so much so that Industrious is devoting an entire post to it later this week.** Check back Thursday to learn how the ability to perform expansive, high-speed processing remotely will push the bounds of what’s possible in our solar system and beyond. (Update: Read all about it here.) That’s just the beginning. Several other business tools are also making a significant impact. Digital twins, for instance, are having a big impact on both experimenting with new ideas and reducing costs. The twin concept uses a digital representation of a physical thing or system to stress test and reimagine various scenarios, with applications as diverse as quality management, security and product design. Digital twins are a key tool used in the servicing, assembly and manufacturing of both satellites and spacecraft. They improve the entire processes; digital twins can take data from IoT-embedded in-flight assets and then map that to new models and simulations, with AI helping analyze and iterate throughout the process. The European Union is also creating an ambitious digital twin of Earth that maps and analyzes massive amounts of geospatial data gleaned from satellites to simulate changes in the atmosphere. The EU model is expected to use machine learning techniques to provide more accurate predictions of climate change. “The world is a dynamic place–deeply connected, constantly evolving and always presenting humanity with new challenges,” Jim Whitehurst, IBM’s president, said in a post on IBM’s THINK blog. “Answers to global problems are grounded in two powerful forces: innovation and human ingenuity.” Quantum, and blockchain, mechanics Blockchain, with its shared, replicated, decentralized ledger system, also has an expanded role in space exploration optimization. Just as it eases cross-border commerce on Earth, blockchain could simplify or speed development efforts, offering “major potential to reduce costs, accelerate processes and transactions, provides provenance and transparency and ultimately shortens the time to market,” Altaf said. One place where blockchain can be useful is in optimizing resupply journeys to the International Space Station, also known as the ISS. This part of the aerospace industry is rapidly growing, particularly with the most recent innovations in launch facilities and payload vehicles from both the public and private sectors. One of the main concerns is ensuring that ISS resupply components align with regulatory requirements. Blockchain provides near real-time information that can improve the scheduling and auditing of each payload. Blockchain may even play a role in the management of space junk, creating a centralized and verifiable database of tens of thousands of pieces of manmade detritus circling the planet. Looking further out, quantum computing will solve complex-as-the-cosmos problems not only on Earth. In July, as part of its Mars 2020 effort, NASA launched the car-size Perseverance rover, which will search for ancient microbial life on the red planet. The rover has a drill to collect core samples of Martian rock and soil, then store them in sealed tubes for pickup by a future mission that would ferry them back to Earth for detailed analysis. In 2026 these samples will be retrieved for a trip back to earth. Quantum computing in future can play a critical role in such decision optimization scenarios. Carl Sagan, the popular astronomer, once noted, “Somewhere, something incredible is waiting to be known.” **The symbiotic relationship between business, space exploration and the business of space could reveal these incredible things even sooner. “The future of space exploration is unlimited,” Altaf said. “Now we hope to use our best technology from here on earth to push it even further forward.”**

5---The internal link card for warming just says people got info from space research, not that more exploration can solve warming.

#### 6---Technological innovation is driving environmental change – such as MethaneSAT tackling climate change

**EDF 21** [Environmental Defense Fund, “This space technology can cut climate pollution on Earth, 11/23/2021, https://www.edf.org/climate/space-technology-can-cut-climate-pollution-earth] /Triumph Debate

**The latest science warns that the window for preventing the most catastrophic global warming is closing fast. But we have a crucial opportunity to slow the rate of warming right now, even as we continue the transition to clean energy as quickly as possible. Deep reductions in carbon dioxide emissions remain critical over the long term.** But it turns out that methane emissions from fossil fuel operations, livestock production and other industries is responsible for more than 25% of current temperature rise**. Cutting these emissions is the fastest way to put the brakes on climate change.** But tracking these invisible emissions can be hard. That’s the reason for **MethaneSAT, a compact new satellite being built by a specially created new arm of EDF. MethaneSAT is specifically designed to locate, measure and track reductions in methane emissions virtually anywhere on Earth with greater precision than any other satellite.** First-of-its-kind satellite gets key data The oil and gas industry is a leading source of methane emissions. From remote wellheads to gas utility lines, companies release at least 75 million metric tons a year — enough gas to produce electricity for all of Africa twice over. Extensive research led by EDF suggests that oil and gas methane emissions in the U.S. are 60% higher than official EPA estimates. To fully understand the problem — and drive the solutions — we need more and better data about: How large methane emissions are. Where they're coming from. The biggest potential reductions. Progress of those reductions over time. **MethaneSAT will provide high-precision global coverage, measuring not just methane concentrations but the rate it’s escaping, from where and who is responsible. It will fill gaps left by other satellite systems, measuring large emission sources as well as those too small for other satellites to see. Because it will focus only on methane, MethaneSAT will be quicker and less expensive to launch than the complex, multi-function satellites built by government space agencies, so we can get data sooner.** 8 **EDF’s efforts using technological innovation to drive environmental change**, **the MethaneSAT mission is about turning data into action**. Video: Watch as EDF's president shares the vision of MethaneSAT in this TED Talk. **That data will be available to the public free of charge, so that stakeholders and the public can see and compare methane emissions by country or company. This unprecedented transparency will both enable and motivate faster reductions. And it will give the public objective assurance that both industry and government are delivering reductions**. Fred Krupp, EDF's president, unveiled the idea for MethaneSAT in a 2018 TED Talk at TED’s flagship event, as part of The Audacious Project, successor to the TED Prize. The purpose of MethaneSAT is to serve as a critical resource for realizing our goal of reducing methane emissions from a diversity of sources, especially global oil and gas. **A 45 percent reduction in oil and gas methane emissions by 2025 would deliver the same 20-year climate benefit as closing one-third of the world’s coal-fired power plants**. Cutting these emissions is the fastest, cheapest thing we can do to slow the rate of warming today, even as we continue to attack carbon dioxide emissions. Drawing from expertise and research MethaneSAT is due to launch in 2022. **The team responsible for getting it off the ground includes Tom Ingersoll, a successful satellite entrepreneur with three decades of experience, and a long list of experts in spaceflight, remote sensing and atmospheric sciences.** Steven Hamburg and Tom Ingersoll Steven Hamburg, left, EDF's chief scientist, and Tom Ingersoll, MethaneSAT project director, pictured at Harvard University And the MethaneSAT team has partnered with Harvard University and the Smithsonian Astrophysical Observatory to develop the science required for the mission. We’ve learned that emissions are much higher than either industry or government previously recognized, and occur across the supply chain. The challenge is, the sources are intermittent, unpredictable and widespread, making it hard to predict where they’ll occur. That means ongoing monitoring and measurement are essential. By providing reliable, fully transparent data on a worldwide scale, MethaneSAT will help transform a serious climate threat into a crucial opportunity.

### AT: Mining

I’ll turn this entire advantage---authoritarianism is GOOD and democracy is bad.

#### Experiment based analysis and new regression stats prove there is no causal link between democracy and peace.

Bakker, 4/20 (Femke E. Bakker, Femke E. Bakker is Assistant Professor Political Science. She studies politics and international relations from political psychological perspective. Her main areas of interest include microfoundations of IR theory, democratic peace theory, political behaviour, political leadership, beliefs systems, liberal values and meditation. She teaches in the field of political psychology, international relations and research methods, “The microfoundations of normative democratic peace theory: Experiments in the US, Russia and China, Political Research Exchange,” 2:1, DOI: 10.1080/2474736X.2020.1753084, 4-20-2020)//ILake-NC

The microfoundations, the essential building blocks of democratic peace theory, which are used untested as empirical facts, do not find any support when tested along with alternative hypotheses in a comparative framework. These are important findings for democratic peace theory. Earlier experimental studies of the democratic peace (Bell and Quek 2018; Geva, DeRouen, and Mintz 1993; Geva and Hanson 1999; Johns and Davies 2012; Maoz and Russett 1993; Mintz and Geva 1993; Rousseau 2005; Tomz and Weeks 2013) have instrumentally assumed liberal norms to be present and of influence within liberal democracies. They did not measure whether these were actually present, and they did not test whether they indeed influenced as hypothesized. Although it is assumed throughout the democratic peace literature that liberal norms are of influence on the willingness to attack, in particular among decision-makers of liberal democracies, this research shows that there is no evidence to support that assumption. The assumptions that liberal-democracy does something special with its citizens that makes them ‘morally more advanced’ (Doyle 1983a, 1983b, 1986; Kant [1795] 2013; Maoz and Russett 1993; Rawls 1999) and that would make them subsequently more peace prone, is empirically simply not supported. Also, regime-type showed to be of no influence on the willingness to attack, or the willingness for other relevant policy options, of decision-makers in all three samples alike. Regime-type did thus not influence decision-makers of liberal democracies significantly, as is expected by democratic peace theory.

#### Pursuit of democracy causes nuclear war with China, Russia, and Iran. Even if democratic peace is true, corrupt American models alter international calculus.

Miller ’17 (Benjamin; 4/27/17; Professor of International Relations at the School of Political Sciences, The University of Haifa; The International Security Studies Forum; “Policy Series: Will Trumpism increase the Danger of War in the International System?: IR Theory and the Illiberal Turn in World Politics”; <https://issforum.org/roundtables/policy/1-5ag-war>; DOA: 12/6/17)

Some realists might, however, not see these recent developments as necessarily leading to more conflict, although they may not see them as leading to stable peace either.[22] In the eyes of these realists, the seemingly unconditional U.S. security umbrella for America’s allies has **allowed them to ‘free-ride’** on the U.S. commitment and to **avoid allocating** the **necessary resources** for their own national defense.[23] Moreover, some of the allies have been **provocative toward** their **opponents**, while relying on the U.S. security umbrella. This could **cause** **unnecessary conflict**. Especially provocative toward Russia, for example, was the enlargement of NATO to the east and the EU economic agreement with Ukraine in 2014. Such anti-Russian expansionist Western moves, in the realist view, compelled Moscow to **behave** more **assertively** and to **annex Crimea** and to **intervene in** Eastern **Ukraine**.[24] Somewhat similarly, it seems **less costly** for American allies in East Asia to engage in maritime conflicts with China so long they are under the U.S. protective shield. Realists believe that moving away from such ever-growing commitments will **stabilize the international system**, or at the very least **reduce** the likelihood of a **great-power conflict**. The realists are especially concerned about the American policies to shape the domestic character of other states, particularly by advancing democracy-promotion, “nation-building,” and the universal protection of human rights.[25] In this context they highlight what they see as **disastrous** American **military interventions**, notably, in Iraq in 2003 and in Libya in 2011 and also the continuously costly intervention in Afghanistan since 2001. In their eyes such military interventions are not necessary for the protection of American national interests. Moreover, such military engagements are **unlikely to succeed** and in many cases are **de-stabilizing** and are causing unnecessary conflicts. Such interventions simply **increase the perceived threat** posed by the U.S. to some other countries. Thus, lessening—if not **completely abandoning**—the U.S. commitment to advance these liberal values is likely, in realist eyes, to **stabilize the international system** and to **serve well** the American national security interests. Even though liberals see trade as a major pacifying mechanism, realists view trade—and economic interdependence more broadly—as potential sources for conflict.[26] They highlight the earlier U.S. trade conflicts with Japan and currently with Mexico and China. Thus, moving away from free trade might diffuse conflicts rather than accelerate them. Moreover, there is a growing populist opposition in the West to globalization. In this sense, it cannot work as a useful recipe for the promotion of peace. Similarly, despite the high levels of economic interdependence between Japan and China, for example, such interdependence does not prevent conflict between them and definitely does not result in stable peace even if it might have helped to prevent a shooting war between them, at least thus far. Realists are also skeptical about the ability of international institutions to advance stable peace.[27] Such institutions are not independent actors, which can influence the behavior of the member-states in important ways. International institutions just reflect the balance of power among states. States follow their national interests, and even more so in this age of rising nationalism. Thus we **cannot** expect much from the ability of international institutions to **pacify intense conflicts**, especially among the great powers. Even the most remarkable of international intuitions—the EU—has recently **failed in advancing cooperation** among its members with regard to the key issues of immigration, terrorism and the Euro financial crisis. Realists might be a bit skeptical about a potential reconciliation between the U.S. and Russia based on factors such as the personal friendship between Trump and Russian President Vladimir Putin or the supposedly common traditional/illiberal values of key figures in their respective administrations. Yet, the presence of a common enemy might be a good source of friendship. In this sense the Islamic State and perhaps even China create a potential basis for cooperation and avoidance of conflict between Moscow and Washington. But on the whole this will not advance a high-level ‘warm’ peace in Europe or elsewhere; rather it may, at most, lead to some kind of an unstable spheres-of-influence arrangement, which is unlikely to endure for an extended period. In sum, while liberals offer a menu of mechanisms for promoting peace, these mechanisms seem now **under assault** or in some process of weakening under Trumpism and the illiberal turn in quite a few other countries. Realists, for their part, do not believe in the far-reaching peace-producing effects of such liberal mechanisms. They tend to see some level of great-power competition as the natural order under international anarchy. Realists at most expect that there will be some stabilizing effects of deterrence, especially **nuclear deterrence**, and of the balance of power among the great powers. These kind of factors might — also under Trumpism—**maintain world stability** and **prevent war** even if some level of great-power conflict is expected to endure at any rate. The **most effective instrument** for cooperation—applicable even under the illiberal turn– is based on common threats faced by the great powers such as large-scale terrorism or risky behavior by a small nuclear power such as North Korea and potentially Iran. Evaluation of the Realist and the Liberal Views At this stage, less than three months into the Trump administration, it is quite difficult to determine which approach is right. Still, on the whole, we might be able to distinguish between short-term versus long-term effects and among different types of peace. In the short-term, **realists** may **have a point**: the avoidance of American interventions for democracy-promotion and humanitarian interventions might **stabilize the international system**. The key American adversaries—Russia, China, and Iran— will be **less troubled** by regime–change strategies or ‘color revolutions’ advanced by the U.S. that are **perceived to be posing major threats** to their regimes. The eastward expansion of NATO and the EU, which realists argue has provoked Russia, **will** also **stop**. Such reassurances are likely to **increase stability** in international politics and to produce at least a ‘cold peace’ in the international system and in key regions.

#### Collapse of democracy’s inevitable – transition to autocracy solves.

Schiavenza ’17 (Matt; 1/19/17; Senior Content Manager at Asia Society; Asia Society; “Could China's System Replace Democracy?”; <http://asiasociety.org/blog/asia/could-chinas-system-replace-democracy>; DOA: 12/6/17)

Two decades later, this notion seems increasingly unfeasible. **Democracy is** **struggling**. According to Freedom House, the number of democracies has **fallen since** reaching a peak in **2006**. The world’s non-democracies, meanwhile, have become **more authoritarian**. Russia, once a tentative democracy, is now under the control of Vladimir Putin, a **nationalist leader** whose regime has centralized power, targeted opposition journalists, and seized sovereign territory of other countries. Then there’s China. For years, conventional wisdom stated that as the People’s Republic grew more prosperous, the country would naturally transition to a liberal democracy. But this prediction — dubbed the “China Fantasy” by the author James Mann — has not happened. If anything, China’s economic success has only **further solidified the C**hinese **C**ommunist **P**arty: The current ruler, Xi Jinping, is widely considered to be the country’s **most powerful** since Deng Xiaoping. Democracy’s ill health has also **infected the U**nited **S**tates **and Europe**. The president of Hungary, a formerly Communist state whose accession to the European Union in 2004 was a triumph for the West, has sought to “**end liberal democracy**” in his country by clamping down on press freedom and judicial independence. These trends are also evident in neighboring Poland. Far-right parties — like the United Kingdom Independence Party, the orchestrator of Brexit — have **gained popularity** across the continent. During his successful campaign for president of the United States, Donald Trump expressed, at best, an indifference toward democratic norms and ideals. Trump called for his opponent, Hillary Clinton, to be imprisoned, raised false accusations of voter fraud, threatened legal action against the media, and refused to commit to honoring the results of the election. Trump has repeatedly professed his **admiration for Putin**, Russia’s dictatorial leader, for being “**a strong leader**”; as president-elect, he **praised the Kazakh dictator** Nursultan Nazarbayev for “achieving a miracle” in his country. Where Did Democracy Go Wrong? According to Brian Klaas, author of the new book The Despot’s Accomplice: How the West Is Aiding and Abetting the Decline of Democracy, there are **three main reasons**. One is **American hypocrisy**, or, as Klaas puts it, the “Saudi effect.” President George W. Bush made democracy promotion an explicit centerpiece of American foreign policy during his second inaugural speech in 2005, yet the following year when Hamas won democratic elections to govern the Gaza Strip, the U.S. refused to honor the results. And as Washington invested billions of dollars and thousands of American lives to **impose democracy by force** in Iraq and Afghanistan, the U.S. government forged a military deal with Uzbekistan’s tyrannical regime and maintained a close relationship with Saudi Arabia, one of the world’s most repressive countries. A second reason for democracy’s decline is the **resurgence of China and Russia**. As China’s economic rise continued without interruption in the quarter-century after Tiananmen Square, observers began wondering whether the Chinese miracle was **because of**, rather than in spite of, **its autocratic government**. (The slower growth of India, a messy democracy, only seemed to strengthen this argument.) And while Russia’s economic fortunes in the Putin era have lived and died with the price of oil, there’s little question that the country is **wealthier and more stable** than it had been under Boris Yeltsin. The success of both countries, sustainable or not, seemed to indicate that democracy and growth were not necessarily co-dependent. Klaas’ third reason is the **weaknesses embedded in** modern **American democracy** itself. Last year’s presidential election was a multi-billion dollar, 18-month saga that resulted in the election of a candidate who had **never served in government** or the military and one, incidentally, who earned **three million fewer votes** than his main opponent. “Not many people looked at our election and thought that they were missing out,” Klaas told Asia Society. “I even heard a Thai general say that if ‘democracy means Donald Trump, we don’t want it.’” What About China's System? There’s **no doubt** that liberal democracy is in crisis. But the next question — whether plausible alternatives exist — is less certain. Consider China. The country’s ability to push through major infrastructure projects, such as a nationwide high-speed rail network, without political obstruction has dazzled Westerners frustrated at the gridlock endemic to American politics. In a 2010 episode of Meet the Press, the New York Times columnist Thomas Friedman famously admitted to fantasizing that the U.S. “could be China for a day” simply as a means to get things done. Daniel Bell, a professor of political science at Shandong University in eastern China, has written extensively about the meritocratic advantages of China’s political system. Chinese leaders must pass a series of examinations and negotiate a complex bureaucracy before achieving national power. Xi Jinping may have benefited from nepotism: His father, Xi Zhongxun, was a key Mao-era official. But the Chinese president also accumulated experience as the governor of two major Chinese provinces and a stint as vice president. This, Bell argues, has given Xi legitimacy in spite of never having to face voters. “I disagree with the view that there’s only one morally legitimate way of selecting leaders: one person, one vote,” Bell said in an appearance at Asia Society in 2015. State-run media in China spun the chaotic outcome of the Arab Spring uprisings as an example of democracy’s inherent flaws. The election of Donald Trump only served to further reinforce this notion. “I remember talking to the Chinese ambassador, and he made a crack about how in the U.S. you can be a nobody one day and the next day rise to power,” said Isaac Stone Fish, a senior fellow at Asia Society, “and you can’t do that in China because you have to go through all these different levels and rise through the system.” Bell acknowledges that the Chinese system has serious drawbacks. The prohibition of free speech, ban on political opposition, and absence of an independent judiciary mean that there are no checks against official abuse of power, something that has emerged as a major crisis in the past decade in the country. The high-profile anti-corruption campaign launched by President Xi has reduced visible signs of excess, such as lavish banquets and fast cars. But critics believe that the campaign also serves as cover for Xi’s sidelining of rivals within the Communist Party. Defenders of China’s Communist Party point to the country’s near-four-decade run of economic growth as proof that the system works. But in structural terms, the modern Party is little different from the one that, under Chairman Mao, presided over widespread political persecution, a deadly famine, and a disastrous period of social upheaval known as the Cultural Revolution. Even after Deng Xiaoping reversed Mao’s policies and adopted a pragmatic economic approach, the Party has still implemented policies whose consequences threaten stability and prosperity. The One Child Policy, adopted in 1980 without public debate, created a demographic imbalance that, three decades later, has prematurely reduced China’s working-age population. Even the much-vaunted record of economic growth is built on a shaky foundation of debt-fueled investment. "There have been 30 instances in the postwar period when a country's debt increased by 40 percent over a 5-year horizon," Ruchir Sharma, an economics expert at Morgan Stanley, said of China in an appearance at Asia Society in December. “And in 100 percent of these instances, the country got into a deep economic trouble within the next five years." China has taken steps to systematize its government by introducing a mandatory retirement age for senior officials and establishing term limits for its leaders. The Communist Party’s Standing Committee of the Politburo, a seven-man body that stands atop China’s government pyramid, is designed to divide the responsibilities of government and ensure no one individual assumes too much power. The behavior of Xi Jinping over the past three years, though, has raised questions whether these norms are durable. Xi has assumed positions within the Chinese government once shared by fellow leaders and has weakened Li Keqiang, his prime minister, by denying him the office’s traditional stewardship of economic policy. Xi has abetted and re-established a cult of personality, something explicitly discouraged in China after the Maoist era, by encouraging the singing of songs in his name. And, as the Wall Street Journal recently reported, there are questions that Xi may not name a successor at this fall’s 19th Party Congress in order to continue as president beyond the customary 10-year term. The Consequences of Democracy's Decline China, for what it’s worth, has never claimed that its system of government was universally applicable. In contrast to the United States or the Soviet Union, Beijing has never tried to install its system in a foreign country by force. Even still, democracy’s decline may prove advantageous to China in other ways. For one, it would weaken the democratic movement in Hong Kong, which has vied with pro-Beijing elements for political control of the Chinese territory, and deter would-be Chinese dissidents from challenging Communist Party rule on the mainland. In addition, Klaas argues, the American absence of support for democracy leaves a vacuum in emerging states that Washington’s geopolitical rivals in Moscow and Beijing might fill. “The ‘America First’ mentality, or the mentality that it’s not our business, makes the mistake that thinking that the withdrawal of Western influence means there’s self-determination,” says Klaas. “ [But what it means is] that China and Russia control things. It’s not something where if the West leaves, then, say, Malawi will be free to choose. It’s a global foreign policy battle, and the West’s losses are China's and Russia’s gains.” Before the U.S. can promote democracy overseas, though the country may need to firm up support for it at home. A Harvard study conducted in November found that just 19 percent of American millennials believe that a military takeover is not legitimate in democracy compared to 45 percent of those older. 26 percent of millennials likewise feel that choosing leaders through free elections is “unimportant,” a sentiment shared by just 14 percent of Baby Boomers. “A lot of people growing up now don’t understand what it’s like not to live in a free society in the West,” says Klaas. “That, combined with the "end of history," assumed that democracy is the natural way of things. “In fact, democracy is the least organic and least natural way we’ve had."

#### Not sustainable – Laundry list of underlying factors driving democracy decline they don’t prevent.

[Jay Ogilvy, 5-25-2017, Jay Ogilvy joined Stratfor's board of contributors in January 2015. In 1979, he left a post as a professor of philosophy at Yale to join SRI, the former Stanford Research Institute, "The Forces Driving Democratic Recession," Forbes, <https://www.forbes.com/sites/stratfor/2017/05/25/the-forces-driving-democratic-recession/#621e1f5a4db2>] //WY – edited gendered langauge

As Luce and others have noted, these four phenomena are interrelated. Part of globalization is about trade, but when people as well as goods cross borders, whether as travelers or refugees, then lives are touched and customs challenged. As is clear from both Brexit and Donald Trump's victory, part of the pressure toward populism comes from lower- and middle-income, less educated people who feel their lives and jobs are threatened by immigrants and low-wage workers in other countries. To repeat myself yet again, for the rich, the world is their oyster; for the poor, the world is their competitor. Hillary Clinton may well have lost the election as a result of her use of a single word: deplorables. In England, they call them "the left-behinds," a phrase that figured centrally in a column not about England but about Islam and the post-Colonial legacy in Asia. When the gap between rich and poor yawns wide, when the middle class gets hollowed out, when economic insecurity strains the social contract, then populists call for a strongman[person] to stand up to the corrupt elite, and democracy suffers. Luce quotes American sociologist Barrington Moore: "No bourgeoisie, no democracy." Though Luce doesn't lump them together as I do here, he captures the pace of change over recent decades in three different fivefold increases: "Since 1970, Asia's per-capita incomes have increased fivefold." "The asset value of the world's leading billionaires has risen fivefold since 1988." "Following China's WTO accession in 2001, America's trade deficit with China has leapt almost fivefold." These three fivefold increases are not unrelated. While the four phenomena under this subtitle -- globalization, immigration, populism and inequality -- are tightly interrelated in self-reinforcing feedback loops, there are other factors behind the democratic recession that can be identified more discretely. The Iraq War and Its Legacy Luce doesn't mince words: "It is hard to overstate the damage the Iraq War did to America's global soft power -- and to the credibility of the West's democratic mission." And the damage continues: "[I]n the eyes of the Islamists, Trump has simply dropped the pretense. The West was always at war with Islam. Trump has removed the mask. At a moment when ISIS is on the military retreat in Iraq and Syria, Trump has made their drive for fresh recruits much easier." Democracy, it turns out, is difficult to promote at the end of a gun. China and the Economic Recession These two phenomena are importantly linked precisely to the extent that undemocratic China did not suffer economically nearly as much as the world's democracies. Is there a lesson here for countries in Africa, where none qualify as effectively functioning democracies and many are receiving aid and investment from China? Luce quotes Andrew Nathan, a leading China-watcher: "By demonstrating that advanced modernization can be combined with authoritarian rule, the Chinese regime has given hope to authoritarian rulers everywhere." So, to briefly summarize Luce before taking issue with what he has to say about technology, all of these factors, not just one, have come together to create a kind of perfect storm for democracy: globalization, immigration, populism, inequality, the Iraq War and its legacy, China, and the economic recession. These are some of the reasons for the "bad governance" that Diamond invokes. The Threat of Technological Unemployment Luce is hardly alone in noting that new technologies, particularly robots with artificial intelligence (AI), pose a greater threat to low-skilled workers than do foreigners. "The latter-day effects of globalization have shaken Western solidarity. The future of artificial intelligence poses challenges that are likely to be orders of magnitude greater." Orders of magnitude greater? Granted, the newest wave of automation poses a threat to employment in ways that earlier technological advances did not, but accurately estimating the scale of the threat is important. Why? Because of the connection between (un)employment and populism: "Europe and America's populist right wants to turn the clock back to the days when men were men and the West ruled. It is prepared to sacrifice the gains of globalization -- and risk conflict with China -- to protect jobs that have already vanished. Populists have little to say about automation, though it is a far larger threat to people's jobs than trade." When I say that Luce is not alone in his fear of what artificial intelligence can do to eliminate jobs, I'm thinking not only about figures like Elon Musk and Stephen Hawking, who have voiced their fears about AI, but also the fascinating and very popular work of Yuval Noah Harari, author of the best-seller, Sapiens: A Brief History of Humankind, and, just recently, Homo Deus: A Brief History of Tomorrow. Like Luce, Musk and Hawking, Harari is alarmed at the prospect of technologically caused unemployment. But Harari's rationale is even more radical. Taking the very long view from 70,000 years ago in his first book, in his latest volume he contemplates a not-too-distant future featuring nothing less than the obsolescence of humanity as we know it. The stakes for politics are high: "When genetic engineering and artificial intelligence reveal their full potential, liberalism, democracy and free markets might become as obsolete as flint knives, tape cassettes, Islam and communism."

#### Democracy causes a laundry list of existential threats

Alex de Waal 16, Executive Director of the World Peace Foundation at the Fletcher School at Tufts University, 12/5/16, “Garrison America and the Threat of Global War,” http://bostonreview.net/war-security-politics-global-justice/alex-de-waal-garrison-america-and-threat-global-war

Trump’s promises have been so vague that it will be hard for him to disappoint. Nonetheless, many of his supporters will wake up to the fact that they have been duped, or realize the futility of voting for a wrecker out of a sense of alienated desperation. The progressives’ silver lining to the 2016 election is that, had Clinton won, the Trump constituency would have been back in four years’ time, probably with a more ruthless and ideological candidate. Better for plutocratic populism to fail early. But the damage inflicted in the interim could be terrible—even irredeemable if it were to include swinging a wrecking ball at the Paris Climate Agreement out of simple ignorant malice.

Polanyi recounts how economic and financial crisis led to global calamity. Something similar could happen today. In fact we are already in a steady unpicking of the liberal peace that glowed at the turn of the millennium. Since approximately 2008, the historic decline in the number and lethality of wars appears to have been reversed. Today’s wars are not like World War I, with formal declarations of war, clear war zones, rules of engagement, and definite endings. But they are wars nonetheless.

What does a world in global, generalized war look like? We have an unwinnable “war on terror” that is metastasizing with every escalation, and which has blurred the boundaries between war and everything else. We have deep states—built on a new oligarchy of generals, spies, and private-sector suppliers—that are strangling liberalism. We have emboldened middle powers (such as Saudi Arabia) and revanchist powers (such as Russia) rearming and taking unilateral military action across borders (Ukraine and Syria). We have massive profiteering from conflicts by the arms industry, as well as through the corruption and organized crime that follow in their wake (Afghanistan). We have impoverishment and starvation through economic warfare, the worst case being Yemen. We have “peacekeeping” forces fighting wars (Somalia). We have regional rivals threatening one another, some with nuclear weapons (India and Pakistan) and others with possibilities of acquiring them (Saudi Arabia and Iran).

Above all, today’s generalized war is a conflict of destabilization, with big powers intervening in the domestic politics of others, buying influence in their security establishments, bribing their way to big commercial contracts and thereby corroding respect for government, and manipulating public opinion through the media. Washington, D.C., and Moscow each does this in its own way. Put the pieces together and a global political market of rival plutocracies comes into view. Add virulent reactionary populism to the mix and it resembles a war on democracy.

What more might we see? Economic liberalism is a creed of optimism and abundance; reactionary protectionism feeds on pessimistic scarcity. If we see punitive trade wars and national leaders taking preemptive action to secure strategic resources within the walls of their garrison states, then old-fashioned territorial disputes along with accelerated state-commercial grabbing of land and minerals are in prospect. We could see mobilization against immigrants and minorities as a way of enflaming and rewarding a constituency that can police borders, enforce the new political rightness, and even become electoral vigilantes.

Liberal multilateralism is a system of seeking common wins through peaceful negotiation; case-by-case power dealing is a zero-sum calculus. We may see regional arms races, nuclear proliferation, and opportunistic power coalitions to exploit the weak. In such a global political marketplace, we would see middle-ranking and junior states rewarded for the toughness of their bargaining, and foreign policy and security strategy delegated to the CEOs of oil companies, defense contractors, bankers, and real estate magnates.

The United Nations system appeals to leaders to live up to the highest standards. The fact that they so often conceal their transgressions is the tribute that vice pays to virtue. A cabal of plutocratic populists would revel in the opposite: applauding one another’s readiness to tear up cosmopolitan liberalism and pursue a latter-day mercantilist naked self-interest. Garrison America could opportunistically collude with similarly constituted political-military business regimes in Russia, China, Turkey, and elsewhere for a new realpolitik global concert, redolent of the early nineteenth-century era of the Congress of Vienna, bringing a façade of stability for as long as they collude—and war when they fall out.

And there is a danger that, in response to a terrorist outrage or an international political crisis, President Trump will do something stupid, just as Europe’s leaders so unthinkingly strolled into World War I. The multilateral security system is in poor health and may not be able to cope.

Underpinning this is a simple truth: the plutocratic populist order is a future that does not work. If illustration were needed of the logic of hiding under the blanket rather than facing difficult realities, look no further than Trump’s readiness to deny climate change.

We have been here before, more or less, and from history we can gather important lessons about what we must do now. The importance of defending civility with democratic deliberation, respecting human rights and values, and maintaining a commitment to public goods and the global commons—including the future of the planet—remain evergreen. We need to find our way to a new 1945—and the global political settlement for a tamed and humane capitalism—without having to suffer the catastrophic traumas of trying everything else first.

#### kThe turn solves the first advantage too---empirics---autocracies are best for the environment.

Pohjanpalo 19 (Virve Pohjanpalo, journalist and editor-in-chief at the University of Helsinki, University of Helsinki, “Which is better for the environment, democracy or dictatorship?”, 2-22-19, <https://www.helsinki.fi/en/news/society-economy/which-is-better-for-the-environment-democracy-or-dictatorship>, //DashW)

An authoritarian system can efficiently tackle environmental problems the existence of which it acknowledges. However, it is bad at discerning latent crises. It is easy to assume that a dictator would not be interested in the wellbeing of citizens or the environment. “I don’t believe in that kind of evil. I’m certain that even autocrats worry about the future. Everyone does,” says University Lecturer Katalin Miklóssy. In her research, Miklóssy has focused on the political history of Eastern Europe and particularly the Cold War. Through teaching cooperation, she has come to know many areas that used to belong to the Soviet Union, especially Belarus and Georgia. Research findings and cooperation have strengthened her view that black and white interpretations of politics should be replaced with a prism: power systems should be studied in all their hues. “Contempt doesn’t help us to understand authoritarian societies or what kinds of incentives could influence authoritarian rulers.” As long as we don’t have a nuanced understanding of how various systems work, we will likely fail in promoting democracy, Miklóssy says. The bur­den of Fin­land­isa­tion Katalin Miklóssy has opened up a new research avenue by studying authoritarian states through environmental history. Industrial towns polluted all the way down to their groundwater, the Aral Sea and Chernobyl must not be forgotten, but other things have happened in authoritarian countries as well, not just catastrophes. “For example, in the 1970s Hungary was ahead of Austria in terms of recycling, and eco-cities built in China have received praise.” Political scientists could really gain from the evidence that environmental history can provide, says Miklóssy. However, joining up these scientific traditions has been uneven thus far. On the one hand, Russians like to point out phenomena that break the division between the Good West and the Bad East. On the other hand, in the United States researchers focusing on global questions tend to be stuck in their Cold War positions even though they do analyse the political history of their own country from a fresh perspective. “Even in Finland it is not generally beneficial to find anything good to say about the Soviet Union. The burden of Finlandisation continues to be so heavy that you might easily be labelled a Putinist.” So­viet doc­u­ments Simo Laakkonen, docent of social and economic history, who has specialised in the environmental history of the Baltic Sea and the Cold War, agrees. “We like to embarrass the Soviet Union and Putin’s Russia and label them as environmental criminals. Often there is good reason to do so, but you should still study the background carefully. Soviet archives have been gradually opened in the last 25 years, but their use is still astonishingly rare.” Laakkonen’s own expedition to the archives of the East already started in the mid-1990s. When writing his dissertation on the history of water protection in Finland, he wanted to find international points of comparison for his observations. “I travelled around the Baltic Sea and managed to get ten important cities to participate in the research project supported by the Nordic Council of Ministers.” 900 wa­ter treat­ment plants Laakkonen was especially delighted with the enthusiasm and findings of his Lithuanian colleagues. “The Lithuanians were astonished themselves. They had thought they were weak in water protection, but the archives proved otherwise,” says Laakkonen. At the conclusion of the Second World War, a huge number of waste water treatment plants were built in the Lithuanian Soviet Socialist Republic, of which 700 were state-of-the-art biological purification plants. The material collected from Eastern Europe continues to occupy Laakkonen, two decades later. His next article is due to be published in a book on environmental history for the University of Pittsburgh Press this year. Sci­entific com­mun­ism According to Laakkonen, his path to sources challenging predominant ideas was not particularly winding. He just had to ignore political rhetoric and delve into expert archives. The study on Lithuania is the first and possibly only quantitative survey of water protection in a Soviet Socialist Republic. “According to Soviet rhetoric, there were no environmental problems and, consequently, there was nothing to fix. Beating about this political bush, we wouldn’t have gotten anywhere. We were in for quite a surprise when my colleagues reviewed everyday documents related to water protection, water protection management and research in natural sciences.” Katalin Miklóssy also speaks of the value of engineering and knowledge of natural scientific facts. They are hard currency when the West wants to discuss difficult environmental issues with countries from the former Soviet Union. Technological facts continue to be respected, as they were under “scientific communism”. “Facts are listened to more intently if scientifically proven environmental crises are discussed as universal issues transcending national borders.” Cal­cu­lated green­ness Many authoritarian leaders keep environmental organisations on a tight leash. However, it can sometimes happen that a government makes the mistake of underestimating the severity of environmental issues: Criticism against the system smouldering in environmental movements may go unnoticed by those in power. “Leaders may think that environmental issues are a handy way of collecting brownie points. They may think they have more room to manoeuvre in the field of environmental politics than in clear-cut power politic debates.” Dictatorships so pure that they could totally ignore public opinion do not exist, says Miklóssy. Especially in hybrid systems, such as Russia and China, leaders need to ensure their genuine popularity. Consequently, environmental problems should not be overlooked entirely, since popularity among the general public depends on the state of the natural environment and the pleasantness of people’s surroundings. The bot­tom line Authoritarian rulers must also listen to the business community, says Miklóssy. “Especially in the very poorest countries, companies have the power to talk to decision-makers.” The state of the environment is a natural topic for these discussions, since most of the time it is intertwined with successful business operations. “Research on third world nations clearly highlights the position of companies between the elite and individual people.” Miklóssy hopes that especially Western corporations would adopt a firmer stance. “Companies may operate in third countries in a manner they wouldn’t dare to attempt in their home countries. The operating environment is described as authoritarian, but companies may also assume quite dictatorial operating methods.”