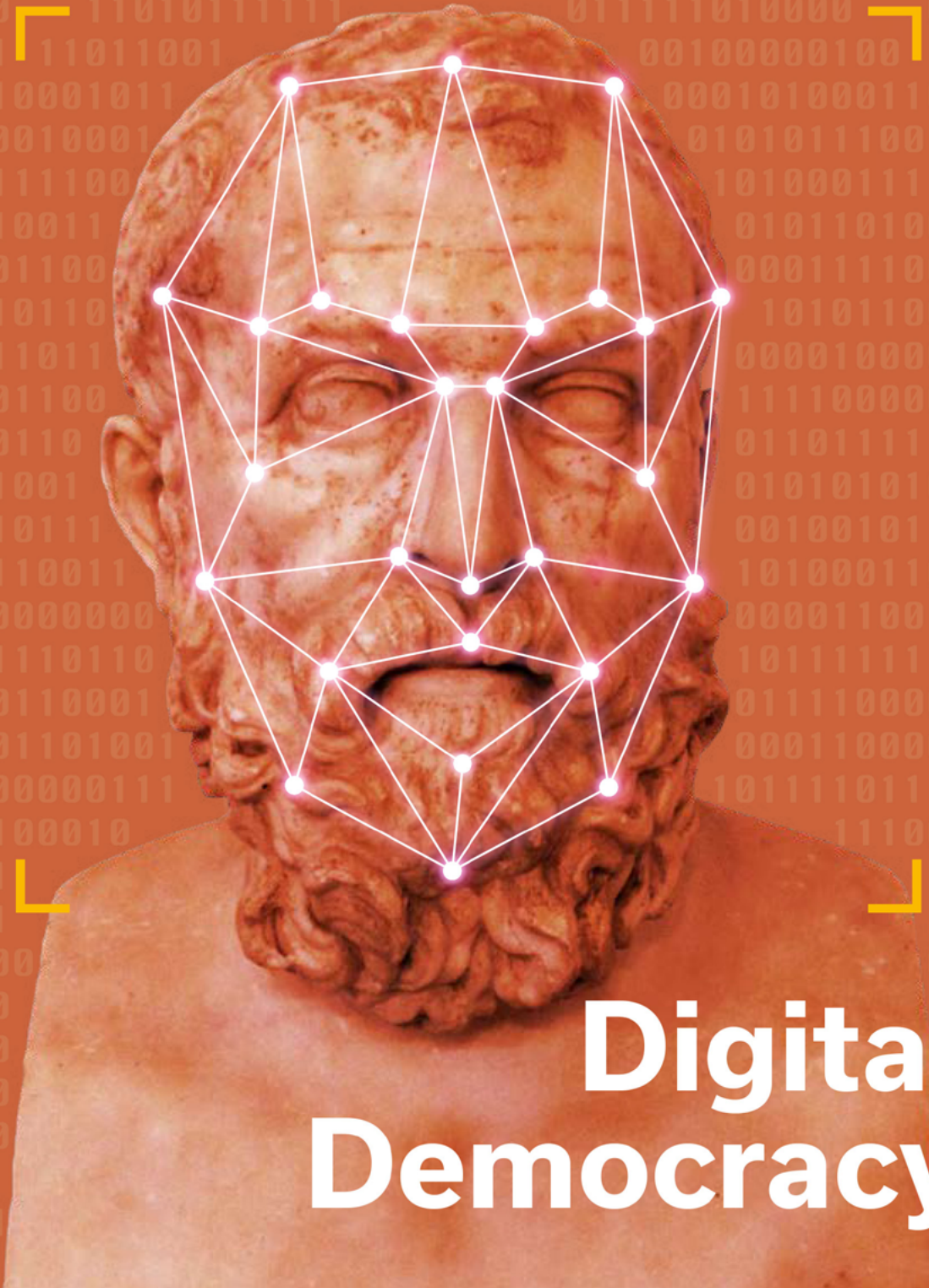


INTERNATIONAL REPORTS



Digital Democracy

INTERNATIONAL REPORTS

1 | 2020

Editorial

Dear Readers,

Rapid technological developments witnessed over recent decades offer many opportunities, but also present us with new challenges – political, social, and sometimes private. Strategic questions regarding the political design of our digital future need to be considered at the international level in particular. This is because strict technological separation of a wide variety of state and non-state actors is now virtually impossible. Globalised goods, services, communications, and data streams are shaping the world.

How do we deal with states that are integrated into global economic cycles and exhibit remarkable innovative potential, but at the same time have restrictive societies and political systems? Countries like China demonstrate how technological development can take place even in an environment characterised by political oppression. There does not appear to be a contradiction between “authoritarian” and “innovative”. In such an environment, how can we take advantage of the opportunities of the digital age to create a sustainable digital future that enhances global democracy and equality of opportunity? In order to answer this question, the United Nations is working towards transnational and trans-institutional cooperation. Technological progress can only become a foundation for growth that includes everyone if there is cross-border collaboration, emphasises Fabrizio Hochschild, Under-Secretary-General at the United Nations.

The opportunities and risks of the digital age are clearly demonstrated in Sub-Saharan Africa. The internet, and particularly social media, offers a continent with great democratic deficits new opportunities for civic involvement, transparency, and free access to information. However, the initial euphoria with respect to the emancipatory potential of social media is increasingly tempered with scepticism, as Mathias Kamp writes. The dark sides, such as the spread of hate and fake news, are all too obvious. Autocratic governments in Africa are becoming increasingly adept at instrumentalising social media for their ends.

In democratic countries, on the other hand, the digital transformation can be used to eliminate obsolete bureaucratic apparatuses, simplify work processes, and increase overall economic attractiveness. The new Greek government is striving for such a network of citizens, business, and state, as Henri Giscard Bohnet and Martha Kontodaimon describe. The country, which is scarred by the financial crisis, aspires to catch up in the digital sector.

China shows how technological innovation in the digital area can be used at least as effectively in autocratic systems. Sebastian Weise uses the example of China, a high-tech autocracy, to show how liberal democracies can face the challenge of innovation in an illiberal context.

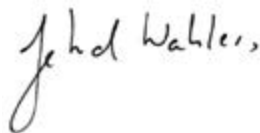
The development of cryptocurrencies forms part of the digital transformation. State actors are involved, as are, increasingly, non-state actors. Jason Chumtong analyses the various causes and possible effects of introducing digital currencies such as Libra, e-krona, and the digital yuan. Only time will tell how successful these initiatives will be, and whether they will become true alternatives to established currency systems.

Cutting-edge technologies constitute a threat when they are used for political manipulation. This is clear from the example of deepfakes, as Hans-Jakob Schindler explains in an interview with Nael Semaan. The spread of fake news as a political instrument has long been a topic in political discourse. It is important to react to technological innovations that continuously expand the potential of disinformation campaigns, threatening our domestic security in the process.

Digitalisation presents an ambivalent picture across the globe. Technological innovation does not necessarily solidify liberal values. Instead, digitalisation is an instrument that can be used in the service of any political or regulatory idea. Actively designing and refining the digital age, but also regulating it in the spirit of liberal values is absolutely essential for opposing high-tech autocracies. Germany must actively participate and fund the digital innovations necessary to avoid being crushed by the digital wave. Because, ultimately, the relationship between technology and ideology will increasingly occupy us in the years to come.

I wish you a stimulating read.

Yours,

A handwritten signature in black ink that reads "Gerhard Wahlers". The signature is written in a cursive, slightly slanted style.

Dr. Gerhard Wahlers is Editor of International Reports, Deputy Secretary General and Head of the Department European and International Cooperation of the Konrad-Adenauer-Stiftung (gerhard.wahlers@kas.de).

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Digital Democracy

Digital Cooperation – An Opportunity to Advance Sustainable Development

Fabrizio Hochschild

In today's complex digital world, we see enormous advantages of digital technologies, which will play an increasingly important role in sustainable development in the coming years. Of course, we are also experiencing risks and challenges in the rapid development of these technologies. These challenges can no longer be met by individual organisations or countries. Instead, the answer to these challenges depends on cooperation between different groups, sectors, stakeholders, and countries.

The Digital Age We Live In

Fifty years to the day since the first internet transmission was made, the world has experienced exponential transformation, driven by the evolution of the information and communication technologies (ICTs) in all aspects of our lives. ICTs have had a revolutionizing impact on our economies and societies, and further disruptive innovations and changes are expected in the near future. Greater levels of digitalization will create new ways and means for tackling global development, with major implications for the United Nations' 2030 Agenda on Sustainable Development.

Technological developments are unfolding at a speed without parallel in human history. The increasing pace of change can be illustrated by the fact that it took about 50 years for the telephone to connect the first 50 million users, but it has taken only seven years to reach the same number of internet subscriptions, and just three years for a social media platform to reach its first 50 million users.¹ Today, there are more mobile cellular subscriptions worldwide than inhabitants on the planet, and 4.1 billion people use the internet.²

The potential of the internet will be at its greatest if we are able to cultivate it as a global resource or public good that is open, inclusive, reliable, robust, secure, and trustworthy. Through its evolution, the internet has become an integral part of our lives and has played a critical role in delivering social, economic, and environmentally

sustainable progress. In today's world where we expect to be connected everywhere and at all times, and where we talk about artificial intelligence, bio technology, material science, and robotics, it is incredible how much progress has been made and how much more can be done for the advancement of human welfare.

However, while the ICTs are shaping history and evolving alongside us, these same technologies have also exposed us to new types of threats, risks, and governance challenges. Capabilities to commit cybercrime or cyberattacks are developing at a tremendous rate, becoming more targeted, having a higher impact on physical systems, and undermining societal trust in ever more insidious manners. There is also a risk that the misuse and abuse of digital technologies will result in mounting inequality, as well as threatening a broad range of human rights. In addition, there are ever-growing concerns about the ethical and social implications of emerging technologies. We are thus increasingly feeling the pressure to develop effective and innovative governance models for new science and technologies.

All these challenges are transnational and also trans-institutional in nature, thus no single government or institution can address the challenges ahead alone. They can be addressed only through international cooperation, which requires a robust process of digital cooperation across governments, private sector, particularly technology companies, research institutions, academia, civil society, and international organizations.

To further develop this perspective, this article is structured into two parts: Firstly, “The Digital Society we shape”, which is composed of three specific themes – digital inclusion, digital capacity and digital governance; and, secondly, “The Digital Interdependence we respect”, outlining the five thematic recommendations from the High Level Panel on Digital Cooperation, as well as the United Nations’ ongoing efforts to follow-up on these. This article will be then concluded in a section on “Enhancing Digital Cooperation towards Sustainable Development”.

The Digital Society We Shape

Digital Inclusion

New data released in 2019 shows that internet use continues to grow globally – on average by 10 per cent every year between 2005 and 2009, with 4.1 billion people now using the internet, or 53.6 per cent of the global population.³ However, an estimated 3.6 billion individuals still remain offline and have no access to the wealth of knowledge available through the internet. This situation is more extreme in the world’s Least Developed Countries, where more than 80 per cent of the population is not connected. The digital divide also persists within countries; for example, men, urban residents, and young people are more likely to be online than women, rural residents, and older people, further exacerbating inequality in societies.

Given that the internet has become an indispensable tool in our daily lives, it is therefore even more important to redouble our efforts to get the whole world connected, and to create an enabling environment for industry to make the necessary investments in infrastructure, applications, and services. To build an inclusive digital society, technological solutions will be crucial, but will not be enough. This task also requires sustained and coherent efforts from many stakeholders across all areas. In this way, expanding access to digital infrastructure, combined with enabling policy and regulatory environments, will allow businesses and stakeholders to participate in the digital economy, and countries

to increase their overall socio-economic well-being and competitiveness.

Connecting the unconnected all over the globe requires a mix of technological and regulatory initiatives.

There are many initiatives that support efforts to connect the unconnected. One good practical example is using new technologies in space and upper-atmosphere communication, such as high-throughput satellites (HTS),⁴ massive non-geostationary orbits (NGSO) satellite constellation,⁵ and high-altitude platform stations (HAPS)⁶. Again, connecting everyone requires a mix of technological and regulatory solutions. While the ubiquity, reliability, and improved capability of these technologies will help expand connections to rural and remote areas, supporting regulatory frameworks such as the additional radio-frequency bands for HAPS approved at the World Radio-communication Conference (WRC-19)⁷, will also need to be updated in line with these technological developments.

Digital Capacity

The world has already entered a digital age where new opportunities and challenges are emerging every day. ICTs are empowering people, especially those in disadvantaged and marginalized groups, with information and knowledge, and act as a catalyst in ensuring their rights within the comity of digital societies. In this increasingly connected world, we are not only the beneficiaries of, but also the driving force behind, the latest innovations and practices. This call for new knowledge, new know-how, and new skills gives those who have the ability to learn and adapt fast a better chance to gain a competitive advantage over others.

Digital capacity is important at every level, be it institutional, regional, or national, as ICTs are

crosscutting and a critical enabler for growth and development. Bringing low-income countries into the digital economy will accelerate local innovation and research. Emerging technologies, such as AI, Internet of Things (IoTs), 5G, and sophisticated mobile technologies, can further boost employment and business opportunities, and improve the delivery of public services, from education to health clinics to garbage collection. For example, Africa is embracing technological change and leapfrogging ICT development, fuelled by mobile broadband, and enabling access to critical information and services. Much of the progress is driven by digitization and e-commerce. The digitalization of finance, such as M-Pesa⁸, is making it possible to provide low-income and rural populations with access to services at an unprecedented scale. This progress has also triggered efforts on the African continent to achieve greater heights in other sectors, such as education, health, transportation, and agriculture.

Digital literacy training needs to accompany technology provision in order to mitigate the unequal distribution of knowledge and expertise.

However, the lack of digital skills is a significant impediment for people to become connected, and connectivity gaps are further exacerbated by unequal distributions of knowledge and expertise. Even in areas where getting online is possible and affordable, extra efforts are still needed to empower people who may be discriminated against and excluded. In order to achieve this critical objective, e-strategies at the national, regional and international levels must address the special requirements of people so as to ensure their full inclusion in the digital societies. For example, investment in infrastructure for affordable access and the provision of digital literacy training could be a solid two-pronged approach to connect the unconnected.

Within the UN system, we have a potentially game-changing connectivity project, called “Gavi for Gigabytes” or shortly “GIGA”, which is being led by UNICEF and the International Telecommunication Union (ITU).⁹ It aims to connect every school to the internet, and especially every young person to the information, opportunities, and choices created by digital technologies. Specifically, GIGA will build on the model of the Global Alliance for Vaccines and Immunization (GAVI) of common bidding with the private sector to map and then connect every school in the world to the internet by 2030. It is expected to connect young people who are excluded from the digital society by poverty, geography, lack of skills, or other disadvantaged circumstances. It is an ambitious project which will require sustainable and coherent efforts from many stakeholders.

Digital Governance

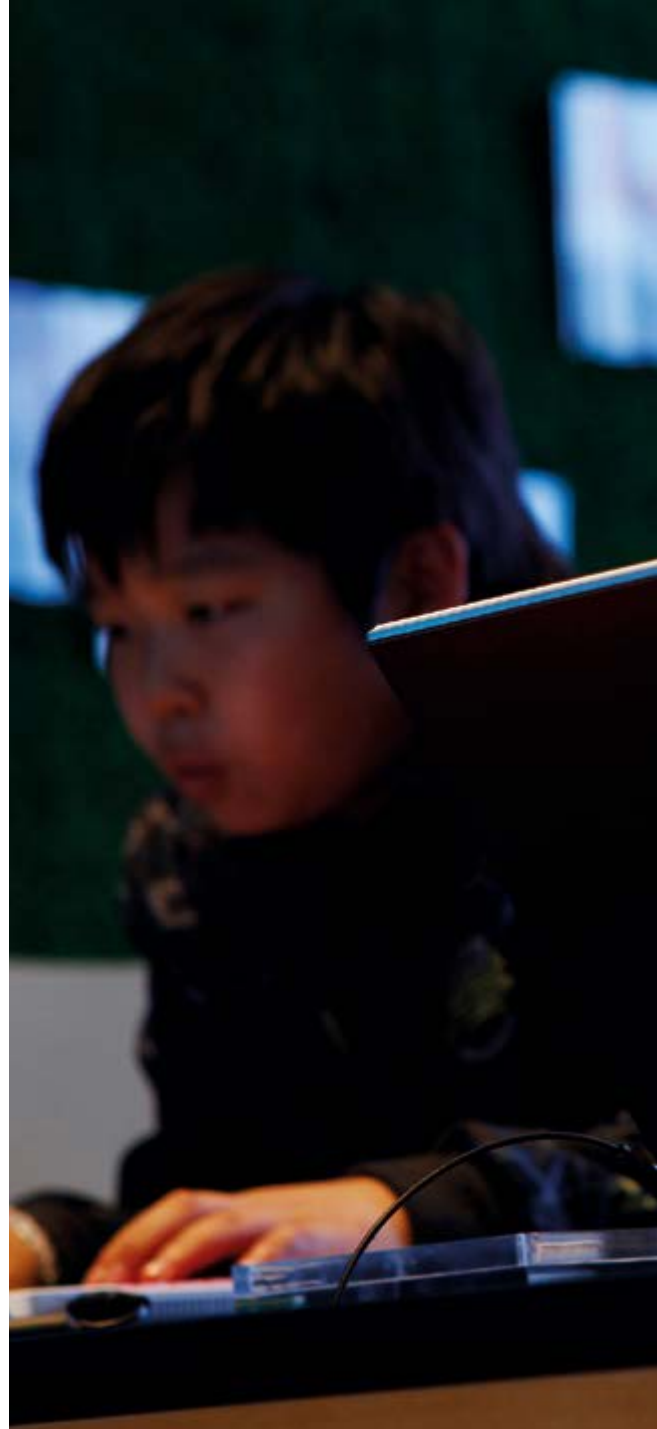
Digital technologies have enhanced democratic participation in public life, facilitated globalized communication networks, and helped spread the availability of information for development and many other purposes. Through e-government, for example, state institutions around the world can be more efficient, provide better services, properly respond to the demands of citizens for transparency and accountability, and be more inclusive. The new generation of digital technologies, in the form of IoTs and AI, along with sophisticated mobile technologies, will enable even greater opportunities to improve the quality of people’s lives, and will bring more transformative shifts in how our economies and societies function.

However, digital technologies have been largely developed in an environment of minimal to no governance, because governance or regulation of the digital domain has often been framed as a threat to innovation. Yet, in an ever more digitalized world, these technologies have also brought about new threats. We are ever more concerned about cybersecurity, with new types of threats and vulnerabilities of ICT infrastructure, systems, and software, as well as dangers

posed to – and by – the vast amounts of data we harvest. Beyond cybersecurity, we also need to address human rights standards and global safeguards in emerging technologies, such as AI, autonomous weapons, biometric sensors, to name but a few. The ethical and legal implications of these technologies are in particular increasingly discussed, especially around the issues of privacy, accountability, and data protection.

In some cases, where international norms or regulations are absent, we have seen the private sector adopting its own guidelines, self-regulation, or non-statutory rules¹⁰ based on business expertise and advanced knowledge. With this model, however, there is less accountability than when regulation is delivered by government authorities or elected public officials. Therefore, the private sector is slowly changing its attitude from ‘regulation constrains innovation’ to a desire for ‘fast, adoptable and smart regulation’. Many countries have also started to develop national digital regulatory and policy frameworks on emerging technologies.¹¹ Both private and public sectors should work together to bridge the absence of regulation, and to develop effective and innovative governance models.

From the experience of the World Summit on the Information Society,¹² we have learnt that when we consider governance of new technologies, we must also consider the indirectly related public policy issues, which are of great significance, including wider legal, economic, developmental, and socio-cultural aspects. In order to better protect public safety, for example, we also need complementary national, regional, and international principles and guidelines. Within the United Nations system, many important initiatives, fora, and discussions are under way, which include, inter alia, the Group of Government Experts (GGE), the Open-Ended Working Group (OEWG), the UN General Assembly Plenary, the Multi-stakeholder Forum on Science, Technology and Innovation (STI Forum), the Commission on Science and Technology for Development (CSTD), the World Summit on the Information Society (WSIS) Forum.



In addition, in 2018, the UN Secretary-General initiated a key milestone in this era of digital transformation – convening a High-Level Panel on Digital Cooperation¹³ to advance global dialogue on how we can work together to realize



Inclusion in digital societies: Investment in infrastructure for affordable access and the provision of digital literacy training should be a solid two-pronged approach to connect the unconnected. [Source: © Bobby Yip, Reuters.](#)

the potential of digital technologies for advancing human well-being, while mitigating their risks. This is the first-ever panel of the UN Secretary-General which is chaired solely by private sector figures. It has resulted in experts'

recommendations to strengthen our joint effort to build digital cooperation for sustainable development. Further details about the activities of the High Level Panel on Digital Cooperation will be provided in the following section.

The Digital Interdependence We Respect

The High Level Panel's Recommendations

In June 2019, in its report, entitled “The Age of Digital Interdependence”, the UN Secretary-General’s High Level Panel on Digital Cooperation set out to help answer some of the biggest questions on digital transformation.¹⁴ The Panel outlined the following five thematic recommendations, which emphasise the need to close the digital gap, grow human and institutional capacity, recognise human rights in digital contexts, build trust, security and stability in cyberspace, and agree on a new global architecture for digital cooperation.¹⁵

1. Build an Inclusive Digital Economy and Society

“[1A] We recommend that by 2030, every adult should have affordable access to digital networks, as well as digitally-enabled financial and health services, as a means to make a substantial contribution to achieving the SDGs.”

The Panel stressed everyone, including those with disabilities, must have access to the internet by 2030 and that the internet provided must be stable, affordable, fast, and available in all languages, as internet access has become the entry point to e-commerce, entrepreneurship, educational and training programmes. Internet access can enable digital literacy and help people to reskill or upskill throughout their lives. Here, the digital inclusion of marginalized groups is critical as it provides access to an untapped resource for economic growth and competitiveness. This also includes a digital public goods platform, which would serve as a place to pool data sets. For example, data can help governments, organizations and civil society better prepare for – and better deal with the aftermath of – climate disasters. It can support a city to better plan its transport networks, and aid public service authorities in providing universal and affordable health care, as well as in addressing persistent inequalities. Such a platform, that could involve the UN, would benefit developing economies in particular, which tend to have less data available to them.

2. Develop Human and Institutional Capacity

“[2] We recommend the establishment of regional and global digital help desks to help governments, civil society and the private sector to understand digital issues and develop capacity to steer cooperation related to social and economic impacts of digital technologies.”

As outlined in the High Level Panel’s report, digital cooperation should be grounded in common human values, such as inclusiveness, respect, transparency and sustainability, as well as in human rights and international law.¹⁷ It is also understood that some of the key challenges facing regulators, consumers, and the private sector alike is the lack of simple entry points to digital cooperation support and related sources of knowledge, as well as insufficient understanding of digital technologies and their implications. In this context, the concept of “digital help desks” or robust capacity-building mechanisms and institutions can be a good entry point to provide support, such as with addressing the digital divide, with governance challenges, with leveraging opportunities, and engaging talent and investing in infrastructures.

The digital help desks could also collect and share best practices, monitor trends, and provide data on digital policy. Already governments and regional organisations have made calls to set up such capacity-building institutions, which could include support in the development of digital policy for capacity building, and viable approaches to invest in ICT infrastructure. One way to achieve this recommendation would be by building on the many existing digital help initiatives at national, regional and international levels, and to identify where gaps and challenges exist in capacity building and digital policy support.

3. Protect Human Rights and Human Agency

“[3A] Given that human rights apply fully in the digital world, we urge the UN Secretary-General to institute an agencies-wide review of how existing international human rights accords and standards apply to new and emerging digital technologies.”

Firstly, given that human rights apply fully in the digital world, the High Level Panel called for an agencies-wide review of how existing international accords and standards are applied to new and emerging digital technologies. They also called on social media companies to work with governments, civil society organisations and human rights experts around the world to fully understand and respond to concerns about existing or potential human rights violations. And finally, they proposed that autonomous intelligence systems should be designed in a way that does not perpetuate in-built biases, and that maintains human accountability. In particular, life and death decisions should not be delegated to machines. The UN Secretary-General himself has called for a ban on lethal autonomous weapon systems.

For example, agreed standards and principles of transparency and anti-discrimination on emerging technologies should be developed. Universal principles on Artificial Intelligence, for instance, could address concerns that decision-making systems supported by AI may include discriminatory biases, such as skin cancer detection algorithms being less effective on dark skinned individuals, or exclusion of accents/languages from speech recognition tools.

Digital security and stability are critical to ensuring human well-being and securing sustainable development gains.

4. Promote Digital Trust, Security and Stability

“[4] We recommend the development of a Global Commitment on Digital Trust and Security to shape a shared vision, identify attributes of digital stability, elucidate and strengthen the implementation of norms for responsible uses of technology, and propose priorities for action.”

This is especially important as the digital environment merges with the physical world. In this new era, how do we enshrine our shared values, principles, and understanding? How can we prevent trust and stability from being eroded by the irresponsible use of cyber capabilities? Digital security and stability are critical to ensuring human well-being and securing sustainable development gains. The call for some form of universal commitment to promoting digital trust at the global level, building on the many but scattered initiatives in this space, is thus timely. Moreover, to be effective and well-received, such an effort must be multi-stakeholder in nature, committing not just governments, but also other key players like technology companies and civil society to this collective endeavour. The Panel thus suggested that such a commitment to digital trust could strengthen the implementation of agreed norms, help develop societal capacity for cybersecurity, heighten resilience against misinformation, and encourage companies to strengthen authentication practices and to be more transparent.

5. Global Digital Cooperation

“[5A] We recommend that, the UN Secretary General facilitate an agile and open consultation process to develop updated mechanisms for global digital cooperation [...and] marking the UN’s 75th anniversary in 2020 with a “Global Commitment for Digital Cooperation” to enshrine shared values, principles, understandings and objectives for an improved global digital cooperation architecture.”

In follow-up to the report, the Secretary-General has requested that the High Level Panel’s recommendations be discussed in earnest with Member States and interested stakeholders. As such, multiple experts, multi-stakeholder and cross-regional roundtable discussions, involving Member States, UN agencies, civil society, and other entities have been convened to discuss how to take the Panel’s recommendations forward.¹⁶ The expert roundtables will provide inputs and advice to be incorporated into a Roadmap on Digital Cooperation that the Secretary-General will present in Spring 2020.



In 2020, the world is celebrating the 75th anniversary of the United Nations. The story of the United Nations has been one of international cooperation across governments, private sectors, NGOs, and international organizations. Today, as a global community, we are facing questions and challenges posed by digital technologies to security, equity, and human rights, but international cooperation on these technologies remains very much in its infancy. Moreover, due to the resurgence of geopolitics and great power rivalry, multilateralism is under fire precisely when we need it most. As part of UN75, the United Nations has resolved to use this opportunity to reach out, to listen, and learn through the biggest-ever global conversation on “The Future We Want”. It behooves us to address technology and digital cooperation as a critical part of this conversation.

Drawing on the recommendations of the High Level Panel on Digital Cooperation, the Secretary-General made three proposals at the 2019 Internet Governance Forum (IGF), which took place from 25 to 29 November in Berlin.¹⁷

His first proposal was to strengthen the IGF into an institution that comes closer to living up to its name. It was created as an outcome of the World Summit on the Information Society (WSIS), which was the most wide-ranging, comprehensive and inclusive debate ever held on the future of the information society. Back in November 2005, at the second phase of the WSIS, the IGF was created as a starting point so as to pave the way for international discussion to foster the sustainability, robustness, security, stability, and development of the internet. In 2020, the IGF needs actionable outcomes and it needs increased inclusion of young people,

women, parliamentarians, entrepreneurs, and under-represented countries.

Second, he highlighted the specific recommendation of the High Level Panel on Digital Cooperation regarding the possibility of a global commitment on Digital Trust and Security, by inviting all governments, industries, and institutions worldwide to consider this issue. Such a commitment should build upon agreed global norms for cyberspace and the pioneering work done by the Paris Call and the Christchurch Call, so as to bring the world together to agree on a vision for the 21st century that includes a more equitable, more accessible, and shared digital future.

The UN works towards enabling international cooperation to nurture a shared digital future that puts people first.

Lastly, the Secretary-General announced his intention to appoint a Technology Envoy to work with governments, industry, and civil society, and advance collective efforts to nurture a shared digital future that puts people first. This will be critical if the United Nations is to optimize the use of digital technologies while mitigating their risks and harms. Once we ensure that everyone is connected, we will see extraordinary progress delivered towards each and every one of the Sustainable Development Goals (SDGs) through digital technologies.

Enhancing Digital Cooperation towards Sustainable Development

In today’s complex digital world, digital technologies, which will play an increasing role in sustainable development over the coming years, can bring about tremendous benefits in areas such as education and healthcare, as well as commerce, food security, energy efficiency, and

← Cracking the code: In this new era, how do we enshrine our shared values, principles, and understandings?

Source: © Maxim Shemetov, Reuters.

e-government. Unfortunately, risks and challenges also come attached to the rapid development of digital technologies, in areas such as security, trust, privacy, human rights, electric waste, and carbon emission through to technical issues, such as interoperability.

These challenges can no longer be addressed by any single organisation or nation. Instead, finding the answer to these challenges depends on our ability to work together across disciplines and stakeholder groups, across nations and any type of divide. In 2020, during the 75th Anniversary of the United Nations, this process and indeed, our human story, will reach a critical juncture. An African proverb says, “If you want to go quickly, go alone. If you want to go far, go together”. In looking to our digital future, the UN is seeking to enhance digital cooperation globally so that we can work together to fully leverage the benefits of technology, while curtailing its unintended consequences. This vision can only be implemented through global collaboration, engaging all the players in the ICT ecosystem, including governments, the private sector, academia, NGOs, and international organizations. If we are to truly build a future we want, we must come together to ensure that technology is used as a force for good, and for all.

Fabrizio Hochschild is Under-Secretary-General and Special Advisor to the Secretary-General at the United Nations, working on Digital Cooperation and the Commemoration of the 75th Anniversary of the UN.

- 1 Desjardins, Jeff 2018: How Long Does It Take to Hit 50 Million Users? Visual Capitalist, 8 Jun 2018, in: <https://bit.ly/2v5yX01> [25 Feb 2020].
- 2 International Telecommunication Union (ITU) 2018: Internet usage keeps growing, but barriers lie ahead, in: <https://bit.ly/3940cXy> [25 Feb 2020].
- 3 ITU 2018: Statistics, Individuals using the Internet, 2005–2019, in: <https://bit.ly/3c6q6fa> [25 Feb 2020].
- 4 SES 2017: Four Reasons High Throughput Satellite will be a Game Changer, 27 Apr 2017, in: <https://shar.es/aH191R> [25 Feb 2020].
- 5 European Space Agency: Types of orbits, in: <https://bit.ly/2w2S0YK> [25 Feb 2020].
- 6 Tseytlin, Michael 2019: High Altitude Platform Stations (HAPS) – bringing connectivity to all, ITU News, 14 Aug 2019, in: <https://bit.ly/2TjJ6hI> [25 Feb 2020]; ITU 2019: HAPS – High-altitude platform systems, Dec 2019, in: <https://bit.ly/37VW7TP> [25 Feb 2020].
- 7 ITU News 2019: WRC-19 identifies additional frequency bands for High Altitude Platform Station systems, 22 Nov 2019, in: <https://bit.ly/2ViB8rs> [25 Feb 2020].
- 8 CNBC Africa 2019: M-Pesa has completely changed Kenyans’ access to financial services, this is how..., 3 Apr 2019, <https://bit.ly/38YtSFm> [25 Feb 2020].
- 9 UNICEF 2019: UNICEF Executive Director Henrietta Fore’s remarks at the Broadband Commission High-Level Event, 22 Sep 2019, in: <https://uni.cf/2Vx6pJ> [25 Feb 2020].
- 10 IEEE: The IEEE Global Initiative on Ethics of Autonomous and Intelligent Systems, in: <https://bit.ly/3a3zJcx> [25 Feb 2020]; Association for Computing Machinery (ACM) 2018: ACM Code of Ethics and Professional Conduct, in: <https://bit.ly/38ZZYQZ> [25 Feb 2020].
- 11 Madiega, Tambiama 2019: EU guidelines on ethics in artificial intelligence: Context and implementation, European Parliamentary Research Service, Sep 2019, in: <https://bit.ly/2w6gAIs> [25 Feb 2020].
- 12 Initiated by the UN, the two-phase of the WSIS Summit took place each in Geneva, in 2003 and in Tunis, in 2005, to create an evolving multi-stakeholder platform aimed at addressing the issues and challenges posed by ICTs through a structured and inclusive approach at the national, regional and international levels. UN General Assembly 2002: Resolution 56/183, World Summit on the Information Society, 31 Jan 2002, in: <https://bit.ly/2VwdRmj> [25 Feb 2020]; UN 2016: World Summit on the Information Society (WSIS), Sustainable Development Goals Knowledge Platform, in: <http://bit.ly/2PILh35> [25 Feb 2020].
- 13 UN, High-Level Panel on Digital Cooperation: About The High Level Panel, in: <https://bit.ly/2v59XpF> [25 Feb 2020].
- 14 UN, High-Level Panel on Digital Cooperation 2019: The Age of Digital Interdependence, Jun 2019, in: <https://bit.ly/2wG7X7r> [25 Feb 2020].

- 15 UN 2019: Secretary-General's Highlevel Panel on Digital Cooperation, 6 Dec 2019, in: <https://un.org/en/digital-cooperation-panel> [25 Feb 2020].
- 16 Ibid.
- 17 Guterres, António 2019: Remarks to the Internet Governance Forum, United Nations Secretary-General, 26 Nov 2019, in: <https://bit.ly/2HVBVqp> [25 Feb 2020].



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[Digital Democracy](#)

Who Holds Sovereignty Over the Internet?

Social Media and Democracy in Africa

[Mathias Kamp](#)

In Africa, the continent with the greatest democratic deficits, the internet, and above all social media, offers new opportunities for civic participation, transparency and public access to information. Yet the initial euphoria about the emancipatory potential of social media is increasingly being tempered by scepticism. It is hard to ignore the internet's dark side, such as the spread of hate speech and fake news. Meanwhile, Africa's autocratic regimes are becoming more adept at instrumentalising social media to serve their own ends.

Social Media – A Double-Edged Sword

The digital revolution is changing democracy and, above all, social media is exerting a growing influence on political developments. Just a few years ago, the focus was generally on its positive aspects, and a certain sense of euphoria emerged in the wake of the Arab Spring.¹ All of a sudden, social media was viewed as a catalyst for social and political change. Positive effects for the development of democracy were widely expected, such as: diversity of information, a networking of progressive forces, new forms of political communication, digital transparency and accountability initiatives, new spaces for activism, and online mobilisation of civic engagement. But a growing sense of disillusionment has set in. The hoped-for new wave of democratisation has failed to materialise. Instead, liberal democracy seems to be coming under increasing pressure all over the globe. Some observers believe social media has played a key role in this, with others even seeing it as a threat to democratic society.² In fact, the focus has shifted more and more to the internet's dark side, where disinformation and fake news are rife, along with targeted manipulation, data abuse, cyberbullying, hate speech, and the polarisation and radicalisation of social groups. In Africa too, there is a light and dark side to social media and to its political significance. Both aspects have huge potential, with democratic and undemocratic forces taking advantage of the new opportunities presented by the

digital sphere. The battle for internet sovereignty and opinions on social media is in full swing.

The Internet and Social Media in Africa

In June 2019, over half a billion people in Africa accessed the internet³ – a number surpassed only by Europe and Asia. However, this mass of users does not detract from the fact that Africa still has a great deal of catching up to do. In terms of the proportion of the population with internet access, Africa lags behind every other region, at just 40 per cent.⁴ There are considerable regional differences within Africa itself, but the proportion of internet users is growing by around 20 per cent a year – faster than anywhere else in the world.⁵

The fact that more people in Africa are not using the internet is primarily due to a lack of infrastructure, and high costs. Remote regions are particularly badly served, often struggling with poor bandwidth or no internet access at all. Yet digital transformation is continuing apace, and the big technology companies have long been pushing hard for African markets. The mobile phone sector is booming, and this is how the majority of Africans access the internet. However the high cost of data connections remains a major hurdle – these charges are more expensive in Africa than anywhere else in the world.⁶ Despite this, the spread of the internet – and social media in particular – have had a significant impact on political and social

developments in Africa, largely driven by the continent's growing young, urban population. Statistics show that Africans, on average, spend considerably more time on the internet and social media, and that political content plays a more important role than in Europe or North America.⁷

Democratic Awakening through Social Media?

Little has remained of the hype about social media being a “liberation technology”⁸, but we should not underestimate the impact of social media on the spread of democracy. Particularly in the political context of Sub-Saharan Africa with its many democratic deficits, online platforms are important tools for promoting democracy and civic engagement. The digital sphere provides new spaces for open political discourse and interactive exchange, transcending geographical borders, the constraints of political power structures, and state control. It also opens up new possibilities for the organisation of civil society. Particularly for countries ruled by autocratic regimes, it is not just a place for sharing information but a way of mobilising protest. Online campaigns can put pressure on politicians and ensure certain issues are put on the political agenda. But they can also go beyond the digital sphere and act as a catalyst and resource for protest movements and civil resistance. They help to attract an (often global) audience and allow observers to participate directly in events. Live tweets and smartphone videos attract attention and solidarity, making it difficult for state propaganda to control the narrative and sweep events under the carpet.

Ten years after the Arab Spring, it has become clear that social media is not the key to a successful revolution. Nevertheless, it can still be an important element in social and political change, as has been demonstrated by recent events and trends in Sub-Saharan Africa.

In October 2014, the former president of **Burkina Faso**, Blaise Compaoré, tried to amend the constitution in order to extend his term of

office. This led to mass demonstrations that finally sealed the end of his 27-year presidency. The uprising was mainly driven by young people, who coordinated the protests on social media.⁹

In **Gambia**, social media played an important role during the elections of December 2016. Opposition groups and young activists took to Facebook, Twitter and WhatsApp to mobilise voters and counter government propaganda. As a result, Gambia's long-time dictator and president, Yahya Jammeh, was narrowly defeated at the polls. When he rejected the outcome of the vote, the protesters took to social media and their message was heard far beyond the borders of this small country. In the end, ECOWAS, the sub-regional body of West Africa, launched a military intervention that forced Jammeh to step down. But it was the protests of young Gambians, both online and on the streets, that paved the way for the ultimately peaceful transfer of power.¹⁰

In **Zimbabwe**, protests against the country's political and economic situation under dictator Robert Mugabe broke out in mid-2016, but they were initiated on social media.¹¹ All over the country, people took to Facebook, Twitter and WhatsApp to coordinate the so-called Stay-Away day on 6 July 2016. This one-off strike action was followed by weeks of protests, which were reignited by a military coup in November 2017. Thousands of demonstrators showed their support for the coup and demanded Mugabe's resignation. After a few days he gave in to pressure from the military and resigned as president, a post he had held for almost 30 years.

Since 2018, **Ethiopia** has been on a – sometimes bumpy – road to reform under Prime Minister Abiy Ahmed. This would have been unthinkable just a few years ago. Here too, social media has played a not insignificant role in bringing about change. In late 2015, a storm of outrage was triggered by the violent suppression of protests in the Oromia region. The protests quickly spread to other parts of the country and increasingly began to focus on more general grievances. They were often coordinated via social media,

bypassing state censorship and attracting strong support from the diaspora.¹² The government's brutality against the protesters was also continuously documented and denounced. Finally, the government was forced to change tack by releasing political prisoners and removing blocks on critical websites. In February 2018, Hailemariam Desalegn finally resigned as prime minister and the ruling party elected Abiy Ahmed as his successor shortly afterwards.

Sudan is the most recent example of an effective popular uprising in Africa. In April 2019, after months of relentless protests and numerous deaths in the capital, Khartoum, the military finally ousted dictator Omar Al-Bashir, who had ruled the country for almost 30 years. After his removal, citizens kept up their protests against the military council that supplanted him and forced a compromise by forming a joint civilian-military ruling body to install a transitional government. The protest was coordinated on platforms such as Facebook, Twitter and the instant messaging service Telegram. The protests, and the brutality of the security forces were also widely reported on social media, with dramatic photos and smartphone videos being viewed all over the world. The regime responded by blocking internet access, but activists quickly found ways of circumventing this by using VPN services. They thus continued to tell the world what was happening in Sudan and kept up the public pressure.¹³

Revolutions still take place on the streets, not online.

Unlike with the events of the Arab Spring, no-one referred to the above as examples of "Facebook revolutions". Social media does not trigger such uprisings, nor is it the most important factor in ensuring their success. Revolutions still take place on the streets, not online. Yet the above examples highlight the significant impact that social media can have on events.

It can raise the collective awareness of shared problems and convey a sense of community and solidarity. Social media opens up alternative channels for communication and coordination, help to circumvent state censorship, mobilise resistance and create public awareness. In the examples given above, without social media it would have been nigh on impossible to mobilise so many protesters in such a short time, and to allow people all over the world to be part of events as they unfolded.

But a complete picture also includes the realisation that the euphoria that follows successful uprisings swiftly gives way to disillusionment, and that supposed democratic awakenings often fail to deliver on their promises. This is currently being demonstrated in Burkina Faso and Zimbabwe. In Sub-Saharan Africa, too, the bitter lesson of the Arab Spring is confirmed: It is much easier to overthrow a regime than to build the hoped-for stable democratic future in its wake. Social media appears to be far more useful in achieving the former than the latter.

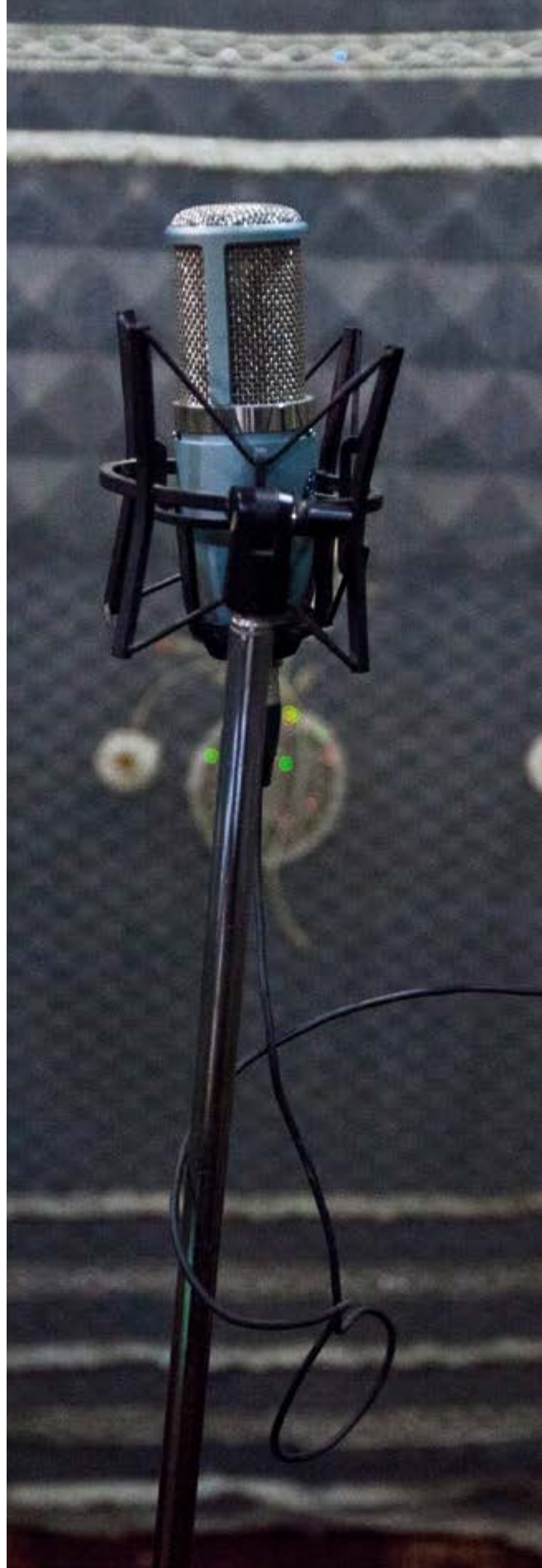
Beyond Revolution: Different Contributions to Democratic Development

As a result, we should not expect too much of social media when it comes to radical democratic change. But democracy is more than simply a question of whether and how the balance of power can be shifted. Any substantive understanding of democracy has to include how citizens interact with each other and the state. It has to consider participation in decision-making processes, individual rights and freedoms, transparency and accountability. Going beyond dramatic uprisings and revolutions, this is where social media can make a contribution in Africa:

- Political movements and parties now have access to new forms of communication, which gives them more direct contact to their members and voters, helping them to coordinate political activities and mobilise support. The established media often leaves little space for criticism and opposition,

whereas social media offers alternative platforms for conveying political positions.

- Social media offers alternative channels for disseminating independent and uncensored information, particularly when the traditional media are controlled by the state. Indeed, many young Africans see Facebook and Twitter as their main sources of information. As a result, the gatekeeper function of conventional mass media is becoming less and less important. Information lands on the internet regardless of editorial priorities and government censorship. Every single citizen becomes a potential source of information. This means that topics and voices that would otherwise be excluded are now part of the public debate.
- Social media can foster greater transparency and accountability. Government institutions can proactively seize digital opportunities to ensure that information and services are available online. For their part, citizens can use the platforms to demand their rights, air grievances and raise specific concerns. Public institutions find it much harder to ignore problems when they have been shared on social media. Social media also provides opportunities for fighting corruption. Whistle-blowers in both public and private institutions can share their allegations outside of the (sometimes untrustworthy) official channels, as can ordinary citizens who have become victims of, or witnesses to, corruption. Experiences in Uganda have shown how social media can make an important contribution to greater transparency, civic participation and the service orientation of authorities at the local level.¹⁴
- Particularly for younger target groups, social media offers additional, innovative approaches for educational and awareness-raising activities, especially in the areas of human rights and civic education. State actors, such as human rights commissions, electoral commissions and non-governmental organisations already use online platforms



in a variety of ways to convey their key principles and values – not only, but particularly, with regard to elections.

- Social media can promote new forms of civic engagement. It can help people to identify shared concerns, and to create a sense of community and solidarity that ideally translates into collective action. This does not necessarily have to involve protests. There are many opportunities for constructive engagement, such as the dissemination of online petitions, promoting fundraising campaigns for social and humanitarian concerns, and coordinating a rapid response to crisis situations, such as the Westgate terrorist attacks in Kenya.¹⁵

Revealing the Ugly Face of Social Media

In December 2019, when Ethiopia's Prime Minister Abiy Ahmed accepted the Nobel Peace Prize in Oslo, he had a clear message: Social media was being used to sow hate and division and preach "the gospel of revenge and retribution."¹⁶ At first glance, given the vital role social media played in the political changes that swept Ahmed into office, this might seem an astonishing statement. However, the dark side – the ugly face – of social media, is increasingly being revealed, and Ethiopia is no exception.

Over the last few years, people in Africa have become much more aware of the negative effects of social media. They are realising that social media can polarise and radicalise society, rather than having the unifying effect described above. Africa has also seen the tone of internet discussions become increasingly harsh. Day in and day out, the social networks are filled with toxic hate speech. The effects of algorithms, filter bubbles, and echo chambers mean that many users do not expand their horizons by assimilating a

range of information. Instead, they shore up their existing world view by engaging solely with like-minded people. This is particularly dangerous in the context of the ongoing conflicts and ethnic tensions that are rife in many African countries. South Sudan is an example of how social media can exacerbate conflict. According to a 2016 study, 60 per cent of users have been involved in spreading posts that fuel ethnic tension and incite violence. Political leaders on both sides of the civil war that raged in South Sudan took advantage of this, often via deliberate manipulation aided by fake news.¹⁷

Governments in Africa are becoming increasingly aware of how to instrumentalise and manipulate social media for their own purposes.

When the dark side of social media is discussed, fake news generally seems to be today's hottest topic. From the brazen lies of individual users to the misleading propaganda of political groups – day after day, Africa's social media is flooded with falsified or completely invented information. It is becoming increasingly difficult for ordinary users to assess the truth of news, and to filter out reliable information. Targeted disinformation campaigns, particularly during election campaigns, are not uncommon. In 2019, fake news was an issue in every national election in Africa, fuelled by the ongoing revelations about systematic manipulation on the part of Facebook et al. In May 2019, Facebook announced the suspension of an Israeli consulting firm for coordinating a network of fake user profiles that systematically tried to influence political sentiment in several African countries.¹⁸ In October there were similar headlines about the blocking of hundreds of fake accounts, which had been used to try to influence elections in eight African countries. This time the connections led back to Russia.¹⁹ Back in 2018, it came to light that the notorious company Cambridge Analytica was at work in several countries,

← Will the radio become irrelevant? Social media offers alternative channels for disseminating independent and uncensored information. Source: © Adriane Ohanesian, Reuters.

including Kenya and Nigeria, where it was harvesting and abusing massive amounts of Facebook data and spreading targeted disinformation in an attempt to influence voter behaviour.²⁰

The Response of African Governments: Control, Manipulate, Block

These indications of targeted manipulation point to another reason for the growing scepticism towards social media: Governments in Africa are becoming increasingly aware of how to instrumentalise and manipulate social media for their own purposes, spying on the online activities of their own citizens and, in case of doubt, restricting their use through regulation and blocking. The aforementioned discussions about hate speech and fake news play into their hands, because they provide a welcome justification for stricter controls.

Of course, the classic instruments employed by authoritarian regimes to deal with their critics – which are well known to journalists working for traditional media outlets – are now also being used for social media. Censorship of critical online content, and the regular arrest of bloggers and activists are taking place. If African governments find they lack the necessary tools to control online content, they increasingly resort to the most radical instrument at their disposal – blocking internet access altogether or, where technically possible, access to certain social networks. Over the last few years more than a dozen African countries have been affected by such shutdowns, at least temporarily. These have mainly been triggered by nascent or escalating protests or “preventive” blockade measures around elections.

Many countries are also tightening their laws. Tanzania has passed a strict cybercrime law, which its opponents see as just another way of silencing critical voices. In Nigeria, plans for a similar law are being met with considerable resistance.²¹ Meanwhile, Uganda has been pioneering a different approach: taxing social media. Since July 2018, Ugandans have had to pay a special tax to access online services like

Facebook, Twitter and WhatsApp. The government justified this step by claiming the need to increase tax revenues but added that it would also curb “irresponsible” social media use. Five other African countries have already implemented similar policies or have them in the pipeline. Reporters Without Borders has condemned the taxes as a massive restriction of freedom of information, which undermines democracy.²² In a recent paper, lawyer Justine Limpitlaw came to the conclusion that the Ugandan model – akin to the licence fees for publishing online content in Tanzania that affect bloggers amongst others – constitutes a violation of international human rights.²³ At first glance the fees might seem small, but they are beyond the reach of the majority of poor people in the countries concerned, thus massively restricting access to information.

China not only exports its technology for digital infrastructure and surveillance, but also its idea of “cyber sovereignty” to Africa.

With these technical steps to monitor the internet and the legal measures to regulate it, many African countries are following the example of China, which has massively expanded its political and economic influence on the continent in recent years. In its 2018 report “Freedom on the Net”, US think tank Freedom House gives a detailed description of the global rise of “digital authoritarianism”, driven largely by China.²⁴ China is not only exporting its technology for digital infrastructure and surveillance, but also its idea of “cyber sovereignty”, in which the state exercises full control over the internet and the digital sphere. It is no coincidence that the legislative measures taken in Uganda and Tanzania were preceded by intensive training for government officials regarding the Chinese model.²⁵ Zimbabwe is currently laying the legal and technical foundations for a surveillance



system based on the Chinese model.²⁶ On top of this, there are persistent allegations – initially made by the Wall Street Journal – that the Chinese technology company Huawei helped the governments of Zambia and Uganda to spy on members of the opposition.²⁷

The South African think tank SAIIA (South African Institute of International Affairs) warns of a

creeping trend towards “digital dictatorship” in view of the measures taken by African governments:

“African leaders have now realised that they can control technology and manipulate the freedom and fairness of political processes. Slowly, they are pushing the boundaries of what is and is not acceptable. Whereas social media and



Surveillance: Governments in Africa increasingly manage to spy on the online activities of their own citizens and, in case of doubt, restrict their use through regulation and blocking. Source: © Goran Tomašević, Reuters.

the internet were initially seen as a threat to the closed and restrictive culture of Africa's old guard of leaders, governments and political parties have flipped the equation and are now using digital technologies in their favour."²⁸

Conclusions for Pro-Democratic Engagement

The examples of democratic change mentioned at the beginning of this article should not conceal the fact that, with just a few exceptions, democratic development in Africa is currently stagnating rather than progressing. Most African nations are still in the grip of old, authoritarian rulers, and successful protests remain few and far between. Current developments give reason to fear that social media will not bring about much change in this respect. Nevertheless, it would be wrong to ignore its role or reduce it to the negative aspects. This article has attempted to shed equal light on the light and dark sides of social media. The first priority is to recognise this inherent contradiction.

Pro-democracy actors would be well advised to take these developments seriously and explicitly include them in their considerations when planning their campaigns. For their part, governments in liberal Western democracies must develop convincing alternative concepts for dealing politically with the opportunities and challenges of social media, and promote their implementation. Of course, this also raises the question of the legal framework and the need for regulation, especially in view of the role of major technology corporations and providers of online platforms. However, the top priority must be to defend freedom of information and freedom of expression, including – and especially – in the digital sphere. Under no circumstances should the West allow China and other authoritarian regimes free rein in Africa, despite the fact that their models appear to be attractive to many African governments.

It is also worth looking at Africa's younger generation of activists and innovators who are striving to find answers to these challenges. There

are many initiatives that should be supported, including campaigns against online hate speech such as #defyhatenow²⁹ in Southern Sudan, and initiatives to unmask fake news, such as those being undertaken by Africa Check.³⁰ It is also important to continue trying to strengthen traditional media. Part of the problem lies in the loss of trust in established media formats. At the same time, the fight against disinformation in the digital sphere can only succeed in conjunction with independent, quality journalism.

Africa also has a particular need for more investment in its digital infrastructure, as digital inequality remains a fundamental problem. As long as large sections of the population in many African countries remain excluded from modern technology, and thus from access to information, the hoped-for emancipatory, democratising effect of the digital revolution will remain illusory.

Ultimately, when considering social media, we come to the rather clumsy realisation that it is not technology that is the problem per se, but how we deal with it. This puts the user in the foreground. Thus, the most important and yet most difficult task is probably the education and information of citizens. The internalisation of basic values such as tolerance and respect, and a sense of critical awareness on the part of internet users – not only about how the technology works, but also about their rights and obligations – are key factors in ensuring that the positive aspects of social media outweigh the negatives. In other words, the best strategy is a responsible, enlightened citizenry – which, of course, is also the key to a functioning democracy.

–translated from German–

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- 1 Cf. Danju, Ipek/Maasoglu, Yasar/Maasoglu, Nahide 2013: From Autocracy to Democracy, The Impact of Social Media on the Transformation Process in North Africa and Middle East, *Procedia – Social and Behavioral Sciences* 81, pp.678–681, in: <https://bit.ly/37DZZIJ> [17 Feb 2020]; Howard, Philip N./Hussain, Muzammil M. 2013: Democracy's Fourth Wave? Digital Media and the Arab Spring, Oxford University Press, in: <https://bit.ly/2SFvyO5> [17 Feb 2020].
- 2 Cf. Oerstroem Moeller, Joergen 2019: Democracy at Risk, Why Social Media Endangers a Free Society, *The National Interest*, 11 Mar 2019, in: <https://bit.ly/3bsMwH5> [28 Dec 2019]; Naughton, John 2018: Social media is an existential threat to our idea of democracy, *The Guardian*, 23 Dec 2018, in: <https://bit.ly/2tN5uHk> [28 Dec 2019].
- 3 Campbell, John 2019: Last Month, Over Half-a-Billion Africans Accessed the Internet, *Council on Foreign Relations*, 25 Jul 2019, in: <https://on.cfr.org/2SjQY3j> [28 Dec 2019].
- 4 Ibid.
- 5 Cf. Kroll, Aleksandra 2019: Global Digital Report, Afrika mit höchsten Nutzerzuwachsdaten weltweit, *IHK*, 21 Jan 2019, in: <https://bit.ly/2SymjHh> [28 Dec 2019].
- 6 Monks, Kieron 2019: Africans face most expensive internet charges in the world, new report says, *CNN*, 22 Oct 2019, in: <https://cnn.it/3bsNUt3> [28 Dec 2019].
- 7 Cf. Kroll 2019, n.5; Kazeem, Yomi 2016: Politics and activism are driving Africa's Twitter conversations to new highs, *Quartz Africa*, 6 Apr 2019, in: <https://bit.ly/2UOKzzy> [28 Dec 2019].
- 8 Cf. Transfeld, Mareike/Werenfels, Isabelle 2016: Soziale Medien: Befreiungstechnologie oder Propagandainstrument?, *Stiftung Wissenschaft und Politik*, 30 Nov 2016, in: <https://bit.ly/3bxLM3A> [2 Jan 2020].
- 9 The insurgency may have been successful but, more than five years on, a sense of disappointment prevails, because hopes of lasting democratic and economic change remain unfulfilled, and the country is now beset by the scourge of Islamist terrorism. Cf. Krippahl, Christina 2019: Change of regime leaves Burkina Faso disillusioned, *Deutsche Welle*, 30 Oct 2019, in: <https://p.dw.com/p/3SCzX> [2 Jan 2020].
- 10 Cf. Taal, Salieu 2019: A hashtag that inspired hope: #GambiaHasDecided, *Open Global Rights*, 28 Feb 2019, in: <https://bit.ly/2Hetw14> [2 Jan 2020].
- 11 Cf. McCorley, Ciara 2016: Social media is emboldening young Zimbabweans to finally stand up to Mugabe, *Quartz Africa*, 29 Aug 2016, in: <https://bit.ly/3bvut2> [2 Jan 2020].
- 12 Cf. Aljazeera 2018: How social media shaped calls for political change in Ethiopia, 11 Aug 2018, in: <https://aje.io/fud4j> [2 Jan 2020].
- 13 Cf. Menon, Sunita 2019: Social media activism goes #BlueForSudan, *Business Live*, 18 Jul 2019, in: <https://bit.ly/38gEAqg> [2 Jan 2020].
- 14 Cf. Agena, Maureen/Ojok, Donnas/Achol, Tony 2019: Social Media, Local Governance and Development in Uganda, *Konrad-Adenauer-Stiftung Uganda, Research Paper 19/01*, in: <https://bit.ly/2Sheaij> [3 Jan 2020].
- 15 On 21 September 2013, Islamist extremists attacked the Westgate shopping centre in Nairobi, killing 67 people. It took three days to resolve the hostage situation. Kenyan citizens took to social media to mobilise support, such as a blood donation drive. Cf. Hamilton, Valerie 2013: When there's no 911, Kenya tweets for help, *PRI*, 24 Sep 2013, in: <https://bit.ly/2tOJSuj> [3 Jan 2020].
- 16 Dahir, Abdi Latif 2019: Nobel Peace Laureate Says Social Media Sows Hate in Ethiopia, *The New York Times*, 10 Dec 2020, in: <https://nyti.ms/3bv44Sn> [3 Jan 2020].
- 17 Cf. LeRiche, Matthew 2016: Facebook and Social Media Fanning the Flames of War in South Sudan, *Centre for Security Governance*, 12 Jul 2016, in: <https://bit.ly/37cxqSE> [3 Jan 2020].
- 18 Cf. Madowo, Larry 2019: Is Facebook Undermining Democracy in Africa?, *BBC*, 24 May 2019, in: <https://bbc.in/31Qf1j1> [2 Jan 2020].
- 19 Cf. Allen, Karen 2019: Taking social media at (Face) book value in Africa, *Institute for Security Studies*, 8 Nov 2019, in: <https://bit.ly/2HeC3Rz> [3 Jan 2020].
- 20 Cf. Daily Nation 2018: Cambridge Analytica says it worked for Uhuru Kenyatta, 20 Mar 2018, in: <https://bit.ly/2SzdPqp> [3 Jan 2020].
- 21 Turnbull, Mark 2019: Africa faces a balancing act on social media regulation, *The Africa Report*, 4 Dec 2019, in: <https://bit.ly/2Sl6pZf> [3 Jan 2020].
- 22 Schönherr, Markus 2018: Zensur unter dem Deckmantel der Demokratie, *Luzerner Zeitung*, 14 Oct 2018, in: <https://bit.ly/39tVjH1> [3 Jan 2020].
- 23 Limpitlaw, Justine 2019: Human rights impacts of taxing popular internet services, The cases of Kenya, Tanzania and Uganda, *APC*, Jan 2019, in: <https://bit.ly/2w6lgOh> [3 Jan 2020].
- 24 Shahbaz, Adrian 2018: The Rise of Digital Authoritarianism. Fake news, data collection, and the challenge to democracy, *Freedom on the Net 2018*, *Freedom House*, Oct 2018, in: <https://bit.ly/2xa112S> [4 Mar 2020].
- 25 Kefferpütz, Roderick 2018: China's Digital Dictatorship Goes Global, *Towards Data Science*, 6 Nov 2018, in: <https://bit.ly/2OLfOHj> [4 Jan 2020].
- 26 Cf. Gilbert, David 2019: Zimbabwe Is Trying to Build a China Style Surveillance State, *Vice*, 2 Dec 2019, in: <https://bit.ly/2Sh6htp> [4 Jan 2020].
- 27 Parkinson, Joe/Bariyo, Nicholas/Chin, Josh 2019: Huawei Technicians Helped African Governments Spy on Political Opponents, *The Wall Street Journal*, 15 Aug 2019, in: <https://on.wsj.com/37deL9b> [3 Jan 2020].
- 28 Gopaldas, Ronak 2019: Digital dictatorship versus digital democracy in Africa, *Policy Insights 75*, *SAIIA*, 22 Oct 2019, p.10, in: <https://bit.ly/2UbscCg> [28 Dec 2019].
- 29 Defy Hate Now, in: <https://defyhatenow.org> [11 Feb 2020].
- 30 Africa Check, Sorting fact from fiction, in: <https://africacheck.org> [11 Feb 2020].



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Digital Democracy

Digital Democracy in Action

How Greece Wants to Catch Up with Europe

Henri Giscard Bohnet/Martha Kontodaimon

The new government in Greece is not wasting time and has a clear plan to make up for the lost years of financial and economic turmoil. There is still a lot to do: in 2019, Greece ranked only 26th among the 28 EU member states on the European Commission Digital Economy and Society Index (DESI).¹ Without digitalising, and slashing its bloated and overstaffed bureaucracy, the country will not achieve its aim of becoming an attractive destination for investment. The current efforts offer the chance to change the perception of Greece as the sick man of Europe.

Out of the Crisis

Life has been hard for the Greek people over the past ten years: during their country's financial crisis, they have seen their salaries reduced, their pensions slashed and jobs evaporated as businesses fled the country; young people in particular have left their homes in the thousands, searching for a job. The Greeks called this decade the years of the "Memoranda", where the Troika of the European Central Bank, the IMF and the European Commission pressured the successive Greek governments into reforms in exchange for financial support.

It worked, partly: The economy was stabilised, necessary reforms have begun, the budget has been balanced and a substantial cash buffer now exists for future downturns. But growth is only returning to the country slowly, after the Greek economy lost more than a quarter of its GDP since 2008. The unemployment rate has gone down but remains at over 17 per cent,² by far the highest in the European Union. Public debt has barely shifted, and stands at a prodigious 181 per cent of the country's GDP.³

Until now, the reform process undertaken by the previous Greek governments during the crisis years can be characterised more by its hesitancy and obduracy than by proper ownership and a real will to move forward. Under the left-wing Syriza government of Alexis Tsipras, privatisation barely progressed, bureaucracy bloomed,

and taxes increased to such a scale that they choked off private business and investments. Companies complained about the high tax rates, red tape, and weak dispute settlement mechanisms.

Under the new government of Kyriakos Mitsotakis – from the center-right New Democracy, which achieved a resounding victory at the parliamentary elections last July, and has an absolute majority of mandates in the Greek parliament – Greece finally wants to "turn the page". The country is open for business again, that is the message of the prime minister.⁴ And indeed, some taxes have been cut, dormant business developments revived, and foreign investors are being wooed. After six months in office, international observers agree that Athens now apparently understands the need for a new push on reforms and is serious about tackling the challenges, which have until now been holding back a healthy revival of the Greek economy. One such fundamental challenge is the inefficient state bureaucracy and tortuous administrative procedures. The government has recognised that it can significantly improve the way the country functions by reforming this area – and it is betting a lot on digitalisation.

State of the Analogue

Among the EU member states, Greece stands at the bottom of almost every indicator when it comes to digitalisation and e-government. It

comes 26th on the use of internet services, such as online banking, and next generation access fast broadband coverage, and last on e-government users and connectivity services overall.⁵ Broadband connectivity is of strategic importance for Europe-wide growth and innovation in all sectors of the economy; it is also highly relevant for social and territorial cohesion. In addition to these benefits, digitalisation could also lead to the upgrading of the region's business activities, such as digital entrepreneurship and smart farming – two sectors mentioned by the EU Commission as promising alternative forms of economic and environmental development.

It is true that Greece's broadband coverage reaches 96 per cent of its territory. However, the coverage of next-generation networks is limited to 66 per cent, far below the EU average of 83 per cent. In terms of broadband cost, Greece ranks last among EU countries on the broadband price index. Surveys show that around 25 per cent of the country's citizens have still never used the internet, and that online transactions are not trusted by the general population.⁶ In terms of internet usage, this stands in contrast to the EU average of eleven per cent, while only five per cent of Germans have never used the internet.⁷

In the private sector, when it comes to e-invoicing and cloud services, Greek companies lag clearly behind. Moreover, the FinTech sector – from mobile banking to electronic trade – remains underdeveloped. In sum, the groundwork for increased digitalisation in Greece is not yet fully laid. Broadband connectivity and internet banking usage, however, are of strategic importance for a country striving to leave financial crisis behind, to upgrade its business activities, and to welcome foreign investments.

The Crisis Years: Modernising the Greek Economy the Wrong Way

In the beginning of the crisis, Greece's public administration had been heavily analogue, belatedly striving to catch up with digitalisation practices that had been applied to other

European countries years earlier. Before 2018, one could procure copies of official papers, such as birth or wedding certificates, offline only. Such certificates could only be issued after checking in with three separate government offices. Most controversially, pension payments arrived with a delay of up to two and a half years after the start of retirement. When it came to private enterprise, according to the World Bank's Ease of Doing Business Report, registering a new company before 2014 would take on average 15 separate government permits; in Germany, it took nine, in nearby Cyprus only six.⁸

Because of the high costs of many unpopular measures for modernisation, politicians from all major parties refrained from addressing the need for reform.

These few examples help to illustrate the long way Greece had and has to go in order to modernise not only its economy, but also its state administration. Over the past years, however, the modernisation efforts came mainly through a policy of sticks and carrots by the Troika, aimed to cajole the successive Greek governments into reforms. Theoretically, many parts of the economy and the administration have thus been modernised by now. However, in practise, the implementation of many measures remains inadequate due to the lack of ownership of those reforms. Aware of the high cost of many unpopular measures to modernise the economy, politicians of all major political parties have recoiled from assuming responsibility, and avoided clearly communicating the need for reform.

No access to banks and public services: Life has been hard →
for the Greek people during the financial crisis.
Source: © Yannis Behrakis, Reuters.

Under external oversight, and in exchange for massive financial support to keep the Greek economy from collapsing, Athens agreed to certain reforms in its public administration, to carry out privatisations, to ensure financial stability, and to upgrade its judiciary system.⁹ As of 2011, it focussed on the consolidation of the

pension system, the survival of the Public Power Corporation (PPC), and the reduction of administrative burdens in the Greek economy.¹⁰ Until June 2014, the Greek government of Antonis Samaras implemented 265 out of 329 OECD recommendations to remove restrictions to competition.¹¹ The financial sector was stabilised



and consolidated, undergoing a second recapitalisation. A first anticorruption law was adopted, and the code of civil procedure was written. On paper, the reforms were paying off: In 2014, Greece had jumped 17 ranks in the World Bank's Ease of Doing Business report, in comparison to the previous year.¹² But in reality, and occurring within the wider context of the Syriza government of Alexis Tsipras, the reforms came at a high cost to the country's citizens. Their incomes, savings, and pensions fell drastically. Pension funds were merged, payouts and benefits were slashed; the system was unified and gradually digitalised. The notorious tax system was modernised at the same time as tax rates rose. Steps were taken to combat tax evasion, and a major reevaluation of property tax values was carried out.¹³ As a result, Greece today tops the OECD charts when it comes to its heavy tax burden on private individuals and companies alike.¹⁴

This wave of reform predominantly affected the private sector; the state administration, however, remains mired in bureaucracy, heavily overstaffed, and in many areas of public life clearly not citizen-oriented. Despite some reforms, public services have until now frequently resisted the stated aim of more efficient, simplified, and transparent procedures.

Efforts at Digital Transformation

Important steps have been taken by previous governments with regard to digitalisation, but these efforts at modernisation and reform have not managed to reach the above-mentioned objectives of efficiency, simplicity, and transparency. This is understandable if one looks at the huge challenges the country was faced with. It is therefore encouraging that the new government in Athens has put digitalisation on top of its domestic agenda: On visiting the newly-established Ministry for Digital Government in July, the prime minister has stated that "the digital transformation of our state is a one-way street for our country. The state has to serve its citizens and this can be only achieved if the state procedures are simplified dramatically and are digitalised". Since then,

reform initiatives have been aimed at making digitalisation a cross-cutting issue that benefits all ministries and government agencies while harmonising procedures dealing with different areas of public life. The buzzwords are interoperability and simplification to make Greece's digital transformation finally take off.¹⁵ For until today, Greece's public administration homepages operate under different systems, are not user-friendly, suffer malfunctions due to lack of maintenance, and are vulnerable to cyber-attacks, as events from Mid-January have shown.¹⁶

With a view to enhancing transparency, the government now claims to more effectively control all the official data owners and state agencies responsible for delivering e-services.¹⁷ A redesign of public administrative procedures is planned, and it is pledged that these will be completely digitalised. With a view to incorporating international best practices, the digitalisation ministry has put up a committee of experts as an institutionalised consultation mechanism, on which, among others, sits former Estonian President Toomas Hendrik Ilves, who presided over the successful transformation of his country into one of the most advanced digital societies and competitive economies worldwide.

In stark contrast to Estonia, until now only 36 per cent of Greek citizens have made use of one form of e-government service or another compared to an EU-average of 64 per cent.¹⁸ Indeed, the EU notes that the Greek population has a low percentage of digital literacy as compared to their European compatriots.¹⁹ In order to achieve a higher acceptance for digital government services in Greece, these must not only be seen as helpful but also beneficial in terms of time-saving, effectiveness, and ease of use. This diagnosis also highlights the need for more digital education in public schools, in lifelong-learning institutions, and beyond.

Leading private sector actors are also vocal supporters of a stronger drive for digitalisation by the government. Reducing red tape, altering the taxation framework, and increasing trust in the

state have always been seen as the holy grail, i.e. the leading principles when discussing the way out of the crisis and into the 21st century.

Digitalisation of the public administration would lead to the more effective tackling of corruption and would increase the trust in public institutions.

Renowned domestic research institutions, such as the Hellenic Federation of Enterprises, the Foundation for Economic & Industrial Research, the Open Technologies Alliance, and the independent think tank diaNEOsis, all agree that digitalisation and simplification of procedures are the only effective means to swiftly achieving those goals. For Greece, digitalisation would not only mean a marked increase to its GDP, but a better quality of life for its citizens:²⁰ In 2017, leading experts calculated that a successful and comprehensive digital transformation could lead to a four per cent increase of GDP by 2021, and to the creation of 50,000 new jobs.²¹ Additionally, digitalisation of the public administration would lead to the more effective tackling of corruption, and improve the long-lamented mismanagement in the public sphere; it would increase trust in public institutions, and advance civic engagement.²²

The Private Sector: Survival and Resilience

Greek businesses bore the brunt of the recession. The country has an unusually large number of small and micro businesses contributing to national GDP; during the crisis, however, shops closed down, workers were let go, and consumption dropped drastically. Those businesses that have survived these years, however, have proven both innovative and resilient, showing themselves able to adjust to new challenges and circumstances. Some big companies have created their own digital initiatives, which have helped them expand their activities around the

globe. The “smart factories”, which the Mytilineos group pioneered, for example, use digital smelter in metallurgy.²³ Other, smaller enterprises banded together and created initiatives such as the Data Science Lab powered by TITAN Greece²⁴ as part of their digital transformation plan. Clearly, however, most of the large companies are still at an early stage of their digital transformation, whether it be to enhance customer experience, or to speed up automation and production streamlining.

Quite remarkable is the emergence of a successful start-up scene in Greece over the last few years, which has already generated a number of successful business stories, expanding well beyond Greece’s borders. Tech companies like Blueground, TaxiBeat and Workable have seen business take off, profits soar, and international interest in their products rise. TaxiBeat, for example, was acquired by Germany’s Daimler group in 2017, and is successful in Latin America. As with other successful Greek start-ups, however, it maintains its headquarters in Athens. Several big US tech companies such as Google, Amazon, and Tesla have taken notice of Greece’s start-up scene and are sponsoring some of its activities as well as piloting own projects, such as Tesla’s R&D office in the Lefkippos technological park on the outskirts of Athens.

Apart from the intrepid and increasingly lively start-up scene, however, small businesses and private initiatives suffer when the state cannot provide the adequate framework and administrative transparency with which to support them. An illustrative example is the Investment Incentives Law of 2016, which was meant to establish the so-called Private Investments Aid Scheme for the regional and economic development of the country. While its homepage was inaccessible until recently, its various bureaucratic hurdles meant that very little funding was actually distributed. Instead, criticism has piled up. The current Minister for Development and Investments has reacted to this in a sarcastic comment on the functionality of the scheme: “In the way that things currently run, assuming that a company applying for this aid has done everything right,



Sunglasses made of seagrass: The emergence of a successful start-up scene in Greece is quite remarkable.

Source © Alkis Konstantinidis, Reuters.

and has all the necessary papers ready, and that everything operates smoothly, it takes 43 bureaucratic steps and seven years of waiting in order to receive the promised funding.” Whether the new government can change things fundamentally for small domestic enterprises will be a crucial test of its political resolve. It will need to be particularly determined to cut red tape and support business development, notably when it comes to investments outside the capital of Athens.

Some Local Governments Lead the Way

In a centralised state like Greece, it is notable that some municipalities have become testbeds for innovation, also in the field of digitalisation. This is remarkable, given the fact that local governments have very limited possibilities to increase its centrally funded budget, and has restricted capacities as regards raising any form of taxes itself – as well as later, in the ability to



directly benefit from them. Of all the 332 registered municipalities, the municipality of Trikala in Northern Greece stands out. In public discourse, it has been recognised as the smart city of Greece. By embracing digitalisation at a relatively early stage as compared to the remainder of the country, the local government and city council have made a few strategic decisions and formed important international partnerships²⁵ in order to bring effective services to the inhabitants. For example, Trikala's Mobile Check App provides, through partnerships with private companies, its entire commercial centre with wireless internet access, and smart parking systems. It has tested driverless public buses, and embraces other smart city schemes, such as smart lighting. Other municipalities have outsourced part of their service digitalisation (i.e. the municipalities of Athens, Dionysos, Igoumenitsa) to a common civic engagement platform for local governments. This has significantly improved the engagement of citizens with their city administration. It has also vastly increased the possibilities of collecting data on diverse issues such as customer satisfaction, public complaints, or reporting vandalism, to name but a few.

These municipalities, where increased acceptance of digital services can be observed, as well as an openness to the use of public private partnerships, can lead the way for other municipalities to follow. The success of these pioneers²⁶ should also motivate the national government to encourage initiatives for local governments to interact more directly with their citizens, particularly when it comes to the usage and expansion of digital services. In this way, hopefully, best practices for service improvement and efficient sustainable use of government funding could be easily highlighted and copied.

With the Help of Digitalisation, Greece Will Get Back into the Game

For the last two years, the Greek economy has been on a renewed upward trajectory.²⁶ For 2020, the minister of finance expects 2.8 per cent growth:²⁷ That would be the highest since the start of the crisis a decade ago. Several

rating agencies have recently moved the country's investor rating out of the "junk"-status and given the country's economy a positive outlook. The Financial Times, among several newspapers, have reported that international markets are seeing a high demand for Greek bonds, while yields are, intermittently, below those of Italy. Clearly, the country seems to be on the way to recovery. How it handles the digitalisation challenge will determine whether the recovery will prove sustainable.

It is common knowledge that efficient government services and transparent policy-making best serve the interests of citizens.

In the twenty-first century, digitalisation is a one-way street: in 2020, it is common knowledge that efficient government services and transparent policy-making best serve the interests of citizens. These can now best be delivered with the help of the internet. Greece, the birthplace of democracy, has in recent years not been at the forefront of innovation. It has missed the first train on information technology at the beginning of the millennium, and is struggling to catch the next one on digitalisation and effective e-government. With only 1.13 per cent of its GDP currently spent on research and development, ranking 18th among its EU counterparts,²⁸ the current government in Athens is aware of the challenge. However, it has taken a few encouraging steps into the right direction, and some local governments, as well as parts of the private sector, show the necessary motivation to bring the country forward. These signs of change and of innovation are mostly based on the lessons learnt and are proof of the creative resilience of some leading actors in the country's private sector. Now, the public sector has to swiftly follow suit. In its first six months in office, the government of Prime Minister Mitsotakis has shown that

it wants to avoid past mistakes and learn from best practices abroad. But most of the work, obviously, still lies ahead.

What would a dynamic and digital democracy in Greece look like? Firstly, it could create transparency where clientelism and red tape have until now obfuscated, hindering development and growth. Secondly, it would enhance trust. By increasing interaction with its citizens and reacting in real-time to their requests or suggestions, as well as letting them monitor the results, trust in public institutions could grow, along with civic engagement. Thirdly, it would facilitate economic growth: By offering a variety of efficient online services to both citizens and entrepreneurs alike, the state administration could become a reliable partner for international investors. There is a huge potential to achieve the reduction, simplification, and harmonisation of procedures. This, amongst many other benefits, would render Greece attractive for foreign direct investment. Moreover, a transition to a stronger digital marketplace could bring in more know-how from abroad.

A functioning digital democracy would also bring about an improved quality of life, where collected data would be used to make cities and communities smart and sustainable. Advances could be made in multiple areas, from waste management to electricity usage and intelligent transport systems – all areas in which Greece has languished at the bottom of European and international rankings.

Digitalisation could also bring about educational benefits. Although Greece's education system has a high standing among its citizens, on the international level there is significant room for improvement. Long distance learning and online studies are still virtually unknown. The benefits of a modernised education system based, among other points, on digital literacy, could be wide-ranging. Specifically, this would help to include individuals with special needs, and could enhance the percentage of women in the workforce, which is also low in comparison to other European states.

Another area, which could benefit from increased digitalisation, is that of Public Private Partnerships, which are still a rare phenomenon in Greece today. Their greater emergence could lead the country to a new era of development powered by collaborative endeavour, and thus neither restricted to one-sided government initiatives nor to business ideas alone. There is room for collaboration in almost every field. This also includes the banking sector, where Greece is still burdened by the legacy of its financial crisis. Currently, the Ministry for Development and Investment is collaborating with the Hellenic Bank Association in order to bring forward the operation of the digital platform of the Investment Incentives Law, hoping to have it up and running by April of this year.

Operating in a digital world can be challenging. In order to be economically successful, Greece must emphasise its strengths, use its resources effectively, and, above all, provide a safe and open environment where its citizens and companies can thrive. At the start of the new decade, it is time to lay the foundations and build on the idea of a digital democracy and economy. If those efforts prove successful, Greece will become an attractive destination not only for sun-seekers and food-lovers, but also for leading companies and smart brains in search of opportunities and innovation.

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- 1 European Commission 2019: Digital Economy and Society Index (DESI), Country Report Greece 2019, in: <https://europa.eu/!gJ98wr> [21 Feb 2019].
- 2 OECD 2019: Unemployment rate, Greece Q3 2019, in: <https://bit.ly/2HaSTAQ> [5 Feb 2020].
- 3 Eurostat 2019: General government gross debt – annual data, unit: Percentage of gross domestic product (GDP), in: <https://bit.ly/37Izulu> [5 Feb 2020].
- 4 Ekathimerini 2019: Mitsotakis certain Greece will turn the page, 24 May 2019, in: <http://ekathimerini.com/240848> [17 Mar 2020].
- 5 European Commission 2019, n.1, p.5, 9 and 12.
- 6 Ibid., p.5.
- 7 European Commission 2019: DESI, Country Report Germany 2019, p.5, in: <https://europa.eu/!VD77My> [21 Feb 2020].
- 8 The World Bank 2020: Ease of doing business index, in: <https://bit.ly/2ShRPBG> [21 Feb 2020].
- 9 European Commission 2019: Financial assistance to Greece, Information on the enhanced surveillance framework for Greece, Overview of the ESM stability support programme and previous programmes, in: <https://bit.ly/31Jqhbi> [23 Dec 2019].
- 10 European Commission 2014: Report on Greece’s compliance with the Milestones for the disbursement to the Hellenic Republic of the third tranche of EUR 1.0bn of the EFSF instalment related to the fourth review under the second programme, 11 Aug 2014, in: <https://bit.ly/37luz9T> [23 Dec 2019].
- 11 European Commission 2014: The Second Economic Adjustment Programme for Greece – Fourth Review, in: <https://bit.ly/38iOKXy> [23 Dec 2019].
- 12 The World Bank 2014: Doing Business 2014, Understanding Regulations for Small and Medium-Size Enterprises, in: <https://bit.ly/2ut7jtw> [5 Feb 2020].
- 13 European Commission 2018: Compliance Report, ESM Stability Support Programme for Greece, Fourth Review, 9 Jul 2018, in: <https://bit.ly/2UH3BHe> [23 Dec 2019].
- 14 OECD 2019: Revenue Statistics 2019, 5 Dec 2019, in: <https://bit.ly/2OHFDM> [27 Dec 2019].
- 15 Hellenic Ministry of Digital Governance 2019: Mission Statement, in: <https://bit.ly/2vmOJF5> [15 Dec 2019].
- 16 Ekathimerini 2020: Greek government websites hit by cyberattack, 24 Jan 2020, in: <http://ekathimerini.com/248802> [11 Feb 2020].
- 17 Hellenic Ministry of Digital Governance, n.15.
- 18 European Commission 2019, n.1, p.12.
- 19 European Commission 2019, n.1, here: Digital Single Market, Greece.
- 20 Spinellis, Diomidis / Vasilakis, Nikos / Pouloudi, Nancy / Tsouma, Niki 2018: Digital Governance in Greece, Successes, Problems and the Way to the Digital Transformation, Mar 2018, in: <https://bit.ly/2OJNvZG> [20 Nov 2019].
- 21 Accenture 2017: Digital Greece, The Road Towards Growth. in: <https://bit.ly/38oqxPK> [27 Dec 2019].
- 22 Spinellis et al. 2018, n.20.
- 23 Profilnet 2017: Mytilineos Digital Smelter, 16 Oct 2017, in: <https://bit.ly/2UI8lwr> [11 Feb 2020].
- 24 Titan Greece 2019: Initiative for digital skills in collaboration with ReGeneration, 12 Sep 2019, in: <https://bit.ly/2UI8HmL> [11 Feb 2020].
- 25 Some of them being active members of the German Greek Assembly (DGV) of local governments of both countries, cooperating on various issues, from waste management to climate-friendly policies and to smart-city mobility schemes, among others. See the DGV-Homepage (in German and Greek), in: <http://grde.eu> [19 Feb 2020].
- 26 Statista 2020: Greece, Real gross domestic product (GDP) growth rate from 2014 to 2024, in: <https://bit.ly/2Hbgilx> [11 Feb 2020].
- 27 Tornos News 2019: Greek 2020 draft budget foresees 2.8% GDP growth and 3.5% primary surplus, in: <https://bit.ly/3bmDtY2> [11 Feb 2020].
- 28 National Documentation Centre 2019: R&D indicators for Greece improve further, 26 Jul 2019, in: <https://bit.ly/3bsxelr> [11 Feb 2020].



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[Digital Democracy](#)

Invented in China

High Technology in the Service of Illiberalism

Sebastian Weise

30 years following the collapse of the Soviet Union, international politics is facing some fundamental questions once again. Whereas during the Cold War it was the socialist doctrine of the USSR, now it is China's digitally empowered authoritarianism that poses a challenge to the West. In this conflict between two different systems, the focus is no longer solely on military capabilities, but also on key digital technologies and emerging industries. If the West is to prevail, it has to make an objective assessment of China's capacity to innovate and find answers that take the factuality of globalisation in research, innovation and business into account.

China in the Fast Lane? From Imitator to Innovator

It is quite astonishing to see how today's systemic competition has developed over a few short years. Even well into the 2010s, many observers were convinced that modern information technology would accelerate the spread of liberal values and ideas. It seemed unlikely that illiberal regimes would be able to contain the democratising power of the internet, and censor the flood of global data and communication.¹ Even though the West recognised China's efforts to control internet freedom at an early stage, as Bill Clinton said in a 2000 speech, these efforts seemed unlikely to bear fruit: "In the new century, liberty will spread by cell phone and cable modem. [...] We know how much the internet has changed America, and we are already an open society. Imagine how much it could change China. Now there's no question China has been trying to crack down on the internet. Good luck! That's sort of like trying to nail Jell-O to the wall."² The competition between the two systems is all the more astonishing because – despite China's impressive and sustained rate of economic growth – it has always lagged behind when it comes to innovation. It has often been stated that China may be able to copy and adapt Western innovations but is unable to develop any major innovations of its own.³ That is why, even until 2014, experts concluded that the rise of China did not pose a serious threat to the

West and the US. After all, technological leadership represents the foundation of power distribution between states. It was thought that, even in the long term, the West could feel secure in the knowledge that complex skills and an open, diverse innovation ecosystem are prerequisites for innovation in the high-tech sector. Precisely such skills and characteristics are difficult to import and copy, and hence China's rise from imitator to innovator would be a protracted one.⁴ Despite all these forecasts, the fact that we are now discussing a new systemic competition and China's innovative capacity is largely due to its "Made in China 2025" strategy and related measures.

"Made in China 2025": A Catalyst for Market-Driven, Open Innovation

"Made in China 2025" is a national strategy drawn up by China in 2015 that sets out a framework for developing the country's industrial and high-tech sector.⁵ With this strategy, China aims to digitalise large sections of its economy and increase its ability to innovate in order to independently scale new heights in the value chain (innovation autonomy). Priority is given to becoming an industrial and technological superpower. In parallel, the economic transformation should contribute towards stabilising economic growth and prosperity, so that China can become a high-income country in the medium term. However, the country is to avoid falling

into the trap of stagnating economic growth (known as the middle-income trap⁶). These are crucial objectives because economic growth and increased prosperity are cornerstones of the country's political stability.

To achieve these goals, the national strategy relies on harnessing market forces, open and independent innovation, leapfrogging, targeted state funding and the de-compartmentalisation of China's civil and military innovation bases. There is also a clear focus on the sectors and areas of technology that the Chinese government perceives to be of strategic importance.⁷ The plan also lists a broad portfolio of areas where specific action is required. These include:

- funding for research and development,
- protecting the domestic market against foreign high-tech companies,
- assisting companies to become national and international market leaders,
- providing support for the transfer of knowledge and technology,
- establishing sector-specific innovation centres at local level,
- continuously and pragmatically adapting the strategy, including clear objectives and transforming the overall strategy into regional and sectoral sub-strategies.

While innovation has long played a central role in the strategic thinking of Chinese governments, this strategy now takes a different approach to innovation policy. This entails shifting the state away from its role as the planner of innovation and towards being a hybrid catalyst for innovation, which establishes conditions favouring market-driven, open innovation whilst providing massive backing for scaling innovations.⁸ Whereas the public debate usually focuses on the enormous increase in the Chinese government's funding for R&D,⁹ this fundamental change at the structural level – based on the ascendant model of the Asian Tiger states – is largely overlooked. This is problematic because it is precisely the fusion of more liberal market forces with autocratic structures that is creating a new, hybrid state-capitalist model for innovation.

Innovation and Systemic Competition

High-Tech in the Service of the Communist Party (CP)

The sought-after transformation of China will do more than create a powerful economic challenger for the West. We are witnessing the emergence of a systemic competitor empowered by digital innovation.¹⁰ China is using innovation to secure its rise to power and consolidate its illiberal domestic order: “Advanced technology is the sharp weapon of the modern state.” (Xi Jinping).¹¹ Its use of a social scoring system (SSS) illustrates how digital innovation and high-tech developments are being applied.¹² What began as a way of addressing lack of trust when granting loans has now developed into a comprehensive state surveillance and disciplining. The SSS primarily monitors the social and political activities of every Chinese citizen, company and NGO. Behaviours rated by the CP as desirable or undesirable are automatically recorded and fed into a points system. People with a negative ranking are subjected to higher taxes, denied access to careers in government or government-related organisations, or face travel restrictions. The extreme measures that such a surveillance system offers the state apparatus are reflected in the situation of the Uyghur minority in China. The arsenal of cutting-edge information technology used for the social scoring system includes the latest telephone and video surveillance as well as AI-supported face and voice recognition, plus systems for analysing digital communication flows and online behaviour. In some regions, the system is even supplemented by a DNA database.

For China, the idea of national cyber sovereignty and a politically charged understanding of cyber security are of primary importance.



Every move one makes: Today, in contrast to analogue times, illiberal regimes are able to achieve a new level of social surveillance and control of public opinion at relatively low cost. Source: © Damir Sagolj, Reuters.

In addition to the social scoring system, China has been using state-of-the-art information technology since 2012 to build and monitor the “Chinese Internet”. While the West advocates an open and free internet, China believes in a censored, state-controlled order for the digital space.¹³ In this context, the idea of national cyber sovereignty and a politically charged understanding of

cyber security are of primary importance. These are also regulatory means to build what China regards as a “clean and righteous internet” at national level.¹⁴ Thanks to the “great firewall”, certain Western platforms and search engines are blocked, data streams filtered, content censored, and access to the internet is restricted or even completely shut down.¹⁵ The latest information

technology – such as AI or deep packet inspections – is of vital importance here. This reveals the central components of the tools that enable China to nail the Jell-O to the wall.

*The Model of High-Tech Autocracy –
A Threat to the Future of Democracy*

There are three reasons why digital authoritarianism poses a threat to the future of democracy.

1. Thanks to the use of advanced information technology, illiberal regimes are able to achieve a new level of social surveillance and control of public opinion at relatively low cost, so that illiberal structures can be consolidated internally.¹⁶ AI in particular opens up new potential for politically controlling every area of society, making past attempts at control under socialist regimes seem crude at best.¹⁷
2. One difference between digital authoritarianism and its predecessor is the fusion of authoritarian political control with free market forces. This not only means that China has built a more impressive economic record than previous systemic competitors, but also that it has developed its own state-capitalist innovation model, which can point to some successes.¹⁸ An objective view should be taken of these, but China's development in the area of innovation still poses the question: can China's hybrid innovation model surpass the innovative power of liberal societies over the long-term?
3. Digital authoritarianism poses a threat because China, together with Russia, serves as a role model for other illiberal states.¹⁹ China and Russia have not only managed to harness advanced technology for their structures but have also developed an appropriate regulatory framework to that end: whether it be the concept of cyber sovereignty, which is important for sealing off the internet, or corresponding cyber security legislation enabling them to carry out mass surveillance. Digital authoritarianism is a threat because

states like China and Russia are exporting their technology together with their model of order. China and Russia play an active role in propagating this model.²⁰ Its recipients include countries such as Ethiopia, Ecuador, South Africa, Bolivia, Egypt, Rwanda, Venezuela and Saudi Arabia.²¹ Only recently, political scientist Anne-Marie Slaughter warned: "Dictators are creating and sharing tools for greater population control than ever before."²²

What Does This All Mean?

Whereas it is clear that the West must be resolute in facing the challenge of China's digital authoritarianism, choosing the right means is proving to be more difficult. China is a competitor who is an integral part of the globalised economic and innovation cycles from which the West benefits. In contrast to the Cold War era, systemic competition entails close links and mutual dependencies beyond the purely inter-governmental level. In lieu of being cut, they should be organised more cleverly.

In terms of breadth, China is currently neither a leading global innovator nor an autonomous actor in the area of innovation.

Factual Analysis Instead of Panic

In order to do this, it is at first important to correctly classify China's development in the innovation and high-tech sector. China has made enormous progress and can now boast some globally competitive and innovative companies in certain areas of the high-tech sector. However, in general, China is currently neither a leading global innovator nor an autonomous actor in the area of innovation. China leads the group of middle-income countries in the Global Innovation Index, but it slumps to 14th place compared

to the advanced industrialised nations. As regards patent applications, it is also clear that a much larger share of Western innovations continue to be registered in China, and that Chinese patents are diffusing far more strongly into emerging and developing countries.²³ Although there has been an enormous increase in the number of Chinese patents, their quality still lags behind that of their Western counterparts.²⁴ With regard to R&D spending by private companies – which accounts for a much larger proportion of global R&D spending than government funding – China has a stronger presence in the world’s top 2,500 than in the past. Yet only one Chinese company – Huawei – is in the group of 50 companies with the highest R&D spending in 2018.²⁵ In 2018, China produced more unicorns than the USA and attracted more venture capital in the start-up sector. Nevertheless, China’s innovation ecosystem as a whole is still at an early stage and heavily dependent on foreign basic innovations and external expertise.²⁶ Even in the field of artificial intelligence, which China has identified as a strategic core area, the country only has six of the world’s 100 most successful AI start-ups.²⁷

If we look at the research landscape, China is among the world leaders in a number of high-tech fields – including AI, quantum computing, and battery technology. Even in the Nature Index, today China ranks second in the natural sciences, directly behind the US.²⁸ A closer look, however, shows that the most influential publications (in the natural sciences) continue to predominantly come from the West.²⁹ The majority of leading scientific institutions (in the natural sciences) are Western universities, too.³⁰ What is more, if we add together various European states’ performance in the Nature Index, China would take third place behind the US and Europe. The story is similar when we look at the field of AI. In an informative ranking – based on research contributions to the world’s leading AI conferences – only two Chinese universities (ranked 15th and 22nd) are in the Top 40 Global AI Organisations. As an AI research location, China is also clearly lagging behind the US and Europe (aggregated).³¹

The same pattern emerges in the high-tech sector. On the one hand, China has risen to become the world’s largest exporter and can boast leading global companies in selected industrial sectors.³² However, a more in-depth look at its exports shows that a significant proportion of high-tech products are “merely” manufactured in China, so the profits flow back to Western technology companies.³³ Despite all its successes, China’s high-tech sector still demonstrates weaknesses in basic research and enabling technologies, particularly in the semiconductor sector.³⁴ Finally, a look at China’s innovation ecosystem shows that, in spite of all the impetus for change to state structures, there are still considerable deficits. Eliminating them will involve a long march rather than a short leap.³⁵

For the West, this means that China must be taken seriously as a competitor in innovation, but without over-egging its capacity for innovation. When it comes to the whole spectrum of innovation, China is still more dependent on the West than vice versa. The West could use this asymmetry as a tool to enforce its interests. As opposed to descending into fatalism, China’s progress should be taken as a sign that the West ought to strengthen and network its innovation systems so as to maintain its innovative edge. In some areas, China is a world leader in innovation, so forms of cooperation with Chinese innovation systems could afford opportunities for the West. Achieving this would require China and the West to operate on a level playing field, and to prevent illegitimate technology transfers and breaches of intellectual property rights. Cooperation with China must be based on rules and reciprocity.

China does not shy away from completely excluding certain foreign platform companies, social media and search engines.

Fair Trading and Rule-Based Cooperation

Precisely this is almost non-existent at the moment, and it is quite rightly being demanded by the US in the current trade dispute.³⁶ A critical look at China's approach to innovation highlights three issues. The first is the targeted transfer of technology and lack of respect for intellectual property rights. For many years now, Chinese companies have made strategic investments in Western high-tech companies and subsequently transferred the expertise back to China. By the same token, foreign companies are forced to enter into joint ventures in order to access the market, so that know-how flows into China. Linked to this is the accusation that China is deliberately using research collaborations and academic exchange programmes for the purposes of transferring knowledge and technology. On top of this, China is not taking adequate action at home against the infringement of intellectual property rights. Some experts have even accused the Chinese state of actively participating in industrial espionage.³⁷ A further issue is how the Chinese market is isolated from international competitors, especially in the digital economy and the IT sector. Even though China has facilitated access to the Chinese market for foreign companies and investors since joining the WTO, these areas are subject to unique restrictions. China does not even shy away from completely excluding certain foreign platform companies, social media and search engines.³⁸

The last practice concerns the competition-distorting promotion of Chinese companies at home and abroad.³⁹ Through a range of policy measures, such as industrial interventions, the state helps Chinese companies in emerging industries to become national champions. Moreover, China is promoting the internationalisation of these companies – including along the New Silk Road – so that Chinese companies can continue to scale up or reduce overcapacity abroad. Ultimately, thanks to state support, Chinese companies enjoy irregular competitive advantages in key emerging industries. Combined with low costs, this enables them to crowd out companies in other countries.

As a first step towards resolutely opposing these practices, the West must take far more decisive action against China's deliberate efforts to



promote the technology transfer. Several Western countries and the EU have already adopted stricter regulations to monitor foreign direct

investment in the high-tech sector, and have introduced measures to prevent Chinese investors from buying up leading Western technology



Educational performance: China's innovation ecosystem is still heavily dependent on basic innovations and foreign expertise. Source: © Aly Song, Reuters.

companies. Europe's support for the USA's WTO case against China is also a step in the right direction.

In the long-term, the aim must be for China to adapt to the norms of fair and free trade.

One way to strengthen these measures would be to set up transatlantic investment screening and for Western nations to share their results. However, it is important that only those Chinese investments and acquisitions posing a serious threat to the digital sovereignty of Western countries are prevented. It is also necessary to intensify the debate that has already begun in the West about academic exchange programmes and research collaborations with China. In the long-term, the aim must be for China to adapt to the norms of fair and free trade – by applying political pressure if need be. For this to succeed, the West is also called upon to restore the World Trade Organization's ability to find answers to the challenges of Chinese innovation policy, and to enforce them.

Regulating Illiberal Digital Mass Surveillance

Furthermore, the West ought to put a stop to the illiberal application of key digital technologies. To this end, the international agenda should lend more weight to the debate on regulatory options for advanced surveillance technology. An obvious focus here would be on facial recognition and its importance for today's mass surveillance systems. Tying it in with the current debate in specialist circles would be a possibility.⁴⁰ It is also worth considering whether the issue should be integrated into the international human rights framework.⁴¹ Unlike the AI ethics discussion, instruments, mechanisms and structures have been established in this framework to exert political pressure on illiberal states for regulation. Within this framework, many international organisations are actively engaged in

protecting human rights worldwide, and there are also a number of civil society actors who can exercise political pressure on illiberal regimes in the event of surveillance technology abuse. Another subject for discussion should be how the spread of such technologies can be contained from the West's point of view. One starting point at the international level would be the inclusion of digital mass surveillance systems into the debate on arms control in cyber and information space. Another approach would be to integrate such systems directly into existing export control regimes at both national and international level.

Working Together to Perpetuate a Liberal Order for the Digital Space

As we stand on the threshold to a new age, it will also be important for the West to develop a liberal order for the digital space based on its values and principles. This must not only be distinct from illiberal ideas of order but also provide answers to the challenges of our time; whether that be the protection of privacy, social polarisation, fake news or how to deal with Big Tech companies. If the end result is to be a strong liberal order, it will require the West to unite in standing up for its values and to cooperate with non-state forces that advocate freedom in the digital age.

Conclusion

Recent systemic competition in the high-tech sector may be on everyone's lips, but this article shows that China is neither the world's innovation leader nor capable of developing pioneering innovations with complete autonomy. China has made considerable progress in innovation in key digital technologies and emerging industries, but the West is still ahead in terms of the breadth and depth of its capacity for innovation. However, China's dynamic development underlines the fact that the West cannot afford to rest on its laurels. If the West wants to prevail in the new system conflict over the long-term, it has to put hysteria and fatalism to one side, and work on strengthening its own innovation systems

and advocate its values in the high-tech sector. It also needs to insist upon reciprocity and clear rules in its relations with China. If all this is to succeed, it will be necessary to act in unison and make wise use of interdependencies rather than resorting to divergence and protectionism. The next chapter of history could end well for the West, provided it takes the reins in a united and resolute manner.

–translated from German–

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- 1 Cf. Clinton, Hillary 2010: Remarks on Internet Freedom, U.S. Department of State, 21 Jan 2010, in: <https://bit.ly/2Sog80R> [12 Feb 2020].
- 2 The New York Times 2000: Clinton's Words on China: Trade Is the Smart Thing, 9 Mar 2000, in: <https://nyti.ms/39xQmNn> [7 Jan 2020].
- 3 Hilgers, Lauren 2013: Lee Kai-Fu, China's Innovation Idol, Bloomberg, 23 Aug 2013, in: <https://bloom.bg/38nv18W> [12 Feb 2020]. For further information see: Abrami, Regina / Kirby, William / McFarlan, Warren 2014: Why China Can't Innovate, Harvard Business Review, Mar 2014, in: <https://bit.ly/3buRMKd> [4 Jan 2020]; Xie, Xuemei / Peng, Yunfeng / Zeng, S. X. / Tam, C. M 2013: What Affects the Innovation Performance of Small and Medium-Sized Enterprises in China?, in: Innovation Organization & Management 15: 3, pp. 271–286.
- 4 Beckley, Michael 2012: China's century? Why America's Edge Will Endure, in: International Security 36: 3, pp. 41–78, in: <https://bit.ly/3ab4mWR> [26 Feb 2020].
- 5 For a translation of the strategy see State Council of the People's Republic of China 2015: Made in China 2025, 7 Jul 2015, in: <https://bit.ly/2UNpKn9> [4 Jan 2020]. For a presentation and analysis see Zenglein, Max J. / Holzmann, Anna 2019: Evolving Made in China 2025. China's industrial policy in the quest for global tech leadership, Mercator Institute for China Studies (Merics), 2 Jul 2019, in: <https://bit.ly/2x9lvZH> [12 Feb 2020]; Atkinson, Robert D. 2015: China's Strategy For Global Technology Dominance By Any Means Necessary, Forbes, 12 Nov 2015, in: <https://bit.ly/38niGSb> [12 Feb 2020]; Huang, Landy / Jiang, Edward 2019: Chinese Venture Capital and Competition with the US, Wharton Public Policy Initiative, 12 May 2019, in: <https://whr.tn/2UKasj7> [12 Feb 2020]; cf. Liu, Xieli / Schwaag Serger, Silvia / Tagscherer, Ulrike / Chang, Amber Y. 2017: Beyond Catch-up – Can a New Innovation Policy help China Overcome the Middle Income Trap?, Science and Public Policy 44: 10, p. 665.
- 6 Cf. Pruchnik, Kamil / Zowczak, Jakub 2017: Middle-Income Trap (MIT): Review of the Conceptual Framework, in: Asian Development Bank (ADB-Working Papers), Jul 2017, in: <https://bit.ly/2SG3NDY> [12 Feb 2020].
- 7 Cf. Zenglein / Holzmann 2019, n.5, p.20 (graphic).
- 8 Cf. Liu et al. 2017, n.5, p.665.
- 9 Cf. Sargent Jr., John F. 2019: Global Research and Development Expenditures: Fact Sheet, Congressional Research Service, 19 Sep 2019, in: <https://bit.ly/2uEqmB1> [12 Feb 2020].
- 10 Cf. Nouwens, Meia / Legarda, Helena 2018: Emerging Technology Dominance. What China's Pursuit of Advanced Dual-Use Technologies Means for the Future of Europe's Economy and Defence Innovation, MERICS, 19 Dec 2018, in: <https://bit.ly/37hJkdX> [12 Feb 2020].
- 11 Buckley, Chris / Mozur, Paul 2018: What Keeps Xi Jinping Awake at Night, The New York Times, 11 May 2018, in: <https://nyti.ms/2SlwsiY> [12 Feb 2020].

- 12 Cf. Wright, Nicholas 2019: How Artificial Intelligence Will Reshape the Global Order, *Foreign Affairs*, 10 Jul 2018, in: <https://fam.ag/2utxUXn> [12 Feb 2020]; Feldstein, Steven 2019: The Road to Digital Unfreedom: How Artificial Intelligence is Reshaping Repression, in: *Journal of Democracy* 30: 1, 1 Jan 2019, pp. 40–52, in: <https://doi.org/10.1353/jod.2019.0003> [26 Feb 2020]; Meissner, Mirjam 2017: Mirjam Meissner über Chinas gesellschaftliches Bonitätssystem, *MERICs Experts* #34, Podcast, 24 May 2017, in: <https://bit.ly/2UWpgeT> [12 Feb 2020].
- 13 Cf. Weise, Sebastian 2019: Time to grow up!, *Konrad-Adenauer-Stiftung, kurzum*, 21 Nov 2019, in: <https://bit.ly/2OMoJrZ> [12 Feb 2020].
- 14 *The Straits Times* 2018: Chinese President Xi Jinping says Internet must be 'clean and righteous', 22 Aug 2018, in: <http://str.gse.org/0Wq7> [12 Feb 2020].
- 15 Cf. Chao, Tang 2016: In-depth Analysis of the Great Firewall of China, 14 Dec 2014, in: <https://bit.ly/2SF1ocH> [12 Feb 2020].
- 16 Cf. King, Garry / Pan, Jennifer / Roberts, Margaret E. 2013: How Censorship in China Allows Government Criticism but Silences Collective Expression, *American Political Science Review* 107: 2, May 2013, pp. 1–18, in: <https://bit.ly/3ab2oMH> [12 Feb 2020].
- 17 Cf. Harari, Yuval Noah 2018: Why Technology Favors Tyranny, *The Atlantic* Oct 2018, in: <https://bit.ly/2vq9LkA> [12 Feb 2020].
- 18 Cf. *Foreign Affairs* 2019: Does Technology Favor Tyranny?, 12 Feb 2019, in: <https://fam.ag/2HlrThW> [12 Feb 2020].
- 19 Cf. Morgus, Robert / Woolbrigh, Jocelyn / Sherman, Justin 2018: The Digital Deciders, *New America*, 23 Oct 2018, in: <https://bit.ly/2SlDdRS> [12 Feb 2020].
- 20 Cf. Shahbaz, Adrian 2018: The Rise of Digital Authoritarianism. Fake news, data collection, and the challenge to democracy, *Freedom on the Net* 2018, *Freedom House*, Oct 2018, in: <https://bit.ly/2xa112S> [4 Mar 2020].
- 21 Cf. Polyakova, Alina / Meserole, Chris 2019: Exporting Digital Authoritarianism, *Brookings Institution*, in: <https://brook.gs/37rhFHO> [12 Feb 2020].
- 22 Cf. *Foreign Affairs* 2019, n. 18.
- 23 Schneider-Petsinger, Marianne / Wang, Jue / Jie, Yu / Crabtree, James 2019: US-China Strategic Competition: The Quest for Global Technological Leadership, *Research Paper*, *Chatham House*, 7 Nov 2019, S. 16, in: <https://bit.ly/397GNoi> [12 Feb 2020].
- 24 Cf. Nirupamala, Kanchana 2019: Intellectual Property: Is China the Global Leader in Innovation?, *Speeda*, 18 Jun 2019, in: <https://bit.ly/39sIVa1> [12 Feb 2020].
- 25 Cf. *European Commission* 2018: The 2018 EU Industrial R&D Investment Scoreboard, 1 Jan 2018, in: <https://bit.ly/37iOKWg> [12 Feb 2020]; Ringel, Michael / Grassl, Florian / Baeza, Ramon / Kennedy, Derek / Manly, Justin 2019: *Innovation in 2019. The Most Innovative Companies 2019*, *Boston Consulting Group*, 21 Mar 2019, in: <https://on.bcg.com/31P9GTB> [12 Feb 2020].
- 26 Cf. Clark, Grant 2018: What Is Intellectual Property, and Does China Steal It?, *Bloomberg*, 5 Dec 2018, in: <https://bloom.bg/38kY90B> [12 Feb 2020].
- 27 Cf. *CB Insights* 2019: AI 100: The Artificial Intelligence Startups Redefining Industries, 6 Feb 2019, in: <https://bit.ly/2SGeSF4> [12 Feb 2020].
- 28 For data from the Nature Index see: <https://natureindex.com> [12 Feb 2020].
- 29 Cf. Atkinson, Robert D. / Foote, Caleb 2019: Is China Catching Up the United States in Innovation?, *Information Technology and Innovation Foundation*, Apr 2019, p. 23, in: <https://bit.ly/2Hi9Yck> [12 Feb 2020].
- 30 Cf. *Nature* 2019: The Top 10 Academic Institutions, 19 Jun 2019, in: <https://go.nature.com/37lF5OL> [12 Feb 2020].
- 31 Cf. Gleb, Chuvpilo 2019: AI Research Rankings 2019: Insights from NeurIPS and ICML, *Leading AI Conferences*, *Medium*, 3 Dec 2019, in: <https://bit.ly/3bz3Zh6> [12 Feb 2020].
- 32 This particularly affects areas relating to artificial intelligence, battery technology, robotics, and information technology, including the hotly debated 5G.
- 33 Cf. Grimes, Seamus / Sun, Yuato 2016: China's Evolving Role in Apple's Global Value Chain, *Area Development and Policy* 1: 1, pp. 94–112.
- 34 Cf. Zenglein / Holzmann, n. 5, pp. 24–26
- 35 Cf. Liu et al. 2017, n. 5, p. 667; *World Economic Forum* 2016: China's Innovation Ecosystem, *White Paper*, Aug 2016, in: <https://bit.ly/2SiGZYY> [12 Feb 2020].
- 36 Cf. *White House Office of Trade and Manufacturing Policy* 2018: How China's Economic Aggression Threatens the Technologies and Intellectual Property of the United States and the World, Jun 2018, in: <https://bit.ly/2SCItzj> [12 Feb 2020].
- 37 Cf. Brown, Michael / Singh, Pavneet 2018: China's Technology Transfer Strategy: How Chinese Investments in Emerging Technology Enable A Strategic Competitor to Access the Crown Jewels of U.S. Innovation, *Defense Innovation Unit Experimental (DIUx)*, Jan 2018, in: <https://bit.ly/39r5Wu3> [12 Feb 2020].
- 38 Cf. Ferracane, Martina F. / Lee-Makiyama, Hosuk 2017: China's Technology Protectionism and its non-negotiable Rationales, *European Centre for International Political Economy (ECIPE)*, in: <https://bit.ly/2SnSn9c> [12 Feb 2020].
- 39 Cf. Koleski, Katherine / Salidjanova, Nargiza 2018: China's Technonationalism Toolbox: A Primer, *Issue Brief*, *U.S.-China Economic and Security Review Commission*, 28 Mar 2018, in: <https://bit.ly/3btLASK> [12 Feb 2020].
- 40 Smith, Brad 2018: Facial recognition: It's time for action, *Microsoft*, 6 Dec 2018, in: <https://bit.ly/2PqSUF8> [27 Feb 2020].
- 41 Lorenz, Philippe / Salow, Kate 2019: *Artificial Intelligence Needs Human Rights*, *Stiftung Neue Verantwortung (SNV)*, *Policy Brief*, 30 Sep 2019, in: <https://bit.ly/2uCWYU> [27 Feb 2020].



[Digital Democracy](#)

E-Currency

Digital Money for the Digital State

[Jason Chumtong](#)

Facebook wants to enter the financial sector in 2020 with Libra, its cryptocurrency. With its two billion users worldwide, the social media company could become a serious actor overnight, developing clout that is comparable to that of traditional central banks. Several concerns have recently been expressed around the world, although even governments are developing e-currencies of their own.

Bitcoin, Blockchain, Cryptocurrency

Blockchain, the technology upon which cryptocurrencies are based, has a great potential.¹ It offers transparency, protection, and efficiency. It can be used to reliably document all process steps and eliminate the possibility of manipulation for transactions ranging from CO₂ certificates in emissions trading, to production and distribution of commodities such as coffee. This circumvents costs for additional certification services.

In the form of money or currency, as the example of Bitcoin shows, these technical possibilities have so far not resulted in applications suitable for everyday usage. As a kind of financial investment, price volatility is too great, and, as a digital means of payment, cryptocurrencies have remained rather dubious, tending to be limited to the payment of criminal activities. Facebook's decision to invest in digital money in the form of Libra could be seen as the beginning of a new way of dealing with cryptocurrencies. The private company is not alone in developing its own digital currency. China has indicated that it will officially introduce the digital yuan in the first half of 2020, and Sweden's Riksbank is already testing the user interface for the e-krona. Facebook's announcement of Libra has also had an impact in Germany. The Association of German Banks is calling for a digital euro, and linking both Germany's and Europe's competitiveness to its successful development. This gives rise to two questions:

1. How does the innovation of digital money contribute to digital structural change?
2. What role does digital money play in the international race towards a digital state?

The Transcendence of Money

Announcing digital money as the financial system's next big innovation seems odd at first. Cashless transactions have been available as transfers, card payments, and direct debit for over fifty years. For anyone who owns a credit card, digital payment is the norm. The business model of N26, a German FinTech start-up, is reliant on mobile account management via the account holder's own smartphone. PayPal, M-Pesa, WeChat, and similar companies represent numerous private service providers for digital financial transactions. It is no news that money is no longer stored in bank vaults, instead it is coded as zeroes and ones on computer servers. But simply digitalising money does not make it digital.

Not All Digital Is Equally Digital

The financial transactions listed above are based on so-called book money or bank deposits that can be converted to cash at an ATM and withdrawn. Our digitally mapped assets reflect our expectations that banking institutions will provide us with cash. They are not a digital copy of the banknotes in question. When we make a bank transfer, we are sending a claim to cash, not the cash itself. Analogue money has various authentication characteristics, such as watermarks and serial numbers. These certify the validity of the money and guarantee its value, legitimising transactions in a secure, and uncomplicated manner. The authenticity of a 50 euro bill used to pay for a purchase can be confirmed without much technical effort. If the bill passes the test, it can be used to offset the value of the goods. Book money or bank deposits do not have these authenticating

characteristics. As such, they simply communicate a claim to money and are not themselves a digital copy of that money; for this reason, a third party must legitimise the transaction (goods for money). When an EC card is used for a purchase, the banking institution in question assumes the authentication process. It checks and confirms the liquidity for the payment transaction. In other words, financial institutions perform the function of watermarking cashless payments.

Digital money can replace this service because, just like analogue money, it is able to independently display authentication characteristics. Blockchain technology² can automatically integrate authentication into money transfers.³ As with other blockchain applications, the transactions are documented in a tamper-proof manner and require no third-party intervention, saving time and money and making even small transactions profitable. This development is expected to give rise to new business models, since digital money allows the implementation of so-called smart contracts. Such contracts provide the technology with long-term potential.⁴

Smart Contracts

Smart contracts are computer protocols that digitally map contractual conditions. They allow the transaction of automated money transfers that are subject to certain rules. Payment can be directly linked to the performance of a service without additional active confirmation by the customer. We use a comparable technology when we rent e-scooters or cars. As soon as we return the vehicle, the provider automatically makes a charge to the credit card we provided when we picked it up. Amazon's supermarkets work in a similar manner. The American online ordering service is testing the functionality of goods purchases in which the customer no longer has to pay at check-out. Instead, a software monitors which products have been taken from the shelves and automatically deducts their price from the customer's Amazon credit when they leave the store. But smart contracts also work without human action. In August 2019, Commerzbank reported successful testing

of payments between machines. During the tests, the bank transferred digital money to the system of a Daimler vehicle. The machine then paid charges autonomously after it charged up at a charging station. No human intervention was necessary.⁵

Digital money, enhanced with smart contracts using blockchain technology, allows for transactions that require no separate payment infrastructure.

The Association of German Banks considers this technology as the foundation for an innovative future monetary system. Digital money, enhanced with smart contracts using blockchain technology, allows for transactions between parties that require no separate payment infrastructure. Currently, payment still requires complex computer programmes, which only large companies with the necessary industry expertise can afford. In the long term, mid-sized companies are also expected to gain access to automated financial transactions. As soon as the technology achieves a level of user-friendliness that allows even laymen to configure automated financial transactions themselves, completely new payment and sharing models are projected to arise. That is why the Association speaks aptly of "programmable digital money".⁶

The increasing linkage of physical and virtual objects (Internet of Things) and the standardisation of data processing via intelligent algorithms (artificial intelligence) require a strategy of collaborative digitalisation. Companies and state actors must understand data as cooperative relationships, and as such translate them into services and market structures. Digital money is a part of this development, and simultaneously a vehicle of digital transformation. Moving analogue money to a digital level will add to it digital

characteristics with which we are familiar from book money or bank deposits: fast transactions and location-independent access. The decisive advantage, however, is the capability of combining money with other technologies. Blockchain technology and smart contracts will allow us to programme money according to our wishes. Digital money thus also becomes an instrument of data and process management. In view of the rapidly progressing digital structural shift, these characteristics are essential components for success. An overview of Facebook's Libra project helps to illustrate this.

New Kids on the Block(chain)

Last summer, Facebook made headlines by announcing that it was working on its own cryptocurrency. The currency is called Libra, is based on blockchain technology, and, according to the official description, is to be used as a complement to, and replacement for, classical national currencies. Akin to PayPal, Libra allows users to send money to other users in the same way they send text messages, using their smartphones or computers. There are no fees for transactions, that only take seconds. In order to use Libra as a means of payment, the user needs a digital wallet, which serves as an account for managing one's own balance. These wallets are currently being developed by Facebook's subsidiary, Calibra, as an independent application and add-on to Facebook Messenger or WhatsApp. The exchange between Libra and the national currency is performed via Calibra itself, or in the form of voucher cards.⁷ At this point, it would be reasonable to question why Facebook is developing a currency for such services, and whether digital money, as described above, is even necessary for the purpose. After all, other providers also enable global, cheap, fast financial transactions using standard local currencies.

First Come, First Served

There is a dearth of technological alternatives for Facebook's future business models. As explained above, digital money based on blockchain allows automated processes to be integrated

as an individually programmable characteristic. This makes it possible to offer extremely small transactions at low cost. A significant part of Facebook's turnover is from advertisements. Advertising providers could, for instance, make direct Libra payments for clicking, rating, or viewing advertising material, but only if the transaction is cheap and Libra's value remains stable. Transactions with bank deposits are not cost-effective for such models, and other cryptocurrencies are too volatile. But Libra is to serve as a true currency, and not merely as an object of speculation. That is why Facebook is developing Libra as a so-called stablecoin. Unlike Bitcoin and other cryptocurrencies, stablecoins are secured by bank deposits and government bonds. In the case of Libra, maintaining value is the task of the Libra Reserve, which, by collecting low-risk assets in a targeted manner, functions as a sort of savings bank. Its management is being assumed by the Libra Association, a decision-making body of actors from the private sector and multilateral organisations, founded especially for this purpose, with access to and control over details of Libra's financial situation. The Libra Association regulates Libra's distribution and assumes technical maintenance and control of the hardware.⁸

Digital money will lead to a number of new offers that do not involve long-term financial commitments for the customer.

Spotify, one of the board members, has similarities with Facebook that go beyond an analogous customer base. It is also interested in rendering services that are of little financial value profitable. Libra makes pay-per-use payment models conceivable, which would allow Spotify to add special small additional services to its portfolio. Spotify could use Libra to allow direct payments between artists and listeners based on individual titles.⁹ Another conceivable use of Libra is for mobile providers allowing access to 5G networks with temporarily enhanced bandwidth.





Just walk out: Amazon is testing the functionality of goods purchases in which the customer no longer has to pay at check-out. Source: © Lindsey Wasson, Reuters.

Digital money will not replace the current trend of billing digital services as subscriptions. However, digital money will pave the way to a number of new offers that do not involve long-term financial commitments on the part of the customer. First-mover-advantage logic applies to the development of such a product: the first into this market will gain a large market share

and a substantial lead over the competition. The integration of other business partners follows the strategy of collaborative digitalisation. The more services that can be automatically paid for with Libra, the greater its user-friendliness. Diverse potential applications are positive for wider distribution. Some of these applications will be further explored below.



Data, Money... What is the Difference?

The option of buying Libra via voucher cards, and thus with cash, expands Facebook's potential pool of customers to include those outside the structured financial sector. The company intends to systematically address regions in which population groups with low capital have little or no access to financial services. Wherever people are not publicly registered, and therefore have no bank account, Libra could spread quickly as an alternative. The financial advantages of

winning over such informal sectors as a market may seem promising, but what is significant is that in so doing Facebook is attacking the established banking system. Libra creates incentives for customers who have so far been locked out of the system. In just those countries that have weak currencies, Libra has a serious chance of becoming a second currency. The M-Pesa, developed in cooperation with Vodafone, shows the potential for success of mobile money transfer without regular bank accounts. After its introduction in Kenya in 2007, the number of active



Paying via QR code: Due to the heavily used services of WeChat and Alipay, the infrastructure for mobile money transactions is already in place. Source: © Jason Lee, Reuters.

reach of the parent company. Facebook's recent handling of personal data lacked suitable consumer protection, which is why the presence of a business interest cannot be ruled out here. Facebook's social media platform already gives it access to the private data records of people who upload details of their everyday lives. This allows Facebook to detect detailed patterns of behaviour, which are especially critical for advertisement and user content. Access to data records on individual consumption behaviour and payment will be of equal, if not greater, value.

The development of an own currency and active use of digital money provide fundamental advantages in the digital structural shift. It allows the monopolisation of financial data streams and opens up new business models, while reducing transaction costs. In Facebook's case, the customer has, to a certain extent, been paying for service with his data from the very beginning. With Libra, Facebook is putting a price tag on the data once and for all.

The Digital State: On Your Marks, Get Set...

It is not surprising that state actors see a danger in the development of Libra. Central banks are responsible for issuing currencies and are decisive in controlling the money supply in the economy. It would be economically reckless to enter into a currency competition with private actors. Moreover, there are unanswered questions regarding the modalities of state control. In congressional hearings about Libra, Facebook CEO Mark Zuckerberg was unable to name concrete measures that would ensure that Libra will operate according to standards. A task force of G7 ministries of finance and central bank governors therefore denied Libra's suitability as a functional currency.¹¹ Much like the German federal government's blockchain strategy paper,

M-Pesa users has risen to 28 million worldwide in ten years.¹⁰ The most widespread use is in central and eastern African regions, but M-Pesa is also gaining significantly in popularity in structurally weak countries such as Pakistan, Bangladesh, and Afghanistan.

Moreover, Calibra makes Facebook the only provider so far with a digital wallet for managing Libra. Even though Calibra is a subsidiary, all important communication channels within the Libra ecosystem remain within the direct

the task force does not see private e-currencies as secure, stable alternatives to state currencies. In line with this narrative, the EU finance ministers declared their intention of impairing the access of private stablecoins such as Libra to the market by means of rules and adapted regulations. An initial approach here might be to regulate Facebook according to the “same business, same risks, same rules” principle.¹² If technology companies offer financial and banking services, they should be treated as financial and banking entities. For this reason, calls for a state alternative – that is, a state e-currency – are becoming louder. A look at the international situation shows how digital money is complementing the digital state in China, Sweden, and the European Union.

In China, procedures that require identification can be transacted via the WeChat communication and payment service.

The Digital Yuan: For the People

With the turn of the year from 2019 to 2020, a new law governing the regulation of online encryption came into force in the People’s Republic of China. It gives the state authority over the standardisation of online encryption for politics and industry. This step has legally paved the way for the digital yuan.¹³ Despite the secrecy surrounding technical details and development progress, the advantages of an e-currency for the Chinese government are foreseeable.

On the one hand, there are financial factors. The central bank hopes that the digital yuan will reduce work processes in the financial sector. This would cut costs while stimulating industry. The Qianzhan Industry Research Institute estimates that this will cause the Chinese blockchain industry to grow from 67 million to 459

million yuan in the next two years. It also gives the state an instrument of control that is eminently suited to the digital revolution the country is undergoing. The digital yuan promises to give the government detailed insight into, and a better understanding of, the financial activities of its citizens. Officially, the government hopes to use the digital yuan to combat tax evasion and fraud more effectively, and to track money flows abroad in a more controlled manner. The heavily used communication and payment services of WeChat and Alipay mean that the infrastructure for mobile money transactions is already in place. The operators of these services, Tencent und Alibaba, are also considered to be close to the government and are important pillars of the Chinese digitalisation strategy. For instance, citizens have had the option of displaying their official identification documents on their smartphones via the WeChat app since 2018. This means that procedures that require identification can be transacted via WeChat.¹⁴ The digital yuan is a logical extension of this development.

The military is also planning something similar. China’s armed forces hope to manage personnel with the digital yuan. Specifically, salaries and rewards are to be linked to training performances and exceptional combat performance. Soldiers are to receive immediate feedback on their behaviour, and this conditioning via digital money will be used to continuously improve their performance.¹⁵ If implementation is successful, an expansion of the technology to China’s Social Credit System is conceivable. This would mean rewards to “good” citizens for socially compliant behaviour, and sanctions to “bad” citizens. Digital money offers the necessary technical requirements for storing data concerning individual social behaviour, and applying rules to that behaviour automatically. Fines for misbehaviour would no longer arrive by mail.

The E-krona: Driven by the People

Europe differs significantly from China not only regarding the conditions for developing digital money, but also in the motivation to do

so. Sweden still has not made a final decision about whether or not it will introduce a digital version of its national currency, but work on this is well underway. Currently, the e-krona is in a testing phase. In cooperation with Accenture, a consultancy, Sweden's central bank is analysing the application limits, legislative challenges, and possible effects on the country's economy.¹⁶ There are important questions concerning the practical design of a suitable digital environment. These concern the conditions necessary for citizens to use their smartphones, watches, and cards to pay, but also the risk scenarios in the event of a system failure. According to the Riksbank, the e-krona is intended to complement cash, but not replace it completely. However, the starting point for its possible introduction is the dwindling amount of cash payments in the country. According to a Riksbank study, such payments fell from 39 per cent to 13 per cent between 2010 and 2018.¹⁷ If this trend continues, cash will completely lose acceptance as a payment method. Scandinavia's affinity for technology is well-known. By actively renouncing cash, Swedes are forcing their own country's hand and driving the digital revolution forward.

The popularity of cash payments differs from country to country. Each country can cite different explanatory factors.

The E-euro: Europe's Opportunity

In countries such as Germany, Spain, and Italy, cash payments remain popular. According to the Deutsche Bundesbank, cash accounted for 51 per cent of all payment transactions in Germany in 2018.¹⁸ In the search for reasons for preferring cash, each country can cite different factors. The expansion of digital infrastructure, the purchasing power of various demographic groups, and the state support for digital trends influence what citizens prefer and what the market offers. Nevertheless, an electronic currency in the form

of the digital euro offers opportunities, even though those opportunities will initially be limited to European industry.

Little information is available about specific work on the digital euro, but France has already announced that it will be the first country in the eurozone to test the use of the e-euro. It helps that Christine Lagarde, the ECB's president, also appears open to the e-euro's introduction.¹⁹ In fact, with the ECB, Europe already has an international institution that can efficiently implement regulatory requirements. This includes functioning financial oversight, data protection, and legal conformity for the e-euro. Moreover, in the political arena, gains in efficiency via digital money, especially for cross-border payment transactions, are well-known. That is the verdict of the G7 working group on stablecoins, which met in Tokyo in 2019. From the industry's point of view, this means that important conditions have been met for integrating the pan-European payment infrastructure actively into the digital structural shift. The decisive buzzword here is Industry 4.0.

As international competition becomes increasingly platform-oriented, the simplicity and user-friendliness of payment methods is becoming more and more crucial. The business-to-consumer (B2C) market (digital platforms for end users) is largely developed, especially by Silicon Valley companies. Competition for cooperation among companies (business-to-business, or B2B), on the other hand, is largely open. Digital money could be the ideal instrument for networking people, machines, and products. The structural framework conditions for cooperation among market participants has long been in place and in use in the European single market. Digital money offers an innovative solution for optimising existing value-added chains and creating new ones. In freight transport logistics, the e-euro could drive huge cost reductions, and significantly enhance European business relationships. Applications in European traffic and public transport are also conceivable. The European Union offers sufficient approaches to integrating the e-euro effectively into its financial

and political architecture. The industry is aware of the opportunities the e-euro offers for the digital shift and is prepared to take on the tasks associated with that shift. Policymakers should follow suit.

Conclusion

Digital money frees users from a hitherto necessary dependence on third parties, which primarily guarantees general protection during transactions. These parties will be replaced by technology, opening up new possibilities. Depending on the application, those possibilities will have far-reaching effects on citizens, industry, and the state. Two advantages of digital money over book money or bank deposits are decisive:

1. The existing infrastructure for commerce in the digital space will be simplified. This reduces the costs associated with commerce, closes the distance between transacting parties, and creates new space for innovation.
2. Digital money allows the combination of new technologies (blockchain and smart contracts) to be accessed by all, not only those with exclusive specialist expertise.

From global players to mid-sized companies to private individuals, all actors can and should participate in, and benefit from, progress. For the digital structural shift, this progress consists primarily of the capabilities resulting from combining selective functions, characteristics, and automatisms with the use of digital money. This combination will provide the market with new business models that were previously either too expensive or unfeasible with conventional financial transactions involving book money and bank deposits. Digital money creates the foundation for new competition, which will be of special benefit to collaborative business ideas. The capability of programming money according to one's own individual business model not only fits in well with the development of the digital structural shift to date, but also drives it forward in the long term.

In the hands of a private company with global reach and billions of customers, such a currency will give rise to spheres of influence that constitute dangers that even sovereign states view as threats. In the case of Facebook's Libra e-currency, this is likely due to the fact that the currency competition is usually carried out among states. But especially in regions where state structures impair the access of certain groups of the population to financial services, digital money allows private actors to offer alternatives. This is a decisive point. The actor providing the technology will have a significant impact on the design of the individual's digital environment.

In the case of the digital yuan, controlling and educational measures are not unusual for China's digital transformation. But these measures also show that the path to a digital state cannot always be clearly separated from the path to a digital autocracy. In contrast, the development of the e-krona shows that the introduction of digital money can be seen as a natural process and a reflection of a country's culture. An important component of a digital democracy is the state offering its citizens the opportunity to become one. And this is where the calls for an e-euro come in. This is less a defensive reaction to Libra than an appeal. Europe must become a unified actor in this competition while it is still in its infancy. By introducing the euro, Europeans have already proven that the function of money is more important than its form. Why should that be different with the e-euro?

-translated from German-

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- 1 More on this in Hübner, Christian 2018: More than Just Bitcoin. The Potential of Blockchain Technology, Using the Example of Latin America, International Reports 1/2018, in: <https://bit.ly/2uVEB19> [17 Feb 2020].
- 2 From a technical point of view, blockchain is an application of distributed ledger technology (DLT). It allows authentication of multiple systems, preventing subsequent manipulation. Blockchain is the best-known implementation of DLT and is there used synonymously.
- 3 Hardono, Thomas / Lipton, Alex / Pentland, Alex 2018: Digital Trade Coin: Towards a More Stable Digital Currency, *Society Open Science* 5: 7, pp. 1–23, in: <https://bit.ly/329krAo> [17 Feb 2020].
- 4 Mills, David et al. 2016: Distributed Ledger Technology in Payments, Clearing, and Settlement, in: *Finance and Economics Discussion Series 2016: 095*, pp. 1–34, here: p. 14.
- 5 Commerzbank 2019: Commerzbank tests blockchain-based machine-to-machine payment solution for the first time, 8 Aug 2019, in: <https://bit.ly/2TmdXLB> [12 Feb 2020].
- 6 Utzig, Siegfried / Tenner, Tobias 2019: German banks say: The economy needs a programmable digital euro!, *Bankenverband*, 30 Oct 2019, in: <https://bit.ly/2Vlfmh3> [12 Feb 2020].
- 7 Libra 2019: Libra White Paper, in: <https://libra.org/en-US/white-paper> [12 Feb 2020].
- 8 Ibid.
- 9 Cf. Prinz, Wolfgang 2019: Die Idee hinter Libra ist wichtig für Deutschland, *Frankfurter Allgemeine Zeitung*, 10 Dec 2019, in: <https://faz.net/-gv6-9u57d> [12 Feb 2020].
- 10 Thome, Matthias 2019: Gründerszene in Kenia. Start-up als Problemlöser?, *ZDF*, 13 Apr 2019, in: <https://bit.ly/31NT3HO> [12 Feb 2020].
- 11 G7 Working Group on Stablecoins 2019: Investigating the impact of global stablecoins, *CPMI Papers* 187, 18 Oct 2019, in: <https://bit.ly/38nbMfU> [12 Feb 2020].
- 12 Coëuré, Benoît 2019: Introductory remarks (speech), *European Central Bank*, 25 Sept 2019, in: <https://bit.ly/2VLvf6j> [12 Feb 2020].
- 13 Tabeta, Shunsuke 2019: China's digital yuan takes shape with new encryption law. Beijing enhances control over tools crucial to developing blockchain, *Nikkei Asian Review*, 31 Dec 2019, in: <https://s.nikkei.com/2vvjrtO> [12 Feb 2020].
- 14 Ankenbrand, Hendrik 2018: Chinas Überwachungsapp drängt in die Welt, *Frankfurter Allgemeine Zeitung*, 15 Jan 2018, in: <https://faz.net/-ikh-962z2> [12 Feb 2020].
- 15 Xuanzun, Liu 2019: Chinese military could deploy blockchain management, *Global Times*, 18 Nov 2019, in: <https://bit.ly/31VrPiI> [12 Feb 2020].
- 16 Sveriges Riksbank 2019: E-krona, 13 Dec 2019, in: <https://bit.ly/2vnxced> [12 Feb 2020].
- 17 Sveriges Riksbank 2018: E-krona project, report 2, 26 Oct 2018, in: <https://bit.ly/2OQnhER> [12 Feb 2020].
- 18 Deutsche Bundesbank Eurosystem 2019: Study finds that cash payments are quick and cheap, 12 Feb 2019, in: <https://bit.ly/2PJYmmO> [12 Feb 2020].
- 19 Stephan, Mark 2019: Kommt jetzt der digitale Euro?, *ARD*, 12 Nov 2019, in: <https://bit.ly/2OPRfsz> [12 Feb 2020].

Under Discussion



Illustration: © racken.

Democratising Deepfakes

How Technological Development Can Influence Our Social Consensus

An Interview with Dr. Hans-Jakob Schindler,
Senior Director of the Counter Extremism Project

The dissemination of fake news as a political instrument has long been an issue in contemporary political discourse. It is important to react to technological innovations that continue to expand the potential for disinformation campaigns, threatening our domestic security. Nael Semaan talked to Dr. Hans-Jakob Schindler, Senior Director of the Counter Extremism Project, about the “new superweapon of fake news” – so-called deepfakes.

Ai: Dr. Schindler, deepfakes have become commonplace and are rapidly spreading online. It is still difficult to differentiate between authentic and unauthentic photos or videos. Deepfakes are, so to speak, the new superweapon of fake news – now it is not only possible to disseminate disinformation, but also to make it look credible. But what exactly are deepfakes, and what is their place in a political landscape already subjected to disinformation?

Hans-Jakob Schindler: In recent years, the popularity of social media has made fake news and

deepfakes part of routine political discourse. Yet, it is important to clearly define the two phenomena. Fake news is false information that is disseminated and then shared further. It is manifested in all forms, including text, audio, images, and video. That is why fake news is fundamentally a social problem that must be combatted in a broad manner. Deepfakes are a subset of fake news. They are electronically modified videos and photographic images that change or simulate people and events and harness the persuasive power of audiovisual media to achieve their effect.

Subsequent changes to audiovisual media are not a fundamentally new phenomenon. In the film industry, electronically modifying videos and recordings has now become an accepted artistic device. For instance, special effects can make actors appear younger, or insert them into old video footage.¹ The movie “Forrest Gump” already pioneered this technology back in 1994. The emergence of deepfakes in political discourse in the form of photo manipulation is not particularly new, either. For instance, already at the start of the 20th century, during Stalin’s dictatorship in the Soviet Union, government officials who had fallen out of favour were regularly removed from photos in order to eliminate them, at Stalin’s behest, from the official history and national memory. In the past, such operations required a high degree of technical and manual knowledge and skill.

This phenomenon is currently gaining in importance since social media is increasingly exploited as a means of manipulation and, in addition to simple false information, political manipulations occur. The technical development has also ensured that technological obstacles are much easier to overcome, and neither the capabilities of a film studio nor extraordinary computing power are necessary to produce deepfakes. A more playful variation of this technology is the face-swap function that is known best from the social media platform Snapchat.²

Ai: Does that mean that you no longer have to be a techie to manipulate images and videos? So anyone could create a deepfake?

Hans-Jakob Schindler: Professor Hany Farid, Senior Advisor of the Counter Extremism Project (CEP),

is currently working on a study on this issue on behalf of the CEP and the Konrad-Adenauer-Stiftung.³ In this context, he speaks of a “democratisation” of deepfake technology. That means that the production of deepfakes can be performed by a much larger number of actors, and hence result in an increased occurrence and political impact.



Manipulation via app: Today, technological obstacles for producing deepfakes are much easier to overcome.
Source: © Steve Marcus, Reuters.

In principle, there are three methods for creating deepfakes: face swap, lip sync, and puppet master. The face swap method transfers the facial features of one person to the head of another. This enables, for instance, an actor to perform certain actions while the face of the targeted person is added creating the impression that he or she performed the actions.

The more technically elaborate lip sync method only simulates the target person's lip movements so that they adapt to the new spoken words. The latter is either spoken synchronously or provided by synthesising the target person's voice. This allows a recording to be manipulated so that the target person says whatever is necessary for the video manipulation. However, it is sometimes possible to see that the lip movements do not always match the rest of the target person's facial movements.

The puppet master method is the most technically complex, and has not yet been fully developed and perfected. It involves maintaining the target person's face in the video, but completely electronically manipulating his or her facial movements. This means that not only the voice, but all of the facial movements, can be entirely synthesised. The average viewer no longer notices any manipulation, therefore making it possible to have the target person speak authentically given that facial muscle movements are in complete harmony with mouth movements. The weakness of this method is that the facial movements in the manipulated video do not always correspond to the target person's natural movement pattern – this is an important point for forensic detection and proof of manipulation.

Ai: Could you give some current examples of deepfakes?

Hans-Jakob Schindler: At the moment, illegal deepfakes are primarily being used in blackmailing

and extortion cases. I recently heard about a case in which an employee received a call that he assumed was from his superior. However, the voice on the phone was synthesised. The employee shared important account data that resulted in financial damage to his company.⁴ Deepfakes are also used in non-consensual pornography.⁵ This involves blackmail with electronically manipulated recordings that allegedly show the victim in embarrassing situations. Victims pay to ensure that the videos are not distributed.

A subset of deepfakes is the creation of artificial identities. Here, images of existing persons are combined electronically to produce images of a new person that do not match any other living person. Such new, unique electronic identities can be fleshed out with CVs and biographical documents that can be ordered online. This is a new variant of identity fraud. The artificial identities are then used to case a target person for espionage or prepare a spear-phishing operation.⁶

But we are also witnessing an increased use of deepfake videos in the political arena, too. Last year, a video of the Speaker of the US House of Representatives, Nancy Pelosi, circulated in which she was supposedly drunk while giving a speech.⁷ Although the video was debunked relatively quickly, it underscored the explosive political potential of combining this technology with the dissemination capabilities of social media.

Ai: What specific dangers do deepfakes pose to our society? What actors have the intention and capability of using deepfakes as a weapon?

Hans-Jakob Schindler: Video recordings are extremely credible, since they are assumed to accurately reflect reality. That is why skilful manipulation of such recordings for criminal or political manipulation is extremely problematic. If, as can be expected, the current technical trend of simplification and dissemination of this technology continues, it will further undermine the basic social consensus about what is factually true and what is not. One of the gravest consequences is the liar's dividend.⁸ Because it is now possible to manipulate videos almost perfectly, it can always be claimed that videos of embarrassing or illegal actions are actually deepfakes. This has repercussions for both, political discourse and, in some cases, legal procedures. That is why the development of technologies that allow detection of deepfakes is an important societal task.

In the last few years, the political sphere has seen repeated cases in which authoritarian regimes attempted to manipulate political processes and elections in democratic states and erode the basic societal consensus. The 2016 US presidential election is merely the best-known example of this. The progressive dissemination and simplification of this technology allows such actors to dispense with state structures when implementing their strategies. If supposedly private individuals can produce deepfakes on behalf of states, it will be all the more difficult to identify clear political responsibility. This represents a growing danger, especially since major technology companies still refuse to assume any responsibility for the dissemination of such manipulations. We only need to think of the US congressional hearings with Mark Zuckerberg in late October 2019, during which he, as CEO of Facebook, denied any responsibility of Facebook for the distribution of false political information on his global platform.⁹



Effective propaganda machinery: It is assumable that terrorist organisations will employ new technologies in future to support the manipulation of individuals in their efforts to radicalise and recruit. Source: © Dado Ruvic, Reuters.

Ai: You have been dealing with international security policy for 20 years. Your focus has always been on combatting terrorism. Large jihadist organisations, such as the so-called Islamic State, are known for their effective media and propaganda strategies. How relevant and viable is the use of deepfakes for terrorist organisations?

Hans-Jakob Schindler: At the moment, there are no known cases of terror organisations producing

deepfakes. However, that does not stop the effective propaganda machinery of organisations such as the Islamic State (IS) from employing such technologies in future to support the manipulation of individuals in their efforts to radicalise and recruit.

Specifically, the deepfake phenomenon can play a role in the judicial processing of IS returners from Iraq and Syria. Some current cases in Europe are dealing with serious IS crimes.¹⁰ Images and video material are also being used as evidence. The authenticity of these IS recordings are beyond question, but the liar's dividend could make prosecution much more difficult in less serious cases. If the accused IS members could now credibly assert that images and video and audio recordings of their crimes have been electronically manipulated, the prosecutor would be faced with new technical challenges.

Ai: But with a little time, it is often possible to prove whether an image or video has been manipulated or not. Should a rebuttal and explanation of the disinformation not be sufficient to combat the effects of deepfakes?

Hans-Jakob Schindler: It is now possible to electronically detect deepfake videos, yet it takes a

great deal of technical effort. The University of California, Berkeley is currently working on developing such methods.¹¹ In principle, these detection methods are based on the creation of typical movement patterns for individuals. Each person has a number of idiosyncratic head, mouth, and muscle movements that match their spoken words and result in a speech and movement pattern unique to that individual. A relatively precise pattern can be calculated from this combination of various factors. This speech and movement pattern is then compared to the recognisable patterns in the video. Since manipulation necessarily involves changing these patterns, it can thus be proven with a high degree of mathematical probability.

However, this method works only if there are enough reliable original recordings of the person shown in the suspicious video for a pattern to be calculated. Hence, it is currently available only for people in the public eye. Fortunately, a high-quality deepfake video also requires a large number of original recordings, so this method is effective at providing evidence.

Such forensic methods are especially useful in the judicial area, where collecting evidence provides sufficient time for effective forensic proof to be collated. Such methods are also helpful in effectively combatting deepfake videos used for political manipulation, but are not sufficient. Social science research has shown that merely debunking fake news is not enough to greatly reduce its impact.¹² Corrections of false information are not as influential on consumers of fake news as the original story. The same effect can be assumed for deepfake videos. That is why forensic evidence of such manipulation only form one part of a wider range of measures.

Ai: How else can the threat of deepfakes be effectively combatted?

Hans-Jakob Schindler: Effectively combatting political manipulation owing to deepfake videos

will require a range of solutions. First of all, it is important to raise social and political awareness of the capabilities and dangers arising from this technology. It must be emphasised that not every video disseminated via social media is credible. Questions of trust in the system continue to be important here. If trust in the effectiveness and credibility of the political system is undermined, manipulation becomes easier and the damage caused by deepfake videos greater.

In addition to raising awareness, there are technical options for limiting the effect of deepfake videos. If the industry could agree upon the automatic inclusion of an electronic signature in the data set when the video is originally recorded, originals could be certified in this way. This technology, called “hashes”, has been around for a long time, and is successfully used in various applications such as data transmission.¹³ Whenever there is a change in the original file, the hash also changes, which could provide an initial indication of potential manipulation.

Ultimately, we will also need to take a closer look at the dissemination mechanisms for deepfake videos. This primarily involves the large social media platforms and companies. There is no way to control global dissemination mechanisms with hundreds of millions of users, and in the case of Facebook even billions, without some sense of corporate social responsibility. The huge impact of targeted political manipulation is significantly increased when manipulation is widely distributed. For several years, the Counter Extremism Project has argued that the adoption of regulatory and legislative measures is inevitable. Germany’s Network Enforcement Act (Netzwerkdurchsetzungsgesetz, or NetzDG) represents a trailblazing first step towards more responsibility for platform operators.¹⁴ Deepfake videos that are used for criminal or politically manipulative purposes can be defined as a violation of the victim’s right to his or her own image. They thus constitute illegal content within the meaning of Paragraph 1 (3) of the NetzDG, and are potentially already covered by the law.¹⁵ The Counter Extremism Project will actively support the law’s amendment, which is to take place in 2020, from its new office in Berlin.

Ai: At KAS, we are taking a multi-faceted approach to the issue of deepfakes in such formats as our Facts & Findings, in which economic journalist Norbert Lossau discusses necessary action and solutions for dealing with deepfakes. We are working with CEP to publish a joint study in mid-2020, which specifically addresses deepfake security concerns. In this context, I would like to ask you a question regarding your forecast for the situation in Germany: Do you think that the upcoming Bundestag elections might become a target for deepfake attacks?

Hans-Jakob Schindler: There is no doubt that, in the last few years, external actors have attempted

to influence the political process within Germany.¹⁶ There is current evidence that deepfake videos were used to spread political disinformation during Britain’s House of Commons elections.¹⁷ There is no reason to assume that such actors will not try again, using all the technical means at their disposal, to achieve their goal. Deepfakes are a

potentially extremely effective new technical weapon in this context. That is why it will be important to raise public awareness and employ technical and legislative measures to enhance the defensibility of the political process in Germany. A certain degree of manipulation will remain possible in any system. The question is, however, whether the effectiveness of such attempts and thus the harm to political and social discourse can be contained.

There is still enough time to counteract the manipulative potential of deepfakes. Nevertheless, the social debate surrounding the issue should start now, since, as I have pointed out, a suite of measures will be necessary. Decisions about how and to what extent new structures are to be created, technology innovations implemented, or regulatory interventions made, will certainly take longer than the technical refinement of deepfake technology. CEP and Konrad-Adenauer-Stiftung will publish the results of their joint study in mid-2020. The study will also include initial specific recommendations for actions for political decision-makers in Berlin.

*The interview was conducted by Nael Semaan,
Policy Advisor for Counter Terrorism at the
Konrad-Adenauer-Stiftung.*

-translated from German-

- 1 Osteried, Peter 2019: Wie Hollywood die Totenruhe stört, *golem.de*, 13 Nov 2019, in: <https://glm.io/144938?t> [10 Feb 2020].
- 2 Goss, Tricia 2019: How to Do a Face Swap, *lifewire*, 11 Nov 2019, *lifewire*, in: <https://bit.ly/38ga0x3> [10 Feb 2020].
- 3 Counter Extremism Project, in: <https://counterextremism.com> [12 Feb 2020].
- 4 Stupp, Catherine 2019: Fraudsters Used AI to Mimic CEO's Voice in Unusual Cybercrime Case, *The Wall Street Journal*, 30 Aug 2019, in: <https://on.wsj.com/31LyThL> [10 Feb 2020].
- 5 "Non-consensual pornography" refers to the distribution of private images and video recordings against the will of the affected person. See Scott, Alexandra 2017: What is Nonconsensual Pornography?, *National Council of Juvenile and Family Court Judges*, 12 Feb 2017, in: <https://bit.ly/2tUh43A> [10 Feb 2020].
- 6 Satter, Raphael 2019: Experts: Spy used AI-generated face to connect with targets, *AP News*, 13 Jun 2019, in: <https://bit.ly/37fnaJm> [10 Feb 2020]; Swinhoe, Dan 2019: What is spear fishing? Why targeted email attacks are so difficult to stop, *CSO*, 21 Jan 2019, in: <https://bit.ly/31UfaMY> [10 Feb 2020].
- 7 Winkler, Peter 2019: Ein Video zeigt eine betrunkene Nancy Pelosi – und führt uns vor Augen, was mit Deepfakes heute alles möglich ist, *Neue Zürcher Zeitung*, 25 May 2019, in: <https://nzz.ch/ld.1484614> [10 Feb 2020].
- 8 Harwell, Drew 2019: Top AI researchers race to detect 'deepfake' videos: 'We are outgunned', *The Washington Post*, 12 Jun 2019, in: <https://wapo.st/2UKvb6A> [10 Feb 2020].
- 9 Rodriguez, Salvador 2019: Watch video of AOC grilling Zuckerberg on Facebook allowing lies in political ads, *CNBC*, 24 Oct 2019, in: <https://cnb.cx/2OLgM64> [10 Feb 2020].
- 10 United Nations Meetings Coverage and Press Releases 2019: Victims' Testimony Steering United Nations Team Investigating ISIL / Da'esh Atrocity Crimes in Iraq, Special Adviser Tells Security Council, 26 Nov 2019, in: <https://bit.ly/31UfGdS> [10 Feb 2020].
- 11 Manke, Kara 2019: Researchers From the I School and Engineering Use Facial Quirks to Unmask 'Deepfakes', *Berkeley School of Information*, 18 Jun 2019, in: <https://bit.ly/38gRggS> [11 Feb 2020].
- 12 Chan, Man-pui Sally / Jones, Christopher R. / Jamieson, Kathleen Hall / Albarracín, Dolores 2017: Debunking, A Meta-Analysis of the Psychological Efficacy of Messages Countering Misinformation, in: *Psychological Science* 28:11, pp. 1531–1546.
- 13 Schmitz, Peter 2017: Was ist ein Hash?, *Security Insider*, 23 Aug 2017, in: <https://bit.ly/2HhVdGc> [10 Feb 2020].
- 14 Echikson, William / Knodt, Olivia 2018: Germany's NetzDG: A key test for combatting online hate, *Counter Extremism Report 2018/09*, *Centre for European Policy Studies (CEPS)*, Nov 2018, in: <https://bit.ly/2tUh8Ak> [10 Feb 2020].
- 15 It would be appropriate to make special mention of § 1 (3) of the NetzDG in conjunction with § 201a of the German Criminal Code: see Federal Ministry of Justice and Consumer Protection 2017: Gesetz zur Verbesserung der Rechtsdurchsetzung in sozialen Netzwerken (Netzwerkdurchsetzungsgesetz – NetzDG), 1 Sep 2019, in: <https://bit.ly/2SDlMej> [10 Feb 2020].
- 16 Pörzgen, Gemma 2017: Informationskrieg in Deutschland? Zur Gefahr russischer Desinformation im Bundestagswahljahr, *Federal Agency for Civic Education (bpb)*, *Aus Politik und Zeitgeschichte (APuZ)*, 19 May 2017, in: <https://bpb.de/248506> [10 Feb 2020].
- 17 The Soufan Center 2019: IntelBrief: The Use of Disinformation in the British Election, 13 Dec 2019, in: <https://bit.ly/2UJTcKt> [10 Feb 2020].

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Between Yurts and Skyscrapers

Mongolia's Youth Are Grappling with a Corrupt Elite

Johann C. Fuhrmann

Young people in Mongolia are fighting for a say in politics. Internet activists are protesting against corruption in politics and business. In Ulaanbaatar, young women are fighting against sexual violence, and for more political participation. Meanwhile, traditional ways of life are in retreat. Are profound social changes, coupled with an ossified political elite, splitting Mongolian society?

A Local Expression of a Global Debate?

“Now it’s war” – the New York Times recently used these words to describe young people’s feelings of resentment towards the baby boomer generation, i.e. those born between 1945 and 1965.¹ The hashtag “OK Boomer” is used by young people to disparage certain attitudes attributed to the older generation. “OK Boomer” is a digital way of dismissing them, a way of saying “Sure thing, grandpa”, that is taking the world by storm. The Fridays for Future protests, and the viral video by vlogger Rezo, have shown that Germany is also experiencing a gap in understanding between the young and the old, particularly when it comes to climate change. Whether it is Greta Thunberg, climate protests or the OK Boomer hashtag – these topics are also covered by the Mongolian media. The journalist Manjaagiin Ichinnorov recently raised the question of whether this landlocked Asian country is also threatened by generational conflict.² However, due to the different starting points and objectives, such a comparison hardly seems possible: While climate protection is at the forefront of the European debate, in Mongolia, young people are mainly fighting to uphold basic democratic rights, and for more social and political participation. Young Mongolians are confronted with a corrupt political elite that shows no willingness to listen to their concerns. On top of this, a proposed new law on NGOs is calling into question the future of civil society. Political disenchantment and growing scepticism towards politicians are the immediate consequences. In parallel, the rapid advance of urbanisation is leading to large-scale social upheaval.

Resignation and Protest

“Including Youth in the Development of Mongolia” was the title of the United Nations’ 2016 Human Development Report on the country.³ This study provides valuable insights into young people’s attitudes towards politics. Mongolia’s youth, which the organisation defines as people aged between 15 and 24, makes up the country’s largest demographic group, at over thirty per cent. They are the first generation to grow up in a democracy in the wake of the peaceful revolution of 1990 and the fall of the socialist dictatorship. Unfortunately, it has been characterised by frequent changes of government – 16 over the last 30 years – and rampant corruption. Young people’s socialisation has also shaped their political consciousness: according to the report, more than 60 per cent of youth in Mongolia consider politics to be dirty, and believe that injustice drives good people away from politics.⁴ Very few want to join political parties or get in touch with their MPs. Yet the impression of an apolitical generation is deceptive, as became clear about a year ago, when tens of thousands took to Twitter and Facebook to protest a corruption scandal involving the ruling party under the hashtag Ждү (SME, small and medium-sized enterprises). At the time, in late 2018, it emerged that numerous politicians in the ruling Mongolian People’s Party (MPP), including two ministers and fourteen MPs, had embezzled a sovereign wealth fund set up to support small and medium-sized enterprises.⁵ According to Mongolia expert Julian Dierkes, over the next few weeks Ждү became “one of the most active and unifying hashtags we have seen emerge on Mongolian social media.”⁶

But this massive protest by young internet activists merely led to the dismissal of the parliamentary speaker, Mijeegombyn Enkbold, and the Minister of Food, Agriculture and Light Industry, Batjargal Batzorig, who was responsible for allocating the money and, among other things, had given his wife a loan from the fund. The fourteen MPs who had enriched themselves in the SME scandal were not prosecuted and remained in office. A subsequent parliamentary vote decided that the government should stay in power, and also split the opposition Democratic Party (DP). Three members of the DP had voted for the MPP government; two of them set up a new party a few months later. Meanwhile, media reports of corruption in the ranks of the ruling party continue unabated. In early November 2019, two MPP politicians were each sentenced to four years in prison for their involvement in the sale of government offices.⁷

Since the youth lacks adequate representation in parliament, Mongolian politicians are rarely taking their views seriously.

Even four years ago, the UN report was critical of young people's dwindling trust and lack of involvement in political institutions. It concluded that Mongolia's youth lacked adequate representation in parliament, and that their views were rarely taken seriously by politicians.⁸ Party funding is a serious problem in this respect, but this is not covered in the report. Party funding not only lacks transparency but also requires prospective MPs, particularly newcomers to politics, to make large payments out of their own pockets. Very few young people have the personal resources or sponsorship to finance expensive election campaigns. High membership fees for political parties disadvantage young women in particular, who, on average, earn 1.4 times less than men.⁹ Particularly in rural Mongolia, women often cannot afford to join political

parties. This is also reflected in the composition of parliament, where only 13 out of 76 MPs are women. The youngest member of parliament, Nyam-Osoryn Uchral, is 34 years old, followed by five aged 39.

The MPP and DP both have youth wings that are represented in every province around the country. A glimmer of hope was provided by the fact that the DP's youth wing was heavily involved in drafting the party's new manifesto. Sukhbaatar Erdenebold, the chairman of the youth organisation, was entrusted with this process. The draft manifesto was debated at 21 regional conferences and finally unanimously adopted on 5 December 2018 at the DP's 9th Party Congress. This was a groundbreaking step in light of young people's general lack of engagement with politics. It also raised hopes that parliament could be rejuvenated after the June 2020 elections. But the DP's recent announcement that candidates in the upcoming parliamentary elections will be required to pay one hundred million Tugrik, the equivalent of over 30,000 euros, into the party's coffers has triggered controversy and disillusionment.¹⁰ It is feared that these financial obstacles will prevent many talented young politicians from standing for election.

Policy failures and persistent corruption mean that young people are increasingly losing trust in their country's democratic institutions. In a comparative survey of twelve Asian countries, Mongolia's youth had the most negative view of parliament. Only ten per cent of them believed that parliament responds to the interests of its citizens.¹¹ Although they are disenchanted with politics, many young people nevertheless get involved in civil society organisations as a way of making their voices heard.

Young Women and the Fight for Equality

In late November 2019, the chairman of Mongolia's constitutional court, Dorj Odbayar, finally succumbed to public pressure and was removed from his post. The 52-year-old was accused of sexually harassing a South Korean flight attendant on a flight from Ulaanbaatar to Incheon.¹² He was

allegedly drunk during the incident that took place last October. He was initially backed by the government, and the parliamentary speaker stated that the South Korean police had confused the seat number and arrested the wrong person. The constitutional court's press office stated that the judge was simply defending a fellow Mongolian who had been wrongly accused of sexual assault.¹³ But in the end, these versions of events could not be sustained. Once the incident became public, the social media furore continued for many weeks, and an online petition, which has attracted thousands of signatories, is still demanding an official apology from the chairman of the court. The fierce controversy ignited by this incident in Mongolia's media was partly due to the fact that sexual violence against women is so widespread. For example, a report by the United Nations Population Fund reveals that more than half of all women in Mongolia who are in a relationship experience one or more forms of violence, whether physical, sexual or psychological.¹⁴ Domestic violence was only made a criminal offence three years ago. Mongolia is clearly a very patriarchal country, as is demonstrated by the fact that all 21 of the country's provincial governors are men. The situation is similar in business, where only 15 per cent of top executives are women – despite various statistics showing that 60 to 80 per cent of university graduates are women.¹⁵ Several years ago, the United Nations Development Programme called for an overhaul of labour market policy, but so far little has changed.

Young women feel let down by their political representatives since they withdrew a law against sexual harassment in 2017.

In Ulaanbaatar, the Mongolian capital, young women are no longer prepared to simply put up with sexual violence and gender inequality. This is where four like-minded women banded together a few years ago to form a women's

Anti-government sentiments: Policy failures and → persistent corruption mean that young people are increasingly losing trust in their country's democratic institutions.

Source: © Rentsendorj Bazarsukh, Reuters.

rights organisation called Young Women for Change. Apart from organising demonstrations, this NGO also runs training courses and seminars in a bid to raise awareness of the problem and change society's attitudes. The activists also use comics and videos to deliberately draw young men into the debate. They feel they have been let down by their political representatives, who passed a law against sexual harassment in 2015 then promptly withdrew it two years later. With bizarre reasoning, one of the few female MPs, Oyunkhorol Dulamsuren of the MPP, justified it as follows: "The reason why parliament removed it from criminal law is that the action was taken in the same vein as sexual violence, so it was unfair for men."¹⁶ Around one year later, in June 2018, Dulamsuren's fellow MP and party member Gantulga had to step down from parliament after being accused of rape.

But the Young Women for Change are not ready to give up. Several of its founding members have been involved in politics for years and now want to stand in the parliamentary elections in June 2020 in order to finally achieve the longed-for transformation in women's policy. They are also taking their fight for equality to the country's digital media, with more than 67,000 followers on Facebook alone.¹⁷

The Threat to Nationalise Civil Society

Recent plans by the Mongolian Ministry of Justice are giving rise to concerns that young people could also experience repression in their civic activities. On 16 October 2019, the Ministry of Justice website published a proposed draft law on NGOs, which seeks to give the government vastly more power over civil society.¹⁸ Mongolia currently has around 21,000 registered NGOs compared to a mere 1,000 twenty years ago. The draft law on "non-profit legal entities" calls



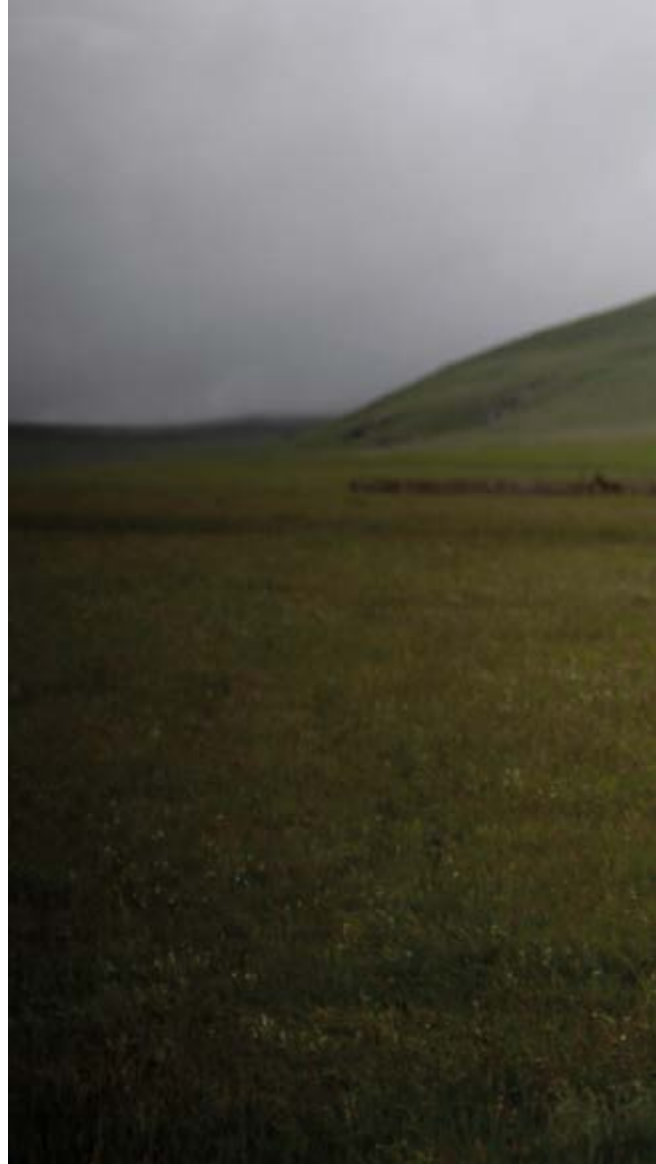
for the creation of a Civil Society Development Council, which is to be endowed with extensive powers and rights of intervention. For example, the council is to be empowered to monitor the activities and finances of NGOs, and to examine them for their “public benefit”.¹⁹ What exactly is meant by “public benefit” and the consequences of not meeting this criterion, remains unclear.

Critics of the new NGO law stress that the room for interpretation could turn out to be highly problematic.

It is clear that the proposed council will be under the government’s control. According to the draft law, the guidelines for the new council will be set by the government chancellery, and the council’s nine members will be appointed and confirmed by the prime minister after an unspecified aptitude test.²⁰ Public funding currently accounts for less than two per cent of the income of Mongolian NGOs, but the draft law also aims to give the government more control over this area.²¹ In future, the government proposes to draw up a list of priorities every two years to determine which topics and project areas it considers worthy of funding. The draft law has already set out the areas in which NGOs will be allowed to operate – and where not. For example, it aims to prohibit joint activities with political parties, and the promotion of religious activities or projects.²² In addition, it proposes that NGOs should be dissolved if their “main objective” changes.

The multitude of vague and indeterminate terms leaves a great deal of room for interpretation. This is what critics of the draft law find particularly worrying. For example, Article 14.2 prohibits activities that are directed against “national unity” and that “promote extremism”. Whether criticising the government or demanding minority rights amounts to extremism remains unclear. In an article for the Washington Post, journalist Aubrey Menarndt highlights how Russia used

identical wording to ban NGOs advocating for the rights of sexual minorities.²³ This example underscores the fact that the draft law is not oriented towards Western models and grants the government extensive rights of intervention in civil society. This is also demonstrated by the planned reporting obligations on funding: in future, NGOs will not only have to report to the relevant financial authorities, but also be obliged to publicly declare all their income, expenditure and activities. This suggests that the state is not just interested in financial transparency, but also in discrediting NGOs that receive funding





Is the youth running off? Young Mongolians are particularly affected by vast internal migration.
Source: © Mareike Guensche, Reuters.

from abroad. At present, foreign donors provide Mongolian NGOs with nearly 68 per cent of their funds.²⁴

The journalist Jargal DeFacto is one of the draft law's most prominent opponents. He has been warning the public about its potential impact for months. Specifically, he fears that NGOs will no longer be able to exercise their government oversight function, and that it will be more difficult for civil society to make its voice heard to the authorities. One reason for this is the vaguely worded ban on political activities.

More seriously, however, the law could lead to self-censorship because NGOs are aware of the unclear legal provisions and the massive influence wielded by the state.

One of the law's supporters is parliamentary speaker Gombojavyn Zandanshatar, who said in a Facebook post that there was absolutely no desire to take "backward steps" with regard to the development of civil society.²⁵ However, he points to the need for more scrutiny of NGOs' financial flows. Indeed, this has been stipulated by the International Monetary Fund and the

Financial Action Task Force on Money Laundering.²⁶ Over the last few months, politicians and the public have been preoccupied by the fact that the organisation recently put Mongolia on its “grey list”. And therein lies a danger: discussions with experts on the ground have revealed that the law is actually quite popular. The Mongolian public is keen to see steps taken to curb corruption. The large number of registered NGOs suggests that some of them are being used for tax evasion or even money laundering purposes. Most observers agree that there is a need for a transparent NGO law. However, the current draft goes far beyond what is needed, and threatens the continued existence of the flourishing NGO landscape that has emerged in recent decades. According to their own figures, over 44 per cent of young men and more than 55 per cent of young women are actively involved in the work of youth organisations.²⁷ These young activists are trying to alert people to the potential impact of the law, such as by posting videos on social media.²⁸ But it remains to be seen whether the law can be stopped.

Urbanisation and the Decline of Nomadic Culture

Urbanisation in Mongolia is progressing rapidly and massively. In 1956, 75 per cent of the population still lived in rural areas. With the onset of industrialisation, between the 1960s and 1980s, a rural exodus began on an unimagined scale. Many nomads gave up animal husbandry and moved to the cities. Today, almost half of Mongolia’s 3.2 million citizens live in the capital, Ulaanbaatar. Only about 300,000 Mongolians still live as nomads.²⁹ Young Mongolians are particularly affected by internal migration: around 60 per cent of migrants arriving in Ulaanbaatar between 2000 and 2010 were aged 15 to 34.³⁰ Around 30 per cent of Mongolians live in poverty. According to an internal migration study published in 2018, the main drivers of migration are economic considerations, family welfare and the desire for improved living conditions.³¹ There are no reliable figures on youth unemployment in Mongolia. Officially, around 18 per cent of young people between the ages of

20 and 24 are deemed to be unemployed, which is more than twice the national average.³² However, the number of unreported cases is likely to be much higher.

The proposed NGO law calls the future of Mongolian civil society in question as a whole.

Urbanisation is bringing major changes to family life, and once again it is young families who are particularly affected. Often one or even both parents live apart from their children. Mothers often live in provincial towns with their children so that they can go to school, while the men work away in agriculture or mining. In November 2019 the National Statistical Office grabbed the headlines when it published its latest figures showing a sharp increase in the number of households headed by women – currently in excess of 72,000.³³ The authorities cited the main reasons for this as “early marriages, early sexual activity and divorce due to domestic violence”.³⁴ The divorce rate has risen dramatically over the last few years: 21,000 marriages per year are matched by 4,200 divorces. In light of these statistics, Oyunkhorol Dulamsuren, Chairwoman of the Standing Committee on Social Policy, Education, Culture and Science, called for the establishment of a Ministry for Families, Children and Youth. She stated: “Today’s youth policy is inadequate. The government should focus more strongly on increasing happiness rather than on economic growth.”³⁵

Conclusion: The Future of Democracy Is at Risk

Young people are being shut out of Mongolian politics – with serious consequences. Trust in democratic institutions is rapidly being eroded. Young people’s protests about rampant corruption in politics and business are not being taken seriously by those in charge. Young women are inadequately protected against workplace discrimination and sexual assault. Although

many young people are actively involved in civil society, the proposed NGO law now threatens censorship and reprisals, while simultaneously calling into question the future of Mongolian civil society as a whole. Young people are also disproportionately affected by the consequences of internal migration, and the number of single mothers is on the rise.

There is plenty of evidence to suggest that Mongolian society is being divided by the actions of the political elite, who are not in a position to manage the massive social changes that are sweeping the country. There is an urgent need for political dialogue, but this will require politicians to make concessions. It is important that young people are actively involved in political processes, otherwise the country's achievements since democratisation will be jeopardised. An important first step would be to ensure that civics and politics are taught in schools. Young people have to turn to television and social media for information because they learn so little about Mongolia's democratic system at school.³⁶ It is also vital to provide political parties with public funding so that people can get involved in their work and stand for election regardless of their income level. Women need more protection against violence and should be supported in the labour market. Tightening up existing laws and introducing new ones relating to sexual violence would be a good step in the right direction, along with education campaigns and government funding programmes. There is no doubt that Mongolia's democracy is facing a major challenge. How will it handle the massive social tensions that have grown up between its yurts and skyscrapers?

—translated from German—

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- 1 Cf. Lorenz, Taylor 2019: 'OK Boomer' Marks the End of Friendly Generational Relations, The New York Times, 29 Oct 2019, in: <https://nyti.ms/2vr2913> [1 Jan 2020].
- 2 Ichinnorov 2019: GenZ, Millennials, Boomers: Understanding the generation gap, Unread, 21 Nov 2019, in: <https://bit.ly/37yXcl5> [1 Jan 2020].
- 3 Cf. United Nations Development Programme (UNDP) 2016: Mongolia Human Development Report 2016, in: <https://bit.ly/36zKdOO> [1 Jan 2020].
- 4 Ibid., p.100.
- 5 Cf. Fuhrmann, Johann C. 2018: Regierungskrise in der Mongolei, Konrad-Adenauer-Stiftung, Country Reports, 30 Nov 2018, in: <https://bit.ly/2O4HZVg> [1 Jan 2020].
- 6 Cf. Dierkes, Julian 2018: Politicians in the Wake of the Ждү Scandal, Mongolia Focus, 18 Nov 2018, in: <https://bit.ly/2RYCPIX> [1 Jan 2020].
- 7 Cf. The UB Post 2019: Ts. Sandui and A. Ganbaatar sentenced to 4 years over '60 billion MNT' case, 4 Nov 2019, p.1.
- 8 Cf. UNDP 2016, n.3, p.15.
- 9 Ibid., p.20.
- 10 Cf. Tugul, A. 2019, "The fact that every candidate has to pay 50 to 100 million Tugrik to the party is based on sound calculations", icon, 12 Nov 2019, in: <https://ikon.mn/n/1q0h> [1 Jan 2020].
- 11 Cf. UNDP 2016, n.3, p.100.
- 12 Cf. France24 2019: Mongolian women fight for law against widespread sexual harassment, 25 Nov 2019, in: <https://bit.ly/2U2Xhtt> [1 Jan 2020].
- 13 Ibid.
- 14 For a more detailed study see: Gemmer, Eve 2018: Gleichberechtigung in der Mongolei. "Einmal zuzuschlagen, ist doch kein Verbrechen", Spiegel Online, 10 Oct 2018, in: <https://spiegel.de/a-1229805.html> [1 Jan 2020].
- 15 Cf. UNDP 2019: Thinking equal, building smart and innovating for a change in Mongolia, 7 Mar 2019, in: <https://bit.ly/37zF4Yk> [1 Jan 2020].
- 16 Cf. France24 2019, n.12.
- 17 See Facebook: Women for Change NGO, in: <https://fb.com/women4changemongolia> [1 Jan 2020].
- 18 Cf. Mongolian Ministry of Justice, 2019: Proposed draft law on non-profit legal entities, in: <https://bit.ly/36yAuZ0> [1 Jan 2020].
- 19 Ibid., Article 45.6.
- 20 Ibid., Article 48.
- 21 Cf. DeFacto, Jargal 2019: Grey society, 14 Nov 2019, in: <https://bit.ly/2Ryz2Sg> [1 Jan 2020].
- 22 Cf. Mongolian Ministry of Justice 2019, n.18, Article 6 (in particular 6.2.1 and 6.2.4).
- 23 Cf. Menarndt, Aubrey 2019: In Mongolia, proposed legislation endangers civil society, The Washington Post, 7 Nov 2019, in: <https://wapo.st/2RwhMwU> [1 Jan 2020].
- 24 Cf. DeFacto, Jargal, 2019: Three risks looming over our civil society, 20 Jul 2019, in: <https://bit.ly/2Rw8xN6> [1 Jan 2020].

- 25 Cf. Post published on the Facebook page of parliamentary speaker Zandanshatar, 16 Nov 2019, in: <https://fb.com/G.Zandanshatar/posts/1185255534996631> [2 Jan 2020].
- 26 Ibid.
- 27 Cf. UNDP 2016, n. 3, p.103.
- 28 NGOs post videos to warn people about the implementation of the law, YouTube, in: <https://youtu.be/UpEqKeoz9-4> [1 Jan 2020].
- 29 Cf. Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) 2018: German-Mongolian Development Cooperation, p.14.
- 30 Cf. UNDP 2016, n. 3, p.30.
- 31 Cf. International Organization for Migration (IOM) 2018: Mongolia: Internal Migration Study, p. 30, in: <https://bit.ly/2uCW6pW> [2 Jan 2020].
- 32 Cf. UNDP 2016, n. 3, p.77.
- 33 Cf. The UB Post 2019: Divorce rate high among young families, 22 Nov 2019.
- 34 Ibid.
- 35 Ibid.
- 36 Cf. Konrad Adenauer Foundation (ed.) 2016: Politische Partizipation junger Menschen, Ulaanbaatar, p. 40, in: <https://bit.ly/2Rz54xt> [2 Feb 2020].

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