



THE STRUGGLE FOR OUR FUTURE
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In the Wiko fellowship year 2019/20, I set out to work on a project titled “The Digital Revolution: A Fight for the Future of Our Society”. Its outline was as follows:

In connection with the digital transformation, many imagine computers, the Internet, smartphones, and a more comfortable life. In reality, however, a perfect storm is brewing that could surpass even the impact and scale of the industrial revolution. In recent years, many new digital technologies have spread. Any of these technologies – such as Uber, AirBnB, digital currencies like BitCoin, and self-driving vehicles – could turn entire business models and business sectors upside down. Even established institutions are currently being challenged: besides traditional money, data has become a new currency. Suddenly, we live in an “attention economy”, which is fueled with personal data collected by “surveillance capitalism”. The fact that “code is law” currently allows one to sidestep the legislation of parliaments, and, with the methods developed for neuro-marketing, one tries to exert behavioral and social control. Taken together, this changes the monetary and economic system, legislation, and politics substantially. What are the opportunities and risks for businesses, democracy, and human rights? What choices are to be made to ensure that technology helps people manage the challenges of the future successfully and that we will create a trustworthy digital society that respects and protects human dignity? My planned book project will try to reconstruct the technological shifts, politics, and discourse related to digitalization, as well as the disruptive developments that have resulted from it. It also dares a look into our possible future(s).

This book has been completed and will appear in a couple of months under the title “Next Civilization”.

During the fellowship year 2019/20, I enjoyed getting connected with other Fellows interested in the digital revolution and in collective behavior. I also benefited a lot from insights into projects in the humanities. Those connected to religious subjects were of particular interest to me, because there is a movement around the previous Google engineer Anthony Levandowski that wants to establish Artificial Intelligence as a new, digital God. Not every digital visionary welcomes such developments. Elon Musk, Bill Gates, Steve Wozniak, and Stephen Hawking, for example, have warned of the dangers of artificial superintelligence.

At the Wissenschaftskolleg, I found ample opportunities to discuss the implications of the digital revolution with scholars in the social sciences, humanities, and law. This allowed me to see my research area from entirely new perspectives. At the beginning of the term, I pointed out that the world was under pressure to transform and reorganize itself for at least three reasons: first, due to climate change and lack of sustainability; second, due to the financial crisis, which is still unresolved; and third, due to the digital revolution.

The latter might deliver solutions to the first two challenges, depending on the way we use digital technologies. However, there are at least two versions: a totalitarian one and an empowering one. Unfortunately, the control-oriented version is much more developed right now.

When the Corona crisis emerged, I asked the Fellows to pay attention not only to related health risks and medical aspects of the disease. I underlined that the management of the disease would have political and societal implications, which would be even more important than the medical ones. In particular, I warned that democracy might come under pressure and indicated that this process would deserve scientific attention and analysis.

In the following month, one might say that we have all been something like laboratory rats in society-scale experiments. Different countries have responded to the threat in different ways. In the beginning, many called for an almost military-style response, as in China. Israel tried to identify infected people with mass surveillance tools that had been created to hunt down terrorists. In the end, this strategy failed miserably. In contrast, Taiwan, which is often called the prime example of a digital democracy, managed to handle the disease surprisingly well. Sweden chose a liberal way, which was often criticized, while many democratic countries decided for a lockdown, which had serious economic impacts. It is still not clear whether the lockdown was appropriate to contain societal problems or whether, overall, it made things worse.

For some time, calls for population-scale tracing prevailed. Many claimed that democracies would not be able to handle the COVID-19 pandemics and it was time to switch to a Chinese-style, data-driven, and AI-controlled governance. Eventually, however, voices prevailed that demanded that tracing had to be implemented in a way that respected privacy and informational self-determination. Moreover, it was discovered that democracies did, in fact, manage to handle the crisis and that a federal organization supported locally fitting solutions. By now, there is probably a grand majority that thinks we need to protect democracy and human rights even in times of crises. The verdicts of constitutional courts confirm this, and many countries have started to regard China critically, partly due to its handling of Hong Kong affairs, partly due to its treatment of the Uyghurs, and partly due to its mass surveillance and management of society by means of a social credit score, which many consider totalitarian.

Unfortunately, the crisis is not over yet. The world is experiencing a perfect storm, and many things will be organized differently, soon. However, neither Big Data nor Artificial Intelligence have turned out to be a panacea. Societies are instead learning by trial

and error. Trust in and support for citizens play a major role, and innovation is key. We have certainly seen that an interdisciplinary, cross-, and transdisciplinary approach as the Wissenschaftskolleg is offering it will be more important than ever.

Some further reflections can be found in *Köpfe und Ideen 2020*: “A Paradise, but Freezing Cold”, interview with Manuela Lenzen. <https://www.wiko-berlin.de/en/wikotheque/koepfe-und-ideen/issue/15/das-kalte-paradies>.

Others can be found in the FuturICT Blog: <http://futurict.blogspot.com>.

Related to the activities at the Wissenschaftskolleg, I have been involved in various

Selected Conferences, Workshops, Symposia, Meetings, and Events

6/9/2019: Salon am Schinkelplatz. Schwarmintelligenz im Tier- und Pflanzenreich: Sind Pflanzen sozial?

20/10/2019: Entrepreneurship Summit 2019, Freie Universität Berlin. Keynote “Build Digital Democracy: Decentralized Data, Controlled by Users. Opportunities for Citizen Entrepreneurs”.

14/2/2020: Wiko Berlin, workshop “The Dynamics of Collective Decisions”. Keynote “Collective Behavior and Collective Intelligence in Society: Would a Self-Organized Society Work?”

14/2/2020: Futurium. “Die berechenbare Gesellschaft”, talk with Ranga Yogeshwar. <https://futurium.de/de/gespraech/ranga-yogeshwar-1/ranga-yogeshwar-dirk-helbing-mit-musik-von-till-broenner>.

28/2/2020: Falling Walls Lab on “Circular Economy”. Keynote “The FIN4 Project: Towards a Socio-Ecological Finance System”. <https://www.youtube.com/watch?v=XnemIMW7e3c>.

Selected Media Contributions

“ETH-Forscher wollen Städte zum Handeln bewegen: Zürich startet Klima-Wettbewerb.” *Blick.ch*, September 2, 2019. <https://www.blick.ch/news/wirtschaft/eth-forscher-wollen-staedte-zum-handeln-bewegen-zuerich-startet-klima-wettbewerb-id15493479.html>.

- “Biometrie verspricht hohe Sicherheit – und birgt große Gefahren.” *Handelsblatt*, October 9, 2019. <https://www.handelsblatt.com/technik/digitale-revolution/digitale-revolution-biometrie-verspricht-hohe-sicherheit-und-birgt-grosse-gefahren/25094118.html?ticket=ST-771798-kxMQCEPyU5isYdeLVEgB-ap6>.
- “Schöne neue Arbeitswelt: ‘Demokratie digital updaten’.” *Handelszeitung*, November 7, 2019. <https://www.handelszeitung.ch/podcasts/schone-neue-arbeitswelt/schone-neue-arbeitswelt-demokratie-digital-updaten>.
- “Digitalisierung und Umweltschutz: Das große Scheitern.” *Spektrum der Wissenschaft*, November 12, 2019. <https://www.spektrum.de/kolumne/das-grosse-scheitern/1685328>.
- “Master the Disaster.” *Schweizer Monat*, Dezember 2019. <https://schweizermonat.ch/master-the-disaster/>.
- “Die Zukunft der Demokratie: Mehr Teilhabe von unten wagen.” *Deutschlandfunk Kultur*, January 20, 2020. https://www.deutschlandfunkkultur.de/die-zukunft-der-demokratie-mehr-teilhabe-von-unten-wagen.976.de.html?dram:article_id=468341.
- “Panikforscher Helbing: ‘Corona ist eine Art Reifepfung’.” *Tiroler Tageszeitung*, March 1, 2020. <https://www.tt.com/artikel/16692598/panikforscher-helbing-corona-ist-eine-art-reifepfung>.
- “Es gibt gewisse Anzeichen einer Massenhysterie’.” *Heilbronner Stimme*, March 5, 2020. <https://www.stimme.de/deutschland-welt/politik/dh/Es-gibt-gewisse-Anzeichen-einer-Massenhysterie;art143115,4331077>.
- “Ethisch sterben lassen – ein moralisches Dilemma.” *NZZ*, March 23, 2020. <https://www.nzz.ch/meinung/ethisch-sterben-die-gefahr-der-moralischen-entgleisung-ld.1542682>.
- “Dirk Helbing: ‘Wir stehen vor einem Systemwechsel’.” *News.at*, March 23, 2020. <https://www.news.at/a/corona-krise-panik-11402456>.
- “Die Demokratie braucht ein solidarisches Update.” *Der Standard*, June 1, 2020. <https://apps.derstandard.at/privacywall/story/2000117764354/die-demokratie-braucht-ein-solidarisches-update>.
- “The Corona Crisis Reveals the Struggle for a Sustainable Digital Future.” *Wiko Briefs – Working Futures in Corona Times*, May 2020. <https://www.wiko-berlin.de/institution/projekte-kooperationen/projekte/working-futures/wiko-briefs-working-futures-in-corona-times/the-corona-crisis-reveals-the-struggle-for-a-sustainable-digital-future>.