

Human Rights Online: Towards a new generation of human rights in the virtual world

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Abstract: Human rights guide interactions based on moral standards of human behavior. Despite the universal and inalienable character of human rights and their protection by national and international law, surprisingly human rights have just recently begun to be addressed in relation to digitalization. Three potential developments of human rights are envisioned in the artificial age: (1) Attention may shift from human rights protecting against surveillance by national governments towards regulation against the interference of big data insights reaping online entities. Privacy protection – like enacted in the General Data Protection Regulation and the Right to Delete – may leverage into an inalienable human right to protect humans in the digital millennium. (2) With freedom of expression pitted against hate speech control in online social media platforms, future applications of human rights to online contexts should imbue the concept of dignity into virtual worlds featuring anonymous actors in order to find a well-balanced virtual space offering rights-to-speak freedom and respectfully-protected human grace. (3) With a heightened degree of anonymity possible in virtual spaces, human rights online should focus on quality assurance when it comes to the credibility and accuracy of online content. Online bots, fake accounts but also Search Engine De-optimization (SEDO) via clickfarms are newest developments in the digital millennium infringing on the right to know and access to accurate information that can also cause social upheaval and financial turmoil. With the International Law Commission monitoring the use of social online media for establishing customary law and legal practice guidelines, a new generation of human rights online should address the role of accuracy and democratization of social media platforms. In the future, human rights obligations of governments and monopolistic internet firms but also individual virtual market actors may ennoble online spaces to flourish a new generation of human advancement in the digital age.

Keywords: accuracy, anonymity, artificial intelligence, credibility, digital age, dignity, human rights, international customary online law, internet, online, searchplace ethics, virtual spaces

Introduction

Human rights are based on moral standards of human behavior that guide interactions. Protected in national and international law, every human being is entitled to these inalienable, universal and egalitarian fundamental rights that are inherent in all human beings regardless of age, origin, location, language, religion, ethnicity, or any other status. Stemming from respect for human dignity and based on the rule of law, human rights are practiced by human empathy to establish societies of trust, decency and dignity. Developed from natural law and enlightenment philosophy, human rights advanced in different generations throughout modern societies. Historically, three generations of human rights cover civil and political; economic, social and cultural rights; as well as collective rights for communities, populations, societies or nations.

Despite the universal and inalienable character of human rights, surprisingly human rights have just recently begun to be addressed in relation to digitalization. On the brink of the age of Artificial Intelligence, robotics and big data insights, the time has come to apply human rights to online contexts. Three potential developments of human rights are envisioned in the artificial age:

(1) With the shrinking governmental control of online information exchange and data brokerage platforms, human rights will become essential for guiding online virtual communication spaces. Attention may shift from human rights protecting against surveillance from national governments towards regulation against the interference of big data insights reaping online entities. Privacy protection – like enacted in the General Data Protection Regulation and the Right to Delete – may leverage into an inalienable human right to protect humans in the digital millennium.

(2) With freedom of expression being pitted against hate speech control in online social media platforms, human rights could serve as an anchor of decency in a general climate of online freedom. In the future, human rights may oblige governments and corporations operating online to find the proper balance between freedom of expression and the protection of human dignity in quality information exchange. Future applications of human rights to online contexts should imbue the concept of dignity into virtual worlds featuring anonymous actors in order to find a well-balance virtual space offering rights to speak freedom and respectfully-protected human grace.

(3) With a heightened degree of anonymity possible in virtual spaces, human rights online should focus on quality assurance when it comes to credibility and accuracy of online content. Online bots, fake accounts but also Search Engine De-optimization (SEDO) via clickfarms are newest developments in the digital millennium infringing on the right to know and access to accurate

information that can also cause social upheaval and financial turmoil. In light of the shrinking relevance of governmentally-controlled journalism and media outlets, quality assurance of information exchange in online marketplaces and online crowd control of internet corporations, such as social online media, could be enacted via human rights online.

With the International Law Commission monitoring the use of social online media for establishing customary law and legal practice guidelines, a new generation of human rights online should address the role of accuracy and democratization of social media platforms. In the future, human rights obligations of governments and monopolistic internet firms but also individual virtual market actors may ennoble online spaces to flourish a new generation of human advancement in the digital age.

This article addresses a speculative prospect of the rise of human rights in online virtual contexts. An advent from virtual ethics will prosper the idea to have certain inalienable rights online that work towards accuracy, decency and dignity in the online space. With the rising attention to digital inequality in the artificial age, the time has come to address the role of human rights for virtual consumers and online participants.

The following paper starts with a description of the history and advent of human rights. The paper then draws attention to rising concern over artificial intelligence ethics and digital inequality in the virtual world. Three future trend developments of human rights online are speculatively outlined in: (1) the protection of online agents in terms of their privacy and freedom from unjustified surveillance; (2) Calibrated balance between freedom of expression and hate speech control in transparent online communication; (3) credibility and accuracy of online content with particular attention to searchplace discrimination. The discussion proposes policy recommendations and societal need for future research on human rights online.

Human rights

Human rights are inherent to all human beings. Every human is entitled to human rights, regardless of race, sex, nationality, ethnicity, language, religion, or any other status (United Nations, 2023). Human rights are universal in their applicability everywhere at every time and egalitarian in granting the same rights for everyone. The universal character of human rights has been accepted as fundamental law practiced all over the world.

Human rights sprung out of the wish for equality and prospered over centuries in the eye of discrimination, injustice and ethical concerns in various historical traditions (Ishay, 2023). Early developments that point at concepts of human fundamental, inalienable rights are already

noticed in secular traditions, ancient Asian and African religions as well as monotheistic religions (Ishay, 2023). Human values later attributed to human rights are already developed in ancient Greek philosophy (e.g., Socrates, Plato, Aristotle, Stoics) and Roman law. Early notions of natural law moral compasses that are inherent in every human being tie back to Christianity (e.g., Thomas Aquinas, Hugo Grotius).

The birth of human rights in the contemporary understanding is often attributed to the Magna Carta (1215), The Habeas Corpus Act (1679) and The English Bill of Rights (1689). Religious notions of natural laws inherent in everyone that guide actions based on conscientiousness but also early liberalism (e.g., Locke, Hobbes) and the age of enlightenment prepared the moral, ethical and philosophical argumentation for human right codifications (Ishay, 2023). Human rights blossomed in the Renaissance.

Philosophical roots are found in Immanuel Kant's categorical imperative, which advocates for actions as universal maxim – one should only act in such a way that behavior can be actively and passively be justified. John Rawls' idea of evaluating every situation behind a veil of ignorance without consideration if individually gaining or losing from ethical predicaments but only considering the problem for its overall implications for everyone ties to the universal and inalienable character of human rights.

Revolutions brought forward first legal documentations of human rights, such as The United States Declaration of Independence (1776), The French Declaration of the Rights of Man and Citizen (1789) and the United States Bill of Rights (1791). Modern human rights developments include socialist perspectives in free trade and just wars (Ishay, 2023). Notable codifications include the Factory Health Act of 1802, the Factory Act of 1833 and the Ten Hour Act (1843).

In the advent of modern human rights, three generations are captured: Historically, three generations of human rights: The first-generation human rights cover civil and political rights (e.g., right to live and political participation). Second-generation human rights are house in economic, social and cultural rights (e.g., right to subsistence). Third-generation human rights are considered as solidarity rights (e.g., the right to peace, right to a clean environment); as well as collective rights for communities, populations, societies or nations. The enforcement appears to get weaker in legal compulsion and political recognition per generation.

The liberal vision of human rights includes the early beginnings in the liberal tradition of John Milton, John Lock and Voltaire arguing for freedom from governmental oppressions (Ishay, 2023). The Magna Carta but also evolutionary codifications around the world account for

documents promoting the idea of inalienable rights to every human being regardless of her or his race and social standing. Important documents include the Resolution against Colonialism of 1904 and the Slavery Convention, which was adopted in 1926 and entered into force in 1927. Later developments include the International Convention on the Elimination of All Forms of Racial Discrimination adopted in 1965 and entering into force in 1969.

The United Nations drove the inalienable character of human rights since the Covenant of the League of Nations in 1919 and the International Labour Organization Charter of 1919. The first of the Geneva Conventions in 1864 laid the foundations of International humanitarian law, which was later further developed in light of the World Wars. The United Nations codified a catalogue of human rights starting with the Universal Declaration of Human Rights in 1948. With having been translated in more than 500 languages, the Universal Declaration of Human Rights accounts for the most translated document in the world. The Universal Declaration of Human Rights asserts human rights as the “foundation of freedom, justice and peace in the world.” Spearheaded human rights attention in times of war and during crime, the declaration codifies a universal right to life (Hobbes, 1652 in Ishay, 2023; Treatise on Crimes and Punishment in Ishay, 2023). Anti-war advocacy was strengthened in the Convention on the Prevention and Punishment of Genocide, which was adopted in 1948 and entered into force in 1951. Other notable developments include the Geneva Convention Relative to the Treatment of Prisoners of War, which was adopted in 1949 and entered into force in 1951.

Fundamental freedoms were codified in the Convention for the Protection of Human Rights and Fundamental Freedoms, which was adopted in 1950 and entered into force in 1953. European early codifications of human rights include The European Convention for the Protection of Human Rights and Fundamental Freedoms, which was adopted in 1950 and entered into force in 1953. The European Social Charter was adopted in 1961 and entered into force in 1965. Libertarian roots inspired the International Covenant on Civil and Political Rights, which were adopted in 1966 and entered into force in 1976.

International law and global governance adopted the concept of human rights in international conflicts and global challenges. Notable developments include the Geneva Convention Relative to the Treatment of Prisoners of War, which was inspired by anti-war sentiments and adopted in 1949, entering into force in 1950. The Convention Against Torture and Other Cruel, Inhuman or Degrading Treatment or Punishment was adopted in 1984 and entered into force in 1987.

International human rights law lays the foundations for obligations of governments to promote and protect human rights and fundamental freedoms to all individuals. Although the

United Nations advocates for equal weight to the different types of human rights, international nuances exist ever since. Western cultures have more of a history in given priority to civil and political rights. The United States Organization of American States issued the American Convention on Human Rights, which was adopted in 1969 and entered into force in 1978. During the Cold War era, the socialist contribution in the industrial age raised attention to the need for economic balance, educational access and social rights. Former Soviet bloc countries and Asian countries have tended to give priority to economic, social and cultural rights, such as the right to work, education, health and housing. The International Covenant on Economic, Social, and Cultural Rights was adopted in 1966 and came into force in 1976.

Women were addressed in the Convention on the Elimination of All Forms of Discrimination Against Women, which was adopted in 1979 and entered into force in 1981. Children became focus of human rights protection in the Convention on the Rights of the Child, which was adopted in 1989 and entered into force in 1990.

In the age of globalization, social human rights were also debated in regards to free trade equalities, just war and the balancing role of international organizations in the global arena. Buddhist and North American traditions drew attention to self-determination in regards to human rights in the imperial age (Ishay, 2023). Notable regional developments include the European Union Charter of Fundamental Rights of 2000 and the Association of Southeast Asian Nations (ASEAN) Human Rights Declaration of 2012. The Arab Charter on Human Rights was adopted in 2004.

Most recent decades saw an advent of labor and developmental human rights attention with Amnesty International raising awareness for decent workplace conditions around the world (Amnesty International, 1998; Ruggie, 2020). The International Labour Organization addressed human rights focus in regards to the Indigenous and Tribal Peoples Convention, which was adopted in 1989 and entered into force in 1991; followed by the United Nations Declaration on the Rights of Indigenous Peoples of 2007; followed by the Organization of the American States American Declaration on the Rights of Indigenous People of 2016. Human Rights in the Islam became subject to scrutiny in 1990 in the Cairo Declaration of Human Rights in Islam. The African Union issued an African Charter on the Rights and Welfare of the Child, which was adopted in 1990 and entered into force in 1999.

Newest developments include attention to war crimes, terrorism but also international law Responsibility to Protect mandates (United Nations Secretary-General, 2009). The human rights of refugees and immigrants – as protected under the Geneva Conventions and the Convention Relating to the Status of Refugees of 1951 as well as the United Nations Protocol Relating to the

Status of Refugees of 1967 – were fortified in the United Nations International Convention on the Protection of the Rights of All Migrant Workers and Members of Their Families, which was adopted in 1990 and entered into force in 2003. Migrant human rights have been discussed to be extended for climate refugees. First, the Rio Declaration on Environment and Development of 1992 set the stage for sustainable development. Climate change then heightened awareness of the need for international law to address global warming-induced injustices within societies, between countries but also over time in terms of overlapping generations (Puaschunder, 2020; United Nations High Commissioner for Human Rights, 2015). A proposed extension of the political asylum covered under the Geneva Convention for those who have been forced to leave due to environmental degradation has been discussed for the last couple of years in light of sinking small nation island states due to global warming. Environmental human rights concern was mentioned in the United Nations Millennium Declaration of 2000, followed by the United Nations 2030 Agenda for Sustainable Development of 2015. The United Nations Conferences of the Parties (COP) most recent protocol involves the United Nations Glasgow Climate Pact of 2021.

Extensions and sophistications of anti-war codifications focused on landmines in The Convention on the Prohibition of the Use, Stockpiling, Production and Transfer of Anti-Personnel Mines and on Their Destruction, which was adopted in 1997 and entered into force in 1999. The Office of the United Nations High Commissioner for Human Rights issued a Protocol to Prevent, Suppress and Punish Trafficking in Persons Especially Women and Children, which was adopted in 2000 and entered into force in 2003. The International Convention for the Protection of all People from Enforced Disappearance was adopted in 2007 and entered into force in 2010. Migration became subject to human rights attention in the United Nations Global Compact for Safe, Orderly, and Regular Migration in 2018.

Biomedicine was addressed in the Convention in Human Rights and Biomedicine, which was adopted in 1997 and entered into force in 1999; followed by the World Medical Association Helsinki Declaration of 2013. Disability were recently advocated to be leveraged into human rights foremost in the United Nations Convention on the Rights of Persons with Disabilities, which was adopted in 2006 and entered into force in 2008 (Mégret, 2008; Paul, Shapiro & Stein, 2016). Transgender rights became noticed as human rights in the United Nations Human Rights Council in the Protection Against Violence and Discrimination Based on Sexual Orientation and Gender Identity in 2016.

Novel sanction mechanism extensions add economic sanctions to legal compulsion and conventional prosecution of bodies, such as the International Court of Justice of the United

Nations and the International Criminal Court as well as the European Court of Human Rights in Strasbourg. The Human Rights Council of the United Nations is a fairly newly established governing body of the UN since 2016 in addition to the United Nations High Commissioner for Human Rights, who oversees attention to human rights around the world.

The future of human rights was recently attributed to be extending in the online virtual space in light of digitalization encroaching society deeper and deeper (Bachelet, 2019; Feenberg, 2019; Risse, 2019; Zuboff, 2019a, b).

Digitalization disruption

Digitalization has revolutionized the world in the last century. In today's world, Artificial Intelligence (AI) is encroaching our contemporary society. The impact of AI, robotics, big data, online social media and searchplaces entering our workforce and our daily lives in the global economy and on human society is increasing.

With the advent of digitalization, ethical questions arise for the state of democracy and order within society. The investigation of legal concepts in relation to digitalization and modern advancements such as AI, robotics, big data, online social media and searchplaces enhanced by Chat-GPT is targeted at aiding a successful introduction of novel technologies into the workforce and society. Critical questions are unraveling the ethical boundaries of our future artificial world. For instance, with 24/7 working robots that can live eternally entering our workforce without having feelings, ethical questions arise whether robots, algorithms and AI should be granted citizenship and legally be considered as quasi-human beings — a technocratic and legal trend that has already started. How to balance robots living forever in light of overpopulation and finite resources? How do we switch quasi-human intelligence off when misbehaving or if AI life has become a burden that cannot be borne by society? In light of robots already having gained citizenship and being attributed as quasi-human legally, should AI and robots be granted full citizen rights – such as voting rights? Should we reap the economic benefits of AI and have a democracy with a diversified populace including robots? If so, should robotics be designed to resemble human beings (e.g., with emotions and fallibilities) or do we want to strive for creating completely rational AI? Would feelingless AI be vulnerable or will the computational power and energetic capacities of robots outperform humankind? Given the humane fallibility and biases, would a rational AI agent make better democratic choices? Should AI therefore be used for governance as for being insusceptible to bribery and fraud, or does the installment of algorithms in leadership positions imbue dangers to humankind? How should we organize the human-led

evolution of AI production and the blend of human-AI enhanced workforce? And what is it that makes human humane in the artificial age?

Economic accounts reflect the introduction of digitalization, AI, big data insights and social online media as a major market disruption.¹ In general, digitalization is viewed to lead to a massive reduction of online market entry, coordination and communication costs. Digitalization also perpetuates an internationalization of communication as online exchange and online social forums are populated across national borders. The economics ‘meme share’ debate has shown that groups of investors meeting online can move prices and influence markets in more global and efficient ways that previously outlined in George Soros’ reflexivity theory. Social online media may therefore make communication channels more effective but markets overall more volatile, when considering the concept of social volatility (Lee, 2021). Social online media have also been criticized for being behavioral echo chambers that may peg more social sentiments to price formation than previous forms of communication (Puaschunder, 2019). In self-reinforcing information silos of the echo-chambers of the internet, economic bubbles may form and burst. In the wake of social volatility being noticed to stem out of social coordination in online virtual spaces, the question arises how to govern the internet in an internationally-homogenous way?

From the legal aspects, there is a trend noticeable of a new online evolution and creation of law with help of digitalization, AI, big data insights online and online social media. The influence of social online media in the creation of law, especially customary law, is currently debated by the International Law Commission.

Both on economic terms and in the legal account of online communication, digitalization has made the world more transparent, easier accessible and faster. Transparency raises opportunities to engage and coordinate large online crowds beyond national borders. In diplomacy, transparent online social media tools have become noticed, e.g., in Facebook crowd formation during the Arab spring but also in Twitter communication inciting ideas that get picked up quickly and align country standpoints. In this, digitalization has opened up traditional diplomacy gateways that were organized but often happened between closed doors via controllable actors. Transparent online communication in social media forums that occurs directly in front of the eyes of others also can elicit group dynamics that are hard to control by any public or private entity. The speed of communication increased dramatically with digitalization but also in the course of online communication. Google’s algorithm not only incentivizes fast loading pages in display position. Google search result display also get shorter and shorter in the displayed words in snippets. We saw an evolution of shortness in messages in

¹ [ChatGPT: the 10 Jobs Most at Risk of Being Replaced by AI \(businessinsider.com\)](https://www.businessinsider.com/chatgpt-10-jobs-most-at-risk-of-being-replaced-by-ai)

WordPress blogs to Tumblr microblogs to Facebook posts to Twitter. We currently also see a shortening of video messages from YouTube to TikTok to Reel. Lastly, in linguistics chats and emojis have been argued for a long time to change the creativity and verbal expression capabilities of the upcoming youth forever.

In general, digital communication imposes important questions on the trade-off between the use of online media for lawmaking. The predicament between equal access to information versus social volatility and market manipulation arises in the digital age.

Overall, the economic, legal and societal impact of digitalization is currently scrutinized from an ethical perspective. The current legal status of robots being referred to as quasi-human is discussed and this diversified society's implications for the general populace and democracy.

Humanness is highlighted as key to future success in the age of AI and automated control. Behavioral human decision making insights and evolutionary economics argue digitalization may devalue humanness and improve the value of human-imbued unique features. The findings hold novel insights on future success factors for human resource management but also invaluable contributions for the successful introduction of AI and digital humanities in modern democracies and societies.

The legal, economic and regulatory status of digitalization is currently developing in jurisdictions and economies worldwide. The United Nations (UN) agencies and regional organizations descriptively report internationally-varying current guidelines, ethics codes, and action statements regarding the digitalization disruption part. The UN is the leading authority on sustainable development, which is targeted by the 2015-incepted Sustainable Development Goals. Strikingly, none of these global goals directly addresses digitalization and the benefits efficient market transitions can hold for economically-empowered development. Information and Communication Technology (ICT) is mentioned here or there but rather addressed in a descriptive and sometimes antique way catching up in simply describing the state-of-the-art after the industry development. The United Nations has been criticized by practitioners to have a backwards-looking approach. Regulators have voiced that the UN reporting lacks any forward-looking market-relevant innovation discourse on digitalization. The United Nations also opened a Centre on Artificial Intelligence and Robotics within the UN system in The Hague, The Netherlands, in 2017. The International Telecommunication Union worked with more than 25 UN agencies to stage the "AI for Good" Global Summit. The UNESCO has launched a global dialogue on the ethics of AI due to its complexity and impact on society and humanity. The OECD hosted a Council on Artificial Intelligence in the first half of 2019 to set international AI standards on a global level. In 2017 the International Organization for Standardization (ISO) and

the International Electrotechnical Commission (IEC) created a joint technical committee to develop IT standards for business and AI consumer applications. Labor unions have also defined critical principles for ethical AI. The United States Library of Congress has comparative e-content and reports on the use of AI in various domains, for instance, healthcare, currency and data management.

While all these reports include contemporary accounts of AI, they lack a clear focus on the downsides of digitalization in creating and exacerbating inequality. All these reports and efforts are different and important, but hold a limited view on the role of inequality in digitalization. For instance, none of them addresses the connection between AI and healthcare moderated by anti-corruption and market financialization. To my knowledge, none of the agencies, reports or efforts are covering ethics of digitalization. And no account exists on an analysis of the societal downfalls of innovation if access is restricted – besides the access to affordable medicine debate of the 1990s in the World Trade Organization (WTO) discourse and The Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS) agreement.

Digitalization ethics

Contemporary digitalization studies question the role of AI, big data, robotics and searchplaces for human lives. With the advent of digitalization encroaching all aspects of our daily lives, ethical questions arise. The creation of online algorithms is compared to a novel type of evolution, in which important questions arise. For instance, should humans create algorithms that resemble human decision making or strive for rational artificiality? And does digitalization impose an implicit social class division for society?

In finance, the advent of cryptocurrencies has steered the question whether bottom-up financialization online and decentralized finance should be legal and if cryptocurrencies fail, how far the government should be obliged to cover bail-outs. The marriage of cryptocurrencies and social online media remuneration schemes, e.g., in BitClout, which pays for social online media interaction with cryptocurrencies is currently evolving. This attempt for the democratization of social media remuneration aims at giving social media online users some kind of ‘salary’ back for their time spend on social media providing content.

Online communication patterns in social media platforms have seen the predicament between free speech and incitement of violence in hate speech. Economically, negative content was found to steer crowds on online social media platforms to react and spend more time on the platform. Platform providers are therefore somehow implicitly incentivized to allow negative

content, which directly infringes on decency, dignity and well-being mandates of online ecosystems. In relation to finance, one can also see the negative spiraling effect of negative market communication bringing down prices and markets by spooked investors. Social online media communication about markets therefore implies social volatility in markets. In all of this, financial market regulation is missing providing clear guidelines and incentives that foster an efficient and safe market environment online.

In the international law community, the role of digital communication – especially in social online media forums – has been discussed for the creation of law, especially customary law, and diplomacy. At the forefront of this discussion the United Nations International Law Commission currently questions the role of social online media dialogue for customary international law creation. Does digital *opinion iuris* exist through voicing legal opinions online, for instance in social media? First governments (e.g., Venezuela, Estonia) are already using ChatGPT for sensing the legal landscape and customary law practice. Will bottom-up ideas about ‘what is right’ or online natural laws influence the content of law? Will online law generation trends revolutionize traditional opinion iuris creation? Will ChatGPT use change key actors’ and authorities’ – such as juries, tribunals – in law? Will there be country practice differences in the integration of online display of law making in crowd communication?

Digital inequality

The history of digital efforts starting from the first mechanical operators has led to today’s most recent advancements of the marriage of finance and digital currencies, social media activity remuneration, lawmaking in online platforms and the financing of space exploration with cryptocurrencies. Literature and data about digitalization is emerging that outlines that the digitalization disruption is exponentially growing with time, especially in the last decade and that trend has been even accelerated by the global COVID-19 pandemic, which is still not completely over. COVID-19 has led to a market transition for digitalization innovations and market advancements in all domains of human life. Within the next five years, the digitalization disruption is likely growing exponentially with 5G being rolled out in major economies of the world and ChatGPT entering the workforce. Digitalization encroaching all aspects of human lives in record speed as a resilience mechanism during crises and driven by industry mechanisms that can revolutionize the way humans live with regulation leaping behind market dynamics, demands for also asking about the gains and losses implied in this innovation, potentially leading to vast inequalities within society, around the world and over time.

Inequality is one of the most significantly pressing concerns of our times. Inequality has many origins, forms and layers within society, around the globe and over time. Digital inequality addresses the emergence and historical evolution of inequality in innovations. A historical snapshot of contemporary digitalization pressures is noticed in the aftermath of the 2008 World Financial Recession and our fading post-COVID-19 economy in regards to digitalization. While the standard economic innovation literature assumes constant improvement of digitalization being available to the coming generations, there is the heterodox case of a connection of innovation and inequality backed by empirical evidence – for instance, before the rise of the internet in the 1990s, there was no correlation noticeable between Gross Domestic Product and life satisfaction. But with the opening of the internet window to the world, a comparatively lower GDP started becoming associated with unhappiness, which may also have triggered a migration wave to follow in the subsequent decades. The role of the internet in raising awareness, mobilizing e-social pressure and crowd control but also the negative aspects of online cancel cultures and the loss of classic media control in the age of digitalization are qualitative accounts of digital inequality.

While digitalization and inequality are predominant features of our times, hardly any information exists on inequality inherent in digitalization and the systemic investigation of inequity underlying any innovative change. With exponential use of digitalization for law, economics and all parts of societal conduct, the demand for investigating digital inequalities from behavior economics, macroeconomic, comparative and law & economics perspectives has reached unprecedented momentum. In the attempt to capture the advantages but also potential downfalls of our contemporary digitalization disruption, the cost-benefit analysis of digitalization for society must include a disparate impact analysis that highlights the winners and losers from digitalization. Innovation but also inequality alleviation in the wake of the digitalization.

Gains and losses of digitalization have direct implications for global healthcare, economics academics, and policymakers around the globe may help professionals derive direct leadership and followership imperatives for integrating digitalization in the modern workspace. Studying the most novel digitalization revolution trends with respect for digital inequalities has many cases – for instance, in capturing digitalization in the medical field, cryptocurrencies in the financial world but also access to education and social justice pledges arising worldwide. The public and private sector applications of digital inequality alleviation strategies can range from innovation management, digital leadership, global online governance, law & economics of digital markets as well as technology advancement. Unique features of the study of online inequality are the industry-driven character – often leading to a critique of public regulatory agencies leaping

behind – as well as young people playing a crucial role in the adoption of new digital innovations and media outlets. In addition, the speed by which new technologies get rolled out and product life cycles online appear to be faster than traditional physical goods. When it comes to digitalization innovations, traditional economics-of-scale features are coupled with network effects. One more customer in a social online medium costs hardly anything more to the platform provider, yet raises the value of the platform almost exponentially.

Most recent developments in 5G, cryptocurrencies, democratization of information, social online media revenue repatriation, ChatGPT use in the online creation of law as well as digital space exploration should be addressed in order to find the right incentives for ethical market conduct around these innovations. An analytic framework to dissect inequality in digitalization should be comprised of qualitative and quantitative parameters in order to guide a monitoring and evaluation agenda so that the digitalization disruption can be delivered in an ethical and inclusive way. Behavioral Law & Economics rational but also disparate impact analysis could outline potential digital inequality alleviation strategies – such as in education, skills development, institutional adjustment and favorable societal norms changing capacities. A comparative analysis of some of the most dominant digitalization hubs in Asia, Europe and North America could help gain global outlook and most future-oriented extra-terrestrial space exploration vision.

Capturing the most recent developments in digitalization should also pay tribute to potential hidden inequalities, such as mentioned in the following. Societal divisions in access to digitalization but also global disparities are obvious inequalities on the surface. Below the obvious inequality, digital competition exists in the age of online searchplace dominance. Shedding light at digital currencies' inherent system dynamics that may create hidden inequalities may lead the way to a real democratization of bottom-up finance. Elucidating the lost taxation revenue from tangible and intangible online transactions and social media content provision will help reclaiming economic growth and remuneration potential from digitalization for society. In the international arena, data deficits between continents and countries should be captured for the sake of repatriating value to its origin. On the forefront of digital innovations, online law creation and the role of ChatGPT in legal judging should be thematized. In the international context, one could ask if AI becomes an information-gathering tool, will it be internationally biased and give misleading or culturally-inappropriate answers to someone in a developing country or a vulnerable population representative? Could be interpreted as online hegemony of AI and IT hubs, revival of criticized Washington consensus, colonialism? Digitalization in the medical sector could be seen as a panacea to supporting COVID-19 prevention but also in integrating COVID Long Haulers back into the economy should be envisioned. Digital exploration of extraterrestrial territories should be covered when raising attention to digital ethics.

Lastly, to pay tribute to future generations, the contested relation between digitalization and sustainability should be reflected upon. Digitalization will be outlined as the remedy but also a burden in regards to the sustainable development goals opening up the final reflection upon potential digitalization inequality alleviation strategies.

Solutions to combat digital inequality will be brought forward in regulation (with particular emphasis on the Brussels effect), the economic impetus of taxation but also global governance institutions' role in monitoring and evaluating the concerted efforts to deliver a fair digitalized world. A plaidoyer for Law & Economics analytics but also stakeholder management in the concerted action of a widespread digitalization disruption will be emphasized. The need for targeted internet oversight agencies but also favorable behavioral social norms imbued in digitalization ethics will round up the future-oriented, interdisciplinary and wide-reaching book. Future human rights online will be portrayed in open-source projects that bestow upon everyone rights to fair access to online opportunities.

Bringing digitalization and inequality together in empirical evidence, theoretical advancements and vivid real-world relevant examples promises to hold invaluable insights on how to gap deficiencies. Studying digital inequality is timely and historically valuable as a trace how important decisions were made during our economic transition time that potentially set the world on a trajectory in regards to the introduction to digitalization into society. Outlining international nuances of digital inequality but also daring a future outlook on the digitalization workplace revolution, may hold invaluable insights for international trade and global development. Capturing digital inequalities provides a historic landmark in innovation evolution that holds beneficial insights on management facets of global digitalization. An innovative connection between digitalization and inequality may set society on a path to debrief about digitalization but also economics to reflect on innovation-driven growth's negative externalities. Vivid case studies can help prepare students as future leaders on digitalization challenges. Sustainable development advocates may to reflect a concerted world effort to improve novel facets of inequality in strategic stakeholder management. A comparative Behavioral Law & Economics approach could help understand the most contemporary trends in digitalization around the world with particular attention to inequality. Empirically-driven evidence makes the case for rising digitalization encroaching our societies around the globe. Attempts to alleviate the impacts of inequality in law, economics and politics should be debriefed upon. Practitioners may also learn from the first monitoring and evaluation planned of the current digitalization pegged to social, economic and environmental causes.

Human rights online

Despite the universal and inalienable character of human rights, surprisingly human rights have just recently begun to be addressed in relation to digitalization (Bachelet, 2019; Feenberg, 2019; Ishay, 2023; Puaschunder, 2022; Zuboff, 2019a, b).

First attempts that prepared the stage for human rights in the online world developed out of open-source access to the internet. In the education sector, open access to the internet was praised as a panacea. Online Information and Communication Technologies (ICT) and MOOC concepts that transport quality education into every corner of the world via the internet were believed to become the transformative change international development has wished for ever since. Demand for access to online healthcare in prevention skyrocketed during the COVID-19 outbreak lock-down phase. Web developers, such as WordPress, which currently hosts around 37% of the internet, drove open-source software platforms, such as free blogspace online for everyone and the openverse – an online open-source search engine for open content, such as music, pictures etc. – were developed. Supporting the idea of democratizing publishing and the freedoms that come with open source, was based on freedoms of redistribution of information (WordPress, 2023a). An inalienable right for everyone to craft the internet in a positive way for the community is laid out in the online ‘Bill of Rights’ philosophy under the General Public License (WordPress, 2023b).

In the future, three key areas of concern could leverage into human rights online attention:

- (1) Attention may shift from human rights protecting against surveillance from national governments towards regulation against the interference of big data insights reaping online entities.
- (2) With freedom of expression being pitted against hate speech control in online social media platforms, human rights could serve as an anchor of decency in a general climate of online freedom.
- (3) With a heightened degree of anonymity possible in virtual spaces, human rights online should focus on quality assurance when it comes to credibility and accuracy of online content.

These potential human rights areas of the future will be discussed in the following in detail.

From governmental surveillance protection to big data reaping online privacy protection

Online platforms have become essential for free markets and international communication without red tape, which creates a difficult balancing act between free speech and protection from harm, e.g., in hate speech (Puaschunder, 2022).

When using online virtual spaces, human consumers face a constant predicament between utility in information exchange and dignity in privacy protection (Puaschunder, 2019a). The better the information and the more useful the expected information exchange, the less consumers tend to care about their privacy. Online platform providers have become big data reaping entities that generate substantial revenue from behavioral insights derived from tracking online behavior (Puaschunder, 2022a). The derived big data insights can be sold for commercial purposes and materialize in targeted classified advertisement online. These revenues are most often generated tax-free and for most parts of the internet without consent. Recent regulation curbs the big data reaping without consent, foremost in the European legislations, but also slowly in the United States, most recently in court decisions to limit big data insights generation for targeted classified advertisement.

Because private actors are becoming crucial online communication social influences and gatekeepers, the question is how human rights can apply to private parties and shape industry standards. With the shrinking governmental control of online information exchange and data brokerage platforms, human rights will become essential for guiding online virtual communication spaces. Attention may shift from human rights protecting against surveillance from national governments towards regulation against the interference of big data insights reaping online entities. Privacy protection – like enacted in the General Data Protection Regulation in Europe and the Right to Delete – may leverage into an inalienable human right to protect humans in the digital millennium (Mayer-Schönberger, 2009). Europe appears to be at the forefront of codifying regulation in the virtual space, coining the term “Brussels effect” for the dominance of European Union regulation shaping the form of the internet around the world (Bradford, 2012). In the United States, the regulation of the internet is technically most advanced, if considering WordPress being housed in the U.S. and controlling the technical capabilities for around 37% of the internet. In addition, internet security firms – such as Akamai – hold the keys for enabling online functions. The actual legislative regulation of the internet is more controlled by the Federal Trade Commission (FTC) and the Federal Communication Commission (FCC) – both agencies primarily focused on consumers as well as unhindered industry development.

Decency and human dignity protection in social online media contexts

With the Coronavirus pandemic exacerbating digitalization and more advanced sophisticated information tracking opportunities of online communication, constant information flows in the digital age may induce unknown socio-psychologically effects and social volatility in markets.

With freedom of expression being pitted against hate speech control in online social media platforms, human rights could serve as an anchor of decency in a general climate of online freedom. In the future, human rights may oblige governments and corporations operating online to find the proper balance between freedom of expression and the protection of human dignity in quality information exchange. Coordination cost of boycotts or threshold for online criticism has become lower (e.g., a coordinated group might start to attack someone who said something they did not like, coordinated ‘shitstorm’ used strategically, e.g., in promotion competition) (Puaschunder, 2022a).

Counter a narrow technical focus on economic fundamentals and mathematical formalizations in classic economics to explain the mechanisms causing economic turmoil, socio-psychological and behavioral group aspects of collective over- and underreaction in markets was recently attributed to social online group behavior. The COVID-19 digitalization shock exacerbated instant communication, global interconnectivity and computational power globally. In light of the mass psychological underpinnings of business cycles based on information flows with particular attention to digital communication, future advancements of human rights may focus on the impact of disinformation online on democracy sentiments and collective moods that influence the economy. Online disinformation flows may lead to systemic global economic risks. The role of accuracy in creating social volatility that influences economic markets should be thematized. Social volatility adds to quantitative volatility any social aspects that influence and shape economic markets offering an innovative way to explain how and what information represented in the media creates economic ups and downs. Social volatility can be related to creating fat tail phenomena that wears down the financial robustness of economic systems. Social online media fetishizing breaking news waves of concurrently presented similar information missing out on diversification potential but instead creating echo-chambers of alternative realities but also the crucial role of fast-paced uncensored social online platforms in perpetuating human present biases should become subject to scrutiny. The media’s untapped potential in setting potentially favorable or unfavorable anchors and building unknown economic choice architectures should be introduced.

Overall, research on the dichotomy between democratization of information exchange online versus manipulation of online content will acknowledge that human beings’ communication and interaction online results in socially constructed volatility that echoes in economic correlates. The Social online media studies promise to explain how an external shock can be fueled by social media communication and online interaction. Grasping the socio-psychological interpretation of an external shock echoes in economic fundamentals can serve as a

market stabilizer. Understanding how the social media forms economic outcomes will help find how market outcomes can be shaped by strategic communication with special attention to new media technologies. Unraveling online communication influences on market expectations and performance shaping economic cycles can help reveal information contents that either cause social volatility bleeding into economic downturns or serve as crowd control stabilizers.

Future applications of human rights to online contexts should imbue the concept of dignity into virtual worlds featuring anonymous actors in order to find a well-balance virtual space offering rights to speak freedom and respectfully-protected human grace. Policy implications should stress how negative communication can be counterweighted in order to alleviate the building of collective moods bleeding into disastrous mass movements causing turmoil in financial market and steering economic fallouts with negative implications for societies' weakest segments. Recommendations how to build stable online systems that promote democracy and resilient economic systems by avoiding emergent risks and communicating market prospects favorably may help building the fundamental architecture of future more stable society.

Human right to accurate online information

On the international account, access to digitalization varies. While the world has become flat and access to information democratized in the digital age, leadership also unequally tilted towards IT spearheading territories of the world. Digitalization hubs may lead the world but also create new hierarchies and power dynamics in the digital age if considering the dominance of digitalization in powerful professions, such as law, IT, fintech etc. The digital elite may communicate differently in today's online-dominated world and may impose a new dominance all over the world making it difficult for dissidents to make their opinion heard, e.g., when it comes to cancel culture, or disparately excluding those who are not online. People therefore have to engage in preference falsification and advocate for online access equally granted. Building on the open-source sentiments, there is already the idea of online access as common good and universal human right, implying mandates for non-excludability, non-rivalry and the right to equal access to the good (IFLA, 2023).

The digital millennium leveraged the World Wide Web into a powerful information source (Puaschunder, 2022b). Online internet searchplaces guide human everyday decisions (Puaschunder, 2022b). The strategic placement of information in search engine results has become increasingly important in political and corporate settings (Puaschunder, 2022b). Virtual competition derails in negative search engine de-optimization and unethical strategic searchplace

manipulation that deflects democratic acts, such as voting, or degrades the perception of a search term by pushing out competitors' quality content from search engine results (Puaschunder, 2022b). The rising amount of negative, unrelated, spamming, or harmful contents in searchplaces has exacerbated the call for self-curating online search terms. ChatGPT has hit the pulse of our times in the democratization of information flow coupled with the demand for self-determination in online displays. In light of the negative implications of searchplace discrimination in the past, such as cyberbullying, systemic racism replicated by algorithms and online inequalities, behavioral economics and responsible competition leadership is calling for creating inclusive digital worlds (Puaschunder, 2022b).

With a heightened degree of anonymity possible in virtual spaces, human rights online should focus on quality assurance when it comes to credibility and accuracy of online content. Harm can be perpetuated by individuals in new ways, e.g., online searches and databases potentially allow violations of privacy. Online bots, fake accounts but also Search Engine Deoptimization (SEDO) via clickfarms are newest developments in the digital millennium infringing on the right to know and access to accurate information that can also cause social upheaval and financial turmoil. Algorithm strategic manipulation occurs, for instance, in up-playing negative reviews of competitors and/or falsely flagging value content of competitors. To this day, this kind of searchplace discrimination is legal due to regulatory vacuum and shadow market for SEO and SEDO (Search-engine Deoptimization).

Defining human rights online would be the first step in reclaiming credibility space in the online virtual world as it could empower internet users to have a say in their online portrayal. Future advancements on human rights online should draw attention to self-determined internet user empowerment to correct abuse of algorithmic loopholes by paid search engine deoptimizers. Legal advancements, regulatory oversight, economic incentives, technical support and industry rescue funds work towards discrimination-free online searchplaces in favor for quality content over unethical competition (Puaschunder, 2022b). Ethics of online inclusion, law and economics analyses of searchplaces and interdisciplinary dialogue building on searchplace ethics but also human-artificial intelligence algorithm compatibility and cyber-checks-and-balances to tackle searchplace discrimination are expected to become key advancements in behavioral e-ethics and competition leadership of the future (Puaschunder, 2022b).

In light of the shrinking relevance of governmentally-controlled journalism and media outlets, quality assurance of information exchange in online marketplaces and online crowd control of internet corporations, such as social online media, could be enacted via human rights online.

Discussion

Digitalization has led to a democratization of hallmarks of democracy and society. The world has become flat in access to information and prosperity. At the same time, digitalization – like any other innovation – imbues inequalities in some profiting more from digital advancements than others. In the eye of the global character of digitalization and the rapid industry development of digital worlds, the time has come to address the online world from a human rights perspective. In order to serve the masses thoughtfully, digitalization needs to be bestowed with human rights values.

In the future digitalization should be studied as a global market disruption that requires multidisciplinary analyses of a wide range of stakeholders. Online creation of (customary) law pushes us to find new methods of sensing legal trends online. Science use of ChatGPT – e.g., in replacing expert interviews and big data scraping – requires attention to humanness and credible work. On the solid human rights formation, moral imperatives and professional codes of conduct could guide on the rise of digitalization encroaching our contemporary society (Nature, 2023).

Overall problems faced on the way to acknowledge human rights online is the changing nature of technological innovations, which updates the rules of the game in real time and already incredible fast, and even evermore fastened speed. The increased speed of online communication and the everchanging nature of the internet makes regulation more dependent on malleable and fickle component. Human rights could therefore evolve in a new generation of more flexible nature giving value to fast-paced changes and adaptation to trends. The regulatory environment keeps changing and developing as we go along with innovation, which is driven by the private sector. Problems of prosecution in cryptocurrencies' misuse tell a story about the leaping behind legislation to curb the fast-growing online phenomena. But also in the case of online fake news addressing the creators and even collecting evidence is hard, not to mention the lack of judiciary agencies to sue someone over internet disputes.

Lastly, the internet remains the ultimate multi-stakeholder phenomenon of our times without borders in a relative regulatory vacuum. Governments have lost control over traditionally well-regulated controlled media channels. Global governance institutions appear to descriptively leap behind private sector industry developments. Incentives for national governments are low to curb internet developments – mainly around the world due to lack in technical capabilities and in the U.S. out of free market preferences, network effects of the largest internet companies housed in the U.S. and big data insights gains. Cartels and monopolies are tolerated as the government may not want to lose intelligence (e.g., border control and visa issuance partially depend already on social media status, tax compliance is backtested with

LinkedIn information). The governmental incentive to break big data reaping monopoly companies (e.g., Amazon, Google, Facebook...) remains limited. To protect consumers and vulnerable users on the international level, only human rights appear to have an impetus to hold back negative consequences in the age of digitalization.

On the international level the question arises how far governments should control virtual spaces. Internet control has been found to be related to authoritarian regimes. Digitalization is significantly negatively correlated with corruption perception (Puaschunder 2022c). Digitalization therefore appears to come from places in the world that are less corrupt and also could bring public services to people in areas that are corrupt – for example in quality education and healthcare in territories of the world that lack sufficient public funding for education and general healthcare. Future question arise if regulated, who should be in charge of internet regulation to a phenomenon that consists of actors around the world. In addition, internet crime is rising exponentially, which outlines the urgency to act on regulating harmful behavior online (Akamai, 2023). National interests still prevail in the global digital world, as visible in the European Union Parliament big data revenue deficit with the US concerns or the U.S. government market protection by banning TikTok in higher education and demanding U.S. Congress hearings of the TikTok leadership (Fung, 2023).

Future research avenues may also address implicit biases of algorithms besides the strategic manipulation in up-playing negative reviews and content of competitors or falsely flagging value content of competitors in searchplace discrimination.

Policy implications demand for a concerted interdisciplinary approach to help understand the most contemporary trends in digitalization around the world embracing variegated stakeholders. As such, digitalization is a topic for the young, given the demographics of social online consumption and media use. If human rights become subject to scrutiny in the digital world, will this lead to rejuvenation of the concept of human rights? Future human rights online should be prepared in teaching online ethics in today's universities and schools. Educating future leaders early on from a young age would help the societal debate on the role of the internet in society. Getting accustomed to the internet in raising awareness, mobilizing e-social pressure and crowd control but also the negative aspects of online cancel cultures and the loss of classic media control in the age of digitalization, will become a key skill for future public and private sector leaders. Building human-machine compatibility but also a sense for digital ethics and being versed in human rights online promises as key skill in our future digital world.

References

- Akamai (2023). *State of the Internet Report*. Retrieved online March 15, 2023 at https://www.akamai.com/our-thinking/the-state-of-the-internet?gclid=CjwKCAiArNOeBhAHEiwAze_nKAG5Lmpor4wAJBSiN7xs9YAH5X7d_Y3j3P9ysKQuw6ohOtqtuGkDpRoC_9MQAvD_BwE&utm_source=google&utm_medium=cpc&utm_campaign=F-MC-52611&utm_term=security%20report&utm_content=US&ef_id=CjwKCAiArNOeBhAHEiwAze_nKAG5Lmpor4wAJBSiN7xs9YAH5X7d_Y3j3P9ysKQuw6ohOtqtuGkDpRoC_9MQAvD_BwE:G:s&s_kwid=AL!5241!3!540846683695!b!!g!!%2Bakamai%20%2Bsecurity%20%2Breport!12087382700!116826635936
- Bachelet, M. (2019). Human rights in the digital age: Can they make a difference? Keynote speech to Japan Society, New York, October 17, 2019.
- Bradford, Anu (2012). The Brussels Effect. *Northwestern University Law Review*, Columbia Law and Economics Working Paper No. 533. 107 (1)
- Feenberg, A. (2019). The internet as network, world, co-construction, and mode of governance. *The Information Society Journal*, 35, 4, 229-243.
- Fung, B. (2023). TikTok CEO to testify before Congress in March. CNN News, January 30, 2023. Retrieved online March 15, 2023 at <https://www.cnn.com/2023/01/30/tech/tiktok-ceo-congress/index.html>
- IFLA (2023). Is Internet Access a human right; is the Internet a public good? Retrieved online March 15, 2023 at <https://trends.ifla.org/expert-meeting-summary/is-internet-access-a-human-right-is-the-internet-a-public-good>
- Ishay, M.R. (2023). *The Human Rights Reader: Major political essays, speeches, and documents from ancient times to the present*. London: Routledge.
- Lee, B. (2021). Volatility. In: Ch. Borch & R. Wosnitzer, *The Routledge Handbook of Critical Finance Studies*. New York: Routledge.
- Mayer-Schönberger, V. (2009). *Delete: The Virtue of Forgetting in the Digital Age*. Princeton: Princeton University Press.
- Nature Editorial. Tools such as ChatGPT threaten transparent science: Here are our ground rules for their use, 612, 613, January 26, 2023.
- Puaschunder, J.M. (2019a). Dignity and utility of privacy and information sharing in the digital big data age. *International Journal of Commerce and Management Research*, 5, 4, 62-70.

- Puaschunder, J.M. (2019b). Value at looking back: Towards an Empirical validation of the role of reflexivity in econo-historic backtesting: Economic market prediction corrections correlate with future market performance. *Oxford Journal of Finance and Risk Perspectives*, 8, 223-239.
- Puaschunder, J.M. (2022a). *Advances in Behavioral Economics and Finance Leadership: Strategic Leadership, Wise Followership and Conscientious Usership in the Digital Century*. Cham: Springer Nature.
- Puaschunder, J.M. (2022b). Advances in Behavioral Economics and Responsible Competition Leadership: Tackling Searchplace Discrimination. TechReg Chronicle on Behavioral Economics, Competition Policy International, October 31, 2022. Retrieved online at <https://www.competitionpolicyinternational.com/advances-in-behavioral-economics-and-responsible-competition-leadership-tackling-searchplace-discrimination/>
- Puaschunder, J.M. (2022b). Human Rights Online: Towards a new generation of human rights in the virtual world. *Proceedings of the 3rd Unequal World Conference of the United Nations*, United Nations New York, New York, United States.
- Puaschunder, J.M. (2022c). The Future of Artificial Intelligence in international healthcare: An Index. In Herta Nagl-Docekal and Waldemar Zacharasiewicz (Eds.), *Artificial Intelligence and Human Enhancement: Affirmative and Critical Approaches in the Humanities*, pp. 181-208, Austrian Academy of Sciences, Austria, European Union, Berlin/Boston: De Gruyter.
- United Nations (2023). *Global Issues: Human Rights*. Retrieved March 14, 2023 at <https://www.un.org/en/global-issues/human-rights#:~:text=Human%20rights%20are%20rights%20inherent,and%20education%2C%20and%20many%20more.>
- WordPress (2023a). About. Retrieved March 14, 2023 at <https://wordpress.org/about/>
- WordPress (2023b). Bill of Rights. Retrieved March 14, 2023 at <https://wordpress.org/about/philosophy/>
- Zuboff, S. (2019a). Surveillance: Capitalism and the challenge of collective action. *New Labor Forum*, 28, 1, 10-29.
- Zuboff, S. (2019b). We make them dance: Surveillance capitalism, the rise of instrumentarian power, and the threat to human rights. In R. F. Jørgensen (Ed.) *Human rights in the age of platforms*. Cambridge, MA: MIT Press.