

Reinhard G. Mueller and Werner Stegmaier (eds.)
How Does the Digitization of Our World Change Our Orientation?

How Does the Digitization of Our World Change Our Orientation?

*Five Award-Winning Essays
of the Prize Competition 2019-21
Held by the Hodges Foundation for
Philosophical Orientation*

Edited by Reinhard G. Mueller and Werner Stegmaier

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Preface:

The Conception of the HFPO Prize Competition

by Reinhard G. Mueller

Through our periodic prize competitions, the *Hodges Foundation for Philosophical Orientation* seeks to philosophically confront some of the most pressing reorientations humanity faces in the 21st century. The current digital transformation increasingly affects all dimensions of our orientation, most noticeably in how we communicate, process and store information, work and move in our everyday life, but also with regard to big data, universal surveillance, artificial intelligence, and the Internet of Things – to just mention a few main keywords. However, it is unclear how this change currently impacts our life and what the long-term consequences will be. As such, through our prize competition, we want to make a contribution to addressing this transformation and provide some initial footholds.

On the day of our foundation's inauguration, on October 25, 2019, we also launched a prize competition concerning the question of this volume, "How Does the Digitization of Our World Change Our Orientation?" and offered the following prize awards:

- 1st prize award: \$25,000
- 2nd prize award: \$15,000
- 3rd prize award: \$10,000
- A special student award of \$5,000, if no student is among the best three

We announced that we would expect new, i.e., not yet published, contributions from any insightful point of view and recommended that authors write approximately 30-120 pages of thorough and comprehensive philosophical research that clearly shows connections to the philosophy of orientation, especially chapter 16 of Werner Stegmaier's *What is Orientation? A Philosophical Investigation*, while we also welcomed critical approaches. We furthermore added the following description and sub-questions to the announcement on our website:

The digital transformation entails fundamental reorientations permeating not only our everyday routines of work and life, but also the ways we understand reality, communicate and interact with others, and thus how we orient ourselves in the world as such. While digital technologies simplify and expedite many processes of communication and production, they also pose new challenges to our political, economic, legal, scientific, artistic, and ethical orientations. How can we philosophically understand these reorientations? How do the new digital technologies fit to the conditions and structures of human orientation? What do they enable or promise, and what will they preclude, constrain or render impossible?

After extending the deadline due to the Coronavirus pandemic by one year to October 25, 2021, we eventually received thirteen qualifying submissions. In the selection process, we, the *Hodges Foundation for Philosophical Orientation*, focused on two aspects: a) to what extent does the author address the prize question in a scholarly well-founded, argumentatively convincing, and promising way? and b) to what extent does the essay make a significant contribution to the philosophy of orientation and our foundation (– which may include critical perspectives)? From these thirteen essays, we eventually invited five finalists to a virtual debate on Zoom, so that the members of our board and advisory council were able to evaluate for themselves the quality of the finalists' contributions and how they were able to defend their claims and statements.

Given the high quality of the finalists' essays and performance during the debate, we eventually decided that all five should receive an award. The winners are in their 20s, 30s, 40s, and 50s, coming from three different continents:

The **1st prize award** went to Prof. **Hans-Georg Moeller** (University of Macau) and Prof. **Paul D'Ambrosio** (East China Normal University) for their joint essay on
“How Does the Digitization of Our World Change Our Orientation? A Discussion of this Question through the Lens of Proficiency (Profile-Oriented Identity).”

The **2nd prize award** was received by **Samantha Sprole** (Nashville, TN, United States) for her contribution on
“Meet the Moment: An Inventory of Experience in the Digital Era and the Call for Orientation Virtues.”

Dr. **Christoph Durt** (Freiburg Institute for Advanced Studies at the University of Freiburg, Germany) won the **3rd prize award** for his essay entitled
“How Does the Digitization of Our World Change Our Orientation?”

The **special student award** was divided among
Abigail Bergeron (undergraduate student at Trent University, Canada, and Swansea University, United Kingdom) for her essay on
“The Question Concerning Our Technologies: Considerations of Orientations”

and **Paul Stephan** (PhD student at the University of Freiburg, Germany) and his contribution with the title:
“How *Could* and *Should* Digitization Change Our Orientation? On Use and Abuse of Digitization from a Utopian Perspective.”

The six authors agreed to the publication of their award-winning contributions in this collection of essays, and they were given the chance to make edits and non-substantial changes to their texts after the debate. It is our pleasure to here share with the world these insightful contributions concerning one of the most pressing questions of our time – of how the current digital transformation changes our orientation.

I.

Introduction: The Philosophical Horizon of the Prize Question

by Werner Stegmaier

1. The Frame of the Change: A Technology for Orientation Generating Gains and Losses

The digital transformation of communication and control technology has developed into a future issue for mankind. It now affects human orientation in all its breadth and depth, from individual orientation in the world, both geographical and spiritual, to interindividual orientation in its economic, political and social dimensions, to philosophical and ethical orientation. After the invention of writing in antiquity and printing in modernity, a new age seems to be dawning in people's communication with each other and their interaction with the world at large – a keyword is “digital disruption.” Such upheavals generate great expectations and hopes, but also fears, uncertainty and anxiety. They can have such a profound impact on people's lives that they require a fundamental reorientation, most recently about the conditions and possibilities of orientation itself: For at the horizon now appear not only previously unknown possibilities for orientation, but also the prospect of a complete manipulation of people in all areas of life.

Nevertheless, the digitization of communication and control technology is not experienced as a crisis like the current crises of the global economic and financial system, climate change, the threat of famine, the worldwide migration due to poverty, the menace to world peace by the aggression of major powers or the Coronavirus pandemic. One cannot stop the development of digital technology worldwide, as any technology that makes life easier, and does not want to, because it may indeed help cope with such crises. However, the digital

transformation could push forward the steering of human orientation to such a degree that humanity loses control over itself: that the control technology becomes independent from the controller and thus an overpowering force, no longer coming from a religious ‘beyond,’ but rather operating in the midst of our world as a fate of mankind. All this is what our question aims at: *How does the digitization of our world change our orientation?*

Digitization, as it may be defined in detail (there are many proposals for this), is not a worldview, an ideology, a belief, or a morality that one would have to convince oneself of and commit oneself to, but first of all a technology that is accepted because it is useful and that needs special skills to use it. Technology is the manufacture and use of devices and machines which ensure very similar sequences of production and use. The core of digital technology is the machine transformation of analog, i.e., not discrete, but gradual states or processes into discrete, sharply distinguished and precisely determinable data, which is based on the binary mathematical distinction of 0/1 (bit = binary digit) and physically processed as a polar electrical voltage state. Technologies, which we enjoy making use of as far as they make life easier, mostly bring about both advantages and disadvantages, i.e., “gains” and “losses.” SAMANTHA SPROLE provides an orienting overview from the perspective of digital natives, people who have grown up with digital technology, are used to it, can handle it skillfully and have little fear of it.

According to Sprole, the hallmarks of the digital communication are the simplified and reliable information storage and utilization, increased information processing power, lower barriers to entry, greater volumes of information, increased speeds of data transfer, decentralized data distribution and collection, and increased interactivity. For her, the digital communication obviously engenders great gains for our orientation: new professions and economic opportunities, new programs and methods of study, new means of understanding via big data, new modes of entertainment and creativity, new online communities, and new routines for digital social interaction and identity formation. But Sprole also highlights the other aspect, the losses in orientation, the information overload, attention fragmentation, distraction, speed of cultural change (including linguistic change), the risks of double contingency in online environments, and, in sum, the uncertainty, complexity, ambiguity, time pressure, and unsettlement that they enhance.

Technologies create new certainty and security as long as you can oversee their functioning. Digital technology, however, has become so complex since its beginnings that most users do not understand its processes. They merely work with the surface of the technology on screens, blindly trusting that the technology, which is inscrutable to them, works in a way that it meets their expectations. But this technology is dependent on so many external circumstances, from power supply to ever-new software and hardware upgrades by the technology companies, that at any time it may also stop working or work differently than you would like. For the benefit of tech companies, one is obviously absorbed into processes that are at least as much in their interest as in that of the users.

Data storage technology has become so advanced that nothing is forgotten once it has been entered. All the data is also available to technology companies: They have created a digital world from huge amounts of data and extracted from them algorithms according to which this world can increasingly be structured and instrumentalized according to specific intentions. Self-developing algorithms hardly can be comprehended by the most intelligent human brains. Thus, the self-accelerating technical progress of digitization, driven not only by the market but also increasingly by public scientific institutions, could bring about a future ever more quickly that people cannot yet foresee and that they may not even want in this way. As the sociologist and systems theorist Niklas Luhmann (1927 – 1998), who strongly impacted philosophy, wrote in his concluding opus magnum *Theory of Society* (1997; the German title is different: *Die Gesellschaft der Gesellschaft*): there could be a “technically induced but use-determined, endogenously dynamic explosion of communication options” (*Theory of Society*, vol. 1, 180, modified translation).

Now, the digital technology seems to bring about a reorientation of humanity, such as previously only religions and then scientific revolutions were able to do, while those in science increasingly replaced those in religion – in much longer periods of time. The digitization of the global human lifeworld, as described in *What is Orientation? A Philosophical Investigation* (pp. 253-261), is itself a product of such scientific revolutions. Likely no reorientation has ever proceeded with so much reflection, unleashed such innovative power – and left us both so curious and so perplexed at the same time. As with all great innovations, reorientation and disorientation are closely intertwined, but what is at stake here is human orientation itself. The previous orientation processes

are still available, but they are penetrated and partially replaced by the new ones. We now experience the world in a different way, and it is no longer the same world. But with the new means of digital technology, one also begins to better understand the functioning of pre-digital animal and human orientation and then marvels all the more at their abilities, which may still be superior to digital technology and from which new orientations could still emerge.

2. The Change's Actual Manifestations in Our Everyday Orientation

2.1. Changes in Interindividual Communication

Digitization with its mathematical language of bits is based on writing, a first-rate cultural achievement. Initially, it also forced written communication, which could then be transferred by technical means back into orality, into digitized analogy. In everyday communication, textuality used to be the expression of more deliberate utterances: Writing requires more time than speaking and thus allows more time to think about what to say and how to say it. At the same time, written messages overcome spatial distances, but require more time to convey. They can be stored for an indefinite period of time, archived, and then retrieved and enforced when needed. Writing has thus fundamentally changed the spatial and temporal management of human orientation and created new possibilities, especially in trade, state administration, and jurisdiction. The societies that used the communication technology of writing reshaped themselves in fundamental ways.

Electronically digitized communication increases the possibilities of writing: people can communicate across any distance almost in real time, and have almost unlimited control over space and time in communication. Everything that concerns people is, as far as the technical and cultural requirements are provided, available to all people immediately and everywhere. One has, as never before, a god-like insight into the world, has an if not omnipotent, then at least omniscient-seeming orientation over the world within the limits of what can be technically achieved. The situativity of human orientation, according to which each can observe the world only from his or her point of view and within their horizons and perspectives in his or her respective spatio-temporally given situation, seems to be cancelled, if, in principle, everyone can know

everything about everyone forever. But this no longer leads into metaphysics: Digital technology remains earthbound.

The limits of digitally enabled human omniscience are obvious. They are set by digital technology itself: It makes accessible only that which can be digitized, i.e., only discretely distinguishable matter, in the case of statements, for example, logically graspable content, but not the moods, feelings, personal tones and attitudes that are expressed at the same time in analog communication with them and essentially help determine the meaning of statements. Digital technology also allows us to communicate feelings and evaluations through the use of emojis and likes and dislikes. But they are separated from the information of the message. Already through language itself, statements are standardized: You have to say or express everything in a language that your interlocutors can understand. The worldwide use of digital communication, however, forces standardization far beyond this; the rapid exchange further promotes simplifications and abbreviations, in which digital natives are masters and which also influence their oral communication, while older people often see in them an impoverishment of language and thus of their possibilities of orientation. Knowledge, just as in the past, must first be collected, and what is collected depends on decisions made here by people, there by machines.

Since messages are saved and the chat history can always be traced if needed, you also have a good overview of the interindividual communication: You can easily compare with whom you communicate about which topics and in what ways. With likes and dislikes, you can constantly see what you agree and disagree with. With sharing functions, messages can quickly be spread to wider and wider circles with whom you are no longer in face-to-face contact. You find yourself in a large virtual circle of like-minded or similar-minded people and can clearly exclude and marginalize dissenters everywhere; your contacts are likewise distinguished in a binary way. Metrics constantly provide accounts of connections, something like an accounting system for consensus and acceptance. Measurability invites you to make your self-assessment dependent on the number of your contacts and followers. Opinions and evaluations become more concise and sharpened; their reasons tend to go into the background. Interindividual communication or, in the language of the philosophy of orientation, orientation to other orientations, is less experienced than managed. By using digital technology, our orientation to other orientations cools down – and coolness itself attains a high value.

At the same time, as an individual, one is increasingly managed by means of digital technology and this in a completely impersonal way. Communication with institutions (companies and authorities) is formatted through masks in which, as before in forms, everyone has to answer the same questions; in general, however, they are now evaluated by “systems” and only rarely by people. The obligation to follow such impersonal communication formats excludes individual particularities; only uniform interests and communications are permitted. FRIEDRICH NIETZSCHE had already lamented this with regard to language as such, which, in order to make possible communication and cooperation among very different people, it must strongly generalize. In this way, however, only “average and *base* experiences” could be easily communicated, and this had been “the most forceful of the forces that have controlled people so far”:

People who are more similar and more ordinary were and always are at an advantage, while the more select, refined, idiosyncratic, and difficult to understand easily remain alone, succumb to accidents in their isolation and rarely reproduce. Tremendous counter-forces would have to be summoned to cross this natural, all-too-natural *progressus in simile*, this continuing development of human beings toward the similar, ordinary, average, herd-like – toward what is *base*! (*Beyond Good and Evil*, No. 268, transl. Adrian Del Caro, modified)

In the language of the philosophy of orientation, digital technology makes orientation to other orientations closer and tighter than ever. At the same time, the digital standardization of communications tends to produce a uniformity of opinions, with the effect of changing personalities in the long run. While the possibilities of communication, of orientation to other orientations, increase, it is at the same time more dependent on the formats set by the new technology. This further reduces the individuality and situativity of orientation and affects its core: to be an individual orientation in an individual situation about that situation. As an individual, you are less alone – at the price of fitting into the average, into the formats of the digital world that suit as many as possible.

Nevertheless, the counterforces Nietzsche speaks of remain. Even under the conditions of the digitization of communication, one is free to devote oneself more closely to certain contacts, to communicate with them on a more superficial or deeper level, and pay more attention to individual and situational

nuances. Orientations can still be singular if one wants them to be. However, you must now be more attentive and inventive to achieve this singularity. In-depth, personally appropriate, and nuanced communication is now a distinction.

2.2. Changes in Individual Orientation

Digital technology is also changing one's self-assessment in other ways. Since storage technology enormously relieves one's individual memory, no one needs to be ashamed of his or her poor memory anymore, as far as knowledge accessible to all is concerned. Since, when composing messages and other texts, one can be supported by spell check and correction software as well as foreign language tools and ever-improving translation machines – soon we will carry devices in our ear that can replace simultaneous interpreters for the most important languages –, embarrassing linguistic deficits are less noticeable. Since navigation devices make it easy to find all routes, one is less likely to embarrass oneself in geographical orientation. Since all this and much more is literally in one's hand on one's smartphone – and the smartphone is therefore also in one's hand more and more often – one feels more certain about one's individual orientation: Digital technology not only makes life easier, it also strengthens orientation security and thereby self-confidence and the confidence of others.

On the other hand, people are focusing more and more on their smartphones and pay less and less attention to their immediate surroundings and communication with people in their immediate vicinity (we've seen the pictures of people sitting around a table all communicating not with others but with their own smartphones). The loss or crash of one's smartphone, which ensures one's orientation, can easily lead to a disaster in one's orientation. The more one relies on technical orientation systems, the more one's own orientation skills decline. But one still needs them to be able to check and correct false or insufficient knowledge on the internet, texts and translations, and the geographic routes recommended by navigation devices. Digital technology cannot orient us as such; it can only be an aid for one's own orientation; only in this way will it be used properly. The basic conditions of human orientation are not canceled by it.

What irrevocably changes is the self-relationship of the individual, one's relationship to one's own identity. HANS-GEORG MOELLER and PAUL D'AMBROSIO show in their essay how it becomes increasingly dependent on the possibilities of digital technology. According to the sociologist Erving

Goffman, who was still entirely concerned with the analog world, in order to get along with others as well as possible, we always try to present ourselves in a suitable fashion through our speech and actions to them and to ourselves; in short, we play-act, as in a theater, in front of and for each other. With digital technology, this play-acting can be staged more purposefully and effectively. We can now give our identity a deliberate design on the screen and more or less hide our natural person behind it; in short, we can profile, if not create, our identities and thus create new footholds for our self-assessment and the assessment by others. Moeller/D'Ambrosio elaborate the bodily conditions, social structures, changing semantics, and digital-technological possibilities of identity management. They show how the old ideals of 'sincerity as role-oriented identity' and 'authenticity,' which is a paradox because one also has to display or perform it in some way, are in Hegel's sense sublated in the digital world in favor of proficity. The more people in an "age of proficity" practice and master identity management, the more it is expected of all others, it becomes the standard: "Under conditions of proficity we need to orient ourselves to profiles."

As Moeller/D'Ambrosio show, one no longer finds oneself observed only by specific others, as in analog communication, but by anonymous "general peers," precisely those metrics and rankings that are now inserted everywhere in the digital orientation to other orientations, thus becoming general standards of orientation. Identity has never simply been a destiny; one has always worked on it through one's self-display. But the more one can work on it with the means of digital technology, the more it becomes a mere profile that others also recognize as such. This makes people more easily recognizable to one another, and they can be more quickly classified under anonymous standards – the security of their orientation to one another increases. At the same time, however, clearly defined profiles can make people unrecognizable, which increases insecurity when it comes to finding one's way with each other.

Even according to Moeller/D'Ambrosio, one is still free to identify or not identify oneself with the profile one creates. An identity created through digital technology is still an identification with identifications, which leaves room to use profiles skillfully. By profiling one's identity in the virtual world under its conditions and formats, one creates a leeway regarding one's always already given standpoint and the given situation of one's individual orientation. This, in turn, expands the leeway for one's decision-making: while some believe that

their design identity is the first step toward their actual self and thus toward self-realization, others consider this to be a mendacious way of dealing with oneself. But both are self-displays. Everyone is now free to profile their own self on the internet one way or another, but soon no one will be free to avoid using profiles altogether.

2.3. The Economic, Political, Social, and Scientific Dimensions of the Change

Collective orientation and its change are less prominent in the award-winning essays. The philosophy of orientation, however, certainly includes them. It likewise deals with how the economy, politics, law, morality, science, religion, and art orient themselves and how individuals orient themselves to them. Certainly, in the end, it is always individuals who orient themselves, and they do so in each case in *their* situation from *their* standpoint, in *their* horizon and perspective. But since people orient themselves strongly to each other, collective orientations emerge in many fields, which then develop into organizations and institutions. In them, individuals retain more or less large leeway everywhere, but orient themselves uniformly in certain respects. They strive for profit in economics and for decision-making and power in politics, follow binding rules in law and morality, seek truth in science, and transcend pragmatic everyday orientation in art and religion. Such collective orientations are likewise being transformed to a certain extent by digital transformation.

Economics and science make the greatest, while morality, religion and art the least and most inconspicuous use of the technical means that the digital transformation offers. Dealing with the current global crises concerns primarily the fields of economics, science, and politics. More than ever, the crises force us to find common orientations worldwide in order to master them, and one essential means of doing so today is digital technology.

Let's take a brief look at how digitization is changing our orientation in business, politics, science, and the social order. Only through digitization can the globalization of the economy make full use of the liberation of markets in as many countries of the world as possible, the worldwide distribution of production sites and the organization of supply chains. The digital optimization of logistics through just-in-time productions and deliveries saves resources and increases productivity. Since the globalization of the economy intensifies

worldwide travel and therefore exchange among cultures, orientation becomes more global as such: in the language of Martin Heidegger in *Being and Time*, a new shape of being-in-the-world emerges, a being-in-the-world that is now digital and largely formatted by the digital infrastructure.

The digital contexts of reference (*Verweisungszusammenhänge*, § 17) expand the field of orientation from the proper and proximate to the world at large, not with the help of a detached metaphysics, but through technically installed networks of lines for electrical signals. With the help of satellite systems, human orientation gains overviews of (almost) every other place on earth from (almost) every place on earth; from spaceships one can view the earth as a whole, which was previously attributed only to God, and this ‘heavenly’ view can be transmitted via information technology to everybody’s smartphones. We now live in the proud consciousness of a comprehensive, but earthbound overview of the earth that is technically possible at any time.

In the human resources sector, the digitization of the economy is creating a variety of new jobs, especially for digital natives, as emphasized by several contributions in this edition. What they have learned and assimilated from childhood onward can be quickly translated into jobs, largely independent of their conditions at home; successful start-ups are emerging largely in the field of IT. The world of labor as a whole is fundamentally transformed. Many jobs are becoming location-independent; instead of face-to-face communication, it is often possible to communicate in video conferences; digitally equipped machines and robots are saving labor and thus also manpower, and at the same time new jobs are being created through the manufacture of machines and robots. Despite many negative forecasts, unemployment does not seem to be rising on average worldwide, but rather falling. Younger generations tend to become more secure in their work and life opportunities.

As in the industrial revolution of the 19th and 20th centuries, the digital revolution of the 21st century has seen the emergence of tycoons, founders or operators of tech companies who emerged from modest start-ups and are now driving digital transformation on a large scale with ever-new lucrative design opportunities, accumulating unprecedented wealth. In the financial system, digitization has made extremely fast stock trading possible, accelerating innovation. At the same time, new digital currencies are created, making transactions independent of state banks and reserve currencies. Thus, new degrees of freedom in the economic orientation world have evolved, and governments are

struggling to contain their excesses. Across governmental systems, one allows the economy so much leeway that it can generate a high income and thus prosperity for the respective societies; in liberal and social democracies, the leeway is limited to such an extent that the generated prosperity benefits everyone as much as possible. Even autocratic regimes, where it is primarily those in power who benefit from the gains of digitization, now feel compelled to give the free economy such greater leeway in order to secure their own power by increasing their populations' wealth.

On the other hand, as increasingly clear, the economy is becoming more crisis-prone and precarious as it is more globally organized with the help of digital technology. Access to resources and the maintenance of supply chains can be disrupted at any time by natural disasters and political confrontations, if not destroyed by wars. Furthermore, the sustainable organization of humanity's living conditions on earth forces limits on economic growth and the exploitation of natural resources. Now the globalized economy must also build more resilience, resistance to disruption, in its own interest. The more economic processes become digitized, the more vulnerable they are to cyberattacks, targeted attacks on the digital infrastructure of companies and government agencies. Meanwhile, there is a growing threat that cybercrime will be transformed into cyberwar by governments, that the economic and political dimensions here will escalate into a military dimension. Digital technology can also be used to optimize conventional weapons, tracking and control systems and military strategies. As long as worldwide eternal peace has not been achieved politically – and it does not seem to be in sight –, the security of people's survival is threatened by digital technology.

This points to the political and social dimension of digitization. Even if the globalization of the economy increases worldwide prosperity on average, it generates major economic inequalities among nations and within national societies. This can lead to spontaneous revolts by disadvantaged groups, in whose organization digital technology in turn plays a crucial role. The fact that everyone can easily connect with others through social media has a positive effect on democratizing the respective societies and global society as a whole, and this is precisely why authoritarian regimes try to both control digital media as much as possible and use them themselves as an instrument of power. Above all, the digital transformation expands the possibilities for surveillance, which CHRISTOPH DURT explores in detail in one part of his essay. It is in the

interest of both companies and governments to track the behavior of consumers and citizens as meticulously they can, to combine the data obtained into data collections (“big data”) and use it to gain indicators for influencing consumers and citizens: “The golden age of surveillance has arrived” (Durt).

Surveillance consists of the most complete orientation to other orientations with the intention of influencing them in one’s own interest: in online shopping, directing the attention of customers to the products that are lucrative for the companies, retaining subscribers for as long as possible by streaming services and gaming, and at the same time constantly feeding them with advertising for profitable products. As Christoph Durt explains, this also involves the subtle orientation technique of nudging, the luring with seemingly harmless signs that, repeated several times and linked with other signs, inconspicuously lead to the desired purchases. In the meantime, an entire profession, the influencer, lives from it. Customer loyalty is boosted by registering every reaction to every nudging and transforming it into new and intensified nudging, so that consumers believe they themselves can develop their orientations in the directions they themselves desire. Consumers and citizens become entangled in their determined orientations by the business or political interests of others. Most people are well aware of this, but many engage in it anyway and enjoy the feeling of having their own orientations confirmed. Politically, the digital orientation technique of nudging renders, in the extreme, an authoritative universal orientation more likely, as it used to be fancied in dystopias. Thus, supported by propaganda on traditional and social media channels, consent can be won even for the brutal suppression of minorities and wars of aggression.

Digitization as an effective and intrinsically value-free technology can thus promote both the de-hierarchization and democratization as well as the autocratization of politics. Socially, it engenders new rankings, now in the terms of superiority and inferiority in the use of digital technology. Digital technology treats everyone the same insofar as everyone uses similar devices that are increasingly easier to use; it hierarchizes people insofar as some can use the devices more effectively than others and thereby gain more influence. ABIGAIL BERGERON draws particular attention to the fact that today younger generations tend to be superior to older ones in this respect. However, since digital technology is largely used in networks, in which individuals can perform their influence only to a limited extent, it also blurs superiority and inferiority. While such networks can be specifically organized and then tightly managed

by individuals, as in large tech companies, they can arise and evolve over time, as is often the case in international academic research groups. As before, the world wide web cannot be fully controlled in its entirety, only at specific servers and in limited areas, e.g., by blocking social media in certain countries or by requiring access codes to certain platforms. In the early years of digitization euphoric hopes for completely new kinds of freedom and community arose, for a new and now worldwide digital social contract, a “civilization of the mind in cyberspace” (John Perry Barlow). By now, the euphoria has settled down.

Since no one has to go to a government agency, a doctor, a lawyer or a craftsman’s store uninformed anymore, the so-called expertocracy is also being constrained by digitization. Niklas Luhmann already argued: “Modern computer technology [...] also attacks the authority of experts. In principle, everyone will in the future be able to check the statements of experts such as physicians and lawyers on his own computer.” But he added: “Of course, this does not do away the fact that everyone who relies on communications in one way or another remains dependent on trust. But in the age of electronic data processing, this trust can no longer be personalized, no longer be implemented by social status; it is now only trust in the system.” (*Theory of Society*, vol. 1, 187f.; translation modified) With digitization, a transition goes on from personal trust to system trust, trust in the mere functioning of digital technologies and the organizations that operate them, remaining largely anonymous. You may contact them via their virtual accounts, but you can never be sure who or what is behind them. Luhmann: “The *authority* of the source with all the required sociostructural safeguards (stratification, reputation) becomes superfluous, is indeed annulled by technology and replaced by *unknownness* of the source. The possibility is also lost of recognizing the intention of an utterance and of nurturing suspicions or drawing other conclusions that could lead to the communication being accepted or rejected.” (*Theory of Society*, vol. 1, 185) This process has “profoundly unsettled the semantics with which society reproduces meaning worth conserving.” (*Theory of Society*, vol. 1, 188) One more or less surrenders oneself to digital technology, which produces meaning and thus orients people, but one does so only to the degree that one cannot orient oneself in it.

3. The Change’s Philosophical Dimensions

At this point, Christoph Durt distinguishes between “orientation *with* information” and “orientation *in* information.” He as well as ABIGAIL BERGERON

raise the question of digital information technology very fundamentally in the philosophical dimension. For their part, they both orient themselves to Martin Heidegger's philosophy of technology. DURT goes another step back to Heidegger's teacher Edmund Husserl. According to Husserl, the "European sciences" have come into a "crisis," because in modernity, through their mathematization, they have detached themselves so far from everyday experience in the "lifeworld" that they are no longer sufficiently comprehensible. Although they themselves could only become plausible from lifeworld contexts, they believed they had discovered true reality. In the language of the philosophy of orientation, they have lost the connection to everyday orientation and thus no longer serve it.

With his treatise *The Crisis of the European Sciences and Transcendental Phenomenology*, Husserl responded in 1936 to Heidegger's *Being and Time*, which had appeared in 1927. Heidegger had already addressed problems of orientation following the concept of being-in-the-world and had distinguished "ready-to-hand" (*Zuhandenes*), which is immediately significant, understandable and useful in everyday orientation, from "present-at-hand" (*Vorhandenes*), which is ascertainable through scientific theories and considered in modernity as truly real. In between, there was Ernst Jünger's influential essay from 1930/34, *Total Mobilization*. There, he described World War I in such a way that all the forces of the warring empires were put into the service of war technology in the spirit of progress, and the empires that could not push weapons-technological progress to the extreme were defeated. In World War II, "total mobilization" was to reach even more severe levels. Technology, if it followed its own progress, became a world-destroying power. Both, Husserl and Heidegger, were concerned by the mathematical-scientific based technology which would powerfully permeate the living world and devalue its own value. This made ambiguous the high value that the mathematical sciences themselves had until then claimed over all other orientations of mankind.

Heidegger took up this ambiguity in an influential lecture in 1953 *The Question Concerning Technology*, on which both Durt and Bergeron primarily focus: Heidegger now understood the path of the mathematical sciences and the technology that emerged from them no longer as a path drifting away from truth, but as part of the "event of truth" or in Greek of "truthing" (*alaethéuein*) – we could say: of orienting oneself in the world. He thus gave a new twist to the question of technology. He now considered the way of technology as a cognitive-technical-economic syndrome of "imagining" (*Vorstellen*), "producing"

(*Herstellen*), “putting forth” (*Herausstellen*), “ordering” (*Bestellen*), and “providing” (*Bereitstellen*), which he called, by a new German word creation, “*Ge-stell*.” This *Ge-stell* is, for Heidegger, always in “danger” of becoming blind to itself and misleading “man in his relationship to himself and everything that is,” i.e., disorienting us in our language (*The Question Concerning Technology and Other Essays*, 27, transl. William Lovitt, modified). The “fate” (*Geschick*), however, leaves the “freedom” – in our language: leeway – for a further and deeper approach here, i.e., to philosophically place technology in larger horizons, in order to see its limits as *Ge-stell*. “The saving power” (*das Rettende*) – a word of the poet Friedrich Hölderlin – comes with this ambiguity of technology itself which challenges us to reconsider it in this way.

Husserl and Heidegger could not foresee to which extent electronic data processing was to grow; if they had already been aware of it, they would probably have assessed technology in a much more problematic and dramatic way. Durt and Bergeron now see it more calmly and optimistically. Durt considers both alarmism and enthusiasm regarding digitization as disorienting. In his words, it all comes down to our “orientation *in* information” – as the contributions collected in this volume attempt to do. Bergeron rejects “Martin Heidegger’s strict division between earlier technology (*techne*) and modern (industrial-era) technology,” with which he tried to distinguish the “ready-to-hand” or “available” from the technology becoming dangerously independent. For Bergeron, “technology can be defined as continuous expansion and a process of transformation.” The “saving power” that Heidegger asks for does not lie in a deeper thinking of the “event of truth,” in which technology also finds its place. It lies, according to Bergeron, already in another perspectivization of technology: “‘Top-down’ approaches,” among which she considers Heidegger’s, “consider all technologies as sharing a universal metaphysical essence.” Instead, for her, “‘bottom-up’ approaches view technology as a plurality of differences.” Bergeron believes “both of these positions have merit and should not be viewed as conflicting or mutually exclusive.” Bottom-up approaches start from the lifeworld or everyday orientation into which technology, in this case digital technology, has long entered, and Bergeron advocates “that these technologies have presented a new way of life or a new *way* to orient oneself within life, but it is largely becoming a *totalizing* way of life.” This means: “We cannot prevent this evolution; we can only witness the growing pervasiveness. These technologies are so deeply entrenched that we struggle even to grasp their totality.” Digital

natives couldn't imagine life any other way now: "Modern technology is not something that just appeared to achieve human needs, but rather it is the very embodiment of those needs." Bergeron, herself a digital native in her 20s, derives much value from the "digital real life," also in terms of identities and profiles.

From the point of view of the philosophy of orientation, the difference between a given and a constructed world is no longer plausible, and the initially given world is not the authentic or true one. For this world, too, we do not simply see as it is, but in our processes of orientation we interpret and arrange it in this or that way, as Nietzsche made clear. Today, as all the contributions to this edition show, we no longer have any difficulty in saying that the "real world" has absorbed the "virtual reality" and we now have a new reality. Digital technology in particular has bridged the difference in such a way that it can hardly be felt anymore. The new reality that has thus emerged may be, as Luhmann puts it, an "alibi reality" of imaging techniques, but these imaging techniques, including digital technology, in turn provide a "guarantee of reality" (*Theory of Society*, vol. 1, 183) with which we can orient ourselves sufficiently. We are now dealing, Luhmann continues, with "a basically operational and then procedural understanding of reality" which shows a "no longer comprehensible complexity" (*Theory of Society*, vol. 1, 186), and here, natural and technical processes do not differ in principle. In the language of the philosophy of orientation, in both the "real" and the "virtual" world, we hold on to footholds, which we create for ourselves in our orientation and which permit connections between each other. Footholds in both worlds can be combined and condensed with each other in such a way that a reality results from both, which then appears as *the only* reality. 3D glasses can "virtually" create surprisingly "real" worlds, with the difference that you can take off or switch off the glasses and then see that these worlds are only simulated. We then believe ourselves back in the "true" world and make this the standard for the plausibility or non-plausibility of the "apparent" world. But precisely this distinction of a true and an apparent world has become implausible since Nietzsche's philosophical masterpiece "How the 'true world' finally became a fable" from *Twilight of the Idols*.

4. The Change's Prospects for the Future of Mankind

The younger generation of digital natives, represented here by Samantha Spole, Abigail Bergeron and Paul Stephan, share the confidence that digital

technology can be kept *as* a technology within the bounds of usefulness in the new reality and will remain controllable within it. As far as they are concerned with philosophy, their life-world experiences resist to be misled by philosophies which contradict that. Digitization has changed their orientation in this respect: their, now digitized, orientation is more convincing than philosophies can be. By asking how philosophies can become plausible for human orientation at all, the philosophy of orientation has the means to do justice to this.

4.1. The Dissolution of Classical Anthropological Distinctions

Classical anthropological distinctions can no longer be maintained, either. For millennia, the human being was understood in the Western philosophical tradition as the living being distinguished above all others by intelligence and rationality. These qualities seemed to provide a superiority that made human beings the rightful lord of life on earth. By now, we see that the human species is able to destroy the conditions of life on earth. But already hundreds of years ago, Michel de Montaigne in his *Apology for Raymond Sebond* expressed strong and well-founded doubts about the superiority of humans over other animals: In many things, but especially in his orientation abilities, he is clearly inferior to them.

Today, it is disputed how to understand “intelligence” and “rationality” altogether:

Should one measure it as up to now above all by logical-mathematical abilities, which make ever further technical progress possible, or by more comprehensive abilities to extend one’s living conditions well, to arrange them however carefully with caution, consideration, prudence and farsightedness and to use for this also the abilities of the computation? The ecological crisis, which will occupy mankind for decades to come, if we can cope with it at all, clearly points to the second, broader sense of intelligence and rationality.

The most disputed point here is artificial intelligence, which is being developed with human mathematical-informational intelligence but may soon surpass many components of it—as well as in terms of creativity. It is sometimes argued that artificial intelligence can only recognize correlations and not causalities. But our everyday orientation and the sciences, too, *infer* or *construct* causalities from regular correlations of footholds; what these causalities are “in themselves” cannot be seen in the end, as we have known since Immanuel Kant

at the latest. It is unclear where the development of artificial intelligence will lead; for the time being, we are trying out what is possible. Thus, mankind with its intelligence can no longer clearly situate itself even in relation to the machines constructed by it.

However, a development direction is emerging here which is especially interesting for the philosophy of orientation. Artificial intelligence is considered to be all the more successful the better the machines controlled by it can orient themselves to their respective environment, e.g., self-driving cars on the road or robots used in healthcare. Now experts try to endow them with context sensitivity, which belongs to the core of human orientation, and to construct something like a “common sense” that can assess the most appropriate course of action in the respective situations. This corresponds to the broader sense of intelligence mentioned above. Human orientation can, with sufficient experience – in the language of electronic data processing from the ‘big data’ of prior orientations –, come to far-reaching action designs based on just a few footholds and quickly correct them when new relevant footholds emerge. This makes human orientation itself a model for the development of artificial intelligence.

Nevertheless, the capabilities of the human brain still seem far from attainable by means of artificial intelligence. According to the state of the art, artificial intelligence is still very slow and inefficient compared to human orientation with its brain embedded in a body, limited to very specific structures and still hardly capable of transfer services. Klaus Mainzer, a German philosopher who is following the current development of artificial intelligence intensively and with the best expert knowledge, puts it this way: “They [humans in their orientation, W.S.] filter fuzzy information with limited sensory organs and cognitive abilities, evaluate situations on the basis of motivations and emotions, complement and strengthen their ability in teams. Learning and communication skills, sensitivity, and sociality continue to make us superior to a supercomputer.” (*Leben als Maschine: Wie entschlüsseln wir den Corona-Kode? Von der Systembiologie zur Robotik und Künstlichen Intelligenz* [*Life as a Machine: How Do We Decipher the Corona Code? From Systems Biology to Robotics and Artificial Intelligence*], p. 135; our translation) He therefore defines intelligent systems, quite in the sense of the philosophy of orientation, as “complex dynamic systems with the ability to learn (neurocomputing), evolutionary and creative abilities (genetic computing), which can decide, act and communicate more or less autonomously in uncertain and indeterminate information spaces (fuzzy and probabilistic

computing). These capabilities are not simply given, but evolve in interaction of dynamic systems and their environments. Embodiment is thus equally a fundamental requirement.” (164) Consciousness in this context is neither a being nor a “central instance of control” (174), but a temporary “state of the brain” (178) focused on particular activities, which in turn occurs in the interaction of “particular patterns of activity” (176) and in certain cases can also observe its own activities as “self-consciousness” (177). Self-reference fundamentally allows for recursivity, which means feeding orientation experiences made in certain contexts via orientation efforts into new situations and transferring them appropriately. This recursivity can now be modeled with computers through the intervention of those “fuzzy agents” that can perform fuzzy searches and evaluations. Both in digital technology and in human orientation practice, successful orientations are learned by examples, which requires those enormous collections of data (“big data”). Both include fault tolerance, learning ability, and adaptability (199f.). Central control is not necessary here; there is no evidence for it in the brains of living beings and it would be far too cumbersome in terms of information technology (217, our translation).

“The saving power” in the question of digital technology would thus be found in the well-known, which is in its functionalities still little understood: our everyday orientation. Its computer-technical modeling is currently being developed, and certainly specific functions of human orientation will be executed by machines more reliably and more persistently. However, the algorithms by which the functions are integrated in order to cooperate optimally in the given situation seem to become increasingly opaque even to their engineers – as opaque as everyday orientation always has been so that one has hardly dared to explore it concretely but made do with metaphysical generalizations. The time-honored assumption, to which also contemporary philosophers still adhere, that artificial intelligence can never model something like consciousness and that human beings therefore always remain superior to the machine, has become questionable: It is more open than ever what in fact consciousness (*Bewusstsein*) is – or now better awareness (*Bewusstheit*) as a temporary state of orientation. Consciousness is no longer the central problem if one refrains from defining human life by it. Mankind now seems able to define itself much more in terms of its orientation abilities. Proceeding in this way, we may be confident that we can keep the development of artificial intelligence on the right track.

4.2. The Search for Salvation in an Ethics or a Utopia of Digitization

The fact that humanity might not succeed in this respect generates fear, and many react to fear defensively. Since it is no longer possible to stop the digitization of human orientation, this defensiveness takes the form of normative regulations: under keywords such as “digital humanism,” one wants to rely on ethics and legislation to prevent undesirable developments that have already occurred or are expected.

Ethical and legal regulations are certainly called for, but their effectiveness is limited. Considering the speed of the development of digital technology, they may be rapidly outdated and therefore remain highly controversial. Even if agreed on them, in the global community they could only contain, not prevent research into the further development of artificial intelligence and its applications; somewhere in the world, they would nevertheless be pursued, often because their progress is necessary to overcome crises. We thus encounter a paradoxical situation: to effectively regulate the development of artificial intelligence anywhere in the world, a world government would be needed that requires precisely this for its governance – the most sophisticated artificial intelligence; and appropriate democratic forms would first have to be found to control such a government without making it ineffective.

Without question, however, caution is required in dealing with artificial intelligence, which in any case will fundamentally change people’s lives and the image of humankind. All that is possible for humanity in terms of clear-sightedness, circumspection, far-sightedness, consideration and foresight, i.e., all the virtues of orientation, must be put to use here. Thus, at each stage of the development of digital technology, one will be able to decide with dispassion and prudence which regulations are effective. States and inter- or supranational organizations have already moved to adopt regulations more and more on an ad hoc basis in order to cope with crises, i.e., engaging in short term politics. There is no ultimate certainty in either normative ethics or prudent orientation practice.

If we cannot find “salvation” in ethics, where Heidegger did not look for it either, then perhaps in a utopia. PAUL STEPHAN, likewise a digital native, makes this suggestion in his contribution. He changes the question from “How *does* ...” to “How *could* and *should* digitization change our orientation?” and follows Ernst Bloch’s *The Principle of Hope* (1954-1959). Utopias neither

describe reality nor do they commit people to ethical norms, but they can design alternatives to the current reality and morality in an uncertain and fearful present and give hope for a better future. As a utopia, this future lies nowhere, and here, too, very different projections are possible. Stephan describes his “dream of a society based not on mere individualism but on solidarity,” which “does not necessarily imply any form of totalitarianism,” but “may help us to reflect upon the boundaries of liberalism.” The digital transformation could contribute in reinforcing not only a “solidary” but also a “collective orientation.” But Stephan himself admits: “It is easy to say, of course, that in a perfect society we would have a perfect digitization.” Indeed, we can only hope that it will turn out this way.

As all the contributions to this volume show, digitization has already greatly changed our current orientation in many respects. How it will do so in the future remains to be seen.

Translated by Reinhard G. Mueller

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II.

Orientation to Profiles: Identity in a Digitized World

by Hans-Georg Moeller and Paul J. D'Ambrosio

Abstract

The philosophy of orientation considers (personal and collective) identities “a problem”: While identities are the primary footholds of mutual orientation, they are not fixed, but evolve and fluctuate. This paper investigates likewise from a philosophical perspective how the prevalent modes of shaping identity have changed over time by shifting between different kinds of orientation. Specifically, we suggest that the digitization of the life world that characterizes the 21st century indicates a recent change in the orientation of identity formation.

We distinguish between three different modes of identity: Sincerity shapes identity in orientation to social roles, authenticity shapes identity in orientation to an original self, and what we call “profilicity” shapes identity in orientation to profiles. Authenticity has replaced sincerity as a dominant identity mode along with the emergence of modern society. During the course of the 20th century, however, the curation of profiles, has become increasingly common. People validate one another’s identity by mutually observing how their profiles are being seen. Digital technologies provide unprecedented opportunities for the curation, display, and observation of profiles. We argue that the success of digital media is, at least in part, due to their capacity to enable large-scale orientation to profiles.

“The philosophy of orientation is not based on identities,
but considers them a problem.”

Werner Stegmaier / Reinhard G. Mueller,
*Fearless Findings: 25 Footholds for the Philosophy of Orientation*¹

1. Introduction

The question: “How does the digitization of our world change our orientation?” indicates that orientation is nothing fixed; it changes over time. Moreover, the question suggests that a significant change of orientation is taking place right now, concurrent with the digitization of our world. Here, we will try to make sense of this change by suggesting a vocabulary to describe it and by paying special attention to changes regarding the “steady footholds of our mutual orientation”²—our identities. For us, the concrete use of digital technologies in the everyday lives of people today reflects, among other things, a change in identity.

Changes in today’s digitalized world do not need to be reduced to one-way cause-effect mechanisms. Digitization changes our orientation, but orientation also changes, or perhaps better, orients digitization. A dynamic unfolds between orientation and digitization. One reason why digital technologies flourish in the way they do is their ability to enhance a change in identity—the steady foothold of mutual orientation—that predates them. More precisely, we suggest that these technologies enhance a change from authenticity, or inner-self-oriented identity, to proficility or profile-oriented identity.³ What people do, for example, with the Internet or big data has something to do with an orientation to profiles.

Technologies are applied within social and historical contexts. These contexts condition the development of technologies as much as the technologies shape society in turn. As it is well known, paper and the printing press (movable type printing) were introduced in China earlier than in Europe, and yet these

1 Stegmaier, Werner and Reinhard G. Mueller, *Fearless Findings: 25 Footholds for the Philosophy of Orientation* (Nashville: Hodges Foundation for Philosophical Orientation, 2019), p. 11. [https://www.stegmaier-orientierung.de/files/dokumente/\(2019\)%20Fearless%20Findings%20-%202025%20Footholds.pdf](https://www.stegmaier-orientierung.de/files/dokumente/(2019)%20Fearless%20Findings%20-%202025%20Footholds.pdf), accessed July 25, 2020.

2 Werner Stegmaier, *What is Orientation? A Philosophical Investigation*, transl. Reinhard G. Mueller (Berlin/Boston: De Gruyter, 2019), p. 25.

3 An extended exposition of the concept of proficility will be presented in our forthcoming book *You and Your Profile: Identity after Authenticity* (New York: Columbia University Press). This essay presents our ideas in a different context (the issue of digitization) and form, and in engagement with Werner Stegmaier’s philosophy of orientation. It was written after the book manuscript was completed and uses some of the source materials and literature also discussed in the book.

technological innovations had vastly different effects in the respective regions. Social change in relation to these innovations was not the same. Technological inventions do not determine specific changes in society or in orientation; rather, technological changes, social changes, and changes in orientation co-evolve.

In order to analyze the dynamics between orientation, digitization, identity, and profiles, we will first provide an account of these notions in Werner Stegmaier's philosophy of orientation. Then we will outline our notion of "proficiency" and its relation to the philosophy of orientation. This conceptual groundwork is the foundation for the following critical analysis of the interplay between digitization and orientation in an "age of proficiency." This analysis is our response to the question: How does the digitization of our world change our orientation?

2. Identity, Profiles, and Digitization in the Philosophy of Orientation

"What is orientation?" is the title of Werner Stegmaier's *magnum opus* indicating the guiding question of his philosophical project as a whole. This question is not just a matter of intellectual curiosity for Stegmaier. It is the one that philosophy, according to him, "should *first of all* be able to answer."⁴ To say that this question ought to be answered first, however, also implies an answer—an answer to the age-old problem where philosophy ought to begin. The problem of the beginning of philosophy was essential to German Idealism (a philosophical tradition within which Stegmaier is firmly rooted, but from which he also decidedly departs) in its attempt to lead philosophy back to the "secure path of science," as Kant famously put it (in the *Critique of Pure Reason*, Bvii). This path, lest it be random, needs to start at the right point. But how to identify this point? We are facing a Catch-22 situation: For philosophy to be a "scientific" (*wissenschaftlich*) system—rather than a merely arbitrary collection of information, ideas, or dogmas—we need to know where to properly begin, but in order to know where to properly begin, we need a philosophical system that locates the correct starting point. Thus, we need to have already begun in order to know where to begin.

⁴ Stegmaier, *What is Orientation?*, p. xi.

Hegel explicitly grappled with this problem in the preface to his *Phenomenology of Spirit*, and it also occupies Stegmaier's philosophy of orientation from the start. In both cases, the strategy is similar: The very fact that we are reflecting on how to do philosophy, or that we are asking about orientation, shows that we have already begun doing what we are wondering about. We are already in the midst of it. Actually, in everything we do, no matter if in everyday life or in philosophy, we are to some extent already oriented, otherwise we could not do what we do and be able to orient ourselves while doing it: "Orientation always presupposes another orientation"; it "is the beginning of everything without having a beginning."⁵ Therefore, the question about the starting point of philosophy, or orientation, becomes retroactive: "it cannot be exhaustively defined in advance."⁶ Instead, we understand that it is the very mode of our operation; it is, so to speak, the element within which we are functioning. And precisely therefore, the question about orientation is the one that philosophy, as a critical reflection on the grounds of our actions, or our being, "should *first of all* be able to answer." A primary reflection reflects on the conditions, or, more specifically, as Stegmaier says using Kant's methodological formula, it reflects on the *conditions of the possibility* of what we are doing when we are doing something. If to live is to operate in the mode of orientation, then a philosophy of life is a methodical or systemic reflection on the conditions of the possibility of the mode of orientation, or, in short, a philosophy of orientation.

Somewhat comparable to Hegel's systematic excursion through the manifestations of consciousness within the realm of the spirit in the *Phenomenology of Spirit*, Stegmaier's equally systematic excursion through the manifestations of orientation in life in *What is Orientation* first traces in great detail the conditions of the possibility of orientation überhaupt⁷ that is "in general" or "as such," before moving on to investigating the conditions of orientation between individuals. This is to say: after presenting a sort of a "phenomenology" of broader features or structures of orientation, Stegmaier eventually focuses on orientation in society. Here, we need to cope with the fact that not only we as individuals orient ourselves but that there are also other individuals around us who do so as well. Individual orientations are related to one another even if they remain distinct. In society, we orient ourselves in the context of the

⁵ Stegmaier, *What is Orientation?*, p. 2.

⁶ Stegmaier, *What is Orientation?*, p. xii.

⁷ Werner Stegmaier, *Philosophie der Orientierung* (Berlin: De Gruyter, 2007), p. xix.

orientations of others with whom we interact. We are faced with the problem, or the possibility, of “orientation to other orientations.”⁸ We orient ourselves with regard to and in communication with others.

In the social dimension of orientation, individuals can relate to one another, or orient to other orientations, by means of trust (*Vertrauen*) or respect (*Achtung*). Trust and respect stabilize “individual orientations to other individual orientations.”⁹ Respect, in particular, works across distances—you may not be close to opponents or competitors, for instance, but you may respect them, and in this way relate your orientation to their orientation, while they may do the same vice versa, resulting in some form of stability where you and the other remain opponents or competitors to one another over time. This relation provides a framework of orientation for both sides; they become meaningful and recognizable for one another. Within a framework of mutual respect, *identity* comes to the fore. Stegmaier maintains: “Being respected by you, others are steady footholds in your orientation,” and then declares: “These steady footholds of our mutual orientation are first of all identities.”¹⁰ Identity, and in particular personal identity, is defined as a prime element of inter-personal or social orientation. Once others turn into a “steady foothold” of orientation for us, once they take on specific contours that remain stable and that we can respect; they assume an identity. Importantly, the process is mutual, so we, too, as individuals, establish our own identity within the same dynamics of orientation in the context of respect.

Within such social orientation dynamics, identity is a steady foothold, yet it also evolves and fluctuates. We respect others, and they respect us, but their identity as well as our own is constantly renegotiated in this relation. Stegmaier explains:

Everyday orientation needs identities so that it can rely on something for the short-, medium-, or long term, and to reach an understanding with others. Therefore, it identifies steady footholds, but it can identify something, or someone, differently in a different situation.¹¹

8 Stegmaier, *Philosophie der Orientierung*, p. xix.

9 Stegmaier, *What is Orientation?*, p. 137.

10 Stegmaier, *What is Orientation?*, p. 137

11 Stegmaier, *Philosophie der Orientierung*, p. 433.

One's social identity can be registered semiotically in the form of signs, or in numbers as on an ID card; we have a juridical identity in legal matters, and biologically a genetic identity is established. Personal identity, in particular, is constituted physically via the body, on the basis of character traits ascribed to people, and through narratives and the construction of autobiographies. We can distinguish between a public and a private identity which are defined in contradistinction to one another—the private is that which is not public, and vice versa. And there is also a distinction between a unique individual identity and a collective identity supposedly shared by larger groups.

Interestingly, orientation about identity often happens with the help of a third party—or a “third person,”¹² as Stegmaier puts it. Job applicants, for instance, are typically required to provide references. This is a common and standardized way of orienting oneself about someone else's identity through information received from an external source. In a less standardized fashion, third parties can provide information on someone's identity in informal communication. A core function of conversations about non-present others is to provide orientation about their identity that is regarded as more complete or reliable than the information we obtain from them directly.

Sexual orientation is an essential aspect of both the social and biological dimensions of human life. It is of core importance not only for procreation, but also for the shaping of interpersonal relationships. Sexual orientation, too, is dynamic and diverse. It can be repressed, disciplined, or contested, giving rise to individual and collective struggles.¹³

As the steady footholds of our mutual orientation, identities need to be recognizable. If you do not recognize someone then you do not know her identity and this indicates a lack of orientation. Identity is not always obvious; it can be confusing or downright deceiving—either accidentally or intentionally. Therefore, the question about true identity can arise—not only regarding objects, but also regarding people, and, importantly, even regarding oneself. This may bring about a quest for authenticity. Personal identity, and especially one's own self-identity, is considered authentic if it is “self-made, of one's own choice, with one's own powers, or if it is the result of ‘self-actualization’”¹⁴ However, as Stegmaier indicates, authenticity is paradoxical: one is supposed

12 Stegmaier, *Philosophie der Orientierung*, pp. 441-442

13 Stegmaier, *What is Orientation?*, pp. 148-150.

14 Stegmaier, *Philosophie der Orientierung*, p. 457.

to actualize one's true self without being able to know what the true self is prior to its actualization. The authentic self that one intends to represent is not the origin, but rather the result of its representation—and therefore not original.¹⁵

Identity does not emerge “naturally”; it is socially produced, and people invest a lot of effort to display their identity to others. Individuals orient to one another's orientation, but while mutual, these orientations still remain separate and rely on images or impressions. When presenting ourselves to others, we project images of ourselves to them, and they do so as well —through our behavior, the way we dress, the way we speak, etc. Social interaction is to a significant extent “impression management.”¹⁶ The images one believes to have presented may in many cases, if not in most, differ from the images that are perceived, but nevertheless we depend on these images since we have no immediate access to one another—no way to see beyond the “presentation of the self”¹⁷ Social roles provide frameworks for impression management. Within the family, for instance, parents and children typically act, or project self-images, in accordance with certain role expectations, and if they don't then problems for mutual orientation will likely ensue. Moreover, a certain coherence of roles and role-related self-images is expected.¹⁸ If, for instance, one presents a lecture at a university and one's spouse suddenly shows up and asks a personal question, this will be perceived as awkward because of the incongruity between the roles “teacher” and “spouse” and the different images attached to them.

The images or impressions that one presents to others can take on the shape of “profiles.” Profiles make identity distinct and recognizable, but they also typify and categorize. The CV one submits along with a job application is simultaneously supposed to distinguish oneself from the other applicants and to show that one has the common characteristics expected of anyone holding the advertised position. Profiles are dynamic and multiple. In order to be successful in today's society one needs to be capable of developing and varying one's profiles. One has to be able to, for instance, present different applications displaying different profiles when applying for different positions. A CV that always stays the same will not be very efficient. Individuals are not the only ones who need to work on and present their profiles; collective bodies, such as

15 Stegmaier, *Philosophie der Orientierung*, pp. 458-459.

16 Stegmaier, *Philosophie der Orientierung*, p. 477.

17 Erving Goffmann, *The Presentation of Self in Everyday Life* (New York: Random House, 1959).

18 Stegmaier, *Philosophie der Orientierung*, p. 449.

political parties, sports franchises, and universities need to do the same; and, importantly, companies need a “corporate identity.”¹⁹

Personal and collective profiles typically work with stories that establish a “narrative identity”²⁰ resulting in “narrative profiles” (*Erzählungsprofile*).²¹ Once more, these narrative profiles both distinguish and typify identity. They show in a dramatized form how an individual, or a corporation, or a nation, is special in a way in which people, corporations or nations are commonly expected to be special, for instance by displaying generally esteemed virtues, such as creativity, integrity, or reliability. Such narrative profiles in turn provide clues or models for further orientation: “One learns from them for one’s own orientation.”²²

After having outlined the conditions of interpersonal orientation related to trust and respect, and more specifically, to identity and profiles, (and before turning to matters regarding orientation, metaphysics, and death which go beyond the scope of this paper) Stegmaier addresses orientation in wider social contexts. Here, he first analyses the conditions of orientation in various social systems (which, for him, are “orientation systems”), such as the economy, politics, law, and the mass media. Then he investigates the conditions of moral orientation. Eventually, he discusses the conditions of orientation in a society that has become global. Globalization, or the emergence of world society, has brought about an encompassing standardization, for instance of time in the form of “universal time (UT), but also in the economy with its “world market,” or in language where English has become a de facto world language that can provide orientation in many parts of the world. Importantly, differentiations between regions according to a center-periphery distinction have been made largely obsolete by global *networks* that do not have a center.²³

Orientation in times of encompassing globalization and standardization tends to take place in networks, and, especially in digitalized telecommunication networks exemplified best by the World Wide Web. The Internet, Stegmaier says, “virtualizes orientation.”²⁴ This is to say that in this trans-geographical, network-like, and highly standardized virtual space, fiction and reality merge

19 Stegmaier, *Philosophie der Orientierung*, p. 450.

20 Stegmaier, *Philosophie der Orientierung*, p. 450.

21 Stegmaier, *Philosophie der Orientierung*, p. 452.

22 Stegmaier, *Philosophie der Orientierung*, p. 452.

23 Stegmaier, *Philosophie der Orientierung*, p. 631.

24 Stegmaier, *Philosophie der Orientierung*, p. 638.

together.²⁵ Identity, too, is virtual on the Internet; it is a semiotic reality. Like all contents there, it is artificially designed with both graphic and linguistic means, and typically with the intent to attract attention.

On the Internet, orientation often takes on game-like qualities. The “surfing” metaphor illustrates this aspect of orientation in the virtual world well:²⁶ we can orient ourselves there playfully so that we neither aim at getting anywhere specific nor try to find the way from point A to point B. Orientation on the internet can thereby become some sort of sport, an “orienting of oneself in its pure form” (*Sich-Orientieren in Reinform*), as Stegmaier says²⁷. In other words, it is as if we were orienting ourselves there only for the sake of orienting ourselves, without any further objectives. This formulation evokes Kantian connotations: Does Stegmaier here really imply that orientation on the web is somehow void of empirical constraints, rarified to its “pure” (*rein*) shape? Probably not, since his discussion of the conditions of orientation in digitalized global communication clearly references its embeddedness in interpersonal, economic, political, and many other orientations so that the Internet certainly does not appear as the transcendental realm of orientation. To the contrary, materialized in the smartphone in your hand,²⁸ the Internet enables very concrete experiences of orientation in a most powerful way.

3. On Profile-Oriented Identity

3.1. A Dynamic Concept of Identity

In Stegmaier’s philosophy of orientation, identities are defined as the “steady footholds of our mutual orientation” without which neither society nor individuals could function as they do. This concept of identity, while firmly located within a philosophical analysis of the conditions of the possibility of orientation, is informed by conceptions of identity formulated in contemporary sociology and psychology. Indeed, Stegmaier makes ample use of modern academic theories of identity relying substantially, for instance, on Erving Goffman. In contemporary socio-psychological research, especially in the tradition of both Goffman and G.H. Mead, identity tends to be regarded as

²⁵ Stegmaier, *What is Orientation?*, pp. 257-260.

²⁶ Stegmaier, *Philosophie der Orientierung*, p. 254.

²⁷ Stegmaier, *Philosophie der Orientierung*, p. 640.

²⁸ Stegmaier, *What is Orientation?*, p. 254.

emerging out of a) psychological processes in the minds of individuals leading to the formation of a notion of selfhood which are intertwined with b) social processes that shape notions of the person as essential constituents of social relationships. Sheldon Stryker and Peter J. Burke summarize this approach:

Among the many traditions of research on “identity,” two somewhat different yet strongly related strands of identity theory have developed. The first, reflected in the work of Stryker and colleagues, focuses on the linkages of social structures with identities. The second, reflected in the work of Burke and colleagues, focuses on the internal process of self-verification (...) Each provides a context for the other: the relation of social structures to identities influences the process of self-verification, while the process of self-verification creates and sustains social structures.²⁹

Internally, individuals learn to relate their highly diverse mental experiences, their feelings and thoughts, to themselves. In early childhood we shape a sense of an “I” as the subject of all our experiences and thereby engage in what Stryker and Burke here call “self-verification.” This happens in the context of complex social structures, such as the family, which ascribe social identities to individuals. As Stryker and Burke argue, some theories emphasize the role of social structures defining personhood over the psychological formation of selfhood while others do the opposite. Eventually, however, identity is seen as developing in a dynamic relation between psychological and social systems.

From the perspective of systems theory, a third systemic realm can be added to mix. The formation of identity not only involves psychological and social process, but also biological operations. People have bodies which are, for instance, biologically female or male, and this matters, for instance, with regard to social structures. They also have brains without which they would not be able to think and feel. Ultimately, the formation of identity must succeed in somehow “uniting” all these functionally and operationally separate systemic realms. It is far from evident to assume that all the incongruent mental, social, and biological aspects of a person somehow cohere in a singular unit called the “self” to which they are attributed. Yet, this is precisely what identity does:

²⁹ Sheldon Stryker / Peter J. Burke, “The Past, Present, and Future of an Identity Theory,” in: *Social Psychology Quarterly* 63 (4) (2000), p. 284.

it provides footholds for orientation by allowing both society and individuals to conceive of this body with all its multiple functions and dysfunctions, of this mind with all its often-conflicting ideas and emotions, and of this person with all its (sometimes) contradictory roles as constituents of a particular “me.” Quite miraculously, identity not only manages to somehow amalgamate the heterogeneous aspects of an individual into a steady foothold of orientation, but it can do the same even with larger collectives—groups, corporations, or nations have identities as well.

Since identity formation involves multiple systemic realms (minds, bodies, society), it evolves, just as these realms do. Life, thought, and social operations (communication) always go on. While identities can well be understood as steady footholds from the perspective of a philosophy of orientation, they are by no means static or fixed once and for all, or grounded on a core “self” nor any immutable transcendental or transcendent principles. To the contrary, identity formation, both of individuals and of collectives, is a never-ceasing effort related to ongoing biological, mental, and social processes. Identities need to be reaffirmed, validated, developed, defended, proven, and so forth. They are dynamic. The “impression management” Stegmaier points to is but one aspect of the more encompassing and constant task of “identity management.”

Social structures change over time, and so do “semantics,” that is a vocabulary of ideas, ideologies, philosophies, religions, moral values, or artistic constructs which rationalize, justify, or support, but also often question, challenge, or subvert these structures. Identity formation takes place within the horizon of changing social structures—it has a historical dimension. If this is so, then in order to be able to provide steady footholds of mutual orientation, identity formation must evolve—not only within the lifetime of an individual, but also over larger historical periods. A type of identity that provides a steady foothold of orientation in the U.S.A. today probably would not have worked equally well in China several millennia ago. To serve as steady footholds, identities need to be manufactured competently by making use of the social and semantic resources available within given contexts.

In the following section, several (not mutually exclusive) “identity technologies” will be discussed: specific culturally and historically contingent conditions of the possibility of identity construction that made sense in relation to the social structures and semantics prevailing at a given time. In order for identity to be convincing, both to others and oneself, and to enable orientation,

it must fit into its social surroundings. Identity is not identical everywhere and at all times.

3.2. Sincerity

The title of Lionel Trilling's book *Sincerity and Authenticity* indicates two different types of identity formation, which, according to Trilling, came into conflict in modern Europe. Using Trilling's words, sincerity can be defined as a form of personal identity tied to "the esteem and fair repute that follow upon the correct fulfillment of a public role." In sincerity, one is "true to oneself" not just for the sake of being true to one's self, but "with a public end in view"³⁰ In effect, sincerity means honestly enacting the public roles one takes on. Here, the vector of self-identification points outward, from one's private intellectual and emotional states to one's public appearance. *One's inner states are oriented to one's outer shape.* The "correct fulfilment" of one's public roles lies in truly identifying with them rather than merely playing them without total commitment—or insincerely.

In their expositions of a "Confucian role ethics," Henry Rosemont Jr. and Roger T. Ames do not refer to Trilling's work. However, they do characterize a Confucian model of personal cultivation and social harmony very much along the lines of Trilling's understanding of sincerity. Rosemont, for instance, proposes that we see "ourselves and our fellow human beings not as autonomous individuals, but as fundamentally interrelated role-bearers who *live* those roles, not merely 'play' them"³¹ Similarly, Roger T. Ames, repeatedly stresses that from a Confucian perspective, roles need to be "lived," rather than played.³² Based on his understanding of the Confucian philosophical tradition, Rosemont develops a model of role-based relational identity that he metaphorically describes as an "onion": "I peel off successive layers; first son, then husband, father, grandfather; I continue peeling away the layers of friends, students, teachers, colleagues, neighbors, etc. And what is left when there are no more layers? Nothing at all."³³ While the onion metaphor will hardly fit every mode of selfhood described in Confucian texts, and much less in the Chinese philosophical tradition, it

30 Lionel Trilling, *Sincerity and Authenticity* (Cambridge, MA: Harvard University Press, 1972), p. 9.

31 Henry Rosemont, *Against Individualism: A Confucian Rethinking of the Foundations of Morality, Politics, Family, and Religion* (Lanham, MD: Lexington Books, 2015), p. xiv.

32 Roger Ames, *Confucian Role Ethics: A Vocabulary* (Hong Kong: Chinese University Press, 2011), pp. 95-97.

33 Rosemont, *Against Individualism*, p. 14.

nevertheless helps illustrating the notion of role-oriented sincerity. Leaving aside the question of whether selfhood has an essential core, or, like an onion, lacks one, it has nevertheless been common in many social contexts, and particularly where Confucian semantics prevailed, to orient conceptions of personal identity to social roles, and, especially to family roles.

This picture shows a Chinese family around 1910:



*Image 1: Chinese family portrait, ca. 1910*³⁴

The position of each person in the picture is determined by their roles in the family: females have to be on the right, males on the left; those who are older sit, and those who are younger stand. Dress and hairstyle are likewise indicative of the gender- and age-dependent role of each person in the family and in the social hierarchy—and this is also the case for the bound feet of the middle-aged woman visible at the bottom left of the picture.

The picture clearly represents strict moral and “biopolitical” regimes which all individuals on the photo need to follow. In accordance with social

³⁴ Image source: <https://pages.ucsd.edu/~dkjordan/chin/familism.html> accessed May 28, 2020. The photo was published in Dingle, 1911.

norms as expressed, for instance, in mainstream Confucian teachings of the time, individuals were expected to sincerely identify with their roles. It can be assumed that, if successful, such identification, may have helped the individuals to make sense of and thus to affirm the often brutal (as in the case of foot-binding) disciplines they had to endure. Sincere identification, manifested in true devotion to a social role, could not only provide much needed orientation about what to do and why to do it, but also generate respect (*Achtung*). Under conditions of sincerity, respect would typically be the reward of role fulfillment. Indeed, philosophical texts from the Confucian tradition (such as the *Analects* of Confucius) tend to highlight just as much as popular treatises (such as the *24 Examples of Filial Piety*) that “esteem and fair repute” are due to those who “live” their roles *sincerely*, that is bodily, emotionally, and intellectually committed. They greatly praise dutiful sons, devoted wives, and loyal ministers.

Successful role performances are rewarded with respect under a social regime of sincerity, bringing about self-respect and providing a firm foundation of personal identity. The respect grounded in sincerity is often called *honor* or *reputation* (the “fair repute” mentioned by Trilling). On the other hand, failure to “live” one’s role(s) can be catastrophic, resulting in a lack of both respect and self-respect (*Selbstachtung*), or, perhaps better, in *dishonor* and *bad reputation*, and end up in despair. In such a case, identity formation breaks down. Until about two decades ago, China had one of the highest suicide rates in the world.³⁵ In a most interesting empirical study, Fei Wu (2009) documents the reasons why some people in less modernized areas in rural China took their own lives around the year 2000: “There was no egg in his soup while everyone else had it”; “his daughter-in-law hid steamed buns from him”; “his sons mistreated him”; “her husband blamed her for the mistreatment of her grandmother”; “his father blamed him for not carrying water”; “as a prostitute she could not marry her lover.”³⁶

In all these cases, utmost desperation was brought about by what these people perceived as a complete absence of role-related respect. This absence of respect made it impossible for them to live a family role in an honorable way. In effect, they felt that by being denied proper treatment as grandfather, father-in-law, father, wife, or son, their path to a valid identity was blocked. For them, no

³⁵ See https://en.wikipedia.org/wiki/Suicide_in_China; accessed August 5, 2020.

³⁶ Fei Wu, *Suicide and Justice: A Chinese Perspective* (New York: Routledge, 2009), pp. xvi-xxi.

steady foothold of orientation was in reach. The foundations of their personal identity had, it seemed, crumbled away leaving them with only suicide as a last resort, as an extreme form of “passive aggression” in a situation where, due to a lack of role-related dignity, no other path remained open.

Sincerity as role-oriented identity is of course not specific to pre-modern Confucianism or traditional China. In multiple forms, it continues to exist today, in the West no less than in the East. It not only occurs in family contexts, but also in sports, in the military, in religious communities, or in any other group context where loyalty and faithfulness to an assigned role are considered to be of prime importance—organized crime, for instance, also fits the bill.

3.3. Authenticity

Despite the survival of role-oriented sincerity in modernity, this identity technology was increasingly overshadowed by the rise of an alternative to it: authenticity. According to Lionel Trilling, in modern Europe people became fascinated with “the idea that somewhere under all the roles there is Me, that



poor old ultimate actuality, who, when all the roles have been played, would like to murmur ‘Off, off, you lendings!’ and settle down with his own original actual self.”³⁷

³⁷ Trilling, *Sincerity*, p. 10.

From an emerging perspective of authenticity, social roles appeared as merely staged and hiding an “original” or “actual self” underneath. To discover this true self, roles need to be discarded or disregarded. A popular metaphor conceives of them as “masks” which need to be stripped in “finding oneself.”

*Image 2: One’s authentic face appears when a social mask is taken off*³⁸

According to Lionel Trilling’s reading, Hegel’s *Phenomenology of Spirit* takes the transition from sincerity to authenticity as a central theme. Under the conditions of sincerity, what is praised as “obedient service” (*Gehorsam des Dienstes*) to the external powers of society (as manifested in social roles) when undertaken with “inner reverence” (*innere Achtung*) and honest dedication, is eventually critiqued as a mindless conformism or “the heroism of dumb service” (*Heroismus des stummen Dienstes*).³⁹ The concept of authenticity eventually turns around the vector of personal identification. In sincerity, inner states (the “inner reverence” that Hegel mentions) were oriented to a public persona acting in accordance with social expectations. From the perspective of authenticity such an orientation seems “dumb”—i.e., unreflective and unresponsive. Instead, what is called for is an orientation to the inner and supposedly “original” self. In authenticity, the outward appearance of a person is considered genuine only if it does not hide but accurately expresses the inner self. *The social persona is supposed to be oriented to this inner self.*

Lionel Trilling’s reflections on sincerity and authenticity substantially influenced Charles Taylor who in turn coined the phrase of the “age of authenticity” to describe a decisive period in modern history. Taylor defines authenticity in this way:

[By “authenticity”] I mean the understanding of life which emerges with the Romantic expressivism of the late-eighteenth century, that each one of us has his/her own way of realizing our humanity, and that it is important to find and live out one’s own, as against surrendering to conformity with a model imposed on us from outside, by society, or the previous generation, or religious or political authority.⁴⁰

38 Image source: <https://www.intermonitor.ru/tag/zhizn-posle-smerti/>, accessed August 5, 2020.

39 See Trilling, *Sincerity and Authenticity*; Walter, “The Work of Art in the Age of Mechanical Reproduction”; also referring to Baillie, *The Phenomenology of Mind*, pp. 294-296; and Hegel, *Phänomenologie des Geistes*, pp. 372, 378.

40 Charles Taylor, *A Secular Age* (Cambridge, MA: Harvard University Press, 2007), p. 475.

Taylor clearly highlights that if someone wants to be authentic, then she must not “surrender to conformity” and refrain from orienting herself to any model “imposed on us from outside.” Instead, she has to find and live out her own.

Sociologically, the inward-orientation of authenticity can be related to the emergence of “functional differentiation” in modern society. According to Niklas Luhmann, pre-modern society was characterized by “stratified differentiation.” Simply put, this means that society was divided into different strata which assigned specific positions (class, gender, ethnicity, etc.) to individuals from birth on. There was relatively little social mobility, so one’s social roles, and thereby one’s identity, was more or less fixed and obvious to oneself and to others. It could not be questioned to any great extent—it was “dumb.” This changed in modernity when the primary structure of society ceased to be based on the dividing lines between social strata (although these lines by no means disappeared altogether). For Luhmann, the structure of modern society is instead based on the differences between various “function systems” (or “orientation systems,” in Stegmaier’s terms) such as the economy, education, the mass media, the “intimacy system” (e.g., families), politics, etc. Within these systems, specific distinctions or codes are at work and personal differences arise accordingly (e.g., rich/poor, with or without degree, famous/not famous, married/unmarried) but they do so without much inter-systemic coherence. As Luhmann points out, this has consequences for personal identity: “The individual becomes defined by divisibility. It is in need of a musical self for the opera, an ambitious self for the job, a patient self for the family. What remains for itself is the problem of identity.”⁴¹

Compared with personal roles in pre-modern social strata, the different roles one takes on in today’s various function systems are much less coherent and stable. Their diversity and flexibility give rise to the idea that these roles are not acquired by nature or birth, but are highly contingent and coincidental, “external” and, indeed, “played.” Therefore, they do not provide reliable clues as to one’s “true” self. Instead, it is assumed, one needs to turn inwards when tackling the “problem of identity.”

41 Niklas Luhmann, “Individuum, Individualität, Individualismus,” in: *Gesellschaftsstruktur und Semantik: Studien zur Wissenssoziologie der modernen Gesellschaft*, Vol. 3 (Frankfurt/Main: Suhrkamp, 1993): p. 223.

See Stegmaier’s discussion of this quote: Stegmaier, *Philosophie der Orientierung*, p. 428, n. 3.

The inward-turn of authenticity modifies the conditions of respect. In sincerity, respect—in the form of honor or reputation—is largely role-based and tied to correct role-fulfillment. In authenticity, however, it relates to the supposedly unique way that “each one of us has of realizing our humanity,” as Taylor put it. Uniqueness and originality need not so much be “honored” as they need to be *recognized*. Following Hegel’s discussion of the concept of recognition (*Anerkennung*) in the *Phenomenology of Spirit*, this term did not only catch on in professional philosophy but became quite a buzzword in the “age of authenticity” far beyond academic circles. It disconnects respect from traditional role fulfillment and makes it an “inter-subjective” affair. One authentic subject recognizes another one. Although recognition is now often also demanded for collective identities (especially in identity politics), such demands still typically focus on individual rights and, quoting Taylor once more, on the freedom to “live out one’s own” rather than having to “surrender to conformity.”

Charles Taylor further explains that authenticity involves “creation and construction as well as discovery.”⁴² Intentionally or not, he thereby points to a contradiction also noted by Stegmaier⁴³ among others. How can the authentic self be at the same time an origin that is “discovered” and a unique construct that is “created?” Authenticity is deeply paradoxical. Not only does it oscillate somewhat uneasily between the poles of discovery and creation, it is further inherently subverted by an in-built double bind. If you follow the demand of the age of authenticity and become authentic then you are not only authentic but you also conform to a model, an “authenticity model.” You are then authentic and inauthentic at the same time. We learn how to be authentic by reading novels, watching movies, or hearing stories about authentic people—or perhaps by being lectured about the concept of authenticity by philosophers like Charles Taylor. In any case, the pursuit of originality is not entirely original. Advertisements for everything from running shoes and economy cars to banking and prescription medication trade on “originality” and creating a unique self. What is more, if everyone is authentic, then all of us are not only unique, but also similar to one another in being authentic. The paradoxes of authenticity are quite obvious, and therefore this mode of identity, while still widely applied, has not remain unchallenged. In fact, it is rapidly losing credibility. The age of authenticity has, it seems, passed its zenith.

42 Charles Taylor, *The Ethics of Authenticity* (Cambridge, MA: Harvard University Press, 1992), p. 66.

43 Stegmaier, *Philosophie der Orientierung*, pp. 458-459.

3.4. Profilicity

If the “age of authenticity” was characterized by the pursuit of an original self, then the present age may be characterized by the pursuit of a profile—it is an “age of profilicity.” To make sense of the notion of “profilicity,” we will first introduce the three concepts “second-order observation,” the “general peer,” and “social validation feedback loops,” and then outline how they all converge in the notion of a “profile.”

Second-order observation

For Niklas Luhmann, functional differentiation is not the only core marker of modernity. Along with it comes something that is equally significant: “A consequence of functional differentiation that is just as important is the far-reaching shift in observation to second-order observation, to the observation of observers.”⁴⁴ He further explains:

The observation of the observers—that is a shift from a consciousness of reality to a description of descriptions, or the perception of what others say or do not say—has become the advanced mode of perceiving the world in modern society. This is true in all major functional domains, in academia no less than in the economy, in art as much as in politics.⁴⁵

While Luhmann maintains that the transition from stratified differentiation to functional differentiation took place between the 16th and 18th century, it took another century or two for pervasive second-order observation to take hold “in all major functional domains.” The following photo, however, shows the same shift from first-order observation to second-order observation happening in a much shorter time span, a mere seven years;

⁴⁴ Niklas Luhmann, *Introduction to Systems Theory* (Cambridge, UK: Polity Press, 2012), p. 102.

⁴⁵ Luhmann, *Systems Theory*, p. 100.



Image 3: People in a theme park in Shenzhen, China⁴⁶

These two pictures, taken by “The Theme Park Guy” Stefan Zwanzger, show people at the same spot in a Chinese theme park in 2010 and 2017. In 2010, the audience watches the show in the mode of first-order observation, looking at it directly. In 2017, everyone (except for the child at the bottom right) applies second-order observation and looks at it through their smartphones while filming or photographing it. This is to say, they look at it as it will appear to others once shared digitally on social media—and this is the purpose of recording the show in the first place. In the mode of second-order observation we look at the world (including ourselves) in terms of how it appears in the observations of others. This mode of observation, as Luhmann says, is considered “advanced” in today’s society—it is somehow more interesting, more relevant, more reliable, or, in some sense, “truer” than first-order observation.

As the theme park pictures impressively display, the “advance” to second-order observation represents a significant shift in orientation. The gazes of the audience in the 2010 pictures are attentive and yet relaxed, leisurely, and joyful. The attention, or orientation, of the audience in the 2017 picture is decidedly different. Here, no one smiles. Instead, everyone is focused on their phones and most express some kind of tension. Second-order observation is not so easy, it seems. This is not surprising since it is much more complex than first-order observation: one must observe something and at the same time think about how it will be observed. *In second-order observation we orient ourselves to the world (including ourselves) as it is seen by others.*

⁴⁶ Image source: <http://www.thethemeparkguy.com/blog/view.html?bid=21> blog entry of December 5, 2018, accessed May 28, 2020.

As Luhmann stipulates, the shift to second-order observation happens throughout society. In line with this “advanced mode of perceiving the world,” politicians, for instance, need to make decisions with an orientation to the effect that these decisions have on constant political polls; otherwise, they might not get reelected or may lose public support. Artists and academics must observe what they and their peers produce in terms of how it is being reviewed—and the reviewers must also consider how their reviews will be observed. If they are unable to do this well, they are unlikely to succeed in their profession. In the economy, financial investors must orient themselves not merely to the financial products as such, but to the perceptions of these products, because these perceptions determine their value (a core aspect of the 2007-8 “Great Recession”). In short: “We no longer need to know what the world is like once we know how it is being observed and once we are capable of orienting ourselves in the realm of second-order observation.”⁴⁷ This kind of orientation is indeed crucial in contemporary society. Expertise in it is relevant when visiting a theme park just as much as when investing on Wall Street.

As Luhmann maintains, the transition to modernity—in the form of a transition to functional differentiation and to pervasive second-order observation in social function systems—did not happen overnight. It was a long, gradual process. Accordingly, descriptions and critical reflections on second-order observation (albeit not on the very concept which is rather specific to Luhmann’s theory) can be found long before the widespread use of smartphones and digital communication technology. Second-order observation has a history; it is by no means new.⁴⁸

An earlier instance of an interest in second-order observation is the aesthetic notion of the “picturesque.” It became popular in the 18th century along with a wider circulation of travel reports and artistic illustrations in the mass media of that period, such as journals and books.⁴⁹ The notion of the picturesque indicates a reversion of orientation in aesthetic observation. A first-order-observation-oriented aesthetic can evaluate an artwork based on its likeness to what it depicts, that is, the “real thing.” From this perspective a portrait of a

47 Luhmann, *Systems Theory*, p. 100.

48 According to Luhmann, second-order observation already existed in the ancient world (Israel, Greece) in the form of prophecy and philosophy (Luhmann, *Theory of Society* 2: p. 49) and analyses of sin/guilt or right/wrong (Luhmann, *Theory of Society* 2, p. 102).

49 The aesthetic notion of the picturesque is commonly traced back to the influential “An Essay upon Prints” by William Gilpin first published in 1768 (see Gilpin).

person can be regarded as well done only if it looks like the person it is supposed to represent. When seeing someone's portrait one may say approvingly: "Oh this looks exactly like her!" The notion of the picturesque, however, reverses this orientation and evaluates something, for instance a landscape, in terms of its correspondence to *depictions of landscapes*. In this case, when admiring the scenery on a trip, one may gush: "Oh, this is so picturesque!" Which, of course, means "It looks just like a painting." Here the observation of an actual scenery is oriented to the observation of sceneries by artists. It adopts the mode of second-order observation.

A more recent case of an aesthetics conceptualizing second-order observation phenomena is Walter Benjamin's famous essay on *The Work of Art in the Age of Technological Reproduction*, first published in 1935. Benjamin proposes that technologically reproduced art, such as photography and film, makes the notion of the original artwork obsolete. Here, art exists in copies. As a consequence, the work of art loses its former "cult value" which was derived from its unique presence at one particular, and often sacred, place. In technologically reproduced art, which is simultaneously available to mass audiences at multiple places, cult value is replaced by "exhibition value" corresponding to the artwork's capacity to attract an audience. Thereby, the value of the work of art is constituted by its perception. Exhibition value is oriented to the audience that observes the work of art; it measures the artwork via an observation of its observation.

John Maynard Keynes' influential book *The General Theory of Employment, Interest and Money* was published in 1936. Here, Keynes explains the generation of financial value with the example of a strange "beauty contest:"

Professional investment may be likened to those newspaper competitions in which the competitors have to pick out the six prettiest faces from a hundred photographs, the prize being awarded to the competitor whose choice most nearly corresponds to the average preferences of the competitors as a whole; so that each competitor has to pick, not those faces which he himself finds prettiest, but those which he thinks likeliest to catch the fancy of the other competitors, all of whom are looking at the problem from the same point of view. It is not a case of choosing those which, to the best of one's judgment, are really the prettiest, nor even those which average opinion genuinely thinks the prettiest. We have reached

the third degree where we devote our intelligences to anticipating what average opinion expects the average opinion to be.⁵⁰

Once more, value—in this case not in art but in the economy—is constituted not by observing something directly (a face or a financial product) but by observing how it is observed. Interestingly, Keynes highlights that the point of the beauty contest, as in “professional investment,” is *not* to guess what “average opinion *genuinely* thinks the prettiest”—which is to say, the point is not to observe the first-order observations of others. To the contrary, the point is *to observe the second-order observations of others*. We must “*devote our intelligences to anticipating what average opinion expects the average opinion to be.*” This is an excellent definition of the specific kind of orientation needed once second-order observation has become “the advanced mode of perceiving the world in modern society.”

Guy Debord’s *The Society of the Spectacle* was first published in French in 1967. The central concept of the book, the “spectacle,” can be considered as another predecessor of the notion of “second-order observation.” Debord combines a Marxist socioeconomic approach with a semiotic one to outline how life has taken on the form of “representation.” He argues that all “social relationships between people” are “mediated by images.” These images whose function was to represent reality, have now become primary: “The perceptible world is replaced by a set of images that are superior to that world yet at the same time impose themselves as eminently perceptible.” In this way, the world has been “turned on its head”; an “inversion of life” has taken place so that now “signs” are the ultimate “end-product.” Representations of life have replaced present life as the relevant reality. These representations are the “spectacle,” and “the spectacle is real,” or, as Debord puts it more spectacularly, “reality erupts in the spectacle.”⁵¹

The word “spectacle” literally means something that is seen in or by the public. The “inversion of life” decried by Debord consists in a shift towards ascribing reality not merely to objects, subjects, or events, but to them *only in so far as and in terms of how they are seen in or by the public*. This shift from being seen to seen as being seen was described as a shift towards the “hyperreal”

⁵⁰ John Maynard Keynes, *The General Theory of Employment, Interest and Money* (London: Palgrave Macmillan, 1936), p. 100.

⁵¹ Guy Debord, *The Society of the Spectacle*, transl. Donald Nicholson-Smith (New York: Zone Books, 1994), pp. 1-2, 4, 8, 9, 36.

by Jean Baudrillard. Both terms, the “spectacle” and the “hyperreal,” further resonate with the concept of the “virtual” as understood by Gilles Deleuze.⁵² The latter term has by now become a popular designation of the online world, but its philosophical origins predate the Internet by several decades. The shift in orientation away from “the perceptible world” that presents itself to first-order observation toward a second-order-observation-orientation to a virtual “set of images that are superior to that world yet at the same time impose themselves as eminently perceptible” happened long before the present “digitization of our world.” The social evolution of second-order observation and of its semantics has a long and complex history on which this paper only threw a few glances.

The General Peer

Second-order observation sees something as “being seen.” Thereby, the “object” one is oriented to is not merely an object—it as an object understood in terms of how it is observed. But what about the observer? Under the conditions of pervasive second-order observation, the observer, too, is not merely an observer—it is an observer understood in terms of what is observed.

As mentioned, Stegmaier’s philosophy of orientation points out that we tend to orient ourselves to a “third person” in order to better assess someone’s identity, for instance in the form of requiring job applicants to provide references, or simply by the means of everyday gossip. Stegmaier’s discussion of such third persons suggests that he mainly thinks of them as concrete individuals—examples that may come to mind include the actual person providing a reference letter, or the friend who tells us what he thinks about another. Indeed, under conditions of sincerity and authenticity, orientation often operates in precisely this way: We receive more information on someone we know from someone else who also knows him or her personally. In this case, the third person is conceived of as an individual person just as much as the first and the second person is. It is a concrete *specific peer*.

In a society where second-order observation prevails, however, the nature of the “third person” changes. Here, a specific peer (a third person) who is personally known to both us (the first person) and the person we want to know more about (the second person) is a less relevant and reliable source of

⁵² The idea of a reality that is accessible in representations or signs or interpretations is quite common in 19th and 20th century European philosophy and appears, in different forms, for instance in the works of Friedrich Nietzsche, Ludwig Wittgenstein, Jacques Derrida and in Josef Simon’s *Philosophie des Zeichens* or “philosophy of the sign.”

orientation than the trans-personal or impersonal *general peer*. The general peer is not a specific individual; it rather takes on the shape of an abstract, now often metrically approached “average opinion” that expresses itself in the form of public preferences, trends, tastes, fashions, or, more precisely today, in various rankings and ratings. The general peer is also the nonspecific target which orients reviews, social media posting, and all sorts of profile curation.

The “general peer” can replace the “third person” as a relevant provider of orientation on personal identity in today’s society. Here is one example: In recent selection processes of academic placement committees that the authors of the present paper participated in, the contents of personal reference letters in support of applicants were hardly considered to be of crucial importance. Typically, these letters were not even closely examined—they were regarded as subjective and partial in nature. Far more attention was given to the publication metrics of candidates such as, for instance, their H-index. The H-index measures “both the productivity and citation impact” of a scholar or scientist and “is based on the set of the scientist’s most cited papers and the number of citations that they have received in other publications.”⁵³ It documents, in a completely anonymous way, the quantitative impact of a scholar’s work on their field without providing any qualitative information. In today’s highly specialized academic world, relatively few members of a selection committee are able to expertly assess qualitative information on a candidate’s work provided by third persons who know a candidate well. The significance of impersonal data on academic impact such as those provided by the H-index, however, is rather obvious to anyone familiar with the academic system and therefore functions much more efficiently as a source of orientation.

What is more, even the professional reputation of the providers of reference letters is losing relevance in today’s academic selection processes. Given the high degree of academic specialization, such personal reputation does not extend very far even within a single field. In philosophy, for instance, a “big name” in the philosophy of mind may mean nothing to someone working on German Idealism, and vice versa. Of considerable importance, however, is the ranking of the universities where these “third persons” who provide references are employed. The regulations for promotion at the university where one of the authors of this paper works, for instance, state that all reference letters must be

53 Quoted from <https://en.wikipedia.org/wiki/H-index>, accessed July 21, 2020.

from colleagues employed at universities ranked 300 or higher in current world university rankings. If you cannot provide at least six letters from colleagues at such top universities, your application may not be considered, irrespective of the contents of any letters. In this case, not only the applicants are seen through lens of the general peer rather than through that of a “third person,” but the “third persons,” (the providers of reference letters) too, are seen through the lens of the general peer as manifested in the rankings of their employers.

The general peer differs from “third persons” by being impersonal and non-specific. But it is still a *peer*; it is constituted intra-systemic, it is an “in-group” phenomenon; even if the group might contain millions. It thereby differs from the notion of the “public sphere” which indicates a wider public realm open to everyone. Academic ratings and rankings, for instance, emerge within the academic system and rely mostly on academic data or sources. An H-index score, for instance, is based on the numbers of citations of academic publications in other academic publications. Like any other “orientation system,” the academic system communicates self-referentially. Similarly, the “likes” that your YouTube video receives stem from other YouTube users. If your friends in real life appreciate your video, but are not registered on YouTube, they cannot assign a “like” that is counted.

In any case: If you would rely only on third persons whom you know personally to cite your academic papers or like your YouTube videos, you would never be able to build up much identity value as an academic or social media influencer. Under conditions of second-order observation, the orientation value and power of the impersonal general peer far outweighs the orientation value and power of actual “third persons.”

In terms of Niklas Luhmann’s social systems theory, the general peer can be defined as “*the intra-social environment of the social subsystems.*”⁵⁴ *In the economy it is the “market,” and in politics it is “public opinion.”* As proposed at the beginning of this section, under conditions of second-order observation objects and their observers are seen in conjunction. Unlike the “third persons” whom we orient ourselves to under conditions of sincerity or authenticity, a general peer like the “market” does not exist independently of its observation—it cannot leave the economic system when the stock market closes and go home. It appears

54 Niklas Luhmann, *The Reality of the Mass Media* (Stanford: Stanford University Press, 2000), p. 104.

only insofar as we orient ourselves to it as an intra-systemic and trans-personal faculty of observation. It has no personal identity.

Social Validation Feedback Loops

Although the perception of the general peer can be measured—for instance by university rankings or the H-index in the academic system—this can only be done “after the fact” or *a posteriori*. You can only know your H-index after you published your work. Just as it is difficult to predict one’s image in the eyes of “third persons”—relevant sources of orientation under conditions of sincerity or authenticity—it is not always easy to predict how one’s academic profile will be affected by a publication, or how something a politician does or says will influence the poll numbers.

In orienting ourselves to the general peer one needs to think ahead; or, as Keynes put it, we need to “devote our intelligences to *anticipating* what average opinion expects the average opinion to be.”⁵⁵ And here it gets tricky. As academics, for instance, we need to be aware that our publications will not be cited just because anyone may find them personally interesting (or “genuinely the prettiest,” in Keynes’ words). Instead, something typically gets cited in academics because it is considered to belong to the “standard literature” in one’s area of research. In other words, our paper will get cited if another academic author thinks that “the field,” or the general peer, expects her to cite our paper. Indeed, references to the “standard literature” are common in today’s academic peer review process: Reviewers tend to point out which additional papers one ought to orient oneself to (in some cases these suggestions also provide some orientation as to the reviewer’s identity). Therefore, the task is to attach one’s own communications most efficiently to ongoing self-referential communication trends in an orientation system. Ideally, one eventually becomes a source of orientation oneself: a successful academic today is in effect an academic “influencer” operating similarly to a social media influencer. People orient themselves to them because they know that “average opinion on average opinion,” or the general peer, expects them to do so.

A core term in the semantics of the digitalized world indicates both the self-referentiality of second-order-observation-oriented communication and its

⁵⁵ Keynes, *General Theory*, p. 100.

inherent dynamics very well: “follower.” In second-order observation, observing is often not just a one-time act of looking at something. You can get hooked on an observation of something, and when you do, you end up observing it again and again: you *follow* it! Successful influencers, in academics or social media, are under constant observation, and they must constantly produce new communications for further observations. Observation becomes a path, a habit, a routine, dependent on a “feed” on the web (which is less static than a “site”), always extending further into the future, always leading followers, always anticipating.

Importantly, those who are being followed must make sure that they are seen as being followed, otherwise they lose value. Normally, followers beget followers. If an academic’s citation count slows, or if the number of views of an influencer’s videos goes down, then, clearly, they are no longer that intensely followed. Followers move. While some are followed less, others are followed more. This motion has an effect on the orientation of followers. They often orient themselves to those who are being seen as followed more and therefore as a more valuable source of orientation. Second-order observation becomes second-order following: Something is seen as being followed, and then the followers are being followed.

A following cannot be taken for granted. Those who are followed must actively build a following. A social media influencer knows that she will only be followed as long as she is seen as being followed. She needs to somehow connect with her followers and make them feel that their following is worthwhile and that it matters. She needs to provide them with a constant “feed” and reward them by making sure that their following remains “cool.” You have to constantly renew your status of being worthy of being followed (both as an influencer on social media and as a high-profile academic) and thereby not only update your own profile, but also the profiles of your followers. Under conditions of second-order observation, the observers and observed, the followers and the followed, appear in conjunction with one another. Their profiles are mutually oriented to one another. You shape your followers just as your followers shape you in the eyes of the general peer.

The highly dynamic interactive processes between observers and the observed, or, in times of digitization, followers and followed, have been most aptly described by Sean Parker, the first president of Facebook, as “social validation feedback loops.” In an interview with the news website Axios, Parker

frankly explained that the “thought process” that led to the construction of Facebook was the search for “exploiting a vulnerability in human psychology” that would allow a media platform to “consume as much of your time and conscious attention as possible.” According to Parker, the makers of Facebook further understood “that means that we need to sort of give you a little dopamine hit every once in a while.”⁵⁶ The dopamine they were intent to release, however, ought not exploit human “vulnerabilities” related to sex or drugs. Instead, they tied their website to something equally fascinating but less controversial: personal identity. More or less intuitively, Parker and his colleagues realized that identity formation, or “social validation,” had shifted to second-order observation in contemporary society, and that newly available digital technologies provided a perfect means to hook people to a network where they could engage in almost constant mutual “following” and thus mutual identity building. Mutual identity validation, performed publicly under the eyes of an always observant “general peer” that made people seen as being seen, they rightly presumed, could become addictive for large parts of the world population, and yet be perfectly legal.

Facebook and other social networks are platforms where social validation feedback loops can emerge. They allow people to shape and claim an identity under conditions of second-order observation. In Werner Stegmaier’s terminology, it can be said that their function is to allow for “individual orientations to other individual orientations” on a massive, global scale and thereby to generate what he calls “respect.” However, the type of respect social media give rise to, or, more generally, the type of respect under conditions of pervasive second-order observation, is decidedly different from the individual *recognition* in authenticity or *honor* and *reputation* in sincerity. Using Sean Parker’s term, the type of respect that is sought for here can be called identity *validation*. This validation manifests itself in *profile value*. On social networks, your “friends” are in effect “followers,” and you are tied to them through social validation feedback loops visible to the general peer. The same pattern applies wherever second-order observation prevails, not only in the mass and social media orientation system, but also in academics.

As outlined above, under conditions of sincerity, people may kill themselves if they feel it is impossible for them to be honored in their role. Under conditions

⁵⁶ Sean Parker, “Facebook Exploits Human Vulnerability (We Are Dopamine Addicts),” from: YouTube Video, 2:19, November 11, 2017, <https://www.youtube.com/watch?v=R7jar4KgKxs&t=72s>, accessed July 25, 2020.

of authenticity, people can deeply suffer from being unable to achieve individual recognition. In profilicity, people may break down if they feel that their profile lacks any validation and that they are seen as not being seen by the general peer. A woman named Nasim Najafi Aghdam entered the YouTube headquarters in California in April 2018. She took out a gun, shot and wounded three people, and then committed suicide. She had posted her apparent motive on Instagram a few days earlier: “All my YouTube channels got filtered by YouTube so my videos hardly get views.”⁵⁷

Profiles

Personal identity can be oriented outward to the social roles one has. Following Trilling, this identity technology is called sincerity. In authenticity the orientation is reversed. One is to look inwards, behind one’s social “masks,” and supposed to find or create one’s identity. Under conditions of pervasive second-order observation, the vector of identity formation is once more turned the other way. Here, people build profiles of themselves and present them publicly. Identification is oriented towards these profiles. If endorsed by the general peer, they become steady footholds of our mutual orientation.

As Niklas Luhmann stated a person does “not really know who he is, but has to find out whether his own projections find recognition.”⁵⁸ In the case of profile projections, however, speaking of “validation” is more accurate than “recognition,” as the latter includes connotations of authenticity. Profiles are self-images projected not only to those we know, but also, and especially, to those we do not know. They are context- or orientation-system-dependent. Academics build their academic profiles with *academic* publications and positions in *academic* organizations. However, these profiles do not reflect academic publications or positions as such, but, more precisely, how these are seen as being seen by the general peer. The profile value of a publications or a position is derived from second-order observation as manifested in an H-Index score or a university ranking. Consequently, the value of one’s CV depends not on the contents of the works it lists but on how these works score in various ratings

⁵⁷ Simon Parkin, “The YouTube stars heading for burnout: ‘The most fun job imaginable became deeply bleak,’” in: *The Guardian*, September 8, 2018. <https://www.theguardian.com/technology/2018/sep/08/youtube-stars-burnout-fun-bleak-stressed>, accessed July 25, 2020.

⁵⁸ Niklas Luhmann, *Theory of Society*, Vol. 2 (Stanford: Stanford University Press, 2013), p. 22.

and rankings (citation counts, ranking of journals, etc.) produced by means of second-order observation.

Similarly, the political profile of politicians or political parties does not simply reflect their political decisions or stances, but the public perception of these decisions or stances as manifested, for instance, in polls. To know about the political profile of a candidate you cannot just rely on reading her speeches, you must also understand how these speeches are perceived in political contexts. Profiles are second-order observation products—it is not good enough to only look at the “object” because the significance of the object emerges through its observation. When orienting ourselves to profiles, we orient ourselves to something in terms of how it is being seen, followed, or validated by its general peer.

Given the highly dynamic relation between the observer and the observed, or the follower and the followed in the construction of profiles, these profiles are a constant work in progress. In profilicity, what Stegmaier calls “impression management” takes on the form of *curation*. The word “curation” comes from the Latin word *curare* which means “to care” in the sense of *taking care of, caring about, and caring for*. First, if, for instance, you are active on a social media platform, you need to *take care of* your appearance there. Things need to be presented well, and, importantly, they need to be updated on a continuous basis. You cannot be silent for too long. As pointed out by Niklas Luhmann, information shared on the media becomes non-information almost as soon as it has been shared and needs to be replaced by new information⁵⁹ Second, you must be perceived as *caring about* whatever you post; otherwise, it will seem hypocritical, or false. If you do not care about what you publish, you will be regarded as cynical at best. Your profile must be backed up by a noticeable investment in it. Third, since your profile is tied to the profiles of your followers, you have an obligation to *care for* them. There needs to be some sort of mutual *feedback* along with the feeds you provide; your followers want to be liked for liking you in return. You need to make sure they appear relevant along with you.

59 Luhmann, *Mass Media*.

Projections of ourselves under conditions of proficity can look like this picture:



*Image 4: People jumping simultaneously at a beach*⁶⁰

There is little sincerity, little role-based identity, here. The people on this photo present themselves in a way in which “having fun at a beach” is commonly presented on publicly displayed images. They do not enact traditional family or community roles. Instead, they take on a “picturesque” pose. There is no authenticity either. Everyone knows that a photo like this is intentionally staged, and since everyone knows this, there is also no pretense, no falsehood involved. The photo functions as a profile picture—not like a profile picture on a CV used for a job application, but like one posted on an Instagram account: a self-image posted in the hope that it will be liked by its viewers so that it then can be seen as liked. To judge it from the perspective of sincerity or authenticity, and to dismiss it as insincere or inauthentic, would only signal a misunderstanding of the conditions under which it makes sense. The picture expresses the identity of the people on it in terms of their very orientation to proficity.

⁶⁰ Image source <https://www.1001freedownloads.com/free-photo/people-jumping-on-the-beach>, accessed May 28, 2020.

4. Digitization and Orientation in an “Age of Profilicity”

Profilicity is not altogether new. Along with second-order observation, it, too, has been around for a long time, probably millennia. However, its challenge to authenticity as a or even the major technology for shaping identity is much more recent. Its rise to prominence is tied to modernity as characterized by functional differentiation and pervasive second-order observation. There is no doubt that the digitization of our world, manifested most conspicuously in the Internet and big data, has played a huge role in boosting profilicity. But, since profilicity and second-order observation predate digitization, the latter is not the “root cause” for a shift towards an orientation to profiles and a profile-oriented identity. Instead, second-order observation and profilicity provided excellent social and psychological environmental conditions for digitization to take off in the way it did in recent decades.

Digitization, second-order observation, and an orientation to profiles are a highly synergetic mix, and the digital world thrives because of its enormous capacities to enhance second-order-observation-orientation and profilicity. When the notion of the “picturesque” emerged in the 18th century, the only available mass media technology was print. The notion of “exhibition value” coined by Walter Benjamin, Debord’s “spectacle,” and Baudrillard’s “hyperreality,” reflect profilicity phenomena that emerged through photography, film, radio, and television in the 19th and 20th century. Today, the Internet opens up another, once more dramatically upgraded dimension of virtuality. Over the course of three or four centuries, orientation in and to a virtual reality constructed in the media “matured” and became evermore extensive. The basic second-order-observation-orientation structure, however, remained stable. In the logic of the picturesque, we orient ourselves to the landscapes or persons we see in terms of how they are seen in publicly disseminated images of them. The spectacle operates with the same inversion of the hierarchy between first- and second-order orientation to an object or event. Today’s global digitization completes this shift and immerses billions of people in a virtual world based on an orientation to second-order-observation: most of us see things most of the time as they are being seen. It is no wonder that we also shape and project our own identities, our steady footholds of our mutual orientation, in the same way.

In profilicity, we orient ourselves to the general peer in order to have our identities confirmed and validated. In sincerity and authenticity, specific peers could do this job—our family members, or our authentic “soul mate,” for

instance. In proficity, this changes: we need to reach out to, interact with, and rely on, people whom we do not know, and whom we have no time, no possibility, and often no desire to meet in person. We need as many academic colleagues as possible to cite our papers, we need as many subscribers as possible when we are hosting a channel on YouTube, and we need as many five-star rankings as possible on Yelp if we run a restaurant or a bar. A positive review from one of our family members is not enough and easily considered biased—in any of the contexts just mentioned, specific peers do not count as much as unknown strangers. The same is the case the other way around: While recommendations by acquaintances are still relevant, we cannot rely on them all the time or exclusively—we obtain reliable information on what to read and what to cite, and on where to eat and where to travel to, from the general peer. We can find the general peer in data or online. *The digital world has become so important to us because it is the main provider of orientation to the general peer.*

Before digitization, orientation to other people's profiles was "primitive" compared with the resources provided by today's big data. Academics, for instance, were of course able to build profiles, for instance, by publishing with reputable publishers or in well-known journals or magazines. By such means it was possible to orient oneself as to whose ideas or opinions were known to be known. And yet, before big data there was no H-Index, no Times Higher Education World University Rankings, no Scimago Journal & Country Rank. Today, there are whole industries processing, analyzing, and presenting data—in fact, nearly every social system relies, in one way or another, on big data. Academia is no exception. In order to be considered for an academic job one needs publications in highly ranked journals. In order to attract fee-paying students (in North America and the UK), secure public and private funding, and entice high-profile staff, universities need to be highly ranked. In order to be highly ranked, universities are keen on hiring scholars who have a high H-index. Journals, in turn, must make sure they attract publications by high-profile scholars which are likely to be cited a lot so that the ranking of the journal benefits. Big data have enabled these self-referential, profile-oriented ranking and rating mechanisms to take off and increasingly dominate the orientation of students, publishers, and universities in the academic system. They all heed to the general peer whose preferences come to the fore in big data.

The general peer is found in the data which rating and ranking agencies, along with consulting firms, devote themselves to analyze. By offering these

analyses, they not only make the general peer visible, they also shape and influence it. The results of these analyses are themselves subject to further analysis, and contribute to the realm of big data itself. Academics send their best article to those journals deemed “top tier”—which only widens the gap, at least in terms of metrics used for analysis. This happens not only in academics. It happens in all orientation systems, most notably in politics and the economy. More and more power, and more and more money, is given to the agencies, analysts, and consultants who provide orientation to the general peer in the form of political polls, financial credit ratings, and so on. Our profiles are validated by the general peer. We orient ourselves to the general peer, learn about its judgments, and petition it by means of big data analyses and rating and ranking agencies.

Before digitization, the general peer was not only difficult to grasp and make sense of—we didn’t have much reliable data—but also aloof. It was difficult to engage with. Niklas Luhmann maintained that the crucial point about mass media is “that no interaction among those co-present can take place between sender and receiver. Interaction is ruled out by the interposition of technology.”⁶¹ This was written more than twenty years ago and with the old media in mind: “*principally books, magazines, and newspapers, manufactured by the printing press.*”⁶² Today, digitization has fundamentally altered the very nature of “interaction” and made Luhmann’s definition of it—communication between those co-present (*Kommunikation unter Anwesenden*)—almost obsolete. Or, to put it differently: digitization thrived because it was able to move interaction beyond the need for physical co-presence. In proficity, we want to interact precisely with those who are not co-present (*nicht anwesend*) and whom we have little intention to be co-present with. *This* kind of interaction, which was almost unthinkable of in the old media with their strict separation between senders and receivers, has now become a daily routine. The old technologies that “ruled out,” as Luhmann said, interaction among the co-present have been replaced by new, digital technologies enabling interaction among those who are not co-present on a massive scale and permanent basis. Digital technology is no longer an “interposition,” it *connects*. Digitization has been so successful because it was able to work this magic: It allowed those not co-present to follow one

61 Luhmann, *Mass Media*, p. 2.

62 Luhmann, *Mass Media*, p. 2.

another. It thrived because it fundamentally changed the nature of interaction in accordance with the needs of profile-oriented identity (profificity) where validation does not come from family or friends, but from mutual followers and the feedback loops between them.

Before digitization, people not co-present found it not only impossible to follow one another constantly—the old media did not allow for that—but, what is more (or less), most people could not be publicly followed at all because they lacked a visible profile. Only a few high-profile celebrities were seen as being seen. Digitization was so enthusiastically embraced and applied because it *democratized profificity*. Today, everyone can have a visible profile, if only a minor one, and be seen as being seen; everyone can be a small-time celebrity. Being seen is no longer a privilege of the rich and famous. Social media platforms are popular everywhere, including in developing nations, where certain apps, such as Kuaishou in China, function as a sort of YouTube for the poorer segments of the population and allow “users to record and share videos depicting their everyday lives.”⁶³

Prior to digitization intense efforts at building a profile—one’s image projected outward to the general peer—could be frowned upon if you weren’t already a star. In German, the word *Profilneurose*, literally “profile neurosis,” is a colloquial expression for people pushing themselves to the foreground in the company of others or at public events. The term is pejorative and indicates vanity, duplicity, and, importantly in an “age of authenticity,” inauthenticity. Under conditions of profificity, however, the moral stigma of being concerned with presenting a public image of oneself has largely dissolved. That one presents one’s profile, and not only one, but numerous different profiles in different contexts (on platforms as different as LinkedIn, eBay, Instagram, and Tinder) is not only perfectly acceptable, but expected. And again: profiles are not seen voyeuristically, but made for being seen as being seen—they are unabashed attention-seeking artifacts and appreciated as such. Today’s technologies have enabled profificity to move out of the shadow of authenticity. Digitization was welcomed not only because it opened up or democratized access to profificity, but also because it normalized it. Profificity reverses the inward-orientation of authenticity and turns it outward again. Digitization facilitated and, if only to

63 “Kuaishou,” in: *Wikipedia*, Wikimedia Foundation, August 5, 2020, <https://en.wikipedia.org/wiki/Kuaishou>.

an extent, de-scandalized this outward-orientation and the fascination with a public image of oneself.

And yet, digitization and profile-oriented identity work has its critics. Typically, the critics argue, explicitly or not, from the perspective of the receding age of authenticity. Roberto Simanowski, for instance, complains that we are “losing ourselves,” that is our authenticity, on social media.⁶⁴ Byung-chul Han is another popular writer taking aim at digitization and related phenomena. In fact, Han’s fame is due in part to his condemnation of today’s “transparency society.”⁶⁵ Han’s stance against transparency, however, has been widely publicized so that he himself has, paradoxically enough, turned into a most visible, high-profile media personality. The paradox of a transparent stance against transparency, or a medialized media-critique is evidenced in his Wikipedia entry. It says: “Until recently, he refused to give radio and television interviews and rarely divulges any biographical or personal details, including his date of birth, in public”⁶⁶ This statement about Han’s supposed reclusiveness is used to profile Han as seen as not being seen. In one of his, actually numerous, media interviews, posted in both English and Spanish on the website of the newspaper *El País* on February 7, 2018, Han complains that “people sell themselves as authentic,” and “produce themselves.”⁶⁷ The article comes with photo of Han which is clearly staged. It presents Han fashionably dressed, wearing a scarf, and with a pensive look on his face. The photo is described in a simple, cool, and “authentic” manner: “yesterday in Barcelona.” It is entirely picturesque. When one accesses the article on the web, it is framed by advertisements. And a performative contradiction is obvious: A defense of “true” authenticity and anti-consumerism is presented in a profile-oriented and commercial way.

64 Roberto Simanowski, *Facebook Society: Losing Ourselves in Sharing Ourselves*, transl. Susan H. Gillespie (New York: Columbia University Press, 2018). For a detailed critique of Simanowski and similar positions see D'Ambrosio and Moeller (2019).

65 Byung-Chul Han, *The Transparency Society* (Stanford, CA: Stanford University Press, 2015).

66 “Byung-Chul Han,” in: *Wikipedia*, Wikimedia Foundation, 25 July, 2020. https://en.wikipedia.org/wiki/Byung-Chul_Han

67 Carles Geli, “‘In Orwell’s 1984 Society Knew It Was Being Dominated. Not Today.’ Speaking in Barcelona, South Korean Philosopher Byung-Chul Han Argues Social Values Have Been Eroded by Consumerist Culture,” in: *El País*, February 7, 2018. https://elpais.com/elpais/2018/02/07/inenglish/1517995081_033617.html, accessed July 25, 2020.



Image 5: Screenshot of Byung-chul Han on the El País website⁶⁸

Byung-chul Han chastises the “transparent” outward-orientation of the digital world and reiterates an inward-oriented semantics of authenticity. By doing this in the context of a profile-oriented media promotion of himself and his publications, he makes a core predicament of an authenticity-based critique of proficility obvious. Society is already to a large extent profile-oriented, and any critique of proficility cannot but operate in this very same mode if it is to be widely seen and heard. To not reflect on this condition when advocating authenticity, as in Han’s case, is not only theoretically insufficient, it almost borders on hypocrisy. The preaching of an ethics of authenticity appears at the same time as an effort to increase the value of a profile. A thorough critique of profile-orientation must recognize that it will not be able to escape such an orientation itself since it, too, is subject to the prevailing conditions of second-order observation in the digitalized media and throughout society as a whole.

Critiques of the inauthenticity of “transparency society” are accompanied by critiques of another controversial aspect of the digitalized world: surveillance. Best-selling authors like Shoshana Zuboff and Cathy O’Neil have presented interesting and informative documentations on surveillance and big data today. Typically, they criticize invasions of individual “privacy.”⁶⁹ However, such an argumentation tends to ignore or underestimate the extent to which, in

68 Image source: https://elpais.com/elpais/2018/02/07/inenglish/1517995081_033617.html, accessed March 2, 2020.

69 Shoshana Zuboff, *The Age of Surveillance Capitalism: The Fight for a Human Future and a New Frontier of Power* (New York: Public Affairs, 2019). Cathy O’Neil, *Weapons of Math Destruction: How Big Data Increasing Inequality and Threatens Democracy* (New York: Crown Publishing Group, 2016).

an age of prolificity, the significance of “privacy” has been modified. When identity-formation relies on second-order observation, the purely “private” or “authentic” self is no longer accessible. As in the case of Byung-chul Han, or any social media user, the “private” or the “authentic” becomes meaningful once it contributes to a profile. Like sincerity, prolificity orients itself to the outward person rather than to the inner self as it is observed merely by itself.

Earlier in history, we could rely on the simple technology of a mirror to see how we looked in the eyes of our peers in the mode of first-order observation. Today, however, we must find out what we look like to the general peer in second-order observation. No mirror can be used. To find out how we are seen as being seen we need digital technology, big data and various types of surveillance. One important reason why digital technology flourishes in today’s world is because it provides us with the new “mirrors” of prolificity.

If, for instance, you are a host on Airbnb you can see how your guests evaluate you in their reviews. If you are lucky and get lots of positive reviews, you might even become a “superhost.” The same is true vice versa: guests are rated by their hosts as well. Orientation on Airbnb functions by seeing how hosts are being seen by guests, and by seeing how guests are being seen by hosts. On other platforms, like eBay, we orient ourselves by seeing how sellers are being seen by buyers, and how buyers are being seen by sellers. When buying a book on Amazon, we orient ourselves to how authors are being seen by their readers, and to readers by how they are being seen by other readers (the website rates, for instance, which reviews are considered as “helpful” by other readers and which ones are not). In our daily Internet life, we take such second-order observation for granted. We happily engage in and subject ourselves to constant mutual surveillance. When identity is profile-oriented, we cannot simply opt out of surveillance. To the contrary, we need surveillance to be able to make our profiles seen and to be able to see how they are being seen.

In so far as surveillance and big data are oriented to second-order observation, they do not invade privacy. When we book a place on Airbnb, we mostly do not care to know what the host is like in private, or what guests think of her privately. How she is seen as a host far overshadows these “private” matters. And it makes sense because we will interact with her in that capacity only—we might not even meet her in person, and it doesn’t matter if we don’t. She can still be rated based simply on her text messages and excellence in having the housekeeper leave the key in a lockbox. The general peer is system-specific

and system-oriented. The “private,” however, has no home in these systems. Surveillance and big data therefore often do not focus on “privacy”—they focus on observations of how people present themselves as hosts or guests, as buyers or sellers, in politics, in traffic, in religious communities, in school, or in their public interactions on social media, but not really on what anyone thinks or does *just* in private.

Moreover, in the digitalized world of today, the private realm (how we are just on our own) and the personal realm (how we interact within our specific peers, such as our family members or teammates) are often intentionally oriented to profile-building. People willingly post pictures from gatherings or from a soccer game—or just of themselves alone at home—on their social media. Authenticity and sincerity are thereby put in the service of proficity. It is beneficial for Byung-chul Han’s profile to publicly display his authenticity. Just it is beneficial for the profiles of politicians, at least in the U.S.A., to present them publicly as sincere family persons. Sincerity and authenticity have not completely disappeared in the virtual world of proficity. They continue to operate, and are increasingly put, very effectively, in the service of proficity. One is tempted to think in terms of Hegel’s notion of *Aufhebung*, or “sublation,” here: When authenticity and sincerity are overcome by proficity they are also somehow maintained in it and elevated to a higher plane. This, too, is a function of digital technology today: it virtualizes sincerity and authenticity, and orients them to proficity.

In practically all orientation systems today we orient ourselves to one another in the mode of second-order observation. “Privacy” has limited value for building proficity—the parts of ourselves that are not seen as being seen do not count for much. Critiques of “surveillance society” or big data should take this orientation away from privacy into account.

The concern with privacy seems to be connected with the age of authenticity and its orientation to the “true self” in its supposed original and unique state. There is an anxiety that the “private self” and “autonomy” are somehow endangered or compromised by being exposed. In order truly to “be ourselves,” it is implied, we need our own, “personal space,” protected from any interference of others. Such a preference, however, is by no means universal. In sincerity-oriented contexts and cultures, privacy is often avoided rather than sought. Chinese university students, for instance, often prefer a shared dormitory room over a single room. They value companionship over privacy.

Similarly, when attending academic conferences in China, it is common that professors share rooms. Western participants (including the authors of this paper), however, often demand a single room—to the slight bewilderment of the organizers. (And yet, avoidance of privacy is not merely an “Eastern” thing. In sincerity-oriented settings in the “West,” for instance in sports, the military, or religious communities, shared living spaces—including shared bedrooms—can still be the norm rather than the exception.) The concern for privacy reflects the inward-oriented conception of identity in authenticity. If the concept of identity is outward-oriented, as in sincerity, privacy is not that precious and its “loss” is less feared.

The present “Western” discourse condemning the loss of privacy through surveillance and big data seems to suffer from a lack of reflection on a considerable blind spot: in our pursuit of proficity, we welcome and rely on digital technologies and new media in our daily lives. At the same time, however, we cling to the ideals and semantics of authenticity, which sometimes, as in the case of “privacy,” are quite incongruent with proficity. In practice we are no longer authentic, but in theory, at least in the “West,” we still like to think we are.

An East-West difference regarding surveillance and big data is exemplified in the reactions to the Chinese “social credit system.” This “system” is not (yet) a unified surveillance system. At present, various trials are being conducted in different areas in China. They all collect data about people, consisting of, for instance, traffic records, criminal records, financial credit records, records of social welfare or charity engagement, etc. The idea is to reward “good” behavior with, for instance, easier access to housing, travel, or education, and to “punish” bad behavior by limiting such access or identifying socially “unreliable” individuals. The system has been almost universally condemned by Western journalists, academics, and politicians, and by the public in general for its disregard of privacy (despite similar mechanisms and data collections being widely used in the West as well, albeit not, or not openly, overseen and implemented by the government, but often by private for-profit organizations). In China itself, however, the social credit system is mostly welcome; it enjoys broad support. As empirical research has shown,⁷⁰ Chinese citizens tend not

⁷⁰ Genia Kostka, “China’s Social Credit Systems and Public Opinion: Explaining High Levels of Approval,” in: *New Media & Society* 21 (7) (2019): pp. 1565-1593.

to be overly concerned with privacy infringements, but appreciate the social benefits brought about by the system and, especially, its promotion of “honest dealings” or trust.⁷¹

For us, the different reactions to surveillance and the social credit system can be analyzed in terms of four cascading conclusions: 1) The widespread use of surveillance technologies and the interest in big data today reflects the emergence of a new outward-orientation of identity in the form of proficity. 2) Such an outward-oriented identity is suspicious from the perspective of an inward- or authenticity-oriented identity conception. From this perspective, a loss of privacy is feared. 3) From a sincerity-oriented perspective on identity, which is still influential in China, the outward-orientation of proficity is not regarded as overly suspicious, and thus a loss of privacy is not considered to be a major issue. 4) Instead, surveillance technology is, to an extent, welcomed in China because it is regarded as a solution of a core problem of the transition from sincerity to proficity: How can we enable trust in interactions where, unlike those in sincerity—when one typically interacts with co-present peers whom one has a personal relationship with—one instead needs to interact with non-co-present strangers.

From a sincerity-perspective, the problem with a move to proficity is not the move to outward-orientation, or the “loss of privacy.” Instead, the problem is the move to interactions with people whom one has no first-order-observation relationship with—the problem is the “loss of trust.” Just as the English word “credit” suggests credibility, the Chinese word *xinyong* 信用 used in “social credit system” (*shehui xinyong tixi* 社会信用体系) associates “trustworthiness.” The social credit system is seen as addressing a huge concern with the modern age of proficity from the perspective of sincerity: How can we introduce trust into dealings with those whom we did not and could not trust under conditions of sincerity, namely those with whom we have no family- or other role-based connection. In China, digital technology is embraced because it helps establish trust, or to use Stegmaier’s term, *Vertrauen*, which he describes as “a basic necessity of life” given the “uncertainty of all orientation.”⁷²

Under conditions of sincerity, commitment to one’s behavioral roles, for instance in the family, provides a foundation of trust. It does not matter

71 Kostka, “China’s Social Credit,” p. 1565.

72 Stegmaier, *Philosophie der Orientierung*, pp. 414-415.

much if this commitment is “unique” or “creative” as long as it is sincere. In authenticity, trust is founded on the belief that people we interact with are “true to themselves.” Their role-conformity is secondary to their authenticity. In proficity, trust operates on the level of second-order observation. Here, we expect others to be truly invested in their profiles. They need to curate these profiles with real care and ensure their reliability, their validity, and their integrity. “Impression management” of “corporate identity” or one’s “personal brand” must generate the trust of the general peer. Authenticity and sincerity can be effective “simulacra” here—in Jean Baudrillard’s sense of “mere representations”—but they remain beyond the reach of personal experience. We can never know if Nike “authentically” supports the Black Lives Matter movement, but it certainly is invested in, and invests in, a profile that does.⁷³ Likewise, we will probably never know if our Airbnb superhost is “sincerely” committed to serving her guests (we might not even ever meet her in person), but her profile reassures us and gives us certainty in this regard. Both Nike and the Airbnb host must manage to be trusted by the general peer so that we can trust them in return. Under conditions of proficity we need to orient ourselves to profiles. These profiles must dispel the uncertainty that is inherent to all orientation and generate second-order observation trust in order to become “steady footholds.” It is a virtual trust in a virtual identity produced in a digitalized world with the help of social media, big data, and social validation feedback loops.

5. Conclusion and Outlook

The Emperor of the South Sea was Fast; the Emperor of the North Sea was Furious; and the Emperor of the Center was Hundun. Fast and Furious met from time to time in the land of Hundun, who entertained them most kindly. Fast and Furious deliberated how to repay Hundun’s favors: “All men have seven holes through which they look, listen, eat, and breathe; he alone doesn’t have any. Let’s try boring them.” Every day

⁷³ See, for example, the announcement of a “\$40 million commitment over the next four years to support the Black community in the U.S. on behalf of the NIKE, Jordan and Converse brands collectively:” <https://news.nike.com/news/nike-commitment-to-black-community> accessed July 25, 2020.

they bored one hole, and on the seventh day Hundun died.
Zhuangzi, 7.7⁷⁴

In response to the question how the digitization of our world changed our orientation, we have been suggesting a somewhat different causal relation between digitization and orientation than the question suggests. For us, technology is not an external root cause of changes of orientation in society and in human life. Instead, the use of technology dynamically interacts with collective and individual orientation. New technologies are used to enhance potentials and tendencies of orientation that already exist in society. Technology does not just impose itself; it is applied on the basis of certain social conditions. Society provides conditions of the possibilities of technology use, but through its application, technology influences, develops, and modifies these conditions. As Father John Culkin said in reference to Marshall McLuhan's media theory: "We shape our tools and thereafter they shape us."⁷⁵

As we have argued, the shift toward second-order observation and proficity predates digital technology. Digital technologies, as applied today in social media, surveillance, and big data serve, amplify, and advance proficity. They thrive because of this capacity; and in this capacity, they increasingly dominate and alter the operations of almost every aspect of society and of our daily live experience. Proficity, as an orientation to profiles, proved to be a most fertile ground for digital technology—the two are a perfect match, co-evolve tightly, and produce amazing synergies.

For us, the change to proficity as an orientation to profiles is first and foremost a change in the conception of identity, or "the steady foothold in our mutual orientation." Identity is an absolutely necessary construct for orientation in society. As individuals, we need to develop a sense of selfhood in order to "own" all the incongruent aspects of our bodily functions, mental experiences, and social contingencies we find ourselves in. Collective identities are equally necessary: There is not only a sense of "I," but also a sense of "we"; otherwise families, nations, companies, religious communities, or sports teams could not exist. Along with historical changes, the social, psychological, and cultural technologies with which identities are built change as well. For us, sincerity,

74 For the Chinese original see: <https://ctext.org/zhuangzi>. This translation is ours, making use of A.C. Graham; and Brook Ziporyn's works.

75 John M. Culkin, "A Schoolman's Guide to Marshall McLuhan," in: *Saturday Review*, March 18, (1967): p. 70.

authenticity, and proficity are such technologies. Sincerity is a role-oriented identity technology, authenticity is inner-self-oriented, and proficity is profile-oriented.

Identity is necessary, but it is also problematic. It is a culturally, historically, and socially contingent construction that covers up the incongruities of our existence, but does not erase them. It provides steady footholds for orientation, but these footholds have no metaphysical, transcendent or transcendental grounding; their steadiness is contingent and temporary; they are challenged over time. We agree with Stegmaier's identity "imperative:" Don't believe in the existence of identities as being given per se, such as those of 'class' or 'race.' You may identify with or reject identities ascribed to you."⁷⁶ Race-identities and class-identities, but also gender or family-role identities can be powerful and productive, but also harmful and pathological. Sincere role-commitment in the family, for instance, not only provided footholds for affection, solidarity, and trust between the generations and among kinship groups; it also bred patriarchy and the systematic oppression of women. The quest for an individual, authentic identity not only fostered creativity and a sense of freedom; it also brought about hyper-individualism and a "culture of narcissism."⁷⁷ Proficity is democratic, diverse, "transparent," and highly dynamic, but the need to constantly curate and update one's profiles can be immensely stressful and become obsessive. Profile-oriented politics, for instance, can result in a destructive, merely poll-oriented "populism" on any side of political spectrum and create devastating social divisions, as it is currently perhaps most visible in the U.S.A.

Both the philosophy of orientation and our analysis of proficity consider identity a problem.⁷⁸ Identity can easily lead to over-identification so that its contingency is overseen. The parable of the death of Hundun from the Daoist text *Zhuangzi* quoted above illustrates how a regime of sincerity can kill.⁷⁹ Role-based Confucian society (represented by the Emperors of the South Sea and the North Sea in the parable) most kindly drills a face into people by which they are identified—for instance as committed wife or dutiful son—but such a face can

76 Werner Stegmaier and Reinhard G. Mueller, *Successful Modes of Orientation: 15 Conclusions from the Philosophy of Orientation for Your Everyday Life* (Nashville: Hodges Foundation for Philosophical Orientation, 2019), p. 4. [https://stegmaier-orientierung.de/files/dokumente/\(2019\)%20Successful%20Modes%20of%20Orientation.pdf](https://stegmaier-orientierung.de/files/dokumente/(2019)%20Successful%20Modes%20of%20Orientation.pdf), accessed July 25, 2020.

77 Christopher Lasch, *The Culture of Narcissism: American Life in an Age of Diminishing Expectations* (New York: W.W. Norton, 1979).

78 Stegmaier / Mueller, *Fearless Findings*, p. 11.

79 For an analysis of the story see Moeller (2017).

also stifle us, suppress us, numb us, and extinguish our vitality. In order to build up immunity against an overpowering “identity drill” and to maintain some sort of existential ease, we can approach identity, both that of ourselves and that of others, in terms of “genuine pretending”: Identity provides genuine footholds for mutual orientation, but these footholds are also provisional, temporary, contingent, and in this sense merely “pretended.” From a Daoist perspective, too, identities are considered a problem as much as a solution. Today, it may be worthwhile to reflect on how to orient ourselves healthily and efficaciously not primarily to traditional social roles, but to profiles. The task at hand is to maintain a certain ease in an age of prolificity and to survive as unharmed as possible the identity drills we inflict on ourselves in a digitalized world.

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III.

Meet the Moment: An Inventory of Experience in the Digital Era and the Call for Orientation Virtues

by Samantha Sprole

Abstract

This essay points to seven distinctive aspects of digital technology and how they constitute both gains and losses within the orientation worlds that define our contemporary culture. It further describes how the proliferation of “orientation virtues” could help foster a new era of digital culture more immune to addiction, cognitive overload, and misinformation.

1. Orientation in the Digital Age: Unpacking New Abbreviations of Technology to Gauge Its Impact

Orientation is the achievement of finding one’s way in a new situation under the conditions of uncertainty and time pressure—an accomplishment that involves the transition from a mood of unsettlement to that of reassuring calmness. A person achieves their orientation through an iterative and self-referential process of abbreviating complex phenomena, grasping footholds, and cultivating routines. Thus, to understand how the digitization of our world changes our orientation, we must interrogate how digital technology generates new situations and alters or enhances the conditions of uncertainty, time pressure, and mood; we must also observe whether digital technology engenders new processes of abbreviation, new holds, and new routines.

The digitization of our world entails the creation, use, and influence of digital technologies including the Internet, smartphones, artificial intelligence, and virtual reality. These technologies—and the digital innovations that preceded them—make up the complex new situation of our time. To abbreviate this new situation and grasp its significance, we start by interrogating the fundamental distinction between digital technology and what came before: analog. Exploring this distinction unpacks key aspects of digitization, that is, the distinguishing effects of the transition from analog signal encoding to binary coding. These key aspects, the distinctive capabilities of our contemporary technological inheritance, provide fertile ground to explore the impact of digitization on human orientation.

Taking each aspect in hand, we observe how our technological capability brings about gains or potential gains for orientation through powerful and stabilizing footholds in new professions and programs of study, and in online communities and collective identities. The information processing capacity of digital tech effectively enhances human mental faculties, and both computational thinking and digital literacy can help reduce risks and solve problems efficiently to help people navigate new situational challenges. Also, the advent of new routines centered around social media use has become a grounding force in many lives, highlighting the transposed continuity of our existence as a social species, and the fluctuant nature of social life in the Information Age.

Simultaneously, the digital era initiates significant obstacles to the achievement of orientation. The inexorable encroachment of digital technology into our lives and routines imposes new requirements for orientation that may be difficult to surmount for certain populations, and may cause issues for intergenerational understanding and social cohesion. Information overload and attention fragmentation reduces an individual's cognitive power and decision-making abilities, heightening the uncertainty and confusion that are inevitable when countenancing the huge volume and speed of information available to us today. Moreover, the inherently social interaction that characterizes online content emphasizes the shifting tides of mutual trust and the unsettling risks of double contingency—especially susceptibility to misinformation.

Through a careful enumeration of the gains and losses for orientation from the digitization of our world, we grasp yet another abbreviation for our contemporary standpoint. This overview itself, detached from the moralizing discourse of our time, becomes a hold and a pragmatic tool to guide us for-

ward toward more orientation achievements. Thus, to combat the increasing disruption and polarization of our times, we move away from directly opposing the forces of misinformation, and toward enhancing the orientation virtue of reasonableness.

2. A New Situation: Digital Technology and Gains and Losses for Orientation

We can grasp essential features of digital life through the distinction between analog versus digital technology. Both terms indicate a means and a method for storing and conveying information. The term “analog” derives from the Greek *analogon*, meaning “proportional” and suggesting the one-to-one relationship between information at the start and end of a transmission process, or the perceived sameness of a signal before and after processing (in terms of electrical or kinetic energy levels, physical proportions, spatial orientation, aural qualities, etc.). During technology-driven signal processing, a signal is encoded, or converted from one form to another via a device or transducer¹, before it is transmitted and eventually decoded. With analog, signals reside on and are represented by physical objects or they are encoded into waves of varying amplitude and frequency. For instance, the grooves on a vinyl record are encoded sound waves that produce “proportional” sound waves when decoded by a gramophone. A carefully designed printer’s plate, when washed with ink and applied to paper, transfers and replicates written information from an original source. With radio, sound waves are encoded as radio waves and travel from a transmitter to a receiver, which converts the waves back to sound. In the analog world, objects may vibrate, pulse, solidify, and move—sometimes in response to encoded wave activity—and thus convey messages and meaning among the public.

In the digital world, signals are encoded as a series of the digits 0 and 1 (i.e., OFF and ON pulses, or “binary code”) before they get stored, processed, and transmitted by computer technology. Digital signals are “quantized,” meaning they represent information according to a limited set of two distinct states rather than the continuous variation of a wave, as we see with radio, or even with

¹ “Transducer” emerged as an English term in the 1920s and comes from the Latin term *transducere* for “to lead across.” The word helps us visualize the way technology leads a signal across a divide between energetic states or wave forms, from one form to another.

the infinite variability of physical objects. The term “digital” derives from the Latin *digitalis*, indicating “finger” or “toe,” and alludes to a simple system of counting small numbers. Even so, this innate limitation of binary coding leaves impressive leeways for engineering innovation that brings analog components along for the ride. Digital controllers typically combine with analog technology, such as the keys on a keyboard or the speakers in your smartphone, but the messages and meaning they store and transmit are encoded in digital signals.

Stemming from the numerical techniques of classical mathematicians and coming on the heels of wartime signal processing advancement, the first digital computers emerged in the 1950s. These behemoths were typically relegated to huge industries like communications, oil, and the US space program, until 1965 when J.W. Cooley and James Tukey invented the fast Fourier transform (FFT) algorithm. In short, the algorithm represents a numerical technique that greatly increased the speed and capabilities of computer processing at the time. The Cooley-Tukey FFT catalyzed more innovations in FFT algorithms in the seventies, and by the eighties these and other advances enabled the advent of CDs, medical imaging, remote sensing, and more.

Alongside developments in digital signal processing, in 1962 MIT computer scientist J.C.R. Licklider conceived of a global computer network that would go on to be developed by the US Department of Defense’s Advanced Research Projects Agency (ARPA) in 1969. In the seventies, engineers devised a way to connect multiple decentralized and independent networks, so that one network’s failure would not threaten the system as a whole. Developments in cable technology also enabled more data to travel at higher speeds and through phone lines during this time. With the eighties came the proliferation of dial-up connections, local area networks (LANs), and domain names. The nineties hailed the introduction of uniform resource locaters (URLs), hypertext markup language (HTML) coding, Windows 95, Internet Explorer, Amazon, Yahoo, eBay and a recognizable online sphere of communication.

Given that the distinction between analog and digital fundamentally relates to a technological shift in information signal encoding, how has this shift precipitated such massive changes in lifestyle, culture, the economy, and more? To put it simply, digital technologies have:

- simplified and made reliable the storage and utilization of information
- increased the information processing power of humans

- catalyzed economies of scale, lowering the barriers to entry for digital technology use
- enhanced the volume of information available to the general public
- increased the speed at which this information travels
- decentralized methods of information distribution and collection
- increased the interactivity between individuals, groups, businesses, governments, and other entities on online platforms.

The sum of these aspects of digital technology constitutes an abbreviation for what is meant by “the digitization of our world.” In practice, each listed aspect overlaps the others, wholly or in part. For the purposes of this research, they are marked separately in order to serve as strong footholds to guide a discussion of the myriad ways in which digital technology affect human orientation processes.

The following seven sections explore our new situation in the digital era—the experiential contours of digital living—in terms of gains and losses to orientation. Research on digital technology usage trends and new digital-era professions help us to begin cataloging these gains and losses.

3. Simplified, Reliable Storage and Utilization of Information

How does the simplification of information handling translate into gains for orientation? First, the relatively simple structure of binary code enables computer network cards to determine whether a file transfer happened successfully. All data files travel across a computer network in “packets,” which are small portions of the total signal. When those packets reach their destination, the network card refers to the “checksum” of the data to determine whether any packets are missing. This basic function shows how simple coding structures can translate into more reliable information exchange. For the individual invested in a successful file transfer, this capability offers reassurance.

At the macro level, the benefits of digital incentivize sustained attention on digital tech and commodities development, excluding alternatives. The continual selection for digital tools from among a variety of potential non-digital alternatives comprises the evolutionary trajectory of our technical society and a stable hold for orientation. Considering the brief history of signal processing outlined above, the greater simplicity of digital versus analog signals means they are less prone to interference during transmission, and binary code is more

replicable than analog waves. This simplicity also means that digital signals typically maintain their quality and strength over time, while purely analog technologies are more easily subject to degradation. Digital information is also easier to copy and delete, as evidenced by the difference between a word processor and a typewriter.

Again, these benefits are crucial footholds in guiding the direction of present technology usage and future technological innovation. Digital technology use has become ubiquitous in contemporary life, both for work and for leisure, as more and more purely analog technologies get phased out. Meanwhile, engineers are committed to advancing the channels for transmitting digital signals (like copper cables versus fiber optic cables) to increase bandwidth and reduce signal interference, and they are exploring newer methods to encode more information digitally, rather than looking far beyond the binary. In sum, simple binary coding translates into gains for orientation because it limits the horizons of our technology use and development within the broad leeways of the digital technosphere; our more convenient and durable digital tools are no longer a brave new frontier, but rather fit seamlessly into daily routines and future planning.

Similarly, the proliferation of relatively simple and reliable binary coding also means gains in orientation for professionals who use digital technology. Indeed, digital technologies have become *de rigueur* in almost every professional discipline imaginable, at least for some aspect of the business (from accounting and filing taxes to communication via email and text). For many professions, mastery of a particular software² is a prerequisite for employment (consider application software for architectural or industrial design tasks, to mix and edit audio and video input, to touch-up and enhance photography; the Microsoft Office suite, various coding languages, and other “technical skills” are now resume mainstays). The proliferation of digital technology constitutes a new orientation world, i.e., new patterns of finding one’s way through professional challenges, and new and crucial work routines involving digital technology, sometimes with little crossover into the world of leisure, or non-work. These developments in the professional sphere translate into gains in orientation as they focus and direct individuals’ educations and career development trajectories

² Software comes in two types, *system software* that enables computer hardware to function, and *application software* that helps people accomplish certain tasks. Many careers make avid use of application software to fulfill their professional responsibilities.

toward the attainment of a specialized digital literacy. More will be said about the impact of digitization on education later in this section.

On the other hand, how has the durability, reliability, and simplicity of binary code contributed to losses in our orientation? Considering the phasing out of analog technology, older generations in particular are forced to undergo tectonic shifts in the devices that define and impact their lifestyle. This can lead to important generational differences in communities, and the workforce especially, as older workers must continually adapt to rapidly changing technology and compete with younger people who, for instance, grew up with digital applications and may have more intuitive understanding of their function. As people reach old age, they tend to have less motivation to learn new technologies.³ This may enhance feelings of social disconnection and disorientation, i.e., a mood of unsettlement, in older people increasingly out of touch with the technological orientation world of contemporary society.

Another population may struggle to meet the challenge of acquiring digital literacy: the economically disadvantaged. Contemporary digital literacy generally requires access to a computer with high-speed Internet, for one, and this might be beyond the reach of people in financial hardship. Moreover, computer skills acquisition requires sufficient time to practice; a person compelled to work low-income jobs might see more advantage to the immediate benefit of another part-time job versus the promise of future financial security by developing a valuable skillset. Furthermore, the emotional stress of financial strain may preclude the mental focus necessary to assimilate complex new knowledge. Truly, the trials of economic hardship pose significant obstacles to successful orientation and the mastery of opportunities intrinsic to our digital age.

On a more technical level, the relatively simple nature of binary coding contributes to another potential loss for orientation: the fidelity of digital signals from their wave source to their wave output, and therefore the confidence individuals can feel that their digital information comprises an authentic representation of the source material. Any vinyl records devotee would heartily agree. Fidelity, from the Latin *fidelis* meaning “faithful,” in this context refers to the exactness with which something is copied or reproduced. Similar to the virtue integrity, fidelity implies a condition that does not change no matter the

³ See Mart Tacken, Fiorella Marcellini, Heidrun Mollenkopf, Isto Ruoppila, and Zsuzsa Szeman, “Use and acceptance of new technology by older people: Findings of the international MOBILATE survey: ‘Enhancing mobility in later life,’” in: *Gerontechnology* 3, no. 3 (2005), p. 126.

circumstance. In the orientation world of digital technology, high- and low-fidelity digital signals, like high- and low-resolution information, refers to the varying quality of information transfer when the original signal was in wave form, as it is with video and audio information. Sound waves, for instance, can be visualized as peaks and valleys with a theoretically infinite number of positions along the contours of a wave. Digital sound, however, conveys snapshots of data from the contours of this analog wave—finite snapshots that conform to its binary code structure. Since purely analog technology preserves the waveform of audio and visual, it theoretically contains a truer representation of the original signal. As digital technology advances,⁴ however, the difference in sound and video quality between analog and digital has become less discernible to the human senses, and digital modulation techniques have purposefully altered the original signal for a satisfying artistic effect.

4. Increased Information Processing Power

Simply put, information processing refers to the manipulation of a signal in a way that renders a useful result. The term “manipulation,” from the Latin root meaning “hand,” emphasizes how information undergoes a transformation that is handled or managed according to rules and parameters defined by people. In the history of computing, some of the earliest computing devices employed a mechanical means to render quick answers to mathematical problems; a signal indicating the starting values, would undergo “processing” defined by arithmetical rules programmed into and handled by the machine, in order to produce an accurate result. Modern information processing, of course, is much more capable and complex, but its fundamental structure hasn’t changed.

So how does increased information processing power translate into gains for orientation? In short, more processing power means greater capacity to overcome information-based problems and challenges. According to Canadian theorist Marshall McLuhan, all human technologies are essentially an extension of one or more human senses or body parts. Cameras and telescopes extend the

⁴ This advancement can be explained by progress in sample rates and bit depth. A sample rate is the number of samples, or snapshots of information, attained from a single second of signal input. The higher the sample rate, the closer the digital information is to the original. Bit depth refers to the number of amplitude values that can be recorded for each sample. At the time of writing, most professional audio engineers work with a 48 kHz sample rate (that means a digital encoding of 48,000 samples per second) and 32-bit (which is able to capture 4,284,967,296 amplitude values). For more information about this subject, visit <https://www.izotope.com/en/learn/digital-audio-basics-sample-rate-and-bit-depth.html>.

human eye, for example, and vehicles extend human legs as a primary means of transportation. This concept helps us to understand computer processing as an extension of the human brain.

Since the widespread use of the abacus in ancient China and Rome, humans have resorted to technology to externalize large or complex sums and information they could not handle easily in their minds. The astrolabe helped mariners find their position at sea, and slide rules made multiplication and division a cinch. These technologies make arduous mental processes easier, faster, and oftentimes more accurate. Digital technologies took the processing power of earlier devices and enhanced them by several orders of magnitude, both in terms of applicability to a wider array of problems as well as further increasing the ease, speed, and accuracy with which these problems are solved. Considering the wide accessibility of digital technologies in orientation worlds increasingly defined by their use, digitization has effectively increased the mental capacity of the human race.

Increasing the information processing power of humans is part and parcel of contemporary discourse regarding the “future of work,”⁵ namely, the theory that digital technologies are forcing a global transition away from majority agricultural and industrial working populations. According to this theory, automation and AI operating systems will increasingly take over “low-skilled” labor positions, offering gains in efficiency and profits to businesses. Optimistic appraisals of this vision for the future focus on the potential for freedom from scarcity, the new economic feasibility and necessity of a universal basic income, and the likely incentives for a shift toward more creative, complex, and exciting work for people.⁶ In this view, the future of work thanks to digital technology provides gains to orientation when people are no longer unsettled by and focused on the satisfaction of their basic material needs. We will briefly consider alternatives to this view after discussing how increased processing power affords gains to orientation in the microcosm of technology-assisted education.

⁵ See Aaron Benanav's *Automation and the Future of Work* (London / New York: Verso Press, 2020).

⁶ The idea that technology might ennoble people by occluding the need to toil at basic cognitive tasks has existed for centuries. In the words of 17th century German polymath Gottfried Leibniz, “...it is beneath the dignity of excellent men to waste their time in calculation, when any peasant could do the work just as accurately with the aid of a machine.” This quotation can be found in Peggy Aldrich Kidwell and Michael R. Williams, *The Calculating Machines: Their History and Development*, (Cambridge: MIT Press, 1992), p. 38-42, translated and edited from Ernst Martin, *Die Rechenmaschinen und ihre Entwicklungsgeschichte* (Pappenheim: Johannes Meyer, 1925).

In the modern era, digital technologies have decreased time pressure on students and created more opportunities to build high-level skills and cognitive abilities. Computer-assisted research, writing, and studying has made student work easier and more efficient. The time it takes to access data online and reinterpret it using a word processor with spellcheck and other capabilities is much less than what was required in the days of libraries and typewriters or long-form writing. The digital era has also seen the proliferation of educational computer programs teaching skills as varied as typing, spelling, foreign languages, geography, physics, and more; these application software platforms operate in response to user performance, thereby providing a differentiated, typically game-based learning environment. Such digital learning tools may exceed the capacity of individual teachers to deliver tailored instruction to large class sizes. Furthermore, the presence of this application software online allows more students to seek personalized, progressive educational experiences outside a classroom setting, and often at minimal cost or for free. Digital learning software condenses and relegates rote learning experience (like memorization) to the screen, and this complements popular contemporary pedagogical techniques that advocate for greater focus on higher-level discussion, creativity, and application of principles during class time and on the job.⁷⁸ In sum, in the realm of education, digital information processing has given rise to more efficient methods of work and study, and this translates into a gain for orientation: the more efficient the educational processes, the faster we can learn, the more challenges we can tackle, and the more qualifications we have for highly skilled work.

Despite this rosy picture of orientation gains through technological progress, increased information processing power also brings about losses for orientation. While human problem-solving capacity may have increased astronomically in the digital era, the concurrent transformation of industry and work has upended longstanding traditions and economic expectations. Whereas in previous eras an individual was more likely to stay in a particular line of work throughout their productive years, this experience has become vanishingly

⁷ This was certainly the consensus during my graduate studies in technology and education in 2011.

⁸ See also increasing pedagogical discourse on “computational thinking,” which starts by collecting data, coding a computer program to organize, visualize, or help analyze the data, then forming conclusions and plans of action based on the results. According to a 2018 report, more than twenty European countries have integrated programming or computational thinking into their public school curricula. For details, see, S. Bocconi, A. Chiocciariello, and J. Earp, “The Nordic approach to introducing computational thinking and programming in compulsory education.”

rare in developed economies.⁹ Due to the rate of technological progress and innovation, it is rare that an individual can predict the technical skillsets that will be in demand five years in the future. These obstacles are only magnified for the older and economically disadvantaged. Automation and a globalized workforce, made possible by digital technologies and communication systems at scale, have provided economic opportunities in some areas and profound economic challenges in others. Whenever a person struggles to find a foothold in their employment journey, this constitutes a loss for orientation.

5. Economies of Scale, Lower Barriers to Entry

Economies of scale refers to the lowered cost per unit of manufactured commodities in relation to their scale of production. In other words, huge industrial corporations have an advantage in the market because the sheer scale of their operations enables them to produce things cheaply. This also results in greater consumer access to goods manufactured at scale.¹⁰ Continued selection for digital tools has coincided with the development of tech industry juggernauts, able to produce more and more advanced digital devices at competitive prices.¹¹ In addition to the previously described gains for orientation—including more professional opportunities in digital tech, more educational opportunities via application software, and increased problem-solving capacity—lowering the barriers to entry for digital technology use unleashes potent new globalized structures of communication.

Digital communication technologies include email, short message service (SMS, or texting), multimedia messaging service (MMS, or texting with images, videos, or audio), voice-over-Internet-protocol (VoIP, or online telecommunications platforms like Skype and Zoom), chat and instant messages, websites, blogs, wikis, online forums, and social media. Research firm Statista

⁹ According to a longitudinal study by the US Bureau of Labor Statistics, “Individuals born in the latter years of the baby boom (1957-64) held an average of 12.4 jobs from ages 18 to 54.” See <https://www.bls.gov/news.release/pdf/nls0y.pdf>.

¹⁰ This section focuses on greater consumer access to smartphones and online communication platforms, however, economies of scale also enable greater access to other things. In the world of fabrication, digital tools are enabling greater consumer access to industrial-level equipment that previously relied on an industrial-grade, three-phase power source. Sparing individual makers the cost of a large and noisy rotary phase converter, digital interventions can cheaply and adequately convert household power to a facsimile of three-phase, thus significantly lowering financial barriers to entry for industrial quality fabrication.

¹¹ In some areas of the world, the greater accessibility of digital devices has even enabled a phenomenon known as “technology leapfrogging,” in which developing nations in particular are able to skip stages of technological development experienced elsewhere.

has tracked the penetration rate of smartphones in the global population as increasing from 49.35 percent in 2016 to 78.05 percent in 2020.¹² If true, this suggests that more than three quarters of the global population are estimated to have access to all of the aforementioned communication services. According to more conservative industry and government statistics collated by DataReportal.com, 66.9 percent of the global population were smartphone users as of July 2021, with 92.1 percent of Internet users reporting mobile devices as their preferred means to online access; these figures also show 56.8 percent of the global population as active on social media.¹³

So how does widespread digital communication, afforded by economies of scale and lower barriers to entry, translate into gains for orientation? In this section, we focus on opportunities for self-expression. In our discussion of interactivity on digital platforms, we delve deeper into digital communication as a tool for community-building and identity formation.

Put simply, the digitization of our world has afforded a huge swath of the global population unprecedented opportunities to express their opinions and share their lives and work online. Thanks to new platforms for expression that formerly didn't exist, and thanks to the possibility of weighing in anonymously and/or voicing a perspective unlikely to reach the awareness of people you know, the Internet has created some enticing conditions for full disclosure. Coupled with decreased financial barriers to entry, digital technology has enabled new generations of public voices that would have otherwise gone unheard. This is especially poignant considering the uneven distribution of rights to full expression under repressive regimes, and sometimes under social constraints like strict families or religious sects. Such hindrances to expression are particularly problematic when they hold back the operation of a free press, the so-called "fourth estate," in charge of keeping other societal institutions accountable. Former UN Secretary-General Ban Ki Moon once cited the role of high taxes on newsprint effectively restricting news readership among certain populations.¹⁴ Thus, economies of scale are a vital (if unintended) aspect of the struggle against political censorship and de facto censorship through financial hardship.

12 See <https://www.statista.com/statistics/203734/global-smartphone-penetration-per-capita-since-2005/>

13 See <https://datareportal.com/global-digital-overview>.

14 See <https://www.un.org/en/chronicle/article/freedom-expression-fundamental-human-right>. Indeed, the United Nations positions freedom of expression under Article 19 of the Universal Declaration of Human Rights.

How might economies of scale engender losses for orientation? First, lowered barriers to entry, coupled with widespread consumer buy-in for social media in particular, may create constraining and psychologically unsettling social expectations for individual participation. The fact that these technologies have become so prevalent in mainstream culture has for many initiated pressures of social influence that incentivize the creation of their online persona. In a sense, withholding an online presence becomes a personal statement that limits your accessibility and knowability to others. In some areas, potential employers are readily turning to social media to research candidates for open positions; they might even rely on professional networking platforms to recruit candidates in the first place. At the same time, social media has helped to reunite long lost friends and classmates. To forego these online experiences might be perceived as tantamount to limiting one's impact and connection to the social sphere, as it currently exists in the digital era. Such limitations become dramatically apparent during periods like the recent global pandemic, in which many people communicated solely through digital means for months on end.

Second, successful online social integration requires an investment of time and effort, even the adoption of new routines, and such routines may actually destabilize individual orientation by displacing more psychologically healthy or beneficial activities. The time and effort required for online communication includes both learning the technology and learning the language that has evolved through online discourse. The latter requirement for successful orientation online can be demonstrated through the use of popular Internet acronyms like “lol” (laughing out loud), “irl” (in real life), “tl;dr” (too long, didn't read), “imho” (in my humble opinion), “fwiw” (for what it's worth) and many more. Also, popular jokes and anecdotes that “go viral” online can take on a metaphorical quality, with references to them utilizing a kind of verbal shorthand; for example, on March 24, 2021 Twitter user @VeryBadLLama wrote: “‘cinnamon toast shrimp guy turned out to be a milkshake duck just like bean dad,’ is a sentence I desperately wish I did not understand.”¹⁵ In sum, economies of scale help set the stage for new social pressures and effortful, possibly time-intensive requirements for orientation in online spaces.

¹⁵ In short, two men who became briefly famous on the Internet for rather innocuous, feel-good stories were later revealed to have troubling incidents in their past. The phrase “milkshake duck” comes from a June 12, 2016 tweet by @pixelatedboat that reads: “The whole internet loves Milkshake Duck, a lovely duck that drinks milkshakes! *5 seconds later* We regret to inform you the duck is racist.”

6. A Greater Volume of Information

The digitization of our world has unleashed a deluge of accessible information, similar in kind to the societal effects of the printing press but at a whole new level of magnitude. As a gain for orientation, high volumes of information from diverse sources internationally serve as a gateway to understanding our increasingly globalized society. Knowledge of English, the main lingua franca of Internet discourse,¹⁶ is spreading rapidly, and when information cannot be sourced in English, web browsers are increasingly adept at translating non-English texts for English readers. Wikipedia, the free online encyclopedia, now has articles written in well over two hundred languages. Essentially, digital communication platforms offer access to pluralistic and multicultural perspectives that would be difficult or cumbersome to engage in a face-to-face setting or through print media.

Thus, this state of affairs is crucial in enabling several virtues of orientation: an expansive overview of any given situation, consideration, and insight as well as open-mindedness. In a different philosophical sense, Leibniz's perspectivism proclaims each individual a "spirit monad," each an immaterial orientation world unto itself, while the God perspective signifies the combination of all monads and possible perspectives into a "supreme monad"; thus, the huge volume of perspectives available online constitutes the biggest accessible repository we have ever amassed of collective human insight and experience—the nearest approximation yet of the God perspective.

These potential gains for orientation are particularly important considering global issues straddling national boundaries, such as the ongoing effects of climate change and the impact of multinational corporations and international and regional deliberative bodies, educational and cultural organizations, and law enforcement. However, in actual practice, the potential benefits of digital communication through exposure to a high volume of multi-perspectival information is anything but a given.

How does the high volume of information afforded by digital technology constitute a loss for orientation? In short, the huge volume of online content available creates the ideal conditions for information overload—a mental state

16 Widely cited research by Web Technology Surveys states that 63.2 percent of websites with a discernible content language use English. The language in second place is Russian, coming in at only 7.2 percent of content. See https://w3techs.com/technologies/overview/content_language.

in which excess information hampers one's understanding or ability to make a decision. Put differently, the volume of information at hand exceeds an individual's ability to process or assimilate it.¹⁷ According to statistics compiled by Kepios, the average Internet user is online for six hours and 55 minutes per day.¹⁸ Considering the short standard length of most digital communication formats (emails, news articles, webpages, social media posts, YouTube videos), the amount of online content you could easily access in a seven-hour period is (cognitively) staggering. Moreover, the trustworthiness of online content adds yet another layer of uncertainty to our ability to utilize this information to find our way through new situations—for a huge increase in the volume of information also tends to indicate a concurrent (if not necessarily proportional) increase in the volume of misinformation. In sum, information overload can cause confusion, frustration, and “analysis paralysis”—hindering our mastery of the current situation.

Our susceptibility to orientation losses due to high-volume information access also hinges on attention fragmentation. Fragmented attention occurs when a person's mental processing undertakes too many things at once. This may occur in a multitasking scenario, in which someone tries to accomplish two or more tasks simultaneously—like answering an email while chatting on the phone. Crucially, though, attention fragmentation also happens in the natural course of switching focus from one thing to another; “attention residue” describes how the brain continues processing input from one experience for a while after switching attention to a new area. Thus, the greater the volume of information encountered in a given time period, the less capability the brain has to fully digest each item of input. As the amount of data compounds, our cognitive ability to gain a stable overview and carefully consider footholds for our understanding diminishes.

7. Increased Speed of Data Transfer

Increasing the speed of digital information transfer entails enhancing the efficiency of signal transmission and reducing latency, that is, the time difference between when a signal gets sent and when the appropriate party receives it. This

¹⁷ See Angela Edmunds and Anne Morris, “The problem of information overload in business organisations: A review of the literature,” in: *International Journal of Information Management* 20, no. 1 (2000), pp. 18-9.

¹⁸ See <https://datareportal.com/global-digital-overview>.

might be the time it takes for a keystroke to register on a word processor, or the time it takes for an audio-visual signal to reach the person on the other end of a call. In the fast-paced realm of commercial telecommunications, latency is typically measured in milliseconds (ms), but as anyone who has watched a news anchor speaking with a correspondent in the field knows, latency can vary widely.

The gains for orientation via the reduction of latency have been many-fold. Ultrafast digital communications have become pivotal for business (video conferencing, for instance) and military operations (remote viewing, command comms, and remote operation of drones) that span the globe, just as online gaming enthusiasts enjoy their hobby with international partners seemingly in realtime. Meanwhile, breaking news can reach an audience within seconds on Twitter. In the financial sector, one millisecond of latency for traders in the stock market exchange can lose investors huge sums of money. Reduced latency also has safety implications, as new-model cars increasingly employ digital safety features (like brakes that engage when the car senses an object ahead) that must achieve near-instantaneous signal transfer in order to function properly. In sum, the increased speed of data transfer achieved during the digitization of our world elicits gains for orientation through our increased capacity to meet goals (cheap and efficient business meetings, dynamic entertainment experiences, wealth accumulation) and reduce risk (minimizing military casualties, transportation safety). With the push to bring high-speed Internet to remote rural areas, tackling latency issues also relates to societal values like social inclusion and equal opportunity.

Looking more closely at the role of signal transfer speed (as well as fast computer processing) in online gaming, we can observe how this technological capability can be crucial in developing orienting routines, identity, and a sense of community. For context, the video game industry has been growing steadily since the mid-nineties. According to statistics collated by GamingScan.com, video game profits are expected to reach over \$180.1 billion in 2021, and at least half of surveyed gamers say that online gameplay capability is important to their decision to purchase a game.¹⁹ Some of the most popular games with online capabilities will assign unique players to a team with a specific objective. Gamers must work together and communicate effectively to coordinate their

¹⁹ <https://www.gamingscan.com/gaming-statistics/>

movements through obstacles in the digital landscape. While single player games can be set aside at will, playing games with other people online encourages more time to be spent on the activity, as the sudden loss of a player might imperil the team's success, or the game objective itself might take longer to execute with ninety or so other participants.²⁰ Thus, increasing amounts of time spent online gaming form a weekly or even daily routine for many,²¹ and the engaging social dynamics and compelling orientation worlds of gameplay invoke an identification with the identity of gamer, within the expansive online community that shares this interest.

The losses for orientation associated with reduced latency go hand in hand with the risks of information overload and attention fragmentation. Super-fast digital signal transfer potentially positions individuals as instantly reachable, any time and in nearly any place. Important trade-offs emerge in the balance between connectivity and productivity, as much of the popular and scientific literature on this subject shows. Regarding some of the previously mentioned aims addressed by reduced latency, the success of digital technology can even backfire. Less casualties suffered by well-equipped hegemonic nations may incentivize further use of military force and decrease the will for diplomacy. Enormous financial gains produced by leveraging existing capital may disincentivize investment in commodities production and the workforce, thus exacerbating uneven income distribution and its attendant social ills.²² These effects may destabilize and reduce opportunities for unlucky individuals.

8. Decentralized Data Distribution and Collection

The centralized/decentralized distinction helps define life in the digital age, as we observe the receding of certain top-down structures that mediate our engagement with information. When it comes to distribution, consider the experiential difference between films watched in a movie theater in a crowd, versus the

20 The rise in online gaming in the 2000s coincided with societal discourse and research about gaming addiction. For more perspective on the neurobiological allure of excessive gaming and possible healthcare approaches, see Daria J. Kuss, "Internet gaming addiction: Current perspectives," in: *Psychology Research and Behavior Management*, 6, (2013), pp. 125-37.

21 There are 2.5 billion video gamers globally, and 60 percent of Americans play video games daily, according to statistics at <https://techjury.net/blog/video-game-demographics/>.

22 The think tank Seven Pillars Institute for Global Finance and Ethics identifies two advantages of economic inequality—short-term growth and perceived fairness—and the following disadvantages: stifled long-term economic growth, increased crime rates, reduced health outcomes, more political inequality, and disparities in education (<https://sevenpillarsinstitute.org/consequences-economic-inequality/>).

streaming model in the home and on portable digital devices. The theater system operates with a distribution company mediating the individual's consumption of the film studio's work, i.e., by confining the activity to a particular time and place. On the other hand, digital content—from streaming new releases in film to online shopping—has the distinction of taking experiences that once involved some necessary in-person social component and tailoring them exclusively to the individual.

This shift involves gains in orientation in that it allows for greater freedom and personal control. The convenience of digital information formats allows a person more leeway in how they manage their time. Online shopping in particular has made price comparisons and bargaining hunting much more efficient, which may please the cash-strapped consumer if not the local retailer. Decentralized information distribution includes many experiences that cater to individual preferences as well as limitations, like time constraints or geographical restrictions, to help them effectively navigate new situations and opportunities where they are. On the contrary, though, this same phenomenon may interfere with our innate need for social stimulation. As we observed during the course of the coronavirus pandemic, continual interpersonal isolation can have serious deleterious effects on emotional well-being. Moreover, some information distributed widely online—like medical information—might prove much less helpful than information mediated by a supervising, professional institution. We thus see both gains and losses for orientation through the popularity of decentralized information distribution.

In the realm of centralized or top-down data collection, one convenient example is the national census; while nowadays it may use digital technology to collect, record, and store its results, the census is a top-down structured method that seeks answers to specific questions in order to generate important data. By contrast, Internet users typically offer their data, as much or as little as they might like in certain circumstances, to platforms that collect this information and/or sell it to advertisers and others. For example, search engines like Google default to recording your search and browsing history, even scanning your emails,²³ to generate a predictive model of your behaviors, preferences, and purchasing habits. Telecommunications companies collect massive amounts

23 As of 2017, Google claims it has ceased the practice of scanning user emails for data to personalize ads directed at them, although it continues to do so for different reasons (<https://variety.com/2017/digital/news/google-gmail-ads-emails-1202477321/>).

of user data as well,²⁴ as do social media platforms. By some estimates, the average smartphone user generates 40 exabytes²⁵ of data every month, typically with very little awareness of what data gets collected and why. The Terms and Agreements contracts that gain user permission for this are notoriously long and difficult to parse.

Most digital device users seem content to accept this trade-off between their privacy and digital services; essentially, the decentralization of data collection elicits gains to orientation by allowing users access to digital services free of monetary expense (that is, at the expense of their data privacy). Still, as privacy concerns intensified after revelations like those leaked by former US National Security Agency employee Edward Snowden,²⁶ more platforms offered new settings and increased encryption to further protect personal data, and some individuals took it upon themselves to safeguard more of their information using virtual private networks (VPN)²⁷ and other means. The gains for orientation related to decentralized data collection are perhaps most pronounced for digital communications companies, marketing specialists, and advertisers; mining user generated data for profitable opportunities is much more efficient and cost-effective than organizing in-house, centralized data collection. More generally, though, decentralized data collection creates opportunities for skills development and professional efficacy, sociological understanding, and personal network awareness.

The era of digitization is also the era of Big Data—a time when data is arguably the most valuable commodity on the market,²⁸ as more people with specialized skills access and manipulate it to achieve their goals. In the commercial sphere, this speaks to the increasing viability of studies and careers in “data science” and “analytics,” which combine data mining tools with computer programming, modeling, and data visualization techniques to generate useful insights and recommendations for large firms and organizations. These career opportunities skyrocketed after 2010 as firms sought help with utilizing massive

24 And they do not always collect this information legally. In 2016, Verizon was forced to pay a \$1.35 million fine for violating user privacy with its use of “supercookies,” which tracked browser activity regardless of user settings.

25 An exabyte equals one billion gigabytes (GB) of information. For reference, a typical film on DVD contains approximately 4-8 GB of information.

26 This is the case even though Snowden’s revelations pertained chiefly to invasion of privacy by the US government rather than invasion of privacy by corporations.

27 VPN uses encryption to allow a user access to a remote computer online, thus disrupting data collection tied to the user’s unique internet protocol (IP) address.

28 A May 2017 article from *The Economist* states in its title, “The world’s most valuable resource is no longer oil, but data.”

unstructured datasets. Corporate data scientists and engineers also paved the way for data-driven machine learning (a subset of artificial intelligence, or deep learning), in which digital devices respond to use patterns rather than programmed commands to optimize user experience. Machine learning algorithms are used for image and voice recognition software, traffic monitoring for GPS applications, appliance functionality (think: Roomba), and more.

Academic researchers and non-professionals also use computational thinking skills and decentralized data to achieve their goals. For example, data scientist and economist Seth Stephens-Davidowitz argues that Big Data has a lot to teach us about human nature and our individual proclivities in his book *Everybody Lies: Big Data, New Data, and What the Internet Can Tell Us about Who We Really Are* (2017, Dey Street Books); Internet usage data, the thinking goes, is much less subject to the biases (i.e., tendency to dissemble) inherent in participant surveys and other top-down methods of information collection. Outside of scholarly pursuits, activists routinely make use of publicly available information to initiate targeted campaigns for labor and tenant organizing, mutual aid distribution, and demonstration planning. While at the personal level, Facebook's "Safety Check" feature helps users instantly learn about the status of their network as they check-in after a natural disaster, and more commonly, people can use their network's public/semi-public data to wish them a happy birthday, congratulate them on a graduation, a new job, a marriage, the birth of a child and more. Social network analysts have even found that weak ties (as opposed to close personal connections) are especially important for defining social structures, and weak ties have significant impact on individual economic outcomes.²⁹ For one, a person is more likely to find a promising employment opportunity by tapping her network of weak ties than by tapping close connections or through any process involving the classifieds or resume blasting.³⁰

While the gains for orientation through decentralized information are many, the phenomenon also entails some losses. Again, information sourced online or from one's social network may not be as reliable as information vetted through a credible authority. Pew Research Center released a 2021

29 See Mark Granovetter, "The impact of social structure on economic outcomes," in: *Journal of Economic Perspectives*, 19, no. 1 (2005), pp. 33-50.

30 See Mark Miller, "To get a job, use your weak ties," in: *Next Avenue* (August 16, 2016): <https://www.nextavenue.org/get-job-use-weak-ties/>

study asserting that roughly a third of US adults turn to Facebook as a primary news source, while about fifty percent use some form of social media for news “at least sometimes.”³¹ A 2018 study found that false information spreads faster online than the truth.³² Misinformation regarding current events may have serious deleterious effects on personal stress and anxiety levels, as well as negatively impact the functioning of a deliberative democracy, as many have pointed out. Regarding privacy issues, the will to keep your data secure imposes new requirements for orientation that may be daunting for the average user, particularly older people who are disproportionately targeted. Compounded by the speed with which hackers and other bad actors breach security systems, and the responsive development of new technological solutions, the knowledge needed for personal protection keeps advancing while it seems our information is never fully safe. As we’ve seen with other aspects of the digital era, our attempts to navigate effectively through new situations can be frustrated by susceptibility to misinformation as well as complexity and steep learning curves.

9. Increased Interactivity

Finally, the last novel feature of our digitized world involves increased levels of interactivity on digital communications platforms. The interactivity of online content especially stands out when compared to earlier iterations of mass media, wherein letters to the editor, professional or community associations, and book clubs might be among the chief methods of engaging with publicly available content. In the digital era, Internet users have an abundance of methods and opportunities to communicate directly with each other, with government offices and representatives, with corporate brands, with celebrities, authors, journalists, artists, local business owners, academics and many more people and entities that might formerly have been out of reach in previous eras. Online interaction may be as pithy as a one-click show of approval (or otherwise) on some posted content, or it might involve extensive feedback, back and forth arguments, or private direct messages using text or multimedia.

The philosophy of orientation contains the idea that “encountering other people ... may irritate you more than anything else and ... may orient you more

31 <https://www.pewresearch.org/journalism/2021/09/20/news-consumption-across-social-media-in-2021/>

32 Soroush Vosoughi, Deb Roy, and Sinan Aral, 2018, “The spread of true and false news online,” in: *Science* 359, no. 6380, pp. 1146-1151.

than anything else.”³³ This raises an interesting question: Can virtual social interaction have a comparable impact on orientation as face-to-face encounters? While the subjective nature of relative psychological impact makes this a difficult question to answer, current trends in online community-building suggest that purely online contact can certainly have powerful effects on people who later go on to take significant action based on online influences.

What are the gains to orientation associated with online interactivity? First, while social interaction in any venue happens under the condition of double contingency (that is, mutual lack of transparency between interlocutors, or indeed, between any one standpoint and another), the relative anonymity of the online sphere helps emphasize and even dramatize the trust that governs these interactions. Indeed, despite the total anonymity (and thus lack of accountability) inherent in some online environments, trust emerges anyway; paradoxically, anonymity might increase some users’ inclination to trust others, as the cover of a neutral screen name could help people communicate more freely than they would under their legal name. Trust is pivotal in the development of online communities and the identification with identities that often occurs online and forms a significant foothold in orientation for many.

So how does trust, community, and identity form through online social interaction? First, online communities typically coalesce around a common interest and shared values. For example, online groups have devoted members who share their art (deviantart.com) or their fanfiction (fanfiction.net), who ask for and receive advice (as in *r/relationships* on the forum site Reddit), and who give support among networks of abuse survivors, parents, weight loss aspirants, pet enthusiasts, fetishists, former cult members, and more. Certain online groups might coalesce over a mutual distrust, i.e., of the government or pharmaceutical manufacturers. Second, to uphold their shared values, online communities will typically institute a system of self-management, complete with content moderators, written ground rules, and expectations for acceptable conduct. The most successful groups demonstrate some staying power, often attracting an inner circle of highly active members that lend a sense of continuity and stability to the group over time. Under these conditions, many online communities come to imbue trust among their members and represent a strong foothold in their lives.

33 Stegmaier, *What is Orientation?*, p. 111.

The strength of that hold, however, may be contingent upon whether an individual has access to in-person social ties under similar conditions. In fact, many people flock to online communities precisely because they lack these conditions in their face-to-face relationships. The more value and emotional satisfaction they manage to derive from these online associations, the more likely they are to start identifying with an identity embodied by the community ethos. For instance, some prominent identities that have emerged from online communities include cosplayers³⁴ (people who enjoy dressing up as their favorite pop culture characters), furies (fans of anthropomorphized animal avatars and animal mascot attire), Anonymous (a far-left “hacktivist” collective), the Proud Boys (far-right politicos), and incels (the “involuntarily celibate”). While all identities are temporary, even illusory or at least inessential for orientation,³⁵ once an individual adopts a collective identity and takes up new routines to solidify that commitment to the group, this constitutes a steady hold for mutual orientation.

Furthermore, the strength of a hold might be evidenced by how it incites an individual to action. Cosplayers and furies may invest hundreds or even thousands of dollars into their costume. Politicized identities may join or organize demonstrations or even break laws for their political convictions, bolstered by the encouragement of other members. Some incels have succumbed to self-harm and violence triggered by their community’s discourse. Just as likely, a member of an online support community may start to identify as a survivor and subsequently dedicate herself to helping others recover from trauma. An artist might grow from the support and feedback he received from his online community, finally setting up an online storefront to sell his work. Finally, whether these groups are maladaptive or not for their members, online communities have enormous potential to help people find stability and to navigate their way through new situations and toward new opportunities and/or risks.

On the contrary, how might interactivity in digital spaces disrupt orientation? In short, as in any social encounter, online interactions may unsettle an individual’s calm in their own standpoint. For one, social media in particular

34 From the portmanteau of “costume play,” cosplay, like furies, did not originate in the digital age, although both communities’ current iteration goes hand in hand with online engagement. Cosplay’s popularity has soared thanks to online photo sharing, fan fiction/fan art, and the success of regional Comic-Con conventions.

35 “...there are no identities per se: it is in every case someone who ascribes or attributes identities to people. We do so to fix our image of others (and of ourselves), and this helps us to orient ourselves to each other over a longer period of time” (from Stegmaier, *What is Orientation?*, p. 137).

has earned a reputation for proliferating content manufactured by experts in image management, and this content might suggest the riskiness of one's current orientation or the desirability of new opportunities (for more travel, more exercise, more wealth, etc.). Similarly, online exposure to new ideas, alternative political opinions, even "alternative facts" can cause cognitive dissonance—forcing the individual to reconcile or ignore the new information and regain a sense of reassuring calmness in their original intellectual perspective. Since an unrestricted, uncurated online presence would surely instigate many more instances of unsettlement and cognitive dissonance, it makes a lot of sense why many choose instead to restrict their online encounters to enclaves of users likely to agree with them. While contemporary discourse decries this practice as the building of "echo chambers," we can understand it without the moralistic bias, as simply an attempt to preserve one's orientation under a relentless onslaught of double contingency.

10. Orientation Virtues, Courage, and the Way Forward

Stegmaier enumerates the following orientation virtues as follows: overview, circumspection, foresight, insight, precaution, consideration, forbearance, and confidence. "They are intertwined on multiple levels and support each other. Today, we call the complex of them simply 'reasonableness,' without assuming a common reason equally shared by everyone ..."³⁶ These aspirational standards, the standards of reasonableness, help us to distinguish between the relative quality of orientation processes as we navigate new situations intrinsic to life in the digital age. These virtues may constitute a hold in our orientation, and with the courage to enact them repeatedly, a new routine can emerge to guide our thoughts and behaviors toward more fruitful outcomes. Our digital world provides us with many challenges, challenges both intrinsic to the technology and challenges outside of it, and the following propositions attempt to demonstrate how the virtues of orientation might show us the way forward.

First, we can "make deliberate use of the professional orientations of the functionally differentiated social systems of communication for one's individual orientation."³⁷ Briefly, a functionally differentiated social system of communication is a basic component of Niklas Luhmann's social systems

³⁶ Stegmaier, *What is Orientation?*, p. 240–41.

³⁷ Stegmaier, *What is Orientation?*, p. 241.

theory. According to this model, modern societies organize themselves in various orientation worlds, distinguished by their language patterns, that each serve a particular purpose and operate according to a particular code. In the orientation world of digital mass media, the code that defines its operation is the distinction between interesting and not interesting content. Thus, we can readily observe how information spreads and has impact in the orientation world of digital mass media: it may provoke anger or fear, it might contradict previously held notions, it might be sensational, it might titillate. All of these qualities, while most likely very interesting, do not necessarily have any bearing on their usefulness for our individual orientation.

If we were to explore the orientation world/functionally differentiated social system of science, however, we would see it operates according to a different code of distinction, that of truth and untruth. The communication patterns of science have a fact-orientation. As such, they invoke a different system for evaluating content. To succeed at making use of the professional orientations of the mass media world and the science world, we can first determine the function of the content (to entertain or to inform), and apply the appropriate standards to evaluate it in kind. While the scientific mindset entails new requirements and skills to develop a fact-orientation (far more requirements than an ability to distinguish between interesting and uninteresting content), deliberately using it to parse the truth claims present in mass media may help mitigate the effects of misinformation—both on one's individual orientation and on society writ large.

Second, we can widen our perspectives and horizons by making use of the daunting volume of information available and considering orientations foreign to our own. This kind of consideration, an important virtue of orientation and a key component of reasonableness, especially requires courage to enact under the conditions of double contingency in online social interaction. When we encounter different perspectives on the Internet, we can rarely authenticate the identity or the opinions of the other person, and across many platforms we might even struggle to distinguish between a person and a bot. Particularly under these conditions, circumspection—a cautious approach—is also a virtue of orientation. But to expand our horizons with new perspectives, we might consider the necessity of trust in our mutual orientation.

“In the uncertainty of all orientation, the building of trust is a necessity of life.”³⁸ While complete mutual trust might be the impossible ideal and the solution to the problem of double contingency, our careful approximation of this ideal will get us much farther than a mistrustful approach. This is just as true for our online interactions with people of different backgrounds and beliefs, as it is with representatives from institutions like the Centers for Disease Control or the federal government. Embracing trust, then, coincides with and even mitigates our impulse for circumspection, and this contributes to the expansion of our perspective and the ongoing achievements of our individual orientation.

Third, we can “considerately deal with ascriptions of identities, i.e., to keep open leeways for identifying with them or not.”³⁹ As we observed in our overview of the digitization of our world, online communities can engender impactful collective identities, especially in the absence of strong in-person social networks. Not all of these collective identities, and perhaps not even most of them, are intrinsically harmful. Rather, they each provide an opportunity to consider whether the devotion of time and the shared values required by a collective identity will benefit or hinder our successful orientation. This elicits yet another virtue, foresight. We might predict personal harm, or stress, or wasted time from investing heavily into a particular online community at a particular time in our lives, but this prediction does not preclude us from engaging moderately with the group. Unfortunately, contemporary trends provide more than a few cautionary tales.

Finally, a commitment to reasonableness encourages us to stabilize these routines that mitigate the risks and losses for orientation in the digital era. By consistently demonstrating forbearance—patient self-control and restraint—we are empowered to regulate our attention and prevent its fragmentation from information overload. Routine, in its many forms across many different orientation worlds, constitutes a self-stabilization of orientation. Routines generally happen beneath the level of conscious awareness; “one only becomes aware of them if they are interrupted or are absent.”⁴⁰ Thus, the patterns of behavior that characterize how we engage digital technology form the backbone of our online routines and the outcomes for our orientation. If we create an overview of these patterns, and shift our behaviors to preserve the integrity of

38 Stegmaier, *What is Orientation?*, p. 133.

39 Stegmaier, *What is Orientation?*, p. 241.

40 Stegmaier, *What is Orientation?*, p. 84.

our attention, we can alter our routines and maintain our engagement with digital technology in a structure of transposed continuities. Our contemporary fate as digital denizens is all but sealed, but we need not succumb to the worst risks and losses for orientation of our time.

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IV.

The Digital Transformation of Human Orientation: An Inquiry into the Dawn of a New Era

by Christoph Durt

Abstract

The digital transformation of the world began long before the invention of electronic devices, and it has always been intertwined with scientific, economic, ethical, and metaphysical orientations. Yet, the essay argues, future changes to human orientation will be even more pervasive. We can already witness how the digital transformation is taking off in a new direction in which the transformation of human orientation is the means or even the goal. Digital technology as basic as a search engine not only helps us to find our way through the internet, but also nudges and reorientates us. The new possibilities for surveilling humans and using them as a resource for data provide the foundation for the targeted and intelligent transformation of human orientation through arising forms of artificial intelligence. The possibilities for altering orientation and consequent behavior multiply with each part of the user's experiential environment that can be digitally controlled, which makes augmented reality and the metaverse extremely attractive to some of the world's richest corporations. Gaining orientation about these developments is key—not to turn back the wheel, but to find ways to use the enormous potential to improve rather than to disturb orientation.

1. Introduction

It is almost impossible to overlook the fact that digital technology already has an enormous impact on human life today, and there is little doubt that its impact will increase dramatically, with no end in sight. Much less obvious is, however, what exactly the digitization, digitalization, or digital transformation¹ consists of. These concepts refer to changes not only of our surrounding world but also of our experience and understanding of our world, ourselves, and our relation to the world. But how can we understand the nature of these changes? We are in midst of a development we do not yet understand and the future of which is unknown. Not only as individual humans but also as members of humankind we find ourselves in a new situation in which we need to find our way. This is a paradigm case for orientation since “[i]n orientation, one is at first dealing with something one does not yet know about: a new situation.”² Considering the widespread confusion concerning our new situation and the pathways open to us, it is clear that orientation is sorely lacking (see section 2).

The digitization is often reduced to the development of digital devices and the changes their use brings to human life and the world we live in. But focusing only on the devices and the consequences of their use misses the chance to gain philosophical orientation in a more fundamental sense. To gain philosophical orientation about the multifaceted development these concepts refer to, the concept of orientation is crucial, in a sense that is often overlooked. This essay shows that the digitization of our world not only fundamentally changes human orientation but that it does so in an essentially novel way. It changes human orientation not only as an accidental consequence or because it is embedded in an attempt for metaphysical orientation (see section 3.2). Rather, something radically new is on its way, and orientation lays at its heart. Digital technology is increasingly built for the very purpose of changing human orientation, and it does so in increasingly intelligent ways.³

The core role of human orientation is overlooked by the main discussions of digital technology, which tend to be based on the misconception that

1 Different aspects of these concepts can be distinguished (see 3 paragraphs down), but here they will new treated as roughly synonymous.

2 Werner Stegmaier, *What is Orientation? A Philosophical Investigation*, transl. Reinhard G. Mueller (Berlin/Boston: De Gruyter, 2019), p. 1.

3 By using the concept ‘intelligent,’ I do not mean to imply that the technology itself becomes intelligent in the way humans are intelligent (see section 2). Rather, ‘intelligent’ refers to solutions that can be intelligent without necessarily being designed by an intelligent being.

intelligent technology must replicate, emulate, or simulate human intelligence (see section 2 and 7). This essay discusses not only the changes digitization brings to metaphysical orientation and to orientation as a consequence of the new possibilities for collecting and processing big data (see section 4), but also how digital technology aims to change human orientation (see sections 5, 6, and 7). All of this shows that orientation is a core concept for understanding both digital technology and its impact on human life.

‘Digitization’ has become a buzzword that is much used but is not well understood. The concept of digitization is commonly used with two distinct yet interrelated meanings. In a narrow sense, it refers to the digitization of analog qualities, for instance when a printed text is scanned and either saved in a graphical format or further processed by means of optical character recognition (OCR) to make the text electronically searchable. Digitization in the narrow sense means the transformation of analog qualities into digital symbols. Section 3 explains that digitization in the narrow sense was already fundamental to digitization in the wider sense centuries before the advent of electronic computers. The wider sense consists in the much larger process that comprises century-long developments of theoretical and practical character, which are pursued in philosophy, science, technology, and society. Sometimes ‘digitization’ refers to the narrow sense and ‘digitalization’ to the wider sense,⁴ but in this essay both terms refer to the wider sense unless further qualified. It will be shown that the digitization of the world is a long and complex process that involves digitization in the narrow sense but cannot be reduced to individual aspects.

Some technology, both analog and digital, is used for orientation purposes and therefore obviously changes orientation. Both analog and digital clocks orient in time, and both a compass and a GPS system can be used to find the right direction. Technology that is used as a tool for improved orientation in a particular environment will be called here orientation technology. The environment may be the tempo-spatial world, some virtual environment, or just information. Much of digital technology is orientation technology, for instance, search engines, not least because digital technology has caused a flood of information in which we need to orient ourselves.

4 Christoph Durt, “‘The Computation of Bodily, Embodied, and Virtual Reality:’ Winner of the Essay Prize ‘What Can Corporality as a Constitutive Condition of Experience (Still) Mean in the Digital Age?’” in: *Phänomenologische Forschungen*, no. 2 (2020), p. 29, fn. 11.

Digital technology tends to be more precise and advanced than analog devices, but that alone does not make it fundamentally different from analog orientation technology. Like analog orientation technology, even the most advanced GPS location systems only contribute initial means of orientation, such as the determination of one's location and the directions to one's destination: "all they really allow one to do is determine locations, and they do so only if these places are already defined as targets. The standardized orientation technology simplifies only the beginning of orientation."⁵ Orientation technology only contributes one part to orientation as a whole.

Already improvements in initial orientation represent big changes and can entail even bigger consequences. But even so, we must also recognize that this is only a small part of how the digitization changes orientation. Section 4 will explain how digital orientation technology is beginning to do more than just provide initial orientation. Furthermore, digital technology that is not orientation technology can also change orientation and is increasingly created for this purpose. A major means to alter human orientation is by changing the situation in which we need to orient ourselves. The situation can be changed in a variety of ways that do not necessarily force the users to a behavior but may nudge and persuade them (see section 5), and may involve the creation of an artificial environment (see section 6).

Digital technology that is not used for orientation enables its users to do things that may be more cumbersome or even impossible without it, and thereby alters and often fundamentally changes the situation. The large extent to which technology changes situations often does not become clear because the technology is embedded so profoundly in our behavior. When the technology breaks down and stops working in the expected way, however, we realize how much we have become dependent on it. In such a situation the conventional use of the technology is disrupted, and the technological device is no longer a tool that is, in Heidegger's expression, ready-to-hand (*zuhanden*), but rather demands attention.⁶ The broken technology confronts us with a new situation in which we either need to fix the technology or find other means to deal with the situation. Technology also comes to the fore when one learns using it. In such cases, technology is not only a means to be considered in a situation, but

⁵ Stegmaier, *What is Orientation?*, p. 253.

⁶ Martin Heidegger, *Sein und Zeit* (Tübingen: Max Niemeyer, 1967), p. 73.

largely defines the situation in which we need to orient ourselves. The more the use of a technology becomes habitual, in contrast, the less it is noticed.

A rather obvious example of how radically technology can change a situation are weapons, which are tools built to decisively alter the power structure of a situation. A robber with a gun makes for a radically different situation to one in which a robber does not have any weapon. The changes technology brings to a situation is an obvious topic of political, sociological, psychological, and ethical concern. While weapons can serve basic desires for power or self-defense, the mere existence of a functioning gun in a shared space may add worries about the potential for misuse to a situation and the risk of accidents. In general, there are numerous reasons why technology is frequently something we need to worry about. It may not work as intended, it may work but be used in unintended ways, its use may have side effects or negative consequences, it may enable undesired actions, the technology itself may develop in undesired ways in the future, and so on. Such risks become the bigger the more powerful the technology becomes—and the more we use it and become dependent on it.

Our dependency on technology is complex and can partly be compared to psychological addiction. Usually there is no one forcing us to use digital devices, people buy their devices of their own free will, and even then could, in theory, simply refrain from using them. In reality, however, temptations that are just a click away are no easier to resist than lighting a cigarette is for a chain smoker with a lighter in one hand and a cigarette in the other. We all know how hard it is to avoid being distracted by a nearby device that is ringing, chirping, sounding, vibrating, flashing, or blinking. Many of the digital devices around us and the applications they contain are designed to grab our attention. Attention is taken away from other tasks, and the frequent interruptions diminish the attention-span and can impair cognitive performance.⁷ Since attention and cognitive performance are important for orientation, frequent distractions and diminishing attention-spans can distort orientation. Digital technology competes for attention and content is designed or selected to keep users engaged as long as possible, creating and reinforcing habitual behavior. There are countless ways

⁷ Hannah Bohle et al., “Behavioral and Neural Correlates of Cognitive-Motor Interference during Multitasking in Young and Old Adults,” in: *Neural Plasticity* 2019 (July 1, 2019), pp. 1–19, <https://doi.org/10.1155/2019/9478656>. we used EEG to test for age-related modulations in the frequency domain related to cognitive-postural task load. Twenty-eight healthy young and 30 old adults participated in this study. The tasks included a postural single task, a cognitive-postural dual task, and a cognitive-postural triple task (cognitive dual-task with postural demands

in which digital technology can become addictive, all of which, of course, skew orientation in the direction of the addictive behavior.

The above and countless other concerns about the impact of digitization on human orientation can lead to all kinds of interesting investigations. Philosophy must be careful not to get lost in the details, however, and not to lose the focus on the bigger question regarding the structures and conditions of human orientation. This essay argues that digitization is not sufficiently understood if it is conceived in terms of the use of digital technology and the consequences of its use. Digitization comprises much more. In particular, the digitization of our world is intertwined with human orientation in a very intimate sense that will be explained below. A whole other dimension of changes of orientation by information technology will be explored. The digitization entails changes for, on the one hand, the use of information for orientation (section 4: orientation *with* information) and, on the other, the need to orient in the vast amount of digital information that is becoming parts of our lives (section 5: orientation *in* information).

The changes the digitization brings to orientation are so profound that it makes perfect sense to say that they constitute a new situation of humankind. Digital technology confronts us not only with numerous altered and new situations in which we need to orient ourselves, but also with a new situation of humankind in which we need to find our way. Our situation requires orientation about the changes in orientation due to the digitization of our world.

2. Orientation about Digitization

Orientation about digitization is sorely lacking. Assessments of digital technology, its future development, and its impact on our world have led to quite different and often contradicting assessments. There is no lack of vocal “experts,” who, sometimes with a quasi-religious eschatological zeal, either promote salvation phantasies or warn that the development of “full artificial intelligence could spell the end of the human race.”⁸ In particular, “Artificial Intelligence” (AI) has become a buzzword. Some claim that the human mind can be saved on hard drives and artificially be reawakened, resulting in immortality,

⁸ “Stephen Hawking Warns Artificial Intelligence Could End Mankind,” in: *BBC News*, December 2, 2014, sec. Technology, <https://www.bbc.com/news/technology-30290540>.

such as a famous author and director of engineering at Google.⁹ Calculative inferences are taken to suffice to predict the future development of digitization. Others, such as a vocal professor at Oxford University, are sounding the alarm that AI is an “existential risk”¹⁰ to humanity due to its alleged future ability of developing superintelligence.¹¹

The vast difference between these assessments of the impact of AI on our future should make us halt for a moment and question the underlying assumptions. Both sides, the alarmists and the enthusiasts, share a common assumption: that digital technology is on the way to developing a general mind akin to the human mind. In fact, the very concept of Artificial Intelligence suggests that intelligence can be either natural or artificial, and the above authors jump to the conclusion that both the intelligence of humans and that of machines involve minds that can truly understand and will, and hence are able to replace the body and may want to destroy humans. Considering this assumption makes it clear why AI is thought to have the desired or feared consequences. From the beginning of AI as a field of study, which is usually traced back to the Dartmouth Summer Research Project on Artificial Intelligence in 1956¹² and which received much inspiration from Alan Turing’s prior writings on the conditions of intelligent machines,¹³ AI has frequently been presented as having the potential to gain and supersede human intelligence. Claims such as that “[i]n from three to eight years we will have a machine with the general intelligence of an average human being”¹⁴ have not proven accurate, however, which has led to the drying-up of funding, only to give rise to new assertions and then another “AI winter.”¹⁵ Yet, the failure of these claims hasn’t led their proponents to abandon them. Instead, they double down on their assertions

9 Ray Kurzweil, *The Singularity Is Near: When Humans Transcend Biology* (New York: Viking, 2005).

10 Nick Bostrom, “Existential Risk Prevention as Global Priority: Existential Risk Prevention as Global Priority,” in: *Global Policy* 4, no. 1 (February 2013): pp. 15–31, <https://doi.org/10.1111/1758-5899.12002>.

11 Nick Bostrom, *Superintelligence: Paths, Dangers, Strategies*, First edition (Oxford: Oxford University Press, 2014).

12 John McCarthy et al., “A Proposal for the Dartmouth Summer Research Project on Artificial Intelligence,” 1955, https://rockfound.rockarch.org/digital-library-listing/-/asset_publisher/YxpQfcI4W8N/content/proposal-for-the-dartmouth-summer-research-project-on-artificial-intelligence.

13 Alan Mathison Turing, “On Computable Numbers, with an Application to the Entscheidungsproblem,” in: *The Essential Turing*, ed. B. Jack Copeland (1936; repr., Oxford: Oxford University Press, 2004), pp. 58–90; Alan Mathison Turing, “Intelligent Machinery,” in: *The Essential Turing: Seminal Writings in Computing, Logic, Philosophy, Artificial Intelligence, and Artificial Life, plus the Secrets of Enigma*, ed. B. Jack Copeland (1948; repr., Oxford / New York: Clarendon Press; Oxford University Press, 2004), pp. 410–432.

14 Marvin Minsky according to Brad Darrach, “Meet Shaky, the First Electronic Person: The Fascinating and Fear-some Reality of a Machine with a Mind of Its Own,” in: *Life Magazine*, November 20, 1970, p. 58D.

15 Daniel Crevier, *AI: The Tumultuous History of the Search for Artificial Intelligence* (New York, NY: Basic Books, 1993), p. 203.

and simply project them to a later point in time. The apparent preoccupation with exact dates for events such as “singularity” distracts from the fact that at the heart of the assertions is not a scientific study but the belief in the possibility that AI *can* develop general intelligence together with the belief in the necessity that this *must* happen one day. Beneath this belief lies once again the assumption that some digital technology is developing a general mind that is replicating, emulating, or simulating the human mind as a whole, and not just certain limited capacities.

Yet, despite amazing progress in particular areas such as deep learning, digital technology seems to “hit a wall”¹⁶ when it comes to general capabilities, even those that come easy to humans and often seem self-evident, such as common-sense knowledge. The fact that digital technology has trouble with easy common-sense tasks while excelling at narrow tasks that humans have trouble with, such as complicated calculations involving large numbers, calls into question the assumption that it will develop a mind that is akin to the human mind. Animistic interpretations that consider digital technology as able to develop a general understanding or will of its own do not withstand scientific scrutiny. The speculations they provoke, such as about the moment of “singularity” when machines will develop artificial general intelligence, are not science but science fiction. Such speculations may be fun but also have the potential to distort our view of digital technology and the consequences of its use, and hence disorient humans about digital technology. They furthermore disorient humans about themselves when they seem to lend plausibility to the idea that humans themselves are really digital machines. They are also apt to distract our view from the actual existential risks and possibilities tied up with the digitization of our world. Real existing digital technology has already changed our world, and it is sure to continue to do so. Considering digital technology as a sort of being with a mind cannot account for these changes, and it is too simplistic to provide a basis for a sober assessment of the future of digitization.

Despite the narrow-mindedness of the view that artificial intelligence must mirror human intelligence, it is driven by a correct intuition, namely that some forms of digital technology are more than only tools. Of course, many digital devices are tools, but the concept of tool is insufficient to account for core

16 Steve Lohr, “Is There a Smarter Path to Artificial Intelligence? Some Experts Hope So,” in: *The New York Times*, June 21, 2018, sec. Technology, <https://www.nytimes.com/2018/06/20/technology/deep-learning-artificial-intelligence.html>.

characteristics of digital technology. The reason is not that tools are necessarily simple, nor that they are neutral objects. The nature of tools is not exhausted by their material constitution but depends on their use: a stone may be just a stone, or it may be a tool if it is used for a particular purpose. That tools can be used in different ways, good or evil, does not mean that tools are neutral. Rather, tools suggest certain uses and inhibit others. The use of tools has many aspects; they do not just have a function but also stand in the context of human practice and experience. For these reasons, the philosophy of technology in the tradition of “postphenomenology”¹⁷ is right to “approach technologies [not] as merely functional and instrumental objects, but as mediators of human experiences and practices.”¹⁸

Even when tools are considered as mediators of human experiences and practices, however, this is still insufficient to account for many of the technological modifications of human orientation investigated in this essay. To see why, the next section will apply fundamental insights of the founder of phenomenology, Edmund Husserl, and his student Martin Heidegger to digital technology. In the attempt to go beyond (*post*) classical phenomenology, postphenomenology seems to have overlooked many of those insights and their value for the study of technology and in particular digital technology. While the founder of the tradition of postphenomenology, Don Ihde, frequently references Husserl,¹⁹ he tends to merely outline or dismiss Husserl’s extensive investigations²⁰ in ways that have been criticized as inaccurate by Husserl scholars.²¹ Subsequent postphenomenologists have not attempted more thorough investigations. And even if we look beyond postphenomenology, we can find only a few authors who have thoroughly investigated Husserl’s contributions to the philosophy of technology in connection with the other philosophers of

17 Don Ihde, *Postphenomenology: Essays in the Postmodern Context*, Paperback, Northwestern University Studies in Phenomenology and Existential Philosophy (Evanston, Ill: Northwestern University Press, 1993); Don Ihde, *Postphenomenology and Technoscience: The Peking University Lectures* (Albany: SUNY Press, 2009); Evan Selinger, *Postphenomenology: A Critical Companion to Ihde (Sunny Series in the Philosophy of the Social Sciences)* (State University of New York Press, 2006); Robert Rosenberger and Peter-Paul Verbeek, eds., *Postphenomenological Investigations: Essays on Human-Technology Relations*, Postphenomenology and the Philosophy of Technology (Lanham, Md.: Lexington Books, 2015).

18 Robert Rosenberger and Peter-Paul Verbeek, “A Field Guide to Postphenomenology,” in: *Postphenomenological Investigations: Essays on Human-Technology Relations*, ed. Robert Rosenberger and Peter-Paul Verbeek (Lanham, Md.: Lexington Books, 2015), p. 9.

19 Don Ihde, *Technology and the Lifeworld: From Garden to Earth* (Indiana University Press, 1990).

20 Don Ihde, “Husserl’s Galileo Needed a Telescope!” in: *Philosophy & Technology* 24 (2011), pp. 69–82.

21 Harald A. Wilsche, “Mechanics Lost: Husserl’s Galileo and Ihde’s Telescope,” in: *Husserl Studies* 33, no. 2 (July 2017): pp. 149–73, <https://doi.org/10.1007/s10743-016-9204-x>.

the phenomenological tradition.²² The emphasis is often on how technology changes the relation to one's living body, and to others.²³ Husserl has been studied in connection with aspects of AI, but very eclectically and in what is overall a dismissive manner.²⁴ More thorough studies are rare, especially in relation to digital technology and digitization.²⁵ This essay takes up some of the widely overlooked insights from the phenomenological tradition, in the next section with regard to the digitization of the world and later with regard to the fundamental changes they have on our orientation (section 6).

3. The Digitization of Our World

While digital technology and its use obviously change our world, the usual conception of the digitization of our world as the result of the use of computers and other digital devices is too narrow. Considering only the devices and the consequences of their use overlooks that these are relatively late developments that are part of a much longer process that started centuries before electronic devices were invented. Electronic digital devices do not only contribute to the digitization, but they are also the result of a prior digitization of the world, together with scientific, philosophical, sociological, economic, and political developments that evolved together with that prior digitization.

Phenomenological investigation takes as its starting point not only physical aspects of the world, but the world as a whole, which we inhabit, which we experience in everyday life, and which is meaningful to us, whether we engage in scientific activity or not. Reductionistic philosophers and laypersons accustomed to a naturalistic view of the world, in contrast, often think only of the physical world as investigated by natural science. Reductionistic concepts of the world, however, are insufficient to account for the impact of digitization on orientation. The reason is not only that the digitization of our world involves sociological

22 Hans Blumenberg, *Lebenswelt und Technisierung unter Aspekten der Phänomenologie*, in: Hans Blumenberg (ed.): *Wirklichkeiten, in denen wir leben: Aufsätze und eine Rede* (Ditzingen: Reclam, 2020), pp. 7-54; Bernhard Waldenfels, *Bruchlinien der Erfahrung: Phänomenologie, Psychoanalyse, Phänomenotechnik* (Frankfurt am Main: Suhrkamp, 2002); Oliver Müller, *Selbst, Welt und Technik: eine anthropologische, geistesgeschichtliche und ethische Untersuchung* (Berlin: De Gruyter, 2014).

23 Waldenfels, *Bruchlinien der Erfahrung*; Bernhard Waldenfels, "Phänomenologie und Phänomenotechnik," in: *Mensch - Leben - Technik: Aktuelle Beiträge Zur Phänomenologischen Anthropologie*, by Julia Jonas 1970 (Würzburg: Königshausen & Neumann, 2006), <https://ubdata.univie.ac.at/AC05496274>; Emmanuel Alloa, "Produktiver Schein: Phänomenotechnik zwischen Ästhetik und Wissenschaft," in: *Zeitschrift für Ästhetik und Allgemeine Kunstwissenschaft* 60, no. 2 (2015): pp. 11-24, <https://doi.org/10.28937/1000106263>.

24 Hubert L. Dreyfus, *What Computers Can't Do: The Limits of Artificial Intelligence*, Rev. ed. (New York: Harper & Row, 1979); Hubert L. Dreyfus, *What Computers Still Can't Do: A Critique of Artificial Reason* (Cambridge, Mass.: MIT Press, 1992).

25 Durt, "The Computation of Bodily, Embodied, and Virtual Reality."

and other implications, but also that orientation often concerns the world in a comprehensive sense. It is only sometimes about orientation in physical descriptions of the world, such as when one reads an article on physical science, or when one uses a GPS system. But, as pointed out in the introduction, this is only one foothold of orientation that requires further orientation. To get a clearer view of how the digitization of our world changes orientation, we need to consider in more detail the digitization of the world as it is experienced and understood by humans.

3.1. The Digitization of the Lifeworld

Orientation always presupposes a given world: “When we orient ourselves, we always presuppose a pregiven world, in which we orient ourselves, in large and in small, spatially and mentally.”²⁶ This is also true when we orient ourselves about the world, “for orientation the world is at the same time a boundary condition and object.”²⁷ The presupposed world that is the background of meaning for science and all theoretical activity Husserl calls in his last work the “lifeworld” (*Lebenswelt*).²⁸ The lifeworld is the world of everyday experience, which is structured not by precise laws but by vague regularities that can be grasped through common-sense knowledge and common-sense reasoning.

Husserl holds that modern science, which developed in the time around Galileo Galilei, has “mathematized” nature. Husserl’s concept of the “mathematization of nature,”²⁹ which he extensively develops in his posthumously published *The Crisis of the European Sciences and Transcendental Philosophy*, spells out how the seemingly purely objective world of modern science is founded in the world of intuitive experience. The mathematization of nature consists of several consecutive yet interwoven steps that start with measurements. The measurements assign ideal numbers to empirical objects, which are thereby transformed into ideal and ultimately formal objects that can be operated on with the formal methods of mathematical-natural science.³⁰ Experimental

26 Werner Stegmaier, “Einstellung auf Neue Realitäten. Orientierung als Philosophischer Begriff,” in: *Neue Realitäten – Herausforderung Der Philosophie*, 20.-24. Sept. 1993 TU Berlin (XVI. Deutscher Kongreß für Philosophie, Berlin, 1993), p. 282, my translation.

27 Stegmaier, “Einstellung auf Neue Realitäten,” p. 282.

28 Edmund Husserl, *The Crisis of European Sciences and Transcendental Phenomenology: An Introduction to Phenomenological Philosophy*, transl. David Carr (Evanston: Northwestern University Press, 1970).

29 Husserl, *The Crisis of European Sciences*, p. 23.

30 For a detailed analysis of the steps involved in this mathematization and their philosophical implications, see Christoph Durt, “The Paradox of the Primary-Secondary Quality Distinction and Husserl’s Genealogy of the

science in turn has contributed to the technical generation of mathematic-scientific reality.³¹ Due to the mathematization of nature, reality is conceived in a new way as consisting of numerically described entities. Since Galileo, the concept of the world as fundamentally mathematical has been presupposed by modern physical science throughout its development into Newtonian physics, relativity theory, and quantum physics. That this works for normal practice in the natural sciences is attested by its successes.

It is an additional step, however, to hold that reality is fundamentally physical, and that everything else is reducible to a physical description. Scientists who claim so exceed the scope of their science and engage in a philosophical-ontological discussion. They adopt a position of reductive physicalism, or possibly some lighter form of naturalism. For Husserl, this turns things upside down. The “‘objectively true’ world,”³² which naturalism takes to be the real world, is in fact induced from the lifeworld. For the scientist who engages in scientific activity, the lifeworld is not functioning as “something irrelevant that must be passed through but as that which ultimately grounds the theoretical-logical ontic validity for all objective verification, i.e., as the source of self-evidence, the source of verification.”³³ Scientific theories must be able to explain the phenomena we experience, and, as already pointed out, scientific measurements ultimately go back to the lifeworld. Even when science explains that some phenomenon is an illusion, such as a stick half immersed in a glass of water that looks bent, it must explain why it appears broken (and physical optics is well apt to do so). The mathematized world of natural science only seemingly replaces the lifeworld; in reality, it builds upon the lifeworld.

Physical descriptions seem to question the impression that objects and their properties and relations in the world exist in the way they appear in ordinary experience. But while this is true with regard to some appearances, such as in the case of the stick that looks bent, the mathematization of nature does not directly affect ordinary experience. Neither does it eliminate the most fundamental assumption given in ordinary experience, which Husserl calls the

Mathematization of Nature. Dissertation.” (eScholarship University of California, 2012), <http://www.durt.de/publications/dissertation/>.

31 Gaston Bachelard, *The New Scientific Spirit* (1934; repr., Boston: Beacon Press, 1984); Gabriele Gramelsberger, “Figurationen des Phänomenotechnischen,” in: *List und Tod*, ed. Gerhard Gamm et al. (Zürich/Berlin: Diaphanes, 2016), pp. 157–68.

32 Husserl, *The Crisis of European Sciences*, p. 131.

33 Husserl, *The Crisis of the European Sciences*, p. 129.

“general thesis of the natural attitude.”³⁴ The general thesis takes for granted that the world exists and that the objects in it and their properties and relations exist in the way they appear in ordinary experience. Such assumptions do not have to be made an explicit topic of thought or predication; they can also be a non-reflective part of experience.³⁵ Either way, the general thesis gives orientation by allowing us to see the things as persistent parts of the world.

The mathematization of nature radicalizes the general thesis by giving a radically objective description that is further removed from subjective experience. The resulting description is of objects that are purely formal and in principle not experienceable. Paradoxically, reality appears to be at the same time disconnected from the original experience and the cause of all experience. The interrelationship between the lifeworld and the mathematized world usually remains unclear because the mathematized physical description fits the lifeworld like a tailor-made “garb of ideas.”³⁶ The precise fit of the ideal objectivities of science makes it seem as if nature conceived in ideal mathematical terms would be merely a more precise description of the same world. The radical difference between the two descriptions is covered up by seemingly frictionless methods of measurements, and the possibility of the calculation of new data that can be used to predict future measurements.

In an expression that better befits today’s use of language, the ‘mathematization of nature’ can also be called the ‘digitization of nature,’³⁷ or the ‘digitization of our world.’ It is a digitization in the wide sense that comprises wide-ranging developments over the course of centuries. At its core is digitization in the narrow sense, although it does not necessarily involve electronic computers. The mathematization or digitization accomplished with analog apparatuses is in principle the same as that resulting from digitizing with a scanner or other digital hardware. The difference is that with digital technology the process of digitization is automated and done by the hardware by itself. Analog technology, in contrast, only provides the means for digitization. For instance, the temperature on an analog mercury thermometer needs to be

34 Edmund Husserl, *Ideen zu einer reinen Phänomenologie und phänomenologischen Philosophie; Buch 1, Band 1: Allgemeine Einführung in die reine Phänomenologie*, ed. Karl Schuhmann, Husserliana, III/1 (Den Haag: Nijhoff, 1976), p. 60.

35 Husserl, *The Crisis of the European Sciences*, p. 62.

36 Husserl, *The Crisis of the European Sciences*, p. 51.

37 Durt, “The Computation of Bodily, Embodied, and Virtual Reality’: Winner of the Essay Prize ‘What Can Corporality as a Constitutive Condition of Experience (Still) Mean in the Digital Age?’”

“read” by a human, and deciding which number corresponds best to the height of the liquid is the most important part of the digitization. In this case, the scientist is the analog-digital converter, a function that in an electronic scanner is fulfilled by its sensor together with other hardware. In either case, the analog world is measured, and values become assigned to points in a correlated ideal space that is used for scientific predictions which again can be correlated to the world. Analog and digital technology can both be used for the mathematization or digitization of our world. The difference is that digital technology is so much faster and thus accelerates the digitization of the world.

3.2. Digitization of the World as Metaphysical Orientation

Although the concept of the world as digital seems to be purely scientific, and many naturalists verbally turn against metaphysics, the claim that the world in itself is numerical is not a scientific claim. It is a metaphysical claim that attempts to get ontological clarity about what is real (primary qualities) and what is reducible to primary qualities (secondary qualities). It responds to a desire for metaphysical orientation; “[b]oth classical metaphysics as well as later concepts of metaphysics and ontology indeed correspond to needs of orientation or respond to problems of orientation.”³⁸

The digitization of the world provides orientation with regard to the world as a whole and the role we have in it as humans by drawing a unified picture. When the world is conceived as fundamentally digital, it seems self-evident that digital technology can accurately replicate or at least simulate everything in the world. It seems a safe bet to claim that “every aspect of learning or any other feature of intelligence can in principle be so precisely described that a machine can be made to simulate it.”³⁹ The possibility of singularity seems evident and, if humanity does survive until then and continues developing ever more powerful computers, the only question seems to be when, not if, singularity will happen. The modern picture of the world as digital, which underlies both the enthusiasm and alarmism about the development of AI, was already drawn five centuries ago (see section 2). Today, digital technology is seemingly proving the applicability of naturalistic explanations of the human mind, too. That the development of digital technology seems to confirm the

³⁸ Stegmaier, *What Is Orientation?*, p. 270.

³⁹ McCarthy et al., “A Proposal for the Dartmouth Summer Research Project on Artificial Intelligence,” p. 1.

naturalistic orientation with regard to the world as a whole and the humans in it may contribute to explain the quasi-religious zeal with which the possibility of Artificial General Intelligence is promoted.

To those who do take our world to be reducible to the world of science, the enormous success of natural science seems to confirm not only that science is on the right track, but also that reductionistic naturalism is true. While natural science has been very successful in explaining nature, however, the lack of success in explaining the human mind has been grist to the mill of the anti-naturalists, who claim that the mind is not reducible to digital calculation. The decade of the brain is long past, billions of dollars have been poured into brain research, but brain science is still lightyears away from a coherent understanding of how the human mind works. If, however, it is possible to replicate or simulate the mind and all of human behavior, then this seems to vindicate the naturalistic picture. Since digital systems can already do astonishing things, such as beating the world's best chess and go players, it seems as if eventually they will be able to do all the things they cannot yet do. Every *not* is understood as a *not yet*, and the obvious failures of digital systems are not understood as contradicting the naturalist assumption (such as with regard to general capabilities, see section 2). Digital technology seems to finally vindicate what modern physicalism had argued long ago: that the world is digital in its real nature, including us as humans and our “Cartesian Theatre” of “inner” experience that seems to be caused by physical “machines” such as our brains.

Besides data, the core concept used for digital representation today is ‘information.’ The world is taken to consist of information and “reports itself in some way or other that is identifiable through calculation and [...] remains orderable as a system of information.”⁴⁰ Humans, too, are part of the world and are conceived and treated as systems of information. Not only is nature measured with digital devices, but increasingly also the human body, together with its vital signs, location, and activities. Information is at the core of the digitized world, with not only nature conceived in terms of physics but also humans as part of nature as well as the social, political, and economic environment created by humans. It is as if humans were just “machine parts” (*Maschinenteile*),⁴¹ parts of a digital system in which everything is ordered by information. This

40 Martin Heidegger, *The Question Concerning Technology, and Other Essays* (New York: Garland Pub, 1977), p. 23.

41 Günther Anders, *Über die Zerstörung des Lebens im Zeitalter der dritten industriellen Revolution, Die Antiquiertheit des Menschen 2* (München: Beck, 1995), p. 112.

machine is not a computer alongside other things in the world but the whole world conceived as a digital system, regardless of whether there are computers in it or not. A classical image of this system is Galileo's picture of the "book of nature," which is written in geometrical terms. A recent depiction is the matrix in the film "The Matrix," which consists of information that appears to humans as the world they live in. Information processing seems to be much more than what is done in computing, it seems to unlock the workings of the whole world.

Section 6 will come back to the ways in which digitization is changing our orientation toward the world and ourselves. There, the above thoughts will be continued in an investigation into how the digital technology of today and of the future changes our orientation toward the world. Before, however, it is important to get clearer on the connections between information and orientation. Up till now, digitization has been focused on a rather narrow kind of information, and section 7 claims that this is beginning to change. Digital technology will be able to operate with information in a wider sense and that will fundamentally change our orientation toward the world.

In the narrow sense, information is digital and consists of digital representations. This is also the meaning of 'data' as it is understood here. Digital representations are the correlates of the world. Information is put in symbolic terms that can be processed by means of logical or mathematical operations. Logical operations with information are at the core of computation, and the construction and maintenance of digital technology requires much more orientation in digital information. Digitization hence increases the need to orient in digital information. Orientation in digital information is only one, very particular, form of orientation, however.

There is also the older sense of semantic information, i.e., information that is meaningful to humans due to the relevance it has in the context of their lives. While orientation in information has always been important for humans, the next two sections consider the novel impact of digital technology on orientation with regard to information. Two ways in which digitization changes our orientation with regard to information are distinguished. Section 4 is concerned with orientation *with* information. Section 5, in contrast, studies orientation *in* information. Orientation with information concerns the use of information for orientation, and orientation in information the orientation one needs to gain to select the information relevant for one's purposes.

4. Orientation with Information

The fast progress of the internet and mobile technology in roughly the first decade of the new millennium was for many users a honeymoon period in which information technology appeared to lead to ever freer speech and almost perfect anonymity. A few years later, however, many have rather abruptly found that digital technology has eliminated much of the privacy they previously enjoyed, with little hope of regaining it. Spectacular leaks and journalistic research have shown the large extent of state surveillance, only some of which is directed against terrorists. The difficulty of keeping private the vast amounts of data stored in digital systems has highlighted two different things: Firstly, there are great new possibilities for investigative journalism. The astonishingly quick sequence of major revelations, many of which involve the leaking of vast trophies of data, such as the WikiLeaks leaks concerning abuses by the American military, the leaks of Edward Snowden and others concerning NSA surveillance capabilities, the publication of the Panama and Pandora Papers, and the leak that revealed the misuse of the Pegasus surveillance system. Such data enables journalism to pursue international investigations of previously unheard magnitudes. They also enable law enforcement agencies to tackle previously hidden illegal tax evasion. Secondly, the extent of surveillance by state and private actors already taking place is enormous and its future potential is truly alarming. The influence of surveillance on orientation merits a differentiated consideration.

4.1. Surveillance and Orientation

Revelations of the surveillance capacities of state actors such as the NSA⁴² and private companies such as NSO⁴³ have shown to the wider public that the exploitation of weaknesses in operating systems such as Android or iOS has become a huge industry. For instance, the Pegasus surveillance software has been used to access the audio and video of smartphones, together with emails, messages, and any other data exchanged or saved on the devices. It has been found on the smartphones of human right activists, political opponents, competitors, and heads of states. It has been used to extensively spy on critics,

⁴² Edward Snowden, *Permanent Record* (London: Macmillan, 2019).

⁴³ "Takeaways from the Pegasus Project," in: *Washington Post*, July 18, 2021, <https://www.washingtonpost.com/investigations/2021/07/18/takeaways-nso-pegasus-project/>.

estranged daughters, and ex-wives of authoritarian rulers and is believed to be used by the Mexican drug cartels.⁴⁴

In view of these revelations, Apple's advertisement slogan "what happens on your iPhone stays on your iPhone" sounds hollow. Of course, much of what "happens" on a smartphone, such as calls and messages, is not meant to stay there in the first place, and since interception and decryption of digital content is always possible (and often easier than thought by ordinary users), the privacy of calls and messages is always in question. But all other content on the iPhone can be accessed by spyware, too, without any fault by the user. Pegasus makes use of several zero-click exploits, which infect cell phones without any action on side of the user, are sold on the black market, and are used by numerous actors.

Apple's remark that this affects only a small percentage of their users⁴⁵ may be factually correct, but it disrespects the large number of customers who have been affected—one leaked list for NSO's Pegasus alone contains around 50,000 numbers that may have been infected. It also suggests that other priorities such as saving money and resources for new developments or keeping open the option to constantly add new features to Apple's iMessage application is taking precedence over the desire to close exploitable weaknesses in its operating systems.⁴⁶ The relatively low priority accorded may make sense from a business perspective as there is little competitive pressure in this respect. Some customers may look for alternatives, but since competing operation systems such as Android and HarmonyOS are notorious for their security weakness, changing to a different system would be futile. For non-experts, there is no easy way to make sure that their digital technology has not been hacked.

Targeted surveillance searches for specific information, which is not readily available. Even when an attempt is made to collect all available digital information, such as in NSA's declared ambition to "Sniff It All, Know It All, Collect It All, Process It All, Exploit It All, Partner It All,"⁴⁷ the real purpose is not necessarily to extensively exploit all the collected data and share it with their

44 Nina Lakhani, "It's a Free-for-All: How Hi-Tech Spyware Ends up in the Hands of Mexico's Cartels," in: *The Guardian*, December 7, 2020, sec. World news, <https://www.theguardian.com/world/2020/dec/07/mexico-cartels-drugs-spying-corruption>.

45 Patrick Austin Austin / Billy Perrigo, "What to Know About the Pegasus iPhone Spyware Hack," in: *Time*, accessed October 14, 2021, <https://time.com/6081622/pegasus-iphone-spyware-hack/>.

46 Stephan Wiesend, "Is Apple To Blame For Failing To Stop Pegasus? - Macworld UK," accessed October 14, 2021, <https://www.macworld.co.uk/news/apple-blame-pegasus-3806896/>.

47 Snowden, *Permanent Record*, p. 222. Snowden states that he retrieved the statement from a PowerPoint presentation that was intended to impress foreign allies of the National Security Agency (NSA) but takes it to be an "accurate measure of the scale of the agency's ambition and the degree of its collusion with foreign governments" (p. 223).

partners. Extensive use of the data of large parts of the population to control the population goes beyond targeted surveillance. For targeted surveillance, the whole is only important because the data it is interested in is hidden, possibly like a needle in a haystack. Targeted surveillance may target specific people or small groups of people such as alleged terrorists, and these need to be laboriously filtered out from the whole dataset. A dragnet may vet vast numbers of people just to find one terrorist, and the data gathered from all the other subjects needs to be systematically disregarded if the purpose is “just” targeted surveillance. One of the main problems of targeted surveillance is the elimination of superfluous information. Otherwise, the targeted surveillance turns into mass surveillance, which is easily misused to control and subdue humans. The excessive collection, preservation, and use of data, either on purpose or by accident, is hence a constant bone of contention in democratic societies.

Mass surveillance can be an effective means to control and subdue whole populations and is extensively used for precisely this purpose. The new surveillance opportunities bolster the possibilities for what could be called surveillance authoritarianism. Surveillance authoritarianism controls its citizens by means of comprehensive surveillance. It collects and processes data to profile all citizens who use digital technology or are recorded by digital technology such as surveillance cameras. When deviating behavior is detected, citizens are imprisoned, stripped of their rights, or otherwise sanctioned. Conversely, wanted behavior may be rewarded with privileges. That such “Big Brother” dystopias are not far-off is shown by the quite successful surveillance efforts of the Chinese government and its simultaneous implementation of a social credit system. The tight control of minority groups such as the Uighur population in China⁴⁸ has been compared to a prison.⁴⁹

Targeted and mass surveillance decisively change orientation with information through orientation in information. The very purpose of targeted surveillance is to decisively improve the orientation of those who order the

48 Chris Buckley / Paul Mozur, “How China Uses High-Tech Surveillance to Subdue Minorities,” in: *The New York Times*, May 22, 2019, sec. World, <https://www.nytimes.com/2019/05/22/world/asia/china-surveillance-xinjiang.html>; Darren Byler, “Ghost World,” *Logic Magazine*, accessed May 7, 2019, <https://logicmag.io/china/ghost-world/>; Darren Byler, “China’s Hi-Tech War on Its Muslim Minority,” in: *The Guardian*, April 11, 2019, sec. News, <https://www.theguardian.com/news/2019/apr/11/china-hi-tech-war-on-muslim-minority-xinjiang-uighurs-surveillance-face-recognition>.

49 Chris Buckley / Paul Mozur / Austin Ramzy, “How China Turned a City into a Prison,” in: *The New York Times*, April 4, 2019, sec. World, <https://www.nytimes.com/interactive/2019/04/04/world/asia/xinjiang-china-surveillance-prison.html>.

surveillance. If the surveillance succeeds, it provides them with information they can use to orient themselves with regard to others, and to influence the orientation of others. The persons targeted by the surveillance, on the other hand, may not even suspect that the surveillance is taking place and not change their orientation at all. Those aware of the surveillance, in contrast, or who merely suspect it, frequently report that this has fundamentally changed their behavior in countless situations. Among other things, being observed means they no longer freely voice their opinion in the observed channels, or near to potential surveillance devices, such as smart watches or cell phones. Just the possibility of being observed is enough to change a situation and an individual's orientation in it. The reorientation will not only depend on the size of the risk and possible negative consequences but also on other factors such as the psychological challenges constituted by potential intrusions of privacy. The privacy or non-privacy of an exchange can fundamentally change the conditions of orientation. They alter the way the situation is viewed and how the different options for action appear. This can cause considerable disorientation and necessitates reorientation.

Due to the new data collection and processing possibilities, and because there is so much more data to operate with in the first place, the potential for surveillance has vastly increased. More people than ever before can be surveilled at the same time, individuals can be targeted much faster, the information gained can be transmitted and processed at speeds that were previously impossible, and it can be evaluated much more quickly and efficiently. Moreover, digital surveillance is often much harder to detect than previous surveillance methods. Actors can operate remotely from anywhere in the world, and they can make use of devices that are already in the target's possession. Furthermore, the data can be easily passed on or sold to others. All this is true for surveillance for political, economic, and other uses.

Rather than constituting a shadowy business-model, today the collection and processing of data is the main staple of many of the biggest corporations in the world. Data has become a lucrative resource that is collected, exchanged, and processed. Everything that happens digitally can be accessed and processed by digital means, including but not limited to communication, purchases, and searches. A large part of online behavior is registered, processed, and used to profile individuals and to feed them advertisement and other information or misinformation. This is done with or without the consent or knowledge of the

user, or with a form of consent the consequences of which are not completely understood by the user. Since with each day more and more of our lives takes place online, each day also creates new possibilities for surveillance. There is a vast number of other data sources waiting to be tapped and there is nearly unlimited potential for improvement in collection and processing. Retrospectively, today's methods will surely look primitive in comparison to what is to come. In short, the golden age of surveillance has arrived.

Yet, the surveillance used in today's digital economy is a surveillance type very different from targeted and mass surveillance, and its influence on orientation is very different from that described above. The next section is hence dedicated to a new form of surveillance that has developed for economic purposes.

4.2. Surveillance Consumerism

Big data has already changed much of the economy into what is often called "surveillance capitalism."⁵⁰ The concept of "surveillance capitalism" is modeled on a relatively old concept, that of early industrial capitalism, and despite its possible merits this essay uses instead the more neutral and general term of 'surveillance economy.' The focus will be on one aspect, that of surveillance consumerism.

Even more than mass surveillance, surveillance economy not only aims to collect all data but also to exploit it as thoroughly as possible. The aim is not to identify the needle in the haystack and to use the result in a concerted

50 Shoshana Zuboff, *The Age of Surveillance Capitalism: The Fight for a Human Future at the New Frontier of Power* (New York: PublicAffairs, 2018). named \"the true prophet of the information age\" by the Financial Times, has always been ahead of her time. Her seminal book *In the Age of the Smart Machine* foresaw the consequences of a then-unfolding era of computer technology. Now, three decades later she asks why the once-celebrated miracle of digital is turning into a nightmare. Zuboff tackles the social, political, business, personal, and technological meaning of \"surveillance capitalism\" as an unprecedented new market form. It is not simply about tracking us and selling ads; it is the business model for an ominous new marketplace that aims at nothing less than predicting and modifying our everyday behavior--where we go, what we do, what we say, how we feel, who we're with. The consequences of surveillance capitalism for us as individuals and as a society vividly come to life in *The Age of Surveillance Capitalism's* pathbreaking analysis of power. The threat has shifted from a totalitarian \"big brother\" state to a universal global architecture of automatic sensors and smart capabilities: A \"big other\" that imposes a fundamentally new form of power and unprecedented concentrations of knowledge in private companies--free from democratic oversight and control\"--\", call-number: \"HF5415.32 .Z83 2018\", \"edition\": \"First edition\", \"event-place\": \"New York\", \"ISBN\": \"978-1-61039-569-4\", \"language\": \"en\", \"publisher\": \"PublicAffairs\", \"publisher-place\": \"New York\", \"-source\": \"Library of Congress ISBN\", \"title\": \"The age of surveillance capitalism: the fight for a human future at the new frontier of power\", \"title-short\": \"The age of surveillance capitalism\", \"author\": [{\"family\": \"Zuboff\", \"-given\": \"Shoshana\"}], \"issued\": [{\"date-parts\": [[\"2018\"]]]}], \"schema\": \"https://github.com/citation-style-language/schema/raw/master/csl-citation.json\"}

action, but to gather as much data as possible and to use it for minor behavioral changes, each of which may only be of small value. A surveillance economy is not primarily interested in hidden or secret information, but in all kinds of information, much of which may be rather superficial and easily available.

While it is true that data of and about users has value and is being sold, this does not confirm the widespread belief that it has intrinsic value. In fact, data lacks intrinsic value even in the case of the most secret information gathered during surveillance. Like printed money, information derives its value from the fact that it can be used for valuable purposes. The information gathered in targeted surveillance may be valuable to enable the identification of unwanted people and behavior, it may be crucial to do or construct something, it may provide a better estimate of the resources of an opponent, it may be used to blackmail opponents, and so on. Although these are very different uses of information gained from surveillance, they all have in common that the information constitutes extraordinary and possibly secret knowledge. In a surveillance economy, one of the main uses is to change the orientation and consequently the behavior of people, e.g., to sell more. Already advertisements and other forms of promotion in the world and classical media are meant to change the orientation of the humans they target toward certain products, services, or belief systems.

Changes in the orientation of individuals toward an accelerated consumerism are nothing new. In consumeristic societies, consumption satisfies needs that have been artificially created and ultimately becomes an end in itself. Consumerism not only changes the orientation of individuals but also that of culture, society, economy, and politics. Since it is believed that consumption keeps the economy expanding, whenever consumption is flagging, stimulus money is used to bolster consumption. It would be more apparent how much digital technology directs the orientation of modern humankind toward consumerism if most of today's societies had not already been extremely consumeristic before digital technology became an integral part of our lives. Of course, consumerism is not per se new. The history of humanity has been driven by always increasing production, trade, and consumption, and every century has accelerated this trend. But in the 20th century, consumption made a huge leap forward, and especially after the Second World War, technological progress, resource exploitation, mass production, cultural change, political will, globalization, and analog media such as radio and television, which not only

facilitate advertising but also themselves constitute a product for mass consumption, prepared the ground for almost absolute consumerism. The digitization started as an orientation about the world (see section 3), we can now say that “world orientation has become a world market orientation.”⁵¹

Digital technology has further accelerated the orientation toward consumerism, in obvious ways. It facilitates consumption by increasing productivity, improving logistics, and contributes to basically everything that enables and fosters consumption. Digital devices themselves are consumer products that are quite frequently replaced with newer devices. Their production, maintenance, and use consume considerable resources. They are furthermore mostly used to consume digital content in all its forms. The heavy consumption of media content is promoted by corporations that offer all-you-can-binge streaming services such as Amazon Prime, Apple TV, Netflix, and YouTube, all of which also create new media content. Completing the so-called FAANG corporations, the main function of Facebook is to provide another endless stream for consumption, as is that of Twitter, albeit in a somewhat more active form than the mere streaming of content. In countries outside of the US that want to control the data of their citizens, Alibaba, Baidu, Tencent, and plenty of other companies are no less about consumption. Gaming is a whole other field that constitutes a form of (somewhat more active) consumption and reinforces consumption in other areas. Last but not least, online shopping not only replaces shopping in shops but also enables more and different consumption.

As described in section 3.2, digitization has had a leading role in the creation of a global system that treats humans either a resource or consumer; it is as if humans were just “machine parts.” Even before personal computers and cell phones were invented, the characteristics of such a global system were already emerging. Humans were both consumers and a resource, although their use as a physical resource, which Günther Anders describes with respect to Auschwitz, was relatively rare. This changes, however, in the digital world. Humans are now not only consumers of analog items as well as a never-ending stream of digital content. In addition, they are an important resource, namely that of data and behavior as expressed in data. In surveillance consumerism, surveillance meets consumerism to form a symbiotic union. Both as consumers and as resources, humans are controlled and managed through surveillance. The surveillance is now a form of mass surveillance that collects the data of as many

⁵¹ Stegmaier, *What is Orientation?*, p. 248.

consumers as possible, and it is also a form of targeted surveillance that aims at changing the orientation of individuals according to their specific character.

The digital “machine” orders everything by computations on information. Information makes the digital world go round. Even money is data stored in accounts at electronic banks or in blockchains. This machine is not a computer beneath other things in the world, but it is the whole world conceived as a digital system, regardless of whether there are computers in it or not. The world can be a “system of information”⁵² (see section 3.2) without personal computers and mobile phones, its possibility does not depend on what is often thought to constitute the origin of digitization. Computers and mobile devices are not the origin but the result of a long development, which in turn they vastly accelerate.

The flood of advertisement in analog and digital media as we know it is just a watery foretaste of what digitization is bringing to us. An analog comparison may be driving in a car and constantly seeing advertisements, most of which do not look like advertisements. They are not only restricted to billboards or the radio, and even street signs are paid for by businesses. Furthermore, the street itself is built differently for each individual user. In an analog world, this would clearly disturb one’s orientation. Yet, by analogy this is the situation we are in when navigating the internet – except that the internet is not navigated with a car but with tools that are able to guide the user. Tools such as browsers and search engines have restrictions, of course, and most importantly do not neutrally obey the actions of the driver but treat each driver individually and attempt to guide them to where their provider wants them to go. The tools themselves are both about providing orientation to their users, and about changing the orientation of their users. This is a novel situation that will be considered in more detail in the next section.

5. Orientation in Information

In analog times, the information relevant for orientation in a situation had to be found, and the problem often used to be that the information had not been collected, or the information was not easily available. Information had to be laboriously collected, gathered from experts, or researched in libraries. Digitalization fundamentally changed the availability of information. Nothing is

⁵² Heidegger, *The Question Concerning Technology*, p. 23.

easier than to get lost in the flood of online information, with more information at most just one click away. To orient oneself in the flood of available information, today more than ever it is crucial to find the information most relevant to the respective situation. There is a new abundance of information, and it is easily accessible, but orientation in the flood of information is lacking.

One of the most fundamental needs in the digital age is orientation in the available information by searching according to semantically differentiated criteria to find the exact information looked for. This would be the job of orientation technology in the digital age, particular search engines (see introduction). As it stands today, despite the powerful capabilities of digital technology including internet search engines, this fundamental need is not only unfulfilled but systematically undermined. Besides a lack of sufficient data and the technical difficulties of correctly interpreting a search request, there are obvious economic reasons that work against delivering the most relevant information. While the biggest search engines are all free of charge to the end user, they make enormous profits in other ways, many of which involve manipulating the very capacity they are used for. Consequently, a large number of search results do not correspond well to the search request because they consist in advertisements, sponsored links, links to other branches of the company providing the search engine (such as YouTube), or other links that may only somewhat correspond to the searched results but are selected because they make money for the search engine when they are presented, clicked on, or lead to purchases. These are usually the first results that pop up in an internet search. The search engine manipulates search results in accordance with the interests programmed into the search engine. Moreover, many sites are tweaked to be ranked higher in the results of searches they do not genuinely correspond to. The obvious attempt is to orient the end user toward profit-generating sites.

In everyday use, that obvious attempt is often not apparent. The search results are, despite the manipulation, still somewhat useful, and users may feel they know how to evaluate the results. User behavior may already have been changed to an extent that users find it helpful when YouTube links always appear in the first search results, regardless of whether they searched for videos or not. To some it may seem as if internet searches are free (rather than paid for with data and behavior), and they may not feel they should demand much from free services or believe that they could easily opt out of a service and choose a different one. Alternatively, some possibly gleefully believe in the

glowing marketing promises that come with shiny devices, neat services, and new features and do not wish to question the dream of effortless freedom. The fact that technological progress does indeed bring with it improved features and devices also hides the manipulations. Users do not even realize how much their orientation in information is hindered by the distortion of search results. Today's digital world is not only far from realizing its already existing potential, but also disorients its users.

Even selling portals that make money from every item sold on their platform manipulate search results to make additional money from sponsored links. The items they present are selected by criteria that are not made clear to the end user. Search capabilities are intentionally limited, for instance, Amazon does not allow words to be excluded from the search. The algorithms and data used are left opaque, with users manipulated in such a way that their orientation is guided toward the behavior that generates the most profit. The same holds for many more sites, some of which sell directly, attempt to link to sales on other sites, provide reviews that favor certain items, or attempt to otherwise change the orientation of their users. Reviews by other users cannot generally be trusted either, because many of them are in one way or another paid for by the sellers of products and services. The manipulation of searches and information used to find one's way through the internet has made in-depth orientation in information difficult and time-consuming.

In total, there are probably more sites that attempt to direct the orientation of their users than those who try to convey information, which, of course, also changes the orientation of users. The new possibilities guiding or manipulating customers in addition to digital advertising have together given an enormous boost to persuasive technology, which attempts to change the orientation and behavior of people by persuasion instead of coercion.⁵³ From the perspective of statistics, small incentives called nudges are sufficient to guide user behavior, and nudging has become a major topic of research.⁵⁴

53 B.J. Fogg, an experimental psychologist who introduced the term "Captology" (derived from the acronym of Computers As Persuasive Technology), defines persuasion as "an attempt to change attitudes or behaviors or both (without using coercion or deception)" (B. J. Fogg, *Persuasive Technology: Using Computers to Change What We Think and Do* [Amsterdam/Boston: Morgan Kaufmann Publishers, 2003]). The concept of persuasive technology is in this essay used in a similar way, but the main focus is on how it changes not only attitudes and behavior but orientation in the wider philosophical sense.

54 Cass R. Sunstein / Richard H. Thaler, "Libertarian Paternalism Is Not an Oxymoron," in: *The University of Chicago Law Review* 70, no. 4 (2003): 1159, <https://doi.org/10.2307/1600573>; Richard H. Thaler and Cass R. Sunstein, *Nudge: Improving Decisions about Health, Wealth, and Happiness* (New Haven: Yale University Press, 2008); Shlomo Benartzi et al., "Should Governments Invest More in Nudging?" in: *Psychological Science* 28, no. 8 (August 2017):

Originally, the concept of nudges was introduced in behavioral economics to refer to gentle reinforcements of positive behavior that are in a person's own interest, such as eating something healthy rather than sweets for dessert. The idea is that, although a person would agree that it's in their own interest, they still need a gentle nudge to do it, such as having the healthy food within easy reach distance. Nudges may provide clues, leads, and footholds that make sense for a given orientation⁵⁵ and hence contribute to one's orientation. Nudges can serve as reminders of intentions a person has, is believed to have, or, at least, should have, which are, of course, very different purposes.⁵⁶ Beyond the original idea, 'nudge' has become just another word for the influencing or manipulation of behavior by means of small and often unrecognized incentives—behavior that either advances the general interests of the person targeted, or the interest of the actors who stand behind the nudge. Since the interests usually do not completely coincide, nudges easily become a method of manipulation of behavior in favor of the provider of the nudge. In either case, nudges orient the user toward the behavior desired by the provider.

Nudges are supposed to reorient people, but ideally in ways that do not require effort on side of the user. Since the least effort is one the user doesn't even feel, nudges that work on an unconscious level conform best to the idea of a nudge. The reorientation attained with nudges does not need to reach the level of consciousness. Nudges orient the user toward certain behavior. One primitive example are suggestions presented on websites that take into account what other users who searched for or bought something also searched for or bought. The results or items presented have a higher likelihood of relevance. When they lead the user to buy something they truly need and can afford, a win-win situation is created: the underlying algorithm has facilitated a sale, and the customer has bought something they truly need the existence of which they may not even have been aware of. Even when a search engine provider is only paid tiny amounts for generating a click, the large number of visits mediated makes for good profits. Of course, the better the suggestions are adjusted to the user, the more profit can be made. The power of algorithmic nudging lies in its combination of large numbers with personalized persuasion strategies.

pp. 1041–55, <https://doi.org/10.1177/0956797617702501>.

⁵⁵ Werner Stegmaier / Reinhard G. Mueller, *Fearless Findings: 25 Footholds for the Philosophy of Orientation* (Hodges Foundation for Philosophical Orientation, 2019), p. 7.

⁵⁶ Robert Sugden, "Do People Really Want to Be Nudged towards Healthy Lifestyles?" in: *International Review of Economics* 64, no. 2 (June 2017): pp. 113–23, <https://doi.org/10.1007/s12232-016-0264-1>.

Furthermore, the strategy can be adjusted not only by using existing data but in real-time interaction with the users.

The quality of nudges and other persuasion techniques can be much improved when algorithms also take into account the preferences of the user, their ways of reasoning and deciding, the selling strategies they are susceptible to, and so on. To provide more “intelligent” suggestions, it also helps to take into account the logical and semantic relations between searched or bought items and possible suggestions. The more useful the data and the more intelligently it is used, the better this strategy works. This is one of the reasons why the intelligent use of data is worthy of more detailed consideration (section 7). Furthermore, the better the situation can be controlled, the better the strategy works. Controlling a situation is an excellent means of controlling the external conditions of orientation, and will be studied in the next section.

6. Orientation in Extended Realities

As pointed out in the introduction, orientation first deals with a new situation. Controlling the situation is hence one of the best ways to hold sway over the orientation of humans and to change their orientation in ways that guide humans into desired behavior. One of the most comprehensive means to technologically define a situation is to create an artificial environment that limits the possible actions of a user. The technology is then not only an item in the environment but itself provides an environment for the user. This environment defines the role of the users and their possible actions. For instance, a cockpit in a plane or the driver seat in a car are surroundings that radically change the actions open to the pilot or driver. The artificial environment of this technology consists in clearly defined surroundings that enable a set of possible actions by their users and inhibits or prevents others. To use Anders’s expression again, humans become “machine parts,” in our case integrated into a machine in the literal sense. In the pilot or driver seat, however, the human is in control, at least if things go as planned. This includes that the pilot or driver controls where the vehicle is going in its environment. The situation changes substantially when the technology used intentionally alters or even determines the environment. In an artificially created environment, the human becomes part not only of an immediate environment but of a wider, artificially created, system. This wider system constitutes a form of virtual environment that increasingly replaces the

world. In such an environment is even possible to completely dominate the orientation of the user. When the user is not able to differentiate and distance herself from the situation, she cannot orient herself.⁵⁷ In a Virtual Reality, a user easily becomes overwhelmed by the strange environment and grows disoriented. In less extreme situations, the user or viewer may be flooded with always new impressions and information the user can only react to, and loses the ability to act.

The concept of “Extended Reality” (XR) is used here to refer to the whole spectrum from Augmented Reality (AR) through to a complete Virtual Reality (VR). Augmented reality superimposes perceptual digital entities on the ordinary perceived reality. There are many possible uses of Extended Reality, but the focus here is on the extended control it gives the creators over the user experience, data, and behavior. It enables providers to place products in the most effective positions, although advertising is a relatively crude means of controlling the orientation of users, even when it is targeted or takes place in a 3D environment. While the purpose of advertising is to change the orientation of humans and guide them toward desired behaviors, this doesn’t mean that advertising is the best means of guiding user behavior. Nudges are a different way of changing the orientation of users, and controlling the environment of users in Extended Reality vastly increases the options for algorithmic nudges. Controlling the Extended Reality environment enables the provider to tightly control the space of possible user experience and actions, and vastly increases the amount of data that can be collected. One of the reasons for the huge commercial interest in Extended Reality is surely the enormous increase in the amount of collectable data it enables, alongside the complete control of virtually everything in the artificially created environment.

It should hence not come as a surprise that forward-looking corporations are pouring billions of dollars into the development of hard- and software for Extended Reality (Alphabet, Amazon, Apple, Epic Games, HP, HTC, Huawei, Facebook, Microsoft, Netflix, Samsung, and Sony, to name just a few). The chairman, chief executive officer, and controlling shareholder of Facebook recently declared to his employees that the corporation is contingent on its development of an Extended Reality called ‘Metaverse,’⁵⁸ and there are rumors

⁵⁷ See Werner Stegmaier, *Philosophie der Orientierung* (Berlin / New York: De Gruyter, 2008), p. 152.

⁵⁸ Casey Newton, “Mark Zuckerberg Is Betting Facebook’s Future on the Metaverse,” in: *The Verge*, July 22, 2021, <https://www.theverge.com/22588022/mark-zuckerberg-facebook-ceo-metaverse-interview>.

that Facebook may even change its name to express the shift of its business model. The Metaverse is frequently thought to be a further development of the internet that incorporates Extended Reality. What it will exactly look like is as yet unclear, and also whether it will ultimately be called Metaverse, Pluriverse, or go by some other name(s). But it is clear already from the huge new opportunities for surveilling users and controlling their behavior that the Metaverse is an attractive long-term investment.

The internet as we know it can be compared to other orientation technologies in that it provides information that can be looked up on maps and in books, tables, and databases. As discussed above, however, the internet already goes beyond the explicit retrieval of static information in that the information presented is not static but changed by user behavior and more or less intelligent algorithms. The Metaverse goes much further than the internet as we currently know it by providing an increasingly augmented and possibly purely virtual reality. What is new about Extended Reality is not just its 3D character and the added possibilities for product placement and advertising it offers. These are minor in comparison with the new possibilities for user interaction. Extended Reality provides an environment that can be experienced and interacted with in more immediate ways than looking up information, reading and typing text, and any other form of explicit representation of information. Far beyond multimedia, it constitutes a dynamic environment in which users can orient themselves by interacting with the environment. This is revolutionary and inaugurates a new phase in the digitalization of the world.

Traditionally, digital computers were operated by means of inputs that had to be entered in a well-defined format. This has been true for a large part of the evolution of digital computing, regardless of whether the software, data, and commands were typed by hand or inserted via punch cards or disks. It has also been true for user-friendly computing, despite many of the technical details of computer operation being hidden for the sake of increased accessibility. While the enrichment of input and output with color, graphics, and video can make computer operation more intuitive, it does not by itself fundamentally change the mode of operation by means of explicit orders. While the internet provides its own universal environment that can be navigated with little knowledge of the underlying operating system and basic processes, it too, like all the above cases, is navigated by means of explicit inputs in well-defined formats. Classical computers provide a situation to their users that is clearly circumscribed. There is

a clearly defined and limited set of possible inputs and outputs, either involving a set of symbols and commands or graphical user interfaces. The orders can set in motion complex processes, and due to their ever-increasing complexity, the exact workings of digital technology are becoming increasingly less transparent.

Paradigm actions in traditional computing are the pushing of levers or buttons, the insertion of punch cards or disks, the execution of software by double-clicking, and the browsing of the internet by clicking on links. We have gotten so used to operating computers by means of sets of possible commands that it may easily seem as if this is just how computers are operated. This has begun to change radically, however. Technology and the human body are moving closer together, and users are increasingly becoming wearers of technology. In the future, there will be a huge increase in the number of cyborgs, i.e., hybrids of technology and humans that incorporate technical objects in their physical bodies. Incorporated interfaces and computers will enable new forms of computer interaction. For instance, brain-computer interfaces are being developed that skip sense and efferent organs and directly connect computers with neurons. Brain-computer interfaces, too, however, are still often operated in classical ways, such as when they enable patients with locked-in syndrome to control a computer typing program.⁵⁹ Eventually, brain-computer interfaces will undoubtedly contribute to radically different ways of operating machines.

We do not need to speculate about the future, however. There are many other ways of replacing explicit commands with something radically new, and these are already being used. Possibilities include (1) measurements of bodily states or behavior the user may not be aware of. Already today, wearables such as smart watches measure and process exponentially more input than that purposefully entered by users. The traditional operation of computers by clicking links or buttons, too, makes it possible to measure reaction time and to induce preferences, desires, and mindsets that may, for instance, be used for advertisements. This engenders a second possibility for replacing explicit commands, namely by (2) using interactions other than commands to start routines. Any input and even non-input can be used to trigger sets of actions. The inferences usually work best with intimate knowledge of the user, which is one reason why profiling is so vital. The most elegant way of replacing explicit

59 Mariska J. Vansteensel et al., "Fully Implanted Brain-Computer Interface in a Locked-In Patient with ALS," in: *New England Journal of Medicine* 375, no. 21 (November 24, 2016), pp. 2060–2066, <https://doi.org/10.1056/NEJMoa1608085>.

commands is (3) not to require any new input at all. So-called predictive technology can infer from previous actions the next best action and thereby eliminates the need to purposefully trigger the action.

While these three ways of replacing explicit commands are already pursued by currently existing technology, they can be much more successful together with Extended Reality. Extended Reality enables (1) many more and more detailed measurements that are processed and used to modify the operation of the computing system. It enables (2) a manifold of interactions that resemble more real-world interactions than the input-output operation of computers. And it enables (3) the more complete prediction and verification of predictions of many different kinds of embodied user behavior than just measuring clicks and other partial actions while missing the action in between.

To effectively change human orientation, however, new forms of human-computer interaction require another ingredient. The Extended Realities they present have to be coherent and make sense to the humans in them. They need to be coherent and be constantly adjusted in real-time according to the actions of the users and all other available information. Extended Realities need to simulate a novel kind of lifeworld, and since the lifeworld is the world of common sense, they need to appropriately model the things and relations in the world that correspond to common sense. Furthermore, to change human orientation in desired ways, the technology should be intelligent enough to appropriately process the relevant information and to initiate the actions and interactions that persuade the users to carry out the desired behaviors. The technology has to intelligently modify the simulated reality, intelligently adjust itself in real time, and intelligently act on and interact with the user, all for the purpose of intelligently modifying human orientation and, most likely, the further purpose of intelligently changing human action.

7. Intelligent Modification of Human Orientation

It is often thought that the novel character of intelligent technology—often referred to as AI—lies in the fact that it replicates, emulates, or simulates humans (see section 3.2). But simulation of human intelligence is only one of the things done by intelligent technology. “Intelligent” technology does

not actually have true intelligence, which would require understanding,⁶⁰ but refers to the capability to do things that make sense to humans. The vivacity with which animistic concepts of AI stimulate our imagination hides the fact that the purpose of most existing intelligent technology is not to create more humanoid beings but to change the orientation and consequent behavior of already existing humans. Rather than truly understanding users, intelligent technology in the context of persuasive technology modifies the orientation of its users by more or less intelligently controlling the environment and situation in ways that orients the user toward a set of desired actions. It may take into account the orientation of its users as induced from previous (inter)actions and calculate persuasion strategies that have individually or statistically been proven successful, or promise for other reasons to be most apt in guiding the user's orientation.

There is much room for improving the computational modification of human orientation, and much pressure to do so. On the one hand, as argued in the last section, extended realities need to constitute a reality that adjusts itself in real time in accordance with user interaction and in a way that corresponds to at least some common-sense expectations by users. On the other hand, to better modify the orientation of users, digital technology needs to deal with very intricate interaction possibilities. The consideration of the playful possibilities of written text exchanges in the context of the Turing Test already shows that this is much harder than usually thought.⁶¹ Wittgenstein was right to abandon his too narrow concept of language as a calculus and to speak of language-games instead.⁶² The concept of a language game clears the path for the conceptualization of a much more dynamic kind of rule-following, which has been called "creative rule-following."⁶³ Current technology has very limited success maintaining meaningful conversations that require creative rule-following, for instance when large language models produce meaningful text by using statistical correlations in enormous amounts of data.⁶⁴

60 Thomas Fuchs, *Verteidigung des Menschen. Grundfragen einer verkörperten Anthropologie* (Frankfurt am Main: Suhrkamp, 2020), pp. 43–44.

61 Christoph Durt, "From Calculus to Language Game: The Challenge of Cognitive Technology," in: *Techné: Research in Philosophy and Technology* 22, no. 3 (2018): pp. 425–46, <https://doi.org/10.5840/techné2018122091>.

62 Ludwig Wittgenstein, *Preliminary Studies for the "Philosophical Investigations": Generally Known as The Blue and Brown Books* (Oxford: Basil Blackwell, 1958), p. 25.

63 Durt, "From Calculus to Language Game."

64 Tom B. Brown et al., "Language Models Are Few-Shot Learners," *ArXiv:2005.14165 [Cs]*, July 22, 2020, <http://arxiv.org/abs/2005.14165>.

Because today's algorithms are good at detecting statistical correlations between presented items and clicks, they can easily be optimized to order the content they present according to what causes the most clicks and thereby keeps users longest on the platform. Such optimizations can have unanticipated side effects, such as that messages from extremist political groups are more amplified than moderate views.⁶⁵ To counter biased amplification and the flood of undesired content, large digital corporations are forced to hire many thousands of human content moderators. Not only for this reason, the intelligent processing of semantic content is a strong desideratum and the main challenge for digitization today. As already pointed out, the means of intelligent processing of semantic content does not have to be true understanding of the content and will involve a plurality of methods that have still to be developed.

To get a sense of the new dimension of digital technology that is designed to change human orientation, it is useful to consider the distinction between traditional and modern technology drawn by Heidegger in his article *The Question Concerning Technology*.⁶⁶ Traditional technology, such as a windmill, uses wind to move the millstone that grinds the corn. Modern technology is fundamentally different. Heidegger gives the example of a hydroelectric power station in contrast to a sawmill,⁶⁷ but a wind turbine is also a good example. Superficially seen, a wind turbine very much resembles a windmill. It has blades moved by the wind the movement of which is contingent on its strength, an axle connected to its body, and so on. Like a traditional windmill, a wind turbine uses wind to move its mechanics, and like a traditional windmill it can be used to grind corn, although that requires an additional motor that uses the electricity generated to move the millstone. It is precisely here that the two fundamentally differ. Wind turbines constitute modern technology because they tap and transform natural forces and resources in ways guided by modern science. They transform the kinetic energy of the wind into electric energy ready to be transmitted, distributed, and stored. A windmill, in contrast, leaves the

65 Dan Milmo / Dan Milmo Global technology editor, "Twitter Admits Bias in Algorithm for Rightwing Politicians and News Outlets," in: *The Guardian*, October 22, 2021, sec. Technology, <https://www.theguardian.com/technology/2021/oct/22/twitter-admits-bias-in-algorithm-for-rightwing-politicians-and-news-outlets>.

66 Heidegger, *The Question Concerning Technology*; see also Aaron James Wendland / Christopher Merwin / Christos Hadjioannou (eds.), *Heidegger on Technology* (New York: Taylor & Francis, 2019).

67 Heidegger, *The Question Concerning Technology, and Other Essays*; see also Wendland / Merwin / Hadjioannou, *Heidegger on Technology*.

forces of nature intact, and its invention does not require any understanding of electricity or other concepts of modern science.

Digital technology is not essentially about the transformation of natural forces and resources. In this respect it is closer to traditional technology, which makes use of natural materials but does not transform them into the constituents described by modern science. Digital technology makes use of modern technology ranging from electric energy to high-tech materials, and like modern technology it is intertwined with modern science. But while digital technology is always realized in physical hardware, it can be realized in multiple setups, such as electrical or optical wires, vacuum tubes, transistors, processors, and quantum mechanical systems. In this sense, it transcends its material basis. It is essentially about the transformation of information units rather than something material. Although it builds on previous technology and natural science, and although it very much supports and is supported by modern technology, digital technology is very different.

Today, digital technology is once again transforming itself into a new kind of technology that reaches beyond the processing of mere syntactic information. It is increasingly also about the intelligent processing of semantic information in ways that can change the orientation and behavior of humans. As said above, the possibility of intelligent processing of semantic information does not imply that the computer understands any of the information. Rather, its hardware and software are designed to transform meaningful information as experienced and understood by humans. This is usually sufficient to modify human orientation and to guide humans into performing the desired behavior.

As described in section 3, the mathematization or digitization of the life-world involves the transformation of the experiential world into information in a formal-symbolic sense. Husserl's description of the process of mathematization can be inverted and used to describe how digital information is used to alter the experience of the lifeworld in Extended Reality.⁶⁸ In the digitization of the world, worldly things are dressed in a tailor-made "garb of ideas." In Extended Reality, digital interfaces either literally wrap the user to convert analog measurements into digital information, in effect digitizing the user in the discussed narrow sense, or the digital interfaces wrap the user to produce experience from digital information. Here, information in the formal-symbolic sense is transformed

68 Durt, "The Computation of Bodily, Embodied, and Virtual Reality."

into user experience. This closes the circle from the user experience to the ideal description of the world and back again. It enables digital technology not only to digitize the human body and all measurable actions, but also to use data to produce experiences of artificially extended realities.

8. Summary and Conclusion

This essay has shown that digitization is not new but has developed since long. An essential step is the mathematization or digitization of nature, which has much accelerated over the course of the last five centuries (see section 3). The transformation of economy and society into a system of information, and the incorporation of humans into this system, prepared our world for digital devices. While digital devices are rightly regarded as the cause of major changes in the world we live in, they are also a result of digitization. Considering only the devices and the consequences of their use in isolation misses the wider context. It furthermore fails to understand the developing nature of the digital devices and systems themselves, which is intrinsically intertwined with human orientation. The digitization of the world goes back to a conceptual undertaking that aims at metaphysical orientation. Even prior to the advent of personal computing and smart phones, the digitization of our world changed human orientation toward the world.

The new possibilities for the collection and processing of enormous amounts of data have inaugurated a golden age of surveillance (section 4). Analog and digital surveillance alike can decisively change the orientation of those who order as well as those who suffer the surveillance. Moreover, the union of individualized mass surveillance with digitally accelerated consumerism is giving rise to a new economic system, that of surveillance consumerism. Surveillance consumerism is not merely about collecting data about consumers, but also about using the data to change the orientation and behavior of users (section 5). Existing means of influencing human orientation and consequent behavior through nudging and persuasive technology are still rather primitive in comparison to the possibilities of future technology aimed at changing human orientation.

One of the most effective means of changing human orientation is to change the situation of the users by changing the specific environment of each user (section 6). It should hence not come as a surprise that many of the world's

biggest corporations are pouring billions into developments with names such as Augmented Reality, Virtual Reality, or the Metaverse. Transforming the environment of users into a digitally orchestrated scenery enables the tight control of orientation and ultimately behavior.

Since digitally created realities need to make sense to the humans in them, they need to be adjusted in intelligent ways (section 7). The intelligent processing of information is furthermore key to changing the orientation of the users and guiding them toward the desired behavior. Computing can adjust to human experience and understanding, but it is a frequent misunderstanding that “intelligent” must do so by replicating, emulating, or simulating human intelligence. AI enthusiasts and alarmists alike rightly claim that intelligent technology has the potential to fundamentally change human existence, but the result will look very different from their anthropomorphic fantasies (section 2). Orientation is here a central concept since digital technology is increasingly able to intelligently modify human orientation.

Taken together, the new possibilities of changing human orientation by collecting and processing vast amounts of data, creating digital environments, adjusting the situation the users find themselves in, and intelligently modifying human experience have led to an enormous potential for the guidance and control of human orientation for political, economic, and other purposes.

On the one hand, this potential bears a risk that may be called existential for humanity as we know it. We may all end up living in a made-up world, not a “matrix” invented by machines, but a new digital world designed to serve the particular interests of a few humans by distracting, disorienting, confusing, manipulating, misguiding, deceiving, controlling, and coercing the rest of us.

On the other hand, the digital transformation of our minds has also an enormous potential to better orient us, help us find our way, augment experience, enhance thinking, and to improve individual and collective thought and decision-making processes. While the digital transformation is increasingly not only a transformation of our world but also of our minds, it is up to us to take control of where it leads to. We are in an unfamiliar situation in which we need to find our way. The first, and key, accomplishment in dealing with the new situation is to gain orientation. This essay is meant to contribute to this first step.

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V.

The Question Concerning Digital Technologies

by Abigail Bergeron

Abstract

In this paper I aim to explore and evaluate the various philosophical methodologies and perspectives on technology, and apply them to questions concerning digital and information communication technologies. My goal is to consider, within the tradition of the philosophy of orientation, what these technologies *promise* and *enable*, what they *constrain*, and what they render *impossible*. I will argue for a substantivist and existential instrumentalist understanding insofar as these technologies represent both a totalizing force and the embodiment of human needs and desires.

I begin by considering what I differentiate as the two approaches to the philosophy of technology, that being the “bottom up” and “top down” approaches, and considering the complexities behind defining and demarcating what technology *is*. The “bottom up” approach considers technology in its specific contexts and uses, and here I consider the world and identity-forming utility of social media and virtual games. I then consider three “top down” approaches, technological substantivism, reformation and existential and optimistic instrumentalism. While optimistic instrumentalism is the predominant cultural understanding of modern communication technologies, I

will argue that existential instrumentalism may be a more accurate interpretation of these technologies' role in modern human life and the need for meaning.¹

“No social, human, or spiritual fact is so important as
the fact of technique in the modern world.
And yet, no subject is so little understood.”
Jacques Ellul, *The Technological Society* (1954)

I should start by stating that I am not seeking such an ambitious project as to wholly rectify this lack of understanding; yet, after seventy years, Ellul's statement retains its prescient relevance. In most places, modern technological life is ubiquitous. Yet, there doesn't seem to be a clear or easy philosophical answer as to *what* technology is, *how* we should approach it, or most importantly, *how* it affects and orients our lives. In contemporary philosophy, there is a disquieting silence on what should otherwise be a focal topic.

Therefore, my project here is to consider and evaluate various perspectives on technology and apply them to modern information communication technologies and digital life. The subsequent aim of this paper is to argue that the digitalization of our world through these technologies has fundamentally and irrevocably changed us and our orientation within the world. This is by no means a “dooms-day” perspective or an argument for some regressive “medievalism” - a return to a world without modern technologies. Rather, I hope this project serves as an opening to more critical and honest discussions on the effect modern technologies have had on our metaphysical understandings of ourselves, identity, and the future. In particular, as I will note, my positionality as a member of the Generation Z cohort provides me with the unique perspective of never having lived in an era without these information communication technologies. This life-long prevalence further buttresses my argument that information communication technologies, both in particular instances (such as the use of social media to construct and extend projections of the self and identity) and in their general metaphysical essence - are fundamentally voracious and coercive.

¹ I would like to thank the *Hodges Foundation for Philosophical Orientation* for offering this competition, and subsequently encouraging this project. Special thanks to those faculty within the Trent University philosophy department who never put a limit on what could be learned, or for that matter, how many words I could write. I am grateful for the truly world-class education I received there, and to all those who have supported me along the way. Your encouragement will not be forgotten.

My methodology for this project includes, as I've termed, both the "bottom-up" and then a "top-down" approach to philosophically considering the phenomenon of technology. It has been commonly thought that such approaches are mutually exclusive. However, I will argue that both can reveal important things about these technologies' function, experience, and character.

By the end of this essay, I hope that readers will better grasp how the digitalization of our world has changed our lives and perspectives. While the brunt of this project is meant to be descriptive, I will make some evaluative claims towards its end. Specifically, I will summarize my thoughts about what these technologies *promise* and *enable*, what they *constrain*, and what they render *impossible*. I will argue for a substantivist and existential instrumentalist understanding of such technologies insofar as these technologies represent both a totalizing force and the embodiment of human needs and desires.

I will begin in Part 1.1. by defining what exactly I mean by the term technology, a surprisingly complicated and much-debated term in philosophy, and demarcate the focus of our paper to modern information communication technologies. In Part 1.2., I set out my categorizations of "bottom-up" and "top-down" approaches and explain the history behind these two allegedly opposing views. Part 1.3. will note the relevance of the generation divide, that is, between "digital natives" and older generations, and I will argue that those from the younger Generation Z cohort are in the unique position of never experiencing life without these technologies.

In Part 2, I begin the first of the two approaches. I consider information communication technologies and digital life from the "bottom-up," the phenomenological experience of participating in social media and related virtual games and worlds. 2.2. will consider whether the virtual and online world can be considered "real" and what this realism means for the people who use and engage with these technologies. I will argue in support of David Chalmers's virtual realism. Lastly, 2.3. will explore how people use the realism of digital life to extend and create themselves and new identities, drawing on Andy Clark and Chalmers's argument for the extended mind.

In Part 3, we will consider information communication technologies from the "top-down," the metaphysical essence of modern technology, from four different perspectives. In Part 3.1., we will look at the substantivist perspective characterized by Martin Heidegger and, much more recently, David Skrbina. Part 3.2. will consider Albert Borgmann's "device paradigm" and his reforma-

tive approach. In Part 3.3., we will look at two instrumental conceptions of technology, what I call *optimistic instrumentalism*, the view that technology can be used for achieving benevolent human aims, and its opposing view, *existential instrumentalism*, which views such optimism as an illusion. While optimistic instrumentalism is the predominant cultural understanding of modern communication technologies, I will argue that existential instrumentalism may be a more accurate interpretation of these technologies' role in modern human life and the need for meaning.

Finally, in Part 4, I will conclude with a summary of my thoughts. While my position may become clearer to readers as we pursue our analysis of different perspectives, I will refrain from making any strong evaluative statements of technology as a whole until this final section. This is partly because I want my work to serve a primarily descriptive function, exploring *technology* and how we can think of it. But also because I feel my perspective is best understood after undertaking a comprehensive and two-pronged investigation, considering technology from a “bottom-up” and “top-down” view.

1. Technology and Orientation

In Werner Stegmaier's book *What is Orientation?* Stegmaier describes orientation as how an individual knows what or with whom “one is dealing with,” how one can “make us of it,” perceive it, and whether to “turn away” from it or “towards” something else.² In considering technology, especially its recent pervasive and rapid development, orientation seems an excellent word to describe how thinkers have struggled to explore, explain, and consider technology's role in human history and the recent industrial and digital ages. We will first consider these orientations regarding both the definition of technology generally and, more specifically, “modern” technologies, the latter of which being the focus of this paper. We will also consider the importance of a generational perspective when addressing modern information technologies.

² Werner Stegmaier, *What is Orientation? A Philosophical Investigation*, transl. Reinhard Mueller (Berlin/Boston: De Gruyter, 2019) p. 1.

1.1. What is Technology?

The word “technology” suffers from the problem of being deceitfully intuitive at first glance but then quickly unravelling into complexities. Before we can begin, we must first determine what exactly *is* our subject matter.

Most anthropologists will agree that material technologies can be traced back to the beginning of our evolutionary lineage, probably since we first became bipedal and our hands were freed for the use of holding instruments and tools.³ Others may take a less anthropocentric approach and argue that animals have also used technologies throughout their evolutionary histories. For example, Skrbina notes how chimpanzees use twigs for termite hunting, the octopodes’ use of coconuts and debris for shelter, or even the web of a spider constructed in such a way to ensnare a wayward insect. These can all be seen as examples of the ontological and teleological “pantechnikon,” the universality of technology through the continuous expansion and usage of cosmic energy. While his account is complex, these examples can support the premise that technology is ubiquitous with human evolution and perhaps ubiquitous in some form across other animals.⁴

In light of this, I will focus the scope of this essay only on human technologies, particularly considering what has become termed “modern” technologies. These technologies affect our current lives. But this, too, comes with its difficulties in definition and understanding.

For example, *when did modern technology begin?* Some, such as Heidegger, believe that modern technology began with “machine-powered” technology, the steam engine, rail systems, factories, and other “mega technologies” that characterized the hallmark of the industrial revolution.⁵ Should we consider such modern or industrial technologies as fundamentally different from premodern or traditional technologies if that is the case? Heidegger responds with a resounding *yes*. In his now-infamous 1954 essay “The Question Concerning Technology,” Heidegger’s conception of modern industrial technology is deemed “incomparably different” from previous technologies. By previous technologies, he means traditional techniques (*techne*) of making and using handicrafts and

3 Don Ihde, *Postphenomenology and Technoscience, The Peking University Lectures* (Albany: State University of New York Press, 2009) p. 38.

4 David Skrbina, *The Metaphysics of Technology* (New York: Routledge, 2015), p. 16.

5 Martin Heidegger, “The Question Concerning Technology,” in: *Basic Writings*, transl. David Ferrell Krell (New York: HarperCollins, 2008), p. 319.

6 Ihde, *Postphenomenology and Technoscience*, p. 39.

artifacts.⁷ This, as we will explore in Part 3, relates to his understanding of the “essence” of modern technology, its unique drive towards endless efficiency and order.

While many have criticized him for this seemingly blunt and unjustified divide, it becomes more understandable when considering the historical context he was writing within. Born at the end of the nineteenth century, Heidegger lived through a tumultuous and rapid technological restructuring of society. As Skrbina notes, at the age of thirteen in 1903, Heidegger would remember hearing of the Wright Brothers’ first flight, yet by 1969, Heidegger would still be alive to watch the televised landing of an astronaut on the moon.⁸ This is an astronomical expansion of technological capacity, and with it comes the equally dramatic myriad of social and cultural changes. In this respect, while Heidegger may have been unjustified in declaring an absolute rift between what he saw as traditional technology and modern technology, or rather his “romanticism” of ancient and pre-technical ways of life (especially the Greeks), it is certainly more forgivable.⁹ The period in which Heidegger lived (early to the mid-twentieth century) saw the use of such “mega technologies” characterized by gigantism and unprecedented complexity. These technologies rapidly succeeded in wholly replacing and restructuring the ways of life that had existed just half a century before. In this light, it becomes more understandable why Heidegger struggled to find commonality between such things as the ancient uses of bows and arrows or the making of wagon wheels, with the automobile or fighter jets that bombed his native Germany.

But that still leaves us with the problem of attempting to define modern technology *today*. Heidegger was explicit about this demarcation of technological boundaries. For example, even the mechanical typewriter, a technology that very few today would consider “modern” in a meaningful sense, did not escape this divide. As Don Ihde discusses in *Heidegger’s Technologies: Postphenomenological Perspectives*, the “mechanized” and inauthentic action of typing, when compared with handwriting, was explicitly scorned by Heidegger, with him describing it as “one of the major reasons for the increasing destruction of the world.”¹⁰ Ihde remarks that Heidegger would be even further displeased if he had lived

7 Heidegger, “The Question Concerning Technology,” p. 319.

8 Skrbina, *The Metaphysics of Technology*, p. 94.

9 Don Ihde, *Heidegger’s Technologies, Postphenomenological Perspectives* (New York: Fordham University Press, 2010), p. 78.

10 Ihde, *Heidegger’s Technologies*, p. 122.

long enough to see the widespread usage of digitalized word processors.¹¹ Yet, while Ihde meant to be ironic, there is an important point to be made here. The mechanical typewriter, an example of the industrial “modern” technologies Heidegger so demarcated and characterized, is still far removed from our contemporary understanding of “modern” technology. So we find ourselves returning to our question, *when does modern technology begin?*

In the same essay where he satirizes Heidegger’s rant against typewriters, Ihde provides us with a much more recent conception of what he determines as “modern” technology. For Ihde, “modern” technology is “technoscience” technologies that are largely “miniaturized” insofar as they deal with sub-microscopic parts, DNA, processing chips, or nanotechnologies, dealing with objects at molecular and atomic levels.¹² Ihde wrote this in 2010, almost a decade and a half later; we can only marvel to what extent this “modern” technology has progressed even further. In this case, one only needs to recall the size and storage capacities of old laptops or early generation smartphones to realize that there has been much progression and “miniaturization” indeed. Ihde, therefore, concludes that much of the “technoscience” or modern technology today can be considered post-Heidegger, and of a different “flavour” than what Heidegger was seeking to describe.¹³

I think Ihde’s description is just about right. While certainly older industrial technologies persist, such as factories, automobiles, or television, these technologies are becoming increasingly modified by Ihde’s termed “technoscience” technologies. Factories are becoming computerized and automated, with much traditional industrial labour being outsourced to robotic machines. Cars have become “smarter” with new synchronization and driving-assistance options. Television, while still, the centre of many family living rooms has also become “smarter,” which is interconnected with gaming, streaming and browsing capabilities. All of this represents a shift in types of technology.

So when did modern technology begin? Certainly, the premise outlined by Skrbina that technology in some form has existed throughout human and even non-human evolution is promising and all-encompassing. Yet, we find ourselves struggling to explain the stark differences between the technologies of a few centuries ago, or even as we’ve explored, a few decades ago, with

11 Ihde, *Heidegger’s Technologies*, p. 77.

12 Ihde, *Heidegger’s Technologies*, p. 3.

13 Ihde, *Heidegger’s Technologies*, p. 5.

the technology of *today*. In this light, Heidegger's claim regarding a deep metaphysical divide appears more appealing than I would like to admit. However, to accept Skrbina's premise is to *prima facie* reject the notion that there is any metaphysical breakpoint between the types or eras of technology. Rather, here I appreciate Ihde's use of the word "flavour" to describe the progression or cessation of certain *kinds* or *types* of technology.

Therefore, we will consider technology a transforming variety of flavours or kinds for this essay. Modern technology can certainly be demarcated as beginning with the industrial revolution, as Heidegger and many other thinkers have claimed. Yet, this boundary is one of degree, not one of mutual exclusion. Contemporary "modern" technology can likewise be further demarcated by Ihde's conception of twenty-first century "miniaturized" or "technoscience" technologies.

I do not doubt that technology will have even further transformed by the time I reach middle-age, and a hypothetical sequel to this essay would deal with yet another demarcated kind of technology - one that we cannot yet imagine. When we consider technology then, we can define it as this continuous expansion and appealingly unpredictable process of transformation, one that, as we will now turn to, has provided for different ways of orientating oneself with it and within it.

1.2. Two Approaches

Related to the above discussion regarding the definition of technology, we must now consider two different approaches to analyzing and considering technology. I've grouped the approaches, which we will explore in close detail in Parts 2 and 3, into two distinct categories, the "bottom-up" and "top-down" approaches. I will argue that while these approaches differ, they do not have to be seen as mutually exclusive.

Heidegger was certainly not the only early philosopher concerned with technology. Yet, he remains a prominent figure due to his mainstream infamy and his understanding of technology as a collective and systemic whole. In the latter regard, he is known for his explicit likening of industrial agriculture to "the production of corpses in the gas chambers and death camps."¹⁴ For

¹⁴ Ihde, *Heidegger's Technologies*, p. 109.

Heidegger, all (modern) technology shares the same essential characteristic, a mode of violent and aggressive revealing or what he called “challenging” and “ordering.” This mode of revealing results in everyone and everything being viewed as an instrumental and expendable resource or a “standing-reserve.” In the “Question Concerning Technology,” Heidegger never distinguished between types or varieties of technology, but rather his argument is premised on the existence of a singular essence that encompasses all potential diversities. Therefore, Heidegger is an excellent and oft-discussed example of a “top-down,” or, as described by Ihde, a “metaphysical high-altitude” take on technology, where all types of technology are subsumed under the same analysis.¹⁵

Of course, it is important to note that Heidegger is not the only philosopher to approach technology from this general and metaphysical standpoint. As we will explore in Part 3, other substantivist positions such as that of Skrbina’s “pantechnikon” are premised on this understanding of technology as some kind of monolithic force, a force that is intrinsic in all kinds and types of technology - from dishwashers to flashlights. Likewise, despite putting forward a reformative rather than substantivist or “anti-technology” position, Borgmann sees technology as sharing transcendental characteristics that have “shaped” the world, especially in the last few centuries. In *Technology and the Character of Contemporary Life*, he describes technology, specifically his “device paradigm,” as a “deeply ingrained pattern” that conceals itself from common understanding.¹⁶ Instrumental views of technology, those views that see technology as a form of “progress” or “tool” to be used for improving life, or see technology as an example of an existential need, are also considered “top-down” approaches on this account insofar as they characterize all technology as sharing an essential instrumental purpose, whether that be an optimistic or existential one.

As we will see in Part 3, these perspectives certainly vary in their normative conception of technology. However, all share the common theme of a “top-down” orientation. They also share the commonality of being harshly criticized for their generality and monotony. Some, such as Ihde, have gone as far as to make the claim that such “top-down” approaches (especially that of Heidegger) should be seen to have become “antiquated and abandoned” just as “technologies

¹⁵ Ihde, *Heidegger’s Technologies*, p. 21.

¹⁶ Albert Borgmann, *Technology and the Character of Contemporary Life, a Philosophical Inquiry* (Chicago: University of Chicago Press, 1984), p. 35.

may become antiquated and abandoned.”¹⁷ On Ihde’s account, Heidegger fails to recognize the “nuanced conclusions” of different and varied technologies.¹⁸ Rather, according to Ihde, we should avoid a “one size fits all” and instead analyze the role of particular technologies in social and cultural life. To consider technology as a plurality rather than as a homogenous whole.

This is what I describe as the “bottom-up” approach. When speaking about his position at Peking University in 2006, Ihde describes it as “a step away from generalizations about technology” and “a step into the examination of technologies in their particularities,” one that seeks to appreciate the multifaceted role of technologies in time and culture.¹⁹ In other words, a “bottom-up” approach seeks to explore technologies in terms of descriptive experience, arguing that an analysis of specific technologies will reveal more than broad or generalized understandings of universal technological essence.

Here some may argue that we find ourselves at a stalemate. Those advocating for a “top-down” approach hold that broad and system-level conceptions of technology are necessary to grasp the far-reaching effects of technology and technological life fully. On this account, “bottom-up” or phenomenological approaches offer us very little in terms of understanding how technologies are developed or relate to each other, ourselves, and history. In some way or form, all technologies, from dishwashers to nuclear weapons, share a commonality. Whereas those such as Ihde, who advocate for a “bottom-up” orientation, seek a more detailed and specific analysis, subsequently seeing the differences between technologies as too important and distinct to ignore. On this account, a dishwasher and a fission bomb should be explored independently, with detail paid to the particularities of their features, usage, and function.

In this paper, it is my position that both orientations have merit and do not have to be considered conflictual or mutually exclusive. While some positions within these approaches may have more substance than others, both orientations reveal important things about technology - the importance of their sameness and the importance of their differences.

¹⁷ Ihde, *Heidegger’s Technologies*, p. 13.

¹⁸ Ihde, *Heidegger’s Technologies*, p. 114.

¹⁹ Ihde, *Postphenomenology and Technoscience*, p. 22.

1.3. Digitalized Life and “Digital Natives”

When I began researching for this essay, I found much of the philosophy of technology to be outdated. Here I don’t mean outdated in a pejorative sense. Much of the scholarship, mainly that which we will now explore, was insightful. Rather I mean *outdated* in a purely descriptive sense. Even papers written only a few decades ago necessarily omitted the type of technology that has now become so pervasive. This is for the obvious reason that these technologies did not yet exist, or at least, not in the hegemonic and all-encompassing form it does currently. Likewise, there is also a lack of *positionality*. Considering how rapidly modern technology continuously transforms, most academics were born and have lived most of their lives in eras of different and earlier technology. Even younger and contemporary thinkers usually find themselves approaching the most recent technology as new to them in this regard, their childhood and early adult life having been shaped by a different kind of technological environment and culture.

I am by no means arguing for a kind of discriminatory ageism - this perspective is no fault of their own. However, I am arguing that you cannot consider digitalized life without considering those dubbed “digital natives,” those who have lived the entirety of their lives in this era of digital life and extensive usage of information communication technologies. The term for this generational cohort is Generation Z and refers to people born from the mid-1990s to the early 2010s, with the majority reaching adulthood in the 2020s.²⁰ As an individual of this cohort, I feel I may have a unique perspective when considering these technologies closely. For people of my generation, technologies such as the internet do not merely represent a new “frontier” of technology but represent the *only* frontier. We have never lived in a world *without* the internet or such technologies. For this reason, such technologies feel especially pervasive because we cannot imagine what life would be like without them. It is all we have ever known.

2. The “Bottom-Up” Approach

Here we begin what I have termed as our “bottom-up” analysis, but which Ihde has described as a *postphenomenological* analysis or “microanalysis.”²¹ As

20 Anthony Turner, “Generation Z and Social Interest,” in: *The Journal of Individual Psychology* 1, no. 2 (2015), pp. 103-113.

21 Ihde, *Heidegger’s Technologies*, p. 120.

discussed, such an approach seeks to consider a specific technology in close detail rather than viewing technology as existing as a homogenous whole or force.

As I have mentioned, our focus for this “bottom-up” analysis will be modern information communication technologies and digitalized life. In Part 3, we will then seek to apply various “top-down” approaches to these technologies. By utilizing both approaches, I will show that these approaches are compatible. Still, adapting both to our focus, we will reveal some important and interesting understandings regarding the function and “essence” of such technologies and how they affect the orientation of human life.

Part 2 will consider our experiences of information communication technologies, revealing how entrenched and pervasive these technologies are. In Part 2.1., I will argue in support of David Chalmer’s position of digital realism that the digital world is “real.” In Part 2.2., I suggest that such technologies represent an unprecedented extension of identity creation and the self.

2.1. The Digital as Real

Various concerns regarding Generation Z and technology usage have become common knowledge. Everywhere we seem to hear of teachers, parents, or medical professionals concerned that having grown up “tethered” to digital and internet life, we youth may suffer from unforeseen social, physical, or psychological problems. While there is certainly evidence that may suggest this is the case, these concerns are not necessarily our focus here. However, the reality of our de facto immersion in such technologies is an important point to consider. For “digital natives,” information communication technologies - internet communities, video games, and social media do not just represent artificial realities, but rather are a way of experiencing life and reality in and of itself, and in this sense constitute their own realities. Here I will argue that the view that virtual = unreal is incorrect. Instead, digital life is very much real life, especially for those who have spent most of their lives “tethered” and “interconnected” in this way. This what Chalmers’s has described as *virtual realism*.

The psychologist Sherry Turkle was one of the first to seriously propose that information communication technologies shouldn’t be considered an unreal form of escapism but a “parallel” form of life. In her 1994 article “Constructions and Reconstructions of Self in Virtual Reality: Playing in the MUDs,” she

details her research of multi-user dungeons or MUDs, an early form of a multiplayer virtual (albeit usually text-based) world. While very primitive in comparison to the deeply textured and multifaceted world-building, role-playing and multi-user games available today (Minecraft or World of Warcraft comes to mind), Turkle notes that MUDs are not just an “escape from the real to the unreal” but rather serve such a role in the player’s lives - particularly in terms of interpersonal relationships and the building of community, that such games may be considered a kind of reality of their own kind.²² For example, she describes the case of Peter. This reclusive student spends the majority of his free-time accumulating achievements and a broad social life in the MUDs, a virtual life that, according to Turkle, is ironically “more expansive than his own [material life].”²³ For players like Peter, this kind of virtual life is genuine as it is meaningful, unpredictable, and full of various social interactions and experiences. In this case, Turkle is not necessarily advocating for digital realism in a metaphysical sense but rather psychologically. The takeaway from Turkle’s article is that Turkle is providing legitimate consideration to such multi-user virtual games and emphasizes their relationship to “the real,” particularly as a very “real” space for social interaction.²⁴

Seventeen years later, in her 2011 book *Alone Together* Turkle explores what she describes as the “fully networked life,” the role of (early) information communication technologies such as Facebook, or virtual reality games such as Second Life. Thanks to the recent widespread usage of phones with internet browsing, tablets, and portable laptops, Turkle describes this “networked life” as “always on and now always with us.”²⁵ In particular, she writes, that “young people” (Generation Z) have been the first to grow up with this expectation of “continuous connection.”²⁶ They find themselves “tethered” to a mobile device that serves as a “portal” to other people and places.²⁷ She cites examples of teenagers who feel they cannot leave social media websites such as Facebook because of their deeply entrenched lives. Namely their social lives that exist

22 Sherry Turkle, “Constructions and Reconstructions of Self in Virtual Reality: Playing in the MUDs,” in: *Mind, Culture, and Activity* 1, no. 3 (1994), p. 159.

23 Turkle, “Constructions and Reconstructions of Self in Virtual Reality” p. 161.

24 Turkle, “Constructions and Reconstructions of Self in Virtual Reality,” p. 165.

25 Sherry Turkle, *Alone Together, Why We Expect More from Technology and Less From Each Other* (New York: Basic Books, 2011), p. 153.

26 Turkle, *Alone Together*, p. 17.

27 Turkle, *Alone Together*, p. 155.

on these platforms.²⁸ Turkle gives another example of a young married man who secretly married a player on Second Life's virtual reality platform. This man states that this online marriage is very much "real" and is part of his "life-mix." Here, Turkle notes that such technologies have made multitasking mandatory and that now people are easily and efficiently also "multi-living" - living simultaneous lives.²⁹ This extension of self and identity will be discussed in more detail in 2B.

Again, Turkle is not attempting a deep metaphysical or phenomenological analysis of the realism of digital platforms or virtual reality games. Still, her psychological study of its *realness* to those who participate and engage with these non-physical spaces is indisputable. Ten years and much evolvement of smartphones later, we find the *realness* of such platforms, whether in internet communities such as forums, virtual reality games or social media, intuitive. While most do not think deeply about what this *realness* means or consists of, our engagement with these online platforms and communities is *real* insofar as it matters to us, and that such a virtual life seemingly takes on a *life of its own*.

In his 2017 article "Virtual Reality," David Chalmers defends a position he describes as "virtual realism" and which I have more loosely referred to as digital realism. Chalmers rejects the understanding of cyberspace or virtual reality as an illusory "consensual hallucination" and instead contends that virtual reality is a "sort of genuine reality."³⁰ In Chalmers, we find the metaphysical grounding for the empirical and psychological analysis that Turkle was constructing.

For Chalmers, virtual realism consists of four main arguments:

1. Virtual objects really exist.
2. Events in virtual reality really take place.
3. Experiences in virtual reality are non-illusory.
4. Virtual experiences are as valuable as non-virtual experiences.³¹

For Chalmers, a virtual reality usually consists of immersion (the sense of being present in that perspective), interaction, and computer generation. Still, it doesn't have to satisfy all of these conditions.³² Consider Minecraft, the earlier mentioned example of a multi-user game that has evolved from the

²⁸ Turkle, *Alone Together*, p. 184.

²⁹ Turkle, *Alone Together*, p. 160.

³⁰ David J. Chalmers, "The Virtual and the Real" in *Disputatio* 9, no. 46 (2017), pp. 309-352, here: p. 309.

³¹ Chalmers, "The Virtual and the Real," pp. 309-310.

³² Chalmers, "The Virtual and the Real," p. 313.

MUD games Turkle explored in the 1990s. In Minecraft the virtual reality is certainly interactive (players control their characters and can affect objects and characters within in the game) and computer-generated - yet it is not “immersive” in a bodily sense where players could use their physical bodies to walk through a world of square wildlife or cut down cubic trees. Instead, players are limited to controlling their characters with their keyboards and perceiving an albeit three-dimensional and visually detailed world through the screens of their devices. In this sense, Chalmers’s is adopting a more encompassing definition of virtual reality; games such as Minecraft or even social media platforms where people create pages, groups, or rooms, can still be considered “virtual reality” even if they are not physically immersive in the strict sense of VR headsets or futuristic Matrix-like realities. Rather virtual realities such as Minecraft are *mentally* immersive and involve virtual worlds and virtual lives that certainly do still “immerse” a user in their engagement with them.

To consider arguments 1-3 regarding the reality of virtual objects, virtual events, and virtual experiences, we’ll proceed with our Minecraft example. In Minecraft, the virtual bodies of players exist in the Minecraft “realm” or virtual space. Chalmers notes that virtual bodies are (obviously) distinct from physical bodies due to the lack of physical immersion.³³ However, when playing Minecraft, players do have these virtual bodies *and* physical bodies - the physical body at this juncture usually hunched in concentration over a laptop or tablet. Having a physical body while playing these games does not negate the reality of the virtual body on the screen, whether it’s taming rectangular wolves or while battering another player - the virtual body does inhabit this virtual space. If I’m striking another player with a diamond sword in Minecraft, I *am* using my virtual body to virtually attack another virtual body. This event really *is* happening, and it’s happening in real-time to another person; there is nothing unreal or fictional about this.

Of course, virtual worlds such as Minecraft are still grounded in the physical world insofar as they exist on physical computers and servers. However, according to Chalmers, this duality of physical/virtual does not make the virtual any less real - my diamond sword exists both in a warehouse of servers and in my virtual hand, ready for battle.

³³ Chalmers, “The Virtual and the Real,” p. 316.

Chalmers makes the critical point that often when people ask *are virtual objects real?* What they really mean are *virtual X's really X's?* According to Chalmers the answer to this is sometimes *yes* and sometimes *no* depending on the X.³⁴ Minecraft pigs are (obviously) not really pigs and do not even accurately depict pigs (pigs generally do not have square legs). However, virtual groups - like a group on Snapchat, is really a group - it consists of a collection of people engaging in conversation and interaction. On this account, some X's *really are* X's that just exist virtually, whereas other X's are not X's but are still real objects, albeit virtually-existing ones.

But what of virtual worlds like Minecraft that include fictional and unreal or fantastical elements? There is undoubtedly nothing *real* about flying or spawning any kind of animal merely by tossing a magic egg. Chalmers responds that a virtual world may contain or consist of fictional or fantastical elements, yet these fictional elements are still virtually real and really exist within these virtual worlds.³⁵

Now let us turn to argument 4), the value of virtual experiences compared with non-virtual experiences. I believe there are two ways to consider this question - from an objective and normative view, *should virtual experiences be considered as valuable as non-virtual experiences?* And from the subjective perspective of the common user, *do users find these experiences to be as valuable as non-virtual experiences?* We'll leave evaluative judgements to the end of this essay and here focus on the latter. Regarding games such as Minecraft, the question answers itself - if players did not find the experience of engaging with the virtual world of Minecraft valuable, they would not invest the time, energy, and even money into playing it. While there are no non-virtual experiences to which to compare the virtual experiences of Minecraft (as one does not typically have the choice between building a virtual castle or building a real one), it is clear by way of popularity and participation that players who play Minecraft find their experiences valuable - so valuable that they elect to play Minecraft rather than participate in other virtual or similar non-virtual experiences.

However, perhaps here, the comparison with non-virtual equivalencies becomes more complex. A flattering Snapchat from a potential love interest may not be seen as valuable as if they had sought you out and complimented

³⁴ Chalmers, "The Virtual and the Real," p. 326.

³⁵ Chalmers, "The Virtual and the Real," p. 334.

you in non-virtual life. However, for some people, it also may be. Especially since so much of dating now takes place in the digital world on dating apps or social media sites, such soliciting in physical life could be even seen as off-putting for some people. Likewise, people would not elect to use social media platforms or participate in internet communities if they did not find something valuable in their usage. While dating norms are highly subjective and perhaps a culturally or generationally contingent phenomenon, my point still stands. People would not participate or invest their time and energy into virtual games or virtual places such as social media if they did not find it at least somewhat valuable, meaningful, and most importantly, real.

I have discussed virtual realism in Turkle's research regarding psychological attachment and Chalmers's metaphysical defence against virtual irreality or fictionalism.

While I believe that any regular user of internet spaces, social media, or virtual games would already intuitively agree that such places are certainly *real* insofar as they are meaningful and important to the people who engage with them, such a position is also a poignant and understated *reorientation* of our lives. What I mean by this is that a mere century ago, the idea that a new or parallel reality that consisted of such connectivity, interaction, and (mental) immersion would be considered pure fantasy. A book may be a form of immersion, but it is certainly not one of interaction or connectivity. The letter, the telegram and the telephone consist of heightened connectivity; one can communicate and connect with another who is not physically present. Yet, this connection consists in either writing or speech, and in the case of the letter or telegram, the connection is not taking place in real-time. It is time-delayed from the point of writing to the end of the other receiving it. Neither represents the kind of immersive, connected and interactive space that information communication technologies and digital life now provide us.

Prima facie, this may appear like an excellent thing. However, I am avoiding making any evaluative assumptions regarding its normative value. That being said, I *will* make the descriptive statement that such a transformation comes with great disorientation and *reorientation*.

For my grandmother, born in 1926, such an innovation is largely inconceivable. The idea that people can immerse themselves, connect, and interact within immaterial and non-physical spaces is extremely *disorientating* for many older generations. While most people, even people of my generation,

may not fully understand or grasp the technical workings of the internet (servers, codes and the like), younger people, especially “digital natives,” still grasp and accept it intuitively. It is there (on your smartphone or device), it is accessible, and it exists - and most people use it. Most people use it in almost every aspect of their personal and professional lives. Whereas people who spent the majority of their lives bereft, or perhaps free, of such technologies find themselves confused at the prospect, not just because they do not understand it technologically, but because they cannot intuitively grasp or accept it, they cannot orient themselves in regards to it.

Hence we find a common and unfortunate generational divide. Some older adults cannot manage to use or engage with such technologies at all, leaving them at risk of being isolated and excluded from others (such as grandchildren) and, arguably, the rest of the world. Other people from older generations have come to, in varying degrees, *reorient* themselves to attempt to use and engage with such technologies, with varying degrees of success. This is largely because such technologies are not merely “auxiliary,” as Werner Stegmaier notes, but rather they have become hegemonic and coercive.³⁶ There are increasingly fewer, and fewer still-viable alternatives - the use of information communication technologies is becoming more and more mandatory to participate in most forms of life.

It is also incredibly *hard* to *reorient* oneself because this technology is transforming so rapidly and so pervasively. As a result of either complete disorientation or the long struggle to *reorient* oneself, it becomes more understandable why older generations may shun or mock younger people’s deep and absolute involvement in such a thing. *The kids are always on their damn phones these days!* is certainly a common and not incorrect remark. The kids *are* always on their phones these days because a phone or the digital reality it connects you to is a life in and of itself. For users of such technology, digital life is very much real - the internet is a real place, and the things we do there are typically conceived of as meaningful and important to those who engage with them.

2.2. The Digital Extension and Creation of the Self

So far, we have determined that digital life and virtual realities represent their own kind of reality, one predicated on connectivity, immersion, and interactivity.

³⁶ Stegmaier, *What is Orientation?*, p. 260.

Here I will argue that accompanying this digital realism is the extension and creation of the (digital) self. I contest that one of the reasons digital life is considered real and meaningful is that such technologies, especially internet communities and social media, represent an unprecedented opportunity for the extension and creation of the self and personal identity. I suggest that this identity extension is an inherent aspect of such technologies and partly explains why these technologies are so pervasive, appealing, and for many users - even so addicting.

First, what do I mean by the extension or creation of self? In Clark and Chalmers's 1998 article "The Extended Mind," they argue for an understanding of the mind as actively external in the case of cognition. They argue that cognition extends beyond the internal mind into the physical or external world (externalism). This extension is active, meaning it plays a present and immediate role in cognitive processes, such as recognition and the formation of beliefs, and problem-solving. They give the example of the computer game Tetris, where individuals can visually rotate shapes using the computer or mentally visualize the rotation of the shapes to place them in the correct place.³⁷ Since Tetris is a timed game, players usually use the quicker and easier 'rotate' tool. For Clark and Chalmers, this is an example of active extended cognition as the physical rotating of the shape is an "epistemic action," meaning it plays a determinative role in supplementing cognitive processes. On this account, an "epistemic action" such as rotating the shape, therefore, also deserves "epistemic credit" as part of the cognitive process. Cognition, therefore, is not a purely mental or internal activity, but it extends itself to the external physical world.

Here it is important to note that for our purposes, we are not looking at the role information communication technologies can be used in the way Clark and Chalmers describe - that is, to externally and actively augment cognition.³⁸

37 Andy Clark / David Chalmers, "The Extended Mind," in: *Analysis*, Vol. 58, No. 1 (1998), p. 8.

38 That being said, an interesting focus for a follow-up paper could discuss the use of such technologies with regard to knowledge augmentation. The example on page 13 regarding Otto's notebook as a trusted, reliable and accessible "coupled system" serving as a substitute to his memory can certainly be expanded to include digital devices and information technologies. For example, I would argue that the use of Google for information extraction and everyday skills such as navigation (Google Maps) certainly count as this kind of extension of cognition to the external world. Instead of navigating by memory or reasoning skills, people, including myself, now rely wholly on GPS. People genuinely trust and consider the information on Google Maps and even Google, reliable, and these programs are accessible anywhere and anytime through the use of a digital device. Of course, it's important to note that Clark and Chalmers explicitly reject the internet as being an example of external cognition unless an individual is "unusually computer reliant" (p. 17). Here my response is to highlight that this article was written in 1998 when arguably most people were not "computer reliant." Two decades later, I would argue that the majority of people are now certainly "computer reliant" and rely on the internet, along with other information technologies in a way that would qualify

Our focus is rather on identity and the extended self. However, Clark and Chalmers's understanding of cognition as creating a "coupled system" involving a "two-way interaction" between internal cognition and externalized epistemic actions (such as rotating the shapes in Tetris) implies that another internal process - that of the self and identity, may also extend beyond the mind in this way.³⁹ At the end of the article, Clark and Chalmers allude to this possibility, agreeing that an extended mind leads to the possibility of an "extended self."⁴⁰ They highlight that most people accept that the self extends beyond the bounds of our subjectivity or consciousness. For example, one's internal beliefs tend to extend into one's external actions. In this sense, it is entirely probable to consider ourselves as extended systems consisting of this "coupling" of the "biological organism and external resources."⁴¹

Therefore, taking Clark and Chalmers's position beyond that of cognition, it can be argued that an extension of (internal) self occurs when one actively spreads aspects of themselves - their beliefs, identity, and ideas- into the wider external world. This would generally be done through words (spoken or written); as Clark and Chalmers note, language facilitates this coupling between the agent and the wider world. However, it need not necessarily be limited to language but could include actions that otherwise express ideas or identity.

On my account then, to take Clark and Chalmers's conclusion that we are "creatures of the world" further, I suggest that an extension of self means that one imparts their personality, interests, thoughts and identity to other people or the external world in some way. It is a proliferation of yourself. Of course, one could argue that as per this definition, people *extend themselves* every time they have a conversation, brainstorming session, or discuss their lives with their friends. We generally don't consider such things an extension of self - these are simply normal interactions. However, I would say that even in such minimal ways, this still represents an extension of one's subjectivity (thoughts, feelings, ideas) beyond oneself, creating a "two-way interaction" between yourself and the external world; the audience in which you are sharing it with. Every time you share or communicate these things, particularly with language, you extend them, broadcasting them to an audience that otherwise would not have

for Clark and Chalmers's definition.

39 Clark and Chalmers, "The Extended Mind," p. 8.

40 Clark and Chalmers, "The Extended Mind," p. 18.

41 Clark and Chalmers, "The Extended Mind," p. 18.

access to such information. You are creating a “coupled process” between your internal self and the wider world. In simpler terms, you externalize what you are thinking or believing. This definition could become more complex, but for our purposes, we will turn to an example to illustrate how this relates to information communication technologies such as social media.

It is ironic that as I was writing this, I received an email advertisement from Twitter - a popular social media website where individuals can share short text or images. The email was titled “Penny for your thoughts, share them with the world on Twitter.” The email is meant to entice me to re-activate my unused account by assuming that I have thoughts that I want to share with the global Twitter community. While the advertisement didn’t achieve its aim, I think this marketing strategy perfectly illustrates what I mean by the extension or even creation of self. The allure of Twitter is to follow and “retweet” the short text or images shared by other people - representing a kind of global bulletin board. Likewise, users build their profiles, a brief biography, a photo or avatar of some sort, and share their short texts, images, websites, and other forms of media to *their* followers - friends, colleagues, and often random strangers. If people “retweet” your posts, your post will end up on *their* profile, beginning a long chain reaction of infinite sharing, “liking,” and more posting. While the average user may only expect to have a few “likes” or “retweets” on their posts, the potential remains that what is posted could reach millions of people all around the world. Millions of people viewing what *you* have to say and what *you* think is important, funny or insightful. This is one of the major appeals of Twitter and similar social media platforms.

But what kind of things do people post on Twitter? People generally write (in 280 characters or less) political opinions, anecdotal updates or experiences, personal or professional insight, and other commentaries. People share funny images or “memes,” news articles, links to videos, music, websites, personal photographs, and commercial advertising or “influencing.” Anyone and anything can have a Twitter profile - businesses, organizations, celebrities, political groups - people make personal Twitters profiles, professional Twitter profiles, profiles that are themed or relate specifically to one focus or interest, or even “profiles” for one’s pets or imaginary characters. On Twitter, you’ll find a platform for continuous public communication and sharing. Of course, here, we’re generally concerned with the average user who uses Twitter for social or communicative purposes. In advertising ploys such as when

one corporation gets into a mock argument or debate - such as @BurgerKing criticizing @McDonalds - I would not say this is an extension of self in the sense we're describing. However, it *is* a kind of fictional extension of the "self," the entertaining ploy being that such corporations are anthropomorphized as having thoughts and feelings. Thoughts and feelings that "they" want to share or *extend* to the wider Twitter community, all of their followers (or fans in this case), and potentially the world. It is a brilliant marketing strategy.

However, I would argue that this marketing strategy is not only utilized for commercial purposes - users of social media market *themselves* through the extension and creation of their online identities. As Stegmaier notes, online, you can create "without much effort" and without "the restrictions of every day [physical] interactions" any identity of your choosing. Virtual or online identities on this account do not just represent an *extension* of your physical identity (such as related to your physical appearance or attributes), but to varying degrees are used to construct or create different or completely new identities - and usually simultaneously. In this sense, we can consider virtual or online identities as not merely extended but often created or "designed" identities.⁴²

The concept of identity creation was what first drew Turkle to her early research on MUDs, which she notes contained an "unparalleled opportunity to play with one's identity and to try out new ones."⁴³ She argues that by living through what she then called "electronic self-representations," we now have "unlimited possibilities to be many people" and have become "masters of self-representation and self-creation."⁴⁴ In MUDs, she attributed this identity creation to the role of anonymity, invisibility, and multiplicity - the ability to create many characters and play out a variety of different roles or identities.⁴⁵ Contemporarily, we find these aspects in a variety of internet forums, communities, or game worlds. For example, on the platform Reddit, users are promised anonymity through randomly generated usernames and the lack of photographic avatars. Many users use this anonymity to seek help with personal issues, share information, or debate topics. While in Minecraft, all users appear the same (as the base "Steve" character until they choose to change their "skins"), and anonymity is guaranteed even if players attempt to model their

42 Stegmaier, *What is Orientation?*, p. 258.

43 Turkle, "Constructions and Reconstructions of Self in Virtual Reality," p. 159.

44 Turkle, "Constructions and Reconstructions of Self in Virtual Reality," p. 164.

45 Turkle, "Constructions and Reconstructions of Self in Virtual Reality," p. 162.

“skins” to match their physical attributes. In many role-playing themed servers (where people play with others in real-time), the player is also invisible as per Turkle’s account; the created character will be responded to only as a function of their role and appearance, subsequently allowing players to play at a variety of identities completely independent from themselves in the physical world.

Interestingly, on social media platforms, we tend to find the opposite. People do not create Instagram - or its professional counterpart LinkedIn to remain anonymous. On the contrary, people develop these kinds of social media identities to extend themselves or a constructed version of themselves. Instagram consists of posting photographs, videos, or slideshows to one’s profile and sharing with followers. Photos are generally selected and edited in specific ways to highlight one’s appearance, achievements or commemorate important and meaningful events. The variety of personal profiles may depend on the platform the individual uses; for example, an individual may have an Instagram to construct an identity as sexually alluring. Meanwhile, that same individual may also have a LinkedIn profile featuring photographs at conferences and share posts highlighting their professional achievements. Turkle’s multiplicity is especially apparent in this multifaceted use of different social media websites to achieve different kinds of extended and constructed identities. Virtual game worlds, social media websites, and other online or digital communities are subsequently used to compose and project a specific identity.

Nor are these identities stagnant. Users may consistently construct and deconstruct various online identities at any time. People may delete photographs or posts, redesign their avatar or profiles, and play or not play multiple games or virtual worlds. In her 1995 book, *Life on the Screen: Identity in the Age of the Internet*, Turkle tells us that the (then early) internet encourages us to think of ourselves as “emergent,” “decentralized,” and “ever in the process.” As such, the internet has become a “significant social laboratory” for this kind of experimentation.⁴⁶

While these identities may be constructed and transient, we value them and use them to achieve various (usually socially motivated) aims. Turkle gives the example of Audrey, a teenage girl obsessed with updating her profile on Facebook. Audrey not only spends the majority of her time preoccupied with what to post and how to construct an identity of herself but also sees this

46 Sherry Turkle, *Life on the Screen: Identity in the Age of the Internet* (London: Weidenfield & Nicholson, 1995), p. 180.

identity as a “second” version of herself, describing it as her “twin” - but an improved one, it embodies everything she wishes she was in her physical life.⁴⁷

This *marketing* of oneself, as I have called it, is again common and mainstream. While much of Turkle’s work focused on young teens and how they use such technologies to do the kind of “identity work” adolescents naturally do, insecure teenagers are certainly not the only ones that use these platforms and construct identities to achieve certain ends. The physical world *is* restricting; we are limited in who and what we want to be, limited in how far our ideas and beliefs can be shared. Never before have we had such a fast and freely accessible way to extend ourselves through sharing and communicating and using these extensions to construct new and different selves.

Here I have presented two specific considerations regarding digital information communication, the realism of digital life, and the unprecedented opportunity for the extension and creation of ourselves and identity through the use of these technologies. On my account, both of these considerations go a long way to explaining the overall appeal and widespread use of these technologies, and not least, their compelling nature.

3. “Top-Down” Approaches

So far, we have looked at digital life and communication information technologies from what I have described as the “bottom-up” approach. We have considered such technologies in a specific context in terms of their realism and widespread use in the extension and creation of identities.

Here, we will take a look at “top-down” approaches. Those approaches take a universalist understanding of the character or essence of technology. We will apply these approaches to our focus on digital life and information communication technologies to complete our comprehensive exploration of such technologies.

In Part 3.1., we will consider two perspectives from the first of the three approaches, referred to as a “substantivist” or determinative value understanding of technology - viewing technology as a force beyond human control. Part 3.2. will consider a more reformative understanding of technology, Borgmann’s so-called “device paradigm,” and his emphasis on engaging with what he calls “focal practices.” Part 3.3. will consider two aspects of the instrumentalist

⁴⁷ Turkle, *Alone Together*, p. 192.

perspective: technology is a means to an end. I call these aspects the *optimistic* and *existential* views, with the former referring to the widespread emphasis of the benefits of technology, how technology can be used to improve and redeem human life, and the latter viewing technology as an embodiment of human existential needs.

I have not yet taken an evaluative stance, whether information communication technologies have oriented us and affected our lives in good or negative ways, and what those might be. As I mentioned at the beginning of this essay, my goal was first to describe the phenomenon and essence of such technologies, and I have sought to do so by taking both a “bottom-up” and “top-down” approach. I argue that both approaches are necessary to fully appreciate how these technologies are unique and how they are interconnected and can be viewed as a whole. However, here I will highlight where both the reformative and optimistic instrumentalist approaches fail regarding modern communication technologies, which will lead to my evaluative summary in Part 4.

3.1. Substantivism

In a substantivist view of technology, technology appears as an autonomous force, one that is outside of human control. For some substantivist thinkers such as Skrbina, this force has always existed, and modern technologies have only exacerbated its prevalence and pervasiveness. For others, such as Heidegger, this force or mode of being begins specifically with modern technology.

This autonomous character of technology is usually depicted as pernicious and insidious, and as such, proponents of this view are often and quickly dismissed for being “anti-technology” or “dystopian.”⁴⁸ Other times, they are dismissed as unrealistic—if we view technology negatively and fatalistically, *what should we do?* To return to a more traditional way of life is a fantasy and not one that anybody would ever choose; certainly, nobody wants to go back to washing their clothes in the river. We will consider these criticisms in turn, but let us first look at the infamous poster boy for such a position, Heidegger.

At the beginning of “The Question Concerning Technology,” Heidegger explicitly rejects what he sees as the current understanding of technology, the view of technology as neutral, as instrumental (a means to an end) or

48 Ihde, *Heidegger's Technologies*, p. 136.

anthropological (a human activity).⁴⁹ For Heidegger, such a view makes us “utterly blind” to the actual essence of technology and how it affects our view of the world. Heidegger is sometimes misinterpreted here for arguing *against* technology. Still, while his writing is pessimistic, the goal of his essay is rather to interpret technology in the *right way*, in a way that frees us, that prepares us for a free relationship with it.⁵⁰ While Heidegger appears to note the negative ways technology has affected the environment (and is sometimes posited as an early advocate for environmentalism), his main concern is the human distress caused by an increasingly hegemonic and all-encompassing technological understanding of being.⁵¹

For Heidegger, the essence of technology is paradoxically “by no means technological.”⁵² Rather, the essence of (modern) technology is a new form of “revealing” fixated on energy - constant production, ordering, and exploitation. It is ever-expanding, drawing everything, including people, into being a “standing reserve.” Technology “challenges” the natural world to provide energy for its production and order, and man, too, unbeknownst to him, becomes part of this system. Heidegger insists that within the technological mode of being all people become mere tools awaiting orders for use in the larger technological system.

He gives the example of an airplane standing on the runway. To most, an airplane is an object, even a miraculous technological innovation. Yet this conceals its true essence. An airplane is not merely an object but a part of the wider system; it is “ordered to ensure the possibility of transportation,” and within the airplane are innumerable parts and mechanisms, all also awaiting this “call for duty.”⁵³ Likewise, what of the people who work on this plane? The engineers, crew, airline attendants? All of these people are also “standing-reserve,” waiting to be used in the wider system of technological being.

Technology in this sense “enframes” us, it conceals this true nature, and instead, it appears to us in the benign forms of efficient production of goods and services. Even worse, we consider it an achievement or tool that will give us greater control over the earth and our lives.⁵⁴ When the essence of technology

49 Heidegger, “The Question Concerning Technology,” p. 312.

50 Heidegger, “The Question Concerning Technology,” p. 311.

51 Hubert Dreyfus, *Background Practices, Essays on the Understanding of Being*, ed. Mark A. Wrathall (Oxford: Oxford University Press, 2017), p. 188.

52 Heidegger, “The Question Concerning Technology,” p. 311.

53 Heidegger, “The Question Concerning Technology,” p. 322.

54 Heidegger, “The Question Concerning Technology,” p. 332.

is concealed, the greatest danger of the technological mode of becoming is its inescapability and homogeny. When we see ourselves in control, we fail to realize the ways such a system controls us; we become “standing-reserve,” blind tools in a totalizing force. When technology becomes totalizing in this way, “enframing” how we view and interact with the world, it removes the possibility of any other kind of perceiving, what Heidegger calls “revealing.”

The solution then is to stop - the power to unconceal this concealed essence of technology and allow for other forms of revealing such as that in the realm of art. It is not within the scope of this essay to explore Heidegger’s whole philosophy in great depth. However, here we find ourselves with some interesting insights:

1. The essence of technology is not technological; rather, its essence is a pernicious way of viewing and participating in the world
2. The view of instrumentalism and human control of such technologies is not just mistaken but illusory. It is harmful insofar as it conceals this essence of technology, and prevents us from realizing how we have come to view and participate in the world in such technological ways.

However, as Skrbina notes - Heidegger was an optimist.⁵⁵ Heidegger believed there was “dignity in keeping watch” over such a force and that we could still foster the “growth of the saving power.”⁵⁶ Recognizing its concealed nature was the first step, engaging instead with the realm of art, the second.

Granted, Heidegger was writing in the 1950s. Such optimism has become less common in more recent substantivist views. Six decades after the publication of “The Question Concerning Technology,” Skrbina takes a much gloomier outlook in his 2015 book *The Metaphysics of Technology*. Here Skrbina notes that Heidegger hedged his bets on this saving power, the power to stop technologically engaging with the world. While that may have been still plausible then, Skrbina notes that such a return to the realm of art or simpler forms of “revealing” is no longer possible. Technology cannot be stopped. That is the real threat.

Skrbina agrees with Heidegger that modern technology functions as a force independent of human goals. Attempting to reign or reform technology is misplaced and plays into that fatal illusion that man is in control-or that technology *can* be controlled. This is because the mere presence of technology

⁵⁵ Skrbina, *The Metaphysics of Technology*, p. 80.

⁵⁶ Heidegger, “The Question Concerning Technology,” p. 340.

“compels usage.”⁵⁷ Once a technology has transformed, a new form or type has appeared and become accessible; this progression becomes irreversible. The technology spreads - from developed nations to developing nations, from culture to culture, and it becomes accepted and even heralded. Yet when viewed individually, technologies appear as a sequence of practical steps towards greater progress and improvement. Anyone opposed to such technologies is seen as regressive or wanting to restrain this progress of human achievement. They are accused of being “medievalists” or wanting to return humanity to the state of the Stone Age, to disease and menial labour. How could anyone reject such seemingly beneficial technologies as indoor plumbing or the telephone?

The common response to such a view is that technologies do not limit our freedom but expand it. This is the view I call *optimistic instrumentalism* that will be considered in Part 3C. That being said, Skrbina uses the example of the car to illustrate how such a view can be considered an illusion. The shift to high-power and high-speed transportation such as motorized vehicles allowed people to travel faster and farther than before. People *did* gain freedom in this sense, a kind of freedom for fast and far travel. However, by accepting the car, people began to accept the constraints that came with it, a network of paved and uncrossable roads, regulations and laws determining their use, the need for mass production of cars, mass mining of fossil fuels and so on.⁵⁸

Furthermore, no person, government, or king “chose” such a system or planned it out concurrence with a pre-determined social philosophy.⁵⁹ Such a system simply “emerged and evolved” over a long period in an impossibly complex way. A development that was largely autonomous and self-evolving and is interconnected to many other systems. Cars consist of complex parts, parts that have to be manufactured, the materials sourced, the regulations for the production and sourcing implemented, the workers employed, etc. In this sense, what Skrbina calls the “global technology system” is just too large and too complex for one individual ever to understand or appreciate. Technology is totalitarian because it has become so encompassing of every aspect of our lives.

Now to turn to our particular focus; the digital life and information communication technologies. In Part 2A, I briefly mentioned how the use of information communication technologies is becoming more and more pervasive;

⁵⁷ Skrbina, *The Metaphysics of Technology*, p. 152.

⁵⁸ Skrbina, *The Metaphysics of Technology*, p. 190.

⁵⁹ Skrbina, *The Metaphysics of Technology*, p. 190.

the usage of such has become mandatory for most kinds of participation in life. What I meant by this is akin to Skrbina's understanding of such technologies as irreversible or compelling usage. For example, one cannot (usually) have a job without email or even having access to the internet to apply to said job. Almost all (successful) businesses are fully immersed in the online market, online shopping and online advertising. Even news, where once people awaited printed or televised updates, now look to the internet for first-hand footage and accounts regarding the latest issues or happenings. As discussed, so much of life, especially social life, now occurs in a parallel life - the digital reality. A place that is very much a *real* place and where meaningful and important things take place. In this sense, it certainly compels usage.

Likewise, the development of such technologies happened similarly to how Skrbina describes the seemingly autonomous development of the car. No one planned it out - such things just evolved, the internet in particular originally evolving from military communication technologies.⁶⁰ From tethered and limited desktop computers, we find ourselves now using smaller, portable, and even more efficient devices - the laptop, the tablet, the smartphone, even the smartwatch - a watch that lets you access the internet right from your wrist. And again, like with the development of motorized transport, it is all impossibly interconnected in some way or another, with our lives, our economies, and our culture - and it is irreversible. One cannot imagine a day where the world just decides to stop using the internet, stops using their devices, stops online shopping, deletes (*kills*) their online identities and projections in games, communities, and profiles. I would say that the opposite has now happened. The sudden occurrence of a global pandemic meant that more traditional physical and in-person interactions or exchanges were prevented. Therefore the pervasiveness of such technologies has been only further accelerated. When faced with such restrictions, people did not choose to go without social interaction, school, or work - people flocked to the ease and accessible solutions these technologies provided. This is irreversible.

What would we have done throughout the pandemic if it were not for these technologies? I have heard comments like this often throughout the course of the past two years. Such statements imply that technology is overwhelmingly beneficial, at least when considering the unique benefits of technologies like Zoom or Amazon. Or at the very least, such a statement implies that such

⁶⁰ Stegmaier, *What is Orientation?*, p. 255.

technologies are neutral tools that can be called to our aid in the face of such a global crisis.

From a substantivist perspective, this illusion is perhaps the most harmful and dangerous aspect of these technologies. The technologies themselves are not evil, but rather it's the consequence of their evolution and deep entrenchment that is a cause for concern. Taken piecemeal, they are beneficial, yet this represents a kind of Heideggerian concealment insofar as this obscures us from appreciating how coercive, irreversible and totalizing these technologies have become.

3.2. Borgmann and Reformation

As noted by Skrbina, recent substantivist accounts of technology seem harder to come by.⁶¹ In particular, much of the mainstream discussion around concerns relating to information technologies involves small-scale reforms. For example, issues relating to compulsive and addictive internet usage are presented as issues that can be solved through *moderating* our usage or better supervision of our children. On this account, such technologies are considered neutral and do not need reformation; rather, how we use or interact with them needs reform. Here we will consider Borgmann's reformatory perspective regarding focal practices and apply it to the issues presented by digital life and information communication technologies.

In Borgmann's 1984 book *Technology and the Character of Contemporary Life: A Philosophical Inquiry*, Borgmann analyzes modern technology he calls the "device paradigm." A "device" on this account is a technical (modern) object that delivers a commodified product so that it is concealed from the user.⁶² An example of a technical device is a central heating system. A central heating system requires the user only to turn it on and set it to the desired temperature; the rest is done for them by complex and concealed automated or mechanical processes. The use of a "device" requires no skill, strength, or attention, and as such, it "shrinks" itself from view.⁶³ In this sense, a "device" provides its user with the requested product on-demand, and the product *appears* on demand as if it were magic.

61 Skrbina, *The Metaphysics of Technology*, p. 27.

62 Skrbina, *The Metaphysics of Technology*, p. 97.

63 Borgmann, *Technology and the Character of Contemporary Life*, p. 42.

On Borgmann's account, a device contrasts with a "thing" or a "focal thing." A focal thing also delivers a product or helps us achieve an aim of some sort, but it delivers it to us differently: without concealment. Instead, "focal things" or "focal practices" require direct attention, engagement and skill. For example, a central heating device can be contrasted with a fireplace, a "focal thing." A fireplace is a focal thing as it provides bodily and social engagement with the "things world."⁶⁴ A fireplace requires the wood to be cut, the roles of building and tending to it allocated, and the skill and attention necessary to start and maintain it. A thing, unlike a device, also provides for more than one commodity; in this case, a fire does not just provide heating but provides the experience of building it and a place where the family gathers for leisure and conversation.

According to Borgmann, the device paradigm has increasingly meant that previously focal things or practices have become converted into devices. This is problematic because we are becoming detached from the products of our consumption insofar as devices are necessarily "superficial"; they conceal from us the "relatedness" of the world.⁶⁵ Borgmann admits that such devices tend to "destroy or displace" the focal things and practices that "grace and orient our lives."⁶⁶

That being said, Borgmann, unlike substantivist thinkers like Heidegger or Skrbina, does not see the deep entrenchment of technology as an issue. Rather, he aims to return us to the "promise" of technology, which was meant to provide "liberty and prosperity."⁶⁷ The decline of focal practices and the concealing character of the device paradigm has meant that such a promise has not been realized yet. That is because commodities are also demeaned and degraded through concealed technological consumption. In other words, we take such "blessings" of technology for granted. He gives the example of how a shower in the routine of technological life is just another "chore," something one does without much consideration as to how or what is being provided (in this case, hot and clean water on demand).⁶⁸ However, suppose one first participates in a focal practice such as running, especially through wet and muddy conditions.

⁶⁴ Borgmann, *Technology and the Character of Contemporary Life*, p. 41.

⁶⁵ Borgmann, *Technology and the Character of Contemporary Life*, p. 47.

⁶⁶ Borgmann, *Technology and the Character of Contemporary Life*, p. 157.

⁶⁷ Borgmann, *Technology and the Character of Contemporary Life*, p. 246.

⁶⁸ Borgmann, *Technology and the Character of Contemporary Life, a Philosophical Inquiry*, p. 247.

Afterwards, in that case, one finds themselves realizing and appreciating the ease the shower device provides.

Borgmann's reform of technology is, therefore, a kind of "pruning back" and "restricting" of technology to a "supporting" rather than a central or all-encompassing role. This is because the "joys" and benefits that such technologies bring us also seem to have a "parasitic" or "voracious" character when not adequately balanced with non-technical life. Focal things and practices are not necessarily pretechnological or anti-technological on this account, but rather they "affirm" technology (and its benefits) by acting as a "counter-weight."⁶⁹ Just as someone who plays basketball finds it inspiring to watch professional basketball on TV, the counter-weight of engaging practices preserves our "sensitivity" and attention to the effortless and efficient way technology provides us with security, ease, and comfort. Far from being anti-technology, Borgmann concludes by stating that the destruction of such technologies would mean the "eradication of all hope."⁷⁰

While we will consider this optimistic instrumentalism in Part 3C, I think it is clear that Borgmann's device paradigm, despite being published almost forty years ago, can be easily applied to digital life and information communication technologies. Borgmann seems to predict the development of such technologies when he references the concern that "microelectronic devices" could profoundly change the quality of our lives.⁷¹ He gives the example of an article from *Newsweek* which describes a future where "smart technologies" are all around us. The article describes such miraculous inventions as the telephone that recognizes a person's number and blocks them, a television that can be turned off with your voice, and a door with a key-less personal lock.⁷² These technologies exist today, and ironically in even more complex and nuanced forms than Borgmann or *Newsweek* could have imagined in the 1980s. While you can certainly block numbers on a landline telephone, we now have much more sophisticated and multifaceted smartphones where incoming calls can instantly be blocked and silenced. Televisions and innumerable other devices, lights, central heating, appliances can all be controlled with voice commands or remotely from your laptop or phone. Such technologies are even ironically called "Smart Home

69 Borgmann, *Technology and the Character of Contemporary Life, a Philosophical Inquiry*, p. 248.

70 Borgmann, *Technology and the Character of Contemporary Life, a Philosophical Inquiry*, p. 249.

71 Borgmann, *Technology and the Character of Contemporary Life, a Philosophical Inquiry*, p. 150.

72 Borgmann, *Technology and the Character of Contemporary Life, a Philosophical Inquiry*, p. 150

Devices” such as the Alexa or Google Home. The “smart” technologies, like Borgmann predicted, are also certainly *friendly*, they are incredibly accessible and easy to set up, and they have become largely indispensable to the lives of those that adopt them. If you can start your car, pre-heat it, and lock it from your phone across the street - why would you ever go back to manually trudging through the snow, sitting in a freezing car, and having to wait for it to warm up? Yet again, this streamlining of efficient and easy products is what disengages us from skilled and bodily reality. When consumption becomes too easy, everything becomes something to be consumed. Therefore, the only way to reform or recover the joy and promise that such technologies provide us is to find a balance or counter-force to such technologies.⁷³

Yet, here we must wonder whether it is still possible to find “counter-forces” to such technologies. Certainly, we could all *get off our phones* and go for a run; that would be a kind of focal practice insofar as it requires bodily engagement and skill. If the individual has the choice between meeting with a friend in a park or meeting with a friend in a virtual park on Sims, it is clear which is the “counter-force” and which represents the device paradigm. It is also possible, granted that the weather is suitable, the friend is within proximity to meet, and the friend can leave their house and meet there. However, even practice as simple as this requires a kind of effort that increasingly becomes overtaken by the ease and efficiency of the device paradigm. What if the weather is *not* suitable, or what if a global *pandemic* makes contact with people difficult or even dangerous? What if an individual simply does not want to go through the effort to get dressed, leave their house, and catch a bus, walk, or drive to said park? In this scenario, the product a virtual platform like Sims delivers is a more efficient and easier way to “meet up” with and interact with friends, one that seeks to mimic physical life without the engagement or effort that physical life requires.

Let’s look at another similar scenario. The platform Zoom and other kinds of group/video technologies (Google Classroom, Skype, Microsoft Teams) that allow people to form groups, create and share meetings, and participate in video calls have meant that businesses and education could continue at full capacity even during the pandemic. Such technologies represent a “device” on Borgmann’s account insofar as they can deliver the product of socializing, collaboration, or

73 Borgmann, *Technology and the Character of Contemporary Life*, p. 162.

learning. The contrasting focal practice would be the undertaking of traditional meetings or lessons - where an individual has to leave their houses for work, locate the correct room the meeting is taking place, perhaps make small talk with the secretary setting out the complimentary donuts, and then be prepared to discuss and debate the points of the meeting face-to-face, sometimes even having to memorize relevant facts for presentation. Whereas on Zoom, these kinds of interactions are much more minimal. One does not need to leave their house or search for the conference room; one merely sits down and logs on. Likewise, there is little prerequisite for friendly small-talk on Zoom; there is no handshaking, no confident eye contact, and certainly no free donuts. It is undeniably a more efficient way of gathering people and hosting meetings. No one is delayed due to traffic. More importantly, no one spreads a virus to anyone else. But this efficiency detaches the meeting from any wider context or bodily engagement. The device delivers only one product, the meeting itself, and provides no other kind of involvement or experience. Perhaps that is why people find themselves suffering from “Zoom fatigue” or “screen exhaustion” after spending entire days working or learning through such platforms and devices. But surely sitting and talking on camera is less exhausting than manually travelling to work, walking around, and otherwise interacting? Here I say that it is not physically exhausting in this sense, but it can be considered mentally exhausting because it is so under-stimulating.

Of course, one can argue that Borgmann’s call for reform can be used here. People just need to make more effort to meet with their friends in physical parks, and schools and workplaces have gradually seen a slow return to in-person meetings and learning. We can, as Borgmann proposes, focus on cultivating these focal practices and only use devices to support them - such as when we are ill and unable to come to work, or when your friends live in a different country, and you cannot simply meet at the park. In this sense, we recover the promise and benefits of such technologies because we appreciate what they can facilitate while still retaining our bodily and skilled engagement with wider contexts.

But what happens when a counter-force is not simple to cultivate or balance? Take the traditional focal practice of building a childhood fort or treehouse. This pastime appears to have been commonplace just a few decades ago if children’s storybooks are believed. With the help of his parents or friends, a child would save his allowance to source the materials needed, plan it out, and learn the requisite skills required to construct the simple structure. The

structure would be built, and much to the joy of the child and his friends, serve as a new space to play.

Where are the treehouses today? I would say that they exist predominantly in virtual worlds such as Minecraft. The process of building a physical treehouse requires 1) some kind of free land or space 2) the parent or child requires the skills and tools 3) the effort of sourcing, buying, and transporting materials like lumber 4) and the bodily engagement of actually building the structure and seeing the project through and compared to the much more efficient and simpler building such a structure on Minecraft, logging into a Minecraft account and undertaking the necessary keyboard maneuvers to collect materials and construct. While playing Minecraft may take some knowledge and skill, it is certainly not a physical or engaged skill like building a treehouse in the non-virtual world.

The child playing Minecraft in his room receives the same core product as if he were in the backyard in his fort, social-time with his friends, creative expression, even having a “space,” albeit a virtual one, specifically designated for meeting up and hanging out. Yet this product is delivered as a commodity, without effort, skill, or engagement, and is removed from the wider context that physically building such a fort would entail. It is also safer. Parents may bemoan their children spending too much time on their computers. Yet, kids can do anything they want on the computer while safely doing nothing and remaining securely under parental supervision. Ironically, these same parents would probably not appreciate it if their children stopped playing Minecraft, bought an axe at Home Depot, and proceeded to cut down *real* trees to build their farms. I would say that in this case, the device paradigm has succeeded in eradicating any possible counter-force or focal practices. The ease and accessibility of virtual and online games and platforms such as Minecraft are just too alluring, too easy. These technologies, in this sense, are voracious and totalizing.

Here we have considered the device paradigm described by Borgmann. In a technological way of life, products or commodities are efficiently and simply provided for us, with the actual process being condensed and concealed from view. The core product remains the same, the social interaction with a friend, the business meeting, a place to hang out with friends. Yet, it is delivered to us without the kind of contextualized and bodily engagement that characterizes pre-technological life or focal practices. Therefore, to avoid disengagement and

better appreciate what these technologies can do for us, Borgmann proposes the reformative position that we should work to cultivate more focal practices. Focal practices provide us with the “counter-force” to return control and focus to our lives while still appreciating the benefits that technology provides. Here I have considered that while in some cases focal practices may be utilized - such as making more of an effort to host meetings in person, in most cases, the device paradigm appears to have taken a much firmer hold than was the case in Borgmann’s 1980s.

3.3. Instrumentalism: Optimistic and Existential Perspectives

Lastly, we will now consider two instrumental perspectives that see technology as a means to an end. I describe Borgmann’s view that technology can be a great instrument for delivering benefits and progress as *optimistic instrumentalism* and the opposing view that technological progress is a myth, as *existential instrumentalism*. We will explore and apply them both to our focus on information communication technologies.

Borgmann embodies optimistic instrumentalism when he boldly states, “Without modern technology, the liberal program of freedom, equality, and self-realization is unrealizable.”⁷⁴ This understanding equates technology with a linear upward development of human progress and increasing happiness and freedom. Borgmann saw the eradication of technology as akin to the eradication of hope, the eradication of the hope of a better life that technology, with its safety, efficiency, and connectivity, promises us. On this account, any problems that arise from technologies are not problems with technology - but rather social, political, or economic problems. Likewise, we will develop the required technology to solve any potential problems that such technologies create in the first instance. For example, to avoid global warming, an optimistic instrumentalist will believe that technology will develop that will allow us to colonize Mars or prevent mass ecological disasters.

In contrast, John Gray, an existential instrumentalist, describes this as the “myth of progress.” In *Straw Dogs*, he argues that the repressed religious impulse in secular societies has “mutated” into a pseudo-Christian belief in technological salvation, that we are a species that can be master of its destiny.⁷⁵

⁷⁴ Borgmann, *Technology and the Character of Contemporary Life*, p. 34.

⁷⁵ John Gray, *Straw Dogs* (London: Granta Books, 2002), p. xv.

While scientific progress is a fact, the belief that scientific progress will allow us to control or affect the human condition is the same as traditional religious superstition. Technology merely represents another instrument for human faith, to absolve us of existential problems like mortality, meaning, and purpose. For Gray, humans cannot live without illusion - and with the collapse of traditional religions and looming ecological disaster, an “irrational faith in progress” may be all we have left to embrace.⁷⁶

The central question then is, *has technology really made our lives better?* In Part 2A, we left this question to the side, and perhaps here, we can finally answer it. For the optimistic instrumentalist, the answer is a clear and undeniable *yes*. Borgmann was worried that such a device paradigm would affect our relation to the world and prevent us from *appreciating* the greatness and benefits that technology presents. According to him, mindless and banal uses of technologies prevent us from realizing how miraculous they truly are.

Have technologies made our lives better? As discussed in Part 3A, suggesting otherwise is often quickly dismissed as wanting to regress humanity to the medieval dark ages, washing clothes in the river, and having life cut short from plagues and diseases. It is safe to say that when technologies are considered individually, as Skrbina notes, technology represents itself as a series of beneficial innovations and achievements. My dishwasher saves me the effort of washing dishes. Zoom allows me to attend a university from a different continent. Minecraft is a fun and interactive game to play. In an individual sense, each technology *is* a beneficial innovation; however, to reiterate, the substantivists would say that *this* is the danger of technology, that it presents itself as benign and alluring, concealing the way it has become entrenched and coercive.

An existential instrumentalist would say that this concealment is all part of the myth of technology, the “myth of progress.” While we all undoubtedly enjoy indoor plumbing, human life has not necessarily gotten *fundamentally* better. Wars, disease, cruelty and injustice have been rampant across human history and are still rampant today. Perhaps, thanks to technological innovations, even more so. Gray points out that mass murder like that we saw in the World Wars and the Holocaust is a side effect of the progress of technologies, killings in such mass and onerous ways - with bombs, nuclear weapons, and poisonous gas, would not have been possible if technology had not provided us with such

76 Gray, *Straw Dogs*, p. 29.

innovative capabilities.⁷⁷ Unfortunately, as technology has advanced, so has human proficiency in destruction and killing.⁷⁸

From an existentialist perspective, implicit in the optimist's understanding of *technology as progress* is a program of human *perfectionism*. Yet this perfectionism doesn't usually achieve what it sets out to do. We saw how motorized transport certainly *perfected* fast and more expansive travel. We can drive or fly long distances and now have the unprecedented power for global interconnectivity and travel. Yet with this *perfecting* comes a whole variety of new problems, which now also require *perfecting*—for example, finding more environmentally sustainable ways to power our cars, trains, and airplanes or dealing with global instability and war over the control of fossil fuels and other needed raw materials. In this regard, technological pursuits do not represent a scientific project but an existential one. It pursues what religion has always promised, freedom from the trials and uncertainty of human life.⁷⁹

On my account, the optimistic instrumentalist sees technology to promote human interests, achieve human goals, and better our lives in a linear understanding of the progress. The existential instrumentalist sees this understanding as a myth; technology merely embodies what we *wish* were the case. We *wish* for human goals to be achieved, for human life to be a continuous march of improvement, and for us to one-day reach salvation - no more sickness, no more sadness, no more struggle. But I think it is fair to say that all these things *still* exist; this has perhaps been made even more clear by the coronavirus pandemic. We may have eradicated the bubonic plague, but we have not eradicated *all* potential plagues; another one may be just around the corner to throw us back into chaos and uncertainty. In this regard, to eradicate all diseases through infinite technological invention certainly seems a utopian aspiration indeed.

Before we conclude, let us narrow the question to our specific focus, *have information communication technologies made human life better?* It depends. While we are more connected than ever before, more (virtually) interactive and immersed than ever before, and perhaps have more accessible knowledge than ever before (thanks Google!) is life really *better*? The optimistic instrumentalist would say *yes*. We can use these technologies to reach out to anyone, connect, play, learn, and stay engaged with the world and everyone in it. But then I still

⁷⁷ Gray, *Straw Dogs*, p. 92.

⁷⁸ Gray, *Straw Dogs*, p. 96.

⁷⁹ Gray, *Straw Dogs*, p. 139.

have to wonder, in what sense is this quantifiably *better*? Are the friendships I have made in Minecraft, Facebook, or Reddit *better* or more *meaningful* than the friendships I would have made if these technologies did not exist? Is the music I can instantly stream on Spotify or Youtube *better* or *more enjoyable* music than more traditional ways of listening to music such as live performance? We have concluded that the virtual world is very real, and it is a meaningful place where meaningful things happen, but before this virtual world existed, meaningful and important things *still* happened. People still met and fell in love. People still sought out and listened to new music. Economies still existed, and businesses prospered or failed. Google might make us *feel* more knowledgeable, and the widespread proliferation and access of knowledge may represent a kind of progress - but is the average person really *more* knowledgeable?

To consider this question, Skrbina uses the example of guns. Guns make people feel powerful as they represent power and protection. As gun violence rises (especially in the United States), gun activists posit guns as the solution; people want to feel empowered to protect themselves. Guns create a “guns as solution” mentality.⁸⁰ An instrumental optimist would say that guns *can* be used to achieve these aims to protect people from violence. In contrast, an existential instrumentalist would say that guns are merely used to embody human needs, the need for safety, security or violence. Guns do not *solve* these needs; the world is just as violent and unsafe as ever before; they just make us *feel* like they do.

Technology, particularly information communication technologies, certainly make us feel more connected - having a large number of Facebook friends, receiving lots of comments on posts or likes on photographs gives us the sense that we do have lots of friends and that people like us. It purports to fill the human need for sociality, community, validation and approval, but does it achieve this aim? Are these needs met? Are we so much happier now that we have all these new ways of connecting and communicating with people? I think the widespread belief is *yes*. The “myth of progress” or the optimistic view has become a staple of our culture. Every new product, new social media website, and new way of communicating and interacting is posited to achieve these aims. But I think the existential position is more correct; technology creates a technology as solution mindset when in actuality, human needs and wishes remain as unmet and unfulfilled as they have ever been

80 Skrbina, *The Metaphysics of Technology*, p. 288.

Here I have presented the last of our “top-down” approaches. I have considered both optimistic and existentialist understanding of technology as a means to an end. Optimists feel that technology can be used to achieve and satisfy human goals and needs. Existential instrumentalists feel that such a position embodies a human need of its own right, the need to feel in control, the need to feel that life can be improved, and the need to know that we can all reach salvation one day.

I have begun to hint at where these considerations might take us. Now that we have completed both our “bottom-up” and “top-down” descriptive analyses, I will turn to make an evaluative statement.

4. How Does the Digitalization of Our World Change Our Orientation?

After completing our descriptive analysis of technology and considering both “bottom-up” and “top-down” approaches and various perspectives, we have now reached the point where I feel confident to make some evaluative statements. We have determined that digitalization and modern technologies have certainly changed our way of life and how we orient ourselves. But the question remains, have they done so in positive or negative ways? Here I will apply what we have just considered and answer three questions regarding this orientation. I will argue that these technologies have presented a new way of life or a new *way* to orient oneself within life, but it is largely becoming a *totalizing* way of life. In this sense, my view is of the substantivist kind. But I am also an existential instrumentalist, modern technology is not something that just appeared to achieve human needs, but rather it is the very embodiment of those needs.

This essay was never meant to be one that presented easy answers or even necessarily a straightforward argument. That is because I don’t believe there are easy answers to such a multifaceted, far-reaching and complex thing as *technology*. As we saw in Part 1A, even simply defining or demarcating technology comes with difficulties, especially when philosophers find themselves in conflict regarding how to approach the phenomenon of technology.

On this note, consider below as a summary of my takeaways from our explorations.

4.1. What Do These Technologies Enable or Promise?

In Part 2 we saw that the virtual world and communication technologies enable unprecedented connectivity, immersion, and interactivity capabilities. I can stream any show I want, while buying anything I want, while talking to friends worldwide and sharing media that could potentially be shared and seen by millions and millions of people. I can extend or create a new identity in minutes, construct a profile based on my interests, goals, or idealized versions of myself and share it with friends, potential dating partners, or professional organizations. Additionally, as we saw in Part 2A, these technologies have enabled an entirely new reality, one that is very “real” and where “real” and meaningful things happen.

What is more significant is what these technologies promise. As an existential instrumentalist, it is my position that these technologies promise us a great deal. As we discussed in Part 3C, these technologies don’t exist to *serve* human needs but rather embody them. Social media is so enthralling because we want to be liked, we want to be connected, we want to extend ourselves—our thoughts, opinions, and experiences, and we want to be people we otherwise may not be in real life. In this sense, these technologies promise us freedom from ourselves. They promise us perpetual access to the world and knowledge. They promise us safety and fantastical escape from the physical world, like the experience of cutting down trees, building castles, or fighting our foes in games such as Minecraft. We can “multi-life” through our online extended and constructed identities. There is a whole other reality now, one that is accessible from anywhere, the computers on our laps, the phones in our hands, even the watches on our wrists. It is all very exciting.

Most importantly, technology promises us power; it promises us safety; it promises us hope. In an era largely devoid of traditional religions, political unity, or a wider community, we can at least still rally behind the idea of rational and linear progress. The faith that we are meant to achieve something that the hardships and calamities of life can be absolved, and above all else, that the eventual land of providence awaits. Mars is ours to be colonized.

4.2. What Do These Technologies Constrain?

As we saw in Part 3.2., these technologies constrain our engagement with the world. On Borgmann’s account, the device paradigm conceals how products

are produced and threatens to displace us from practices that would otherwise engage us. Instead of building tree forts, children now build virtual tree forts on Minecraft. While the core product remains the same, there is an experience lost in this concealment.

Borgmann's program for reform centres around restraining our usage of devices and cultivating a balance or "counter-force" through focal practices is well-intentioned. It has also largely become the mainstream position, especially when discussing the pervasive usage of information communication technologies. The solution usually proposed is to *constrain* or limit the amount of time we spend on our devices, the amount of time we spend online. We should get out, go for more walks, continue to make an effort to go to school and work in person. I have argued that cultivating these focal practices is still possible in some cases, although the ease and accessibility of devices are making them increasingly less appealing. More importantly, I contend that in many cases, a viable "counter-force" or focal practice simply doesn't exist anymore. The device paradigm has become so ubiquitous and totalizing that we now find ourselves left to our own devices (pun intended).

4.3. What Do These Technologies Render Impossible?

My strongest argument here is that these technologies represent an irreversible and coercive force that is totalizing. It is my opinion that Heidegger's concern that the technological mode of being would become, through its concealment and constant expansion, the only way of being, has largely come true. Taken piecemeal, technology represents a series of small beneficial improvements and innovations. Yet, this is misleading. Technology is a complex and interconnected system that evolves in unpredictable and diffused ways. The proposed benefits of such technologies are not the only consequences of their adoption and implementation. Another consequence is what they render impossible, to reverse or reject them. To put it simpler, they prevent a way out. We cannot prevent this evolution; we can only witness the growing pervasiveness. These technologies are so deeply entrenched that we struggle even to grasp their totality.

More importantly, this impossibility is seen as merely another change for those who have lived most of their lives before the very recent development of "technoscience" technologies, such as the internet and digital life. Here I take the position that this understanding is itself a form of Heideggarian "concealment."

Where the oldest generations may shun them, and others may have worked to *reorient* themselves and accept the changes, seeing it as a new “frontier” among many, those of Generation Z do not have the privilege to take such an optimistic view. For Generation Z, such as myself, the ubiquitous usage and increasing prevalence of these technologies are all we have ever known. Consequently, all we can ever imagine *will* be. That is the essence of this totalizing force.

5. Conclusion

Is this the end of all considerations regarding modern digital information communication technologies? Certainly not. Entire anthologies could be written on the mere summary of perspectives we have discussed here, and I await eagerly to read them.

This project’s overarching goal was to explore the various ways we can view and orient ourselves concerning these technologies. Here I have considered the definition of technology, and I have argued that both the “bottom-up” and “top-down” approaches provide us with important insight. Such positions should not be thought of as mutually exclusive.

We have subsequently considered modern technology, specifically virtual worlds and information communication technology, from both approaches and applied various perspectives to our focus. In Part 2, we determined by examining information communication technologies from a “bottom-up” perspective that such technologies represent real worlds in and of themselves (digital realism). We seek to use these technologies to extend and construct identities of ourselves in an unprecedented way. In Part 3, we applied “top-down” perspectives. We considered substantivist, reformative, and instrumental approaches to technology.

I have concluded that my position is one of the substantivist and existential instrumentalist kind. I see such technologies as an inherently irreversible and totalizing force. A force that does not allow for any other kind of life, being, or orientation through its deep-entrenchment and compelling nature. The technological mode of being, especially that of modern digital life, and even more so for those born into it (Generation Z) operates much like Heidegger argued, by “concealing” itself and subsequently subsuming any possibility for “unconcealment” or reformative attempts such as Borgmann’s “pruning back” our usage and reliance.

Yet, what is even more concerning is that even if, hypothetically, my view became widespread, I still cannot imagine the world giving these technologies up. As an instrumental existentialist, this is not only due to the entrenchment of these technologies, but because I do not believe that we could ever forsake the human needs that they embody. Turning off your phone is easy. Turning off hope and faith in progress is, arguably, much harder.

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VI.

How *Could* and *Should* Digitization Change Our Orientation? On the Use and Abuse of Digitization from a Utopian Perspective

by Paul Stephan

Abstract

The central aim of my essay is to argue against the two most prominent fashionable attitudes towards digitization in our current age. On the one hand, there is a naïve technological optimism which neglects the social context of the use of technology, while on the other hand we observe a romanticist pessimism, sometimes even cynicism, with regard to digitization on the other hand. A practical, informed, and hopeful orientation as envisioned by Ernst Bloch can help us to avoid these dead ends and to acknowledge the utopian possibilities of digital technologies while striving for a better social usage of them.

My essay consists of two parts. In the first part, I introduce Bloch's philosophy of orientation as a supplement to Werner Stegmaier's. In the second part of my essay, I show how this orientation applies to the problems of digitization. Firstly, I argue that the development of new digital technologies has been empirically connected not only to military or economic calculation, but also to the utopian dreams and aspirations of great inventors and creative collectives. Secondly, I discuss the reasons for the glaring gap between this digital utopianism and digitization's reality. Thirdly, I show how this gap could and should be overcome through concrete practice.¹

¹ I would like to thank the *Hodges Foundation for Philosophical Orientation* for offering this prize and for awarding a share of it to my contribution. I also thank all of my friends and colleagues who helped me by proofreading it, especially my dear brothers Jakob and Hans, my old 'chap' Frederick Myles, Larissa Berger, Leo Will, Adrian Paukstat, Tilman Williams, and Lukas Meisner.

“For we are saved by hope: but hope that is seen is not hope:
for what a man seeth, why doth he yet hope for?”
(Saint Paul, *Epistle to the Romans*, ch. 8, v. 20)

“And now abideth faith, hope, charity, these three;
but the greatest of these is charity.”
(Saint Paul, *First Epistle to the Corinthians*, ch. 13, v. 13)

“But by my love and hope I conjure thee: cast not away the hero in
thy soul! Maintain holy thy highest hope!”
(Friedrich Nietzsche, *Thus Spake Zarathustra*, The Tree on the Hill)

1. A Brief Orientation

In his various studies on the conception of orientation, Werner Stegmaier correctly highlights the fact that the importance of orientation is largely overlooked both in contemporary philosophy and in philosophy in general. Man is rarely defined as an animal which, before it does anything else, orients itself. What is overlooked is, accordingly, the essential *futurity* of human existence: Man is never here, he is always *there*.² Or, to put it more precisely: He is only here insofar as he is at the same time *there*.³ This sentence, for example, will only make full sense in the light of the end of this text (hopefully) – a sense which is never fully present, however, but can only be pointed to by each single letter, word, and sentence.

What is particular about Stegmaier’s approach to orientation is its methodical *individualism* and *pragmatism*. Although in his study *What is Orientation? A Philosophical Investigation* he devotes many chapters to collective forms of orientation, he declares from the very beginning of the book that orientation is ultimately a radically individualistic affair.⁴ Similarly, while Stegmaier also analyzes metaphysics as a form of orientation, from the beginning he criticizes metaphysical orientations as being inflexible and too attached from reality to work out; although he admits that they may be useful under particular circum-

2 Following traditional language, I will use only the male form to refer to the human race as such. Women are obviously not excluded from this notion of ‘Man’ or ‘men.’ – Concerning the important question to what extent and in what sense animals and plants are also able to orient themselves see Werner Stegmaier, *What is Orientation? A Philosophical Investigation*, transl. Reinhard G. Mueller (Berlin/Boston: De Gruyter, 2019), pp. 16–29.

3 See Stegmaier, *What is Orientation?*, pp. 8–9.

4 See Stegmaier, *What is Orientation?*, p. 6.

stances.⁵ If there is any normativity in Stegmaier's philosophy of orientation, it is an individualistic ethic of practical success: Preferable orientations are those that work well and allow one to make beneficial decisions in a rapidly changing environment.⁶

One may ask, if this basic orientation of Stegmaier's approach is too narrow in two related regards: 1) It plays down the essential role of collective orientations; 2) It likewise plays down the essential role of metaphysical orientations. These two regards are connected because metaphysical orientations are rarely individualistic: Metaphysical philosophy is essentially universalistic and collectivistic insofar as it assumes that all men both are orienting themselves and/or should orient themselves towards a common goal or a set of common goals which does not or do not change in each situation but apply universally.⁷ A classical metaphysical thinker such as Plato, for example, envisions in his major work *Republic* an ideal society which is in its totality oriented towards the ideas of the True, the Beautiful, and, most importantly, the Good.⁸ People trained to orient themselves towards the Good, philosophers, should govern this society. This utopia was explicitly directed against even the imperfect democracy of ancient Athens. A society which was portrayed by Plato as a decadent world in which individualism and pragmatism prevail, in which everyone only cares about himself and no one about the common; a society that is already a marketplace society, in which ultimately the rich reign and Athens fights countless wars just to become even richer. A society that has lost its measure, i.e., its inherent orientation and is thus destined to perish.

Plato's critique of Athens resembles to an astonishing extent critiques that are often directed against digitization and digitized society. Digitization is often portrayed as confining people to highly individualistic "filter bubbles" in which they can be easily manipulated by wealthy and clever demagogues. All sense of truth is said to be lost in our "post-factual" age; true knowledge does not count any longer. As even Stegmaier writes,⁹ it is feared that A. I. will take control of the entirety of social life, thus destroying humanity as such. —

⁵ See Stegmaier, *What is Orientation?*, p. 269.

⁶ See Stegmaier, *What is Orientation?*, p. 25.

⁷ See Stegmaier, *What is Orientation?*, pp. 265-273.

⁸ For the relationship between metaphysics and an anti-individualist approach to politics, see Stegmaier, *What is Orientation?*, pp. 280-281.

⁹ See Stegmaier, *What is Orientation?*, p. 258.

As Stegmaier himself demonstrates,¹⁰ all of this can undoubtedly be *described* very accurately and detailed with the use of his pragmatist methodology, one may ask if one has not to take a more ‘platonic’ approach to be able to properly *judge* and *critique* this development.

In this essay, I will accordingly refer to a more ‘platonic’ thinker who developed a philosophy of orientation in its own right: the German philosopher Ernst Bloch, who lived from 1885 to 1977 and left a still fascinating oeuvre including his major work *The Principle of Hope* (1959¹¹), in which he analyzes for almost 1,700 pages (in the German original¹²) exactly those aspects that play a minor role in Stegmaier’s approach, namely collective and metaphysical orientations, from an apologetic point of view. Bloch criticizes precisely the mentality of individualistic pragmatism as insufficient and defends utopian aspirations, namely the unification of humanity under a set of shared collective, fixed goals.

According to Bloch’s perspective, which we will introduce and defend against possible objections from a more ‘Stegmaierian’ point of view in the second part of this essay, the first question to ask with regard to digitization would not be so much how it *does* change our orientation; this question can only be answered properly if one considers how it *could* and *should* change it. This follows from the essential futurity of human existence which we have already introduced: In order to understand phenomena such as digitization one has to seize properly what they *are not yet* in the sense of their immanent tendencies and possibilities, i.e., their immanent orientation. And this includes not just possible or even likely developments but also potentials that are improbable. The third part of this essay will, accordingly, deal with the utopian potentiality of digitization, while the fourth part will confront it with its reality – in the fifth part the question will be raised of how the gap between these two could be overcome.

2. Bloch’s Philosophy of Orientation

Similar to Stegmaier, Ernst Bloch develops a philosophy of orientation.¹³ He does not use this term in a terminological manner but it appears rather often

10 See Stegmaier, *What is Orientation?*, pp. 247-264.

11 Transl. Neville Plaice / Stephen Plaice / Paul Knight (Cambridge: The MIT Press, 1986).

12 Ernst Bloch, *Das Prinzip Hoffnung* (Frankfurt am Main: Suhrkamp, 1976).

13 At least in Stegmaier, *What is Orientation?* and also the more voluminous German original of the book (Werner

in *The Principle of Hope*. For example, in these important sentences at the end of the book's first of three volumes:

So truth then, sweeping clean, an instruction to build, is in no way grieving or ice. On the contrary, its attitude is, becomes, remains critical-militant optimism, and this *orientates* itself in the Become always towards the Not-Yet-Become, towards viable possibilities of the light. It creates the readiness, which is uninterrupted and informed of tendency, to risk the intervention into what has not yet been achieved.¹⁴

These sentences contain the basic methodology of Bloch: 1) The attitude of truth should orient itself not towards the mere given as the result of the past but towards that which has not yet become, which *could* become, however. 2) It should not be oriented towards *any* possibilities, though, but only to those which are a) "viable" and b) are "of the light," i.e., are *good* possibilities from the point of view of a utopian, reconciled world. 3) It shall seek an active, engaged relationship towards its object in order to actually transform it according to these possibilities.

This attitude relates to Bloch's notion of waking and active vs. blind and passive hope. Within the philosophical tradition, hope is often characterized as being a somehow deficient and even dangerous mood in which one has an illusionary stance towards one's actual situation and, accordingly, does not act properly but in an either passive or crazy manner. It is no wonder that it plays, despite being one of three Christian core virtues (besides faith and charity) and included in the catalogue of the four most fundamental questions of philosophy of Immanuel Kant,¹⁵ virtually no role in modern philosophy.¹⁶ Although Stegmaier emphasizes, just as Bloch, the essential futurity of human existence, hope plays no role in his description of future-oriented affects, the counterpart to mental states such as angst, despair, anxiety, depression, and fear being not hope but moods such as reassurance, resoluteness, and, most

Stegmaier, *Philosophie der Orientierung* [Berlin/New York: De Gruyter, 2008]), the name Bloch is not mentioned once, however.

¹⁴ Bloch, *The Principle of Hope*, p. 446; my emphasis.

¹⁵ "For what *may* I hope?" is the third of these questions; see Claudia Bloeser and Titus Stahl, "Hope," in: *Stanford Encyclopedia of Philosophy*, <https://plato.stanford.edu/entries/hope/>, accessed August 31, 2022).

¹⁶ For a comprehensive overview over the philosophical discourse about hope, correctly highlighting the uniqueness of Bloch's apology of it, see *ibid.*

importantly, courage.¹⁷ To understand the difference between Stegmaier's and Bloch's philosophies it is, accordingly, crucial to get a clear understanding of the difference between these affective orientations towards the future.

Fear and *despair* are negative affective orientations towards the future. The fearful person expects that something bad will happen – the desperate person has even given up all hope and is sure that exclusively bad things will happen. Stegmaier and Bloch both teach that both fear and despair are deficient emotions. Even if fear is surely often an adequate response to objective dangers, both fear and despair narrow the view on a certain situation: Only negative aspects come into view in despair and are overemphasized in fear. For successfully dealing with a given situation, despair is never and fear rarely a good advisor.¹⁸

Emotions like courage and resoluteness seem indeed to be a proper alternative. These affects imply not certainty but strong confidence in one's ability to cope with a given situation and to find one's way out of it if it is dangerous. Both courage and resoluteness are associated with a *realistic* attitude. A courageous general may of course capitulate if the odds are obviously against him and further resistance is futile. But he will try at all costs not to capitulate prematurely. As opposed to a fearful or desperate person, he will give up his plans only after thorough consideration and after all attempts to realize them against the odds have failed.

2.1. The Hopeful General

What would a *hopeful* general do? If he is guided by *blind* hope, he will either do nothing and wait because he is, without any reason, sure that something unforeseeable will happen that will change the situation entirely (take, for example, the eagles in *The Lord of the Rings*). Or he might just sacrifice himself for a futile cause. This mood is also criticized by Ernst Bloch – authentic, waking hope is, in his view, never detached from a sober sense of reality and the experience of actual practice. But what is then the difference between this waking hope and mere courage or resoluteness?

An example for a hopeful general might be Thomas Müntzer, a theologian and disciple of Martin Luther who became by many coincidences not just the main theoretician of the so-called "Great Peasants' Wars," which shuttered

¹⁷ See Stegmaier, *What is Orientation?*, pp. 30–34, 42, 60f., and 91.

¹⁸ See Stegmaier, *What is Orientation?*, p. 37.

almost the entire Holy Roman Empire around the year 1525 but also one of his political and military leaders. It was a major rebellion not just of peasants but also of townsmen (both small businessmen and workers) and the lower nobility against the social hierarchy, namely the power of the higher nobility and the church. Luther took the side of the higher nobility, Müntzer the side of the peasants. As one might suspect, this revolt had little chance: After some successes, the princes of the empire gathered a huge, well-equipped army to fight against barely trained peasants fighting mainly with their scythes and pitchforks. For Müntzer, it was nevertheless not a viable option to capitulate: He gathered a large crowd at Bad Frankenhausen, a small town located in Thuringia. Müntzer gave a passionate speech and it is said that precisely at that moment a halo appeared over the sun, which was enthusiastically interpreted as being a rainbow, the biblical sign of hope and also the symbol of the uprising. This apparent foothold was not sustained, however: The army of the united noblemen stormed the peasants' camp within minutes. Almost everyone was slaughtered, while the aristocratic forces took almost no casualties.

Of course, one has to take into account when judging Müntzer's behavior that he had good reasons for doubting the honesty of the noblemen's apparent will to negotiate: Their brutality and dishonesty had been proven many times¹⁹ and chances were low that they would act otherwise in this instance. Also, the revolutionaries being entirely surrounded by their enemies, escaping was no longer an option. In a situation like this, when neither capitulation nor flight makes any sense, hope seems to be not so irrational as it might seem at first glance: It may be defined as *courage in a situation in which courage is completely unjustified*. The peasants neither just waited, however, nor did they attempt a futile offensive: They did anything they could in order to prepare for the coming attack by the noblemen's army. They did not act foolishly.

At least in *The Principle of Hope*, Bloch does not discuss this specific battle, but also he acknowledges the overall futility of the attempts of Müntzer and his comrades: Their chances were almost zero from the beginning.²⁰ Bloch, however, speaks of the "insight"²¹ of their attempts and the "great deal of

19 This was demonstrated one last time at the battle of Frankenhausen itself when they launched a surprise attack breaking the agreed cease-fire.

20 See Bloch, *The Principle of Hope*, pp. 582-583, and p. 1171. He also speaks of Müntzer's "hubris" (p. 1195); this is not meant critically, however, since "hubris" is for Bloch a virtue, not a vice.

21 Ibid., p. 582. In the German original he speaks of "Klugheit" (prudence) (Bloch, *Das Prinzip Hoffnung*, p. 681) here.

reality”²² that lies precisely in their “enthusiasms.”²³ His argument is simply that by becoming active and informed hope, “docta spes,”²⁴ hope *realizes itself*: If one does not act in a hopeful manner, utopia will remain a mere u-topia (a ‘not-place’ in the original ancient Greek meaning of the word) forever; that it might be possible to realize a just society under the conditions of modernity is the result of exactly these apparently ‘futile’ struggles.²⁵

Thus, Bloch fully acknowledges that the logic even of waking hope is crazy or mad.²⁶ But according to him it is precisely this madness, this craziness that makes history proceed – and ultimately helps to realize dreams and visions that seemed completely lunatic when they first came up. Precisely by trying the impossible, the apparently impossible becomes a concrete possibility. In the mood of waking hope, chances show up and alternatives appear that are not visible from a mere courageous or resolute perspective. Thus, if resoluteness and courage are moods, as Stegmaier highlights as well, that are less narrow than fear and despair, hope is, as Bloch puts it, “*the most human of all mental feelings and only accessible to men, and it also refers to the furthest and brightest horizon.*”²⁷

Of course, hope gains its meaning only within a collectivist and metaphysical framework. From an individualistic and pragmatistic perspective, hope rarely makes sense. In a situation such as Müntzer’s, it might be more advisable from a sober point of view to hope that the noblemen might spare one or to find a way to escape – or not to begin a fight with such bad odds in the first place. Müntzer’s attempts are only prudent in the light of the vision of a just society; from the perspective of a metaphysical history of philosophy in which individualistic and pragmatist considerations play little or no role. However, one may ask if the life of a person who lives in the spirit of waking hope might not maybe be less successful but at least *happier* than that of someone who is merely courageous: He is less affected by temporary setbacks since he judges his own life on the basis of an entirely different standard than temporary success.

22 Bloch, *The Principle of Hope*, p. 582.

23 Ibid. In the German original, Bloch uses here the slightly stronger term “Schwärmereien” (Bloch, *Das Prinzip Hoffnung*, p. 681) which signifies an overtly passionate, almost mad, enthusiasm, mainly of a religious nature.

24 Bloch, *The Principle of Hope*, p. 1372. Literary: ‘educated hope.’

25 “[E]very barrier, if it is felt as such, is already crossed. But equally: no barrier is actively crossed without the intended goal drifting ahead in genuine images and concepts and transposing us into such significant conditions” (Bloch, *The Principle of Hope*, p. 445).

26 In one passage of *The Principle of Hope* he speaks for example of the “lunacy” of every authentic dreamer and that it is not so easy to distinguish the revolutionary or the visionary inventor from a “paranoiac” (Bloch, *The Principle of Hope*, pp. 473–474).

27 Bloch, *The Principle of Hope*, p. 75.

He is willing even to endure great pain and face huge obstacles, even risking his own life, because he is sure that he fights for a worthy cause that will be realized possibly not in his lifespan, but in the long run. One may wonder, indeed, if any great invention and innovation would be possible in the realm of human endeavors without at least an ounce of hope in this sense – and even if a truly happy life is possible lacking such a broader perspective on one's own fate. If "Fortune favors the bold," as the old saying goes, fortune *loves* the hopeful.

2.2. The Case of Bonhoeffer

In *What is Orientation?*, Stegmaier discusses this mode of orientation in similar terms in the chapter on religious orientation. There, he does not speak of hope but defines the basis of religious orientation as being "an *unconditional trust in all situations, for all time*."²⁸ As an example for a religious life of hope, he mentions Dietrich Bonhoeffer, a German protestant theologian who was a leading member of the Confessing Church (*Bekennende Kirche*), which was an alliance of those parts of the protestant churches that resisted both the integration of the churches into the Nazi state and firmly opposed the quietist passivity that Lutheran orthodoxy demonstrated towards the new regime. Bonhoeffer insisted from 1933 on that it is not just a possibility for but a duty for an authentic Christian to oppose the Nazi regime, even if it meant violent opposition and martyrdom. Because he participated in attempts to assassinate Hitler, Bonhoeffer was arrested in 1943 and executed weeks before the capitulation of the *Wehrmacht* on April 9, 1945. He attached a poem to the last Christmas letter to his fiancée beginning with the famous lines "By loving forces wonderfully sheltered, / we are awaiting fearlessly what comes."²⁹ Stegmaier quotes this poem as an example of how religion "gives an orientation the *greatest possible confidence*."³⁰ Stegmaier still judges religious orientation from a skeptical point of view due to its alleged alienation from the actual world, but he acknowledges in this brief chapter at least the power of religious faith to deal with extremely desperate situations: "Religious orientation may give one the utmost courage to act, all the way up to sacrifice one's own life for others – and to maintain one's faith."³¹

28 Stegmaier, *What is Orientation?*, p. 198.

29 Quoted from Stegmaier, *What is Orientation?*, p. 201.

30 Stegmaier, *What is Orientation?*, p. 201.

31 Stegmaier, *What is Orientation?*, p. 202.

Bonhoeffer may well be seen as a Müntzer of the 20th century. What has to be emphasized here, again, is the fact that just like his 16th century precursor, Bonhoeffer saw Christian hope not as an excuse for simply waiting for God to make everything good but as a strong encouragement if not commitment to become active oneself in order to realize the Good. Thus, again, *authentic hope realizes itself*; it does not depend on the mystical intervention of a transcendent being: Bonhoeffer still serves as an inspiration for courageous resistance against tyrannical politics. Without his faith, he would perhaps have lost confidence at some point and would have collaborated with the Nazi regime damaging the cause of the resistance movement.

Accordingly, from a Blochian perspective it needs to be asked, 1) whether hope can be secularized and, 2) whether it should not be restricted to extreme situations of despair, as Stegmaier suggests, but rather should serve as a background mood shaping all human endeavors. Despite quoting religious examples frequently and even using religious language from time to time, Bloch explicitly takes up a secular, even atheist perspective.³² He criticizes the inherent passivity of religious hope and its deferral of hope into a transcendent realm – instead, he argues for the laborious struggle to realize even most religious hopes, such as the abolishment of death within the actual world.³³ Religious faith is replaced by the faith in historical progress. Of course, this is a still metaphysical orientation to some extent, but it does not rely on religious convictions in the narrow sense of the word. Actually, there were, for example, also many non-religious members of the antifascist resistance movement during WW II who acted just as bravely as Bonhoeffer;³⁴ Bloch himself, who spent most of these

32 In his later book *Atheism in Christianity. The Religion of the Exodus and the Kingdom* from 1968, transl. J. T. Swann (London/New York: Verso Books, 2009), Bloch coined the famous phrase “Only an atheist can be a good Christian; only a Christian can be a good atheist” (p. viii) which summarizes his ambivalent stance towards religion rather perfectly.

33 See Bloch, *The Principle of Hope*, pp. 1279-1280. Bloch discusses the possible abolishment of death using medical technology pp. 466-467.

34 Jean Améry, an Austrian writer and survivor of the Holocaust, made a similar observation in his work ‘Beyond Guilt and Atonement’: “With regard to the presented reality, with which both of them, Christians and Marxists, had dealt generously already outside, they showed distance, equally impressive and consternating, here, too. Their realm was not the Here and Now, anyway, but the Tomorrow and Somewhere: the Christians’ very far Tomorrow, outshone in a chiliastic manner, and the utopian-mundane Tomorrow of the Marxists. [...] Hunger was not plain hunger but the necessary consequence of either the denial of God or of capitalist decay, beatings or the death within the gas were either the renewed sufferings of the Lord or natural political martyrdom. In such a way, the early Christians had suffered and also the oppressed peasants of the German Peasants’ War. Each Christian was a Saint Sebastian, each Marxist was a Thomas Müntzer” (Jean Améry, *Jenseits von Schuld und Sühne. Bewältigungsversuche eines Überwältigten* [Stuttgart: Klett-Cotta, 2012], p. 38; my translation). I thank Elena Gußmann who is currently working on a comparison between Christian and socialist conceptions of martyrdom for pointing me to this most interesting passage.

years in great poverty and isolation and still managed to write *The Principle of Hope*, may count as an example.³⁵

Bloch himself develops such considerations in the chapter *Disappearance of lethal nothingness in socialist consciousness* in *The Principle of Hope*.³⁶ There he writes empathetically:

All take earlier flowers into the grave, among them some which are dried or have become unrecognizable. Only one kind of person can get by on the way to death almost without traditional consolation: the red hero. By professing till his murder the cause for which he has lived, goes clearly, coldly, consciously into the nothingness in which, as a freethinker, he has been taught to believe. His sacrifice is therefore different from that of previous martyrs; for they, almost without exception, died with a prayer on their lips, believing they had gained heaven. Religious ecstasy not only left the fear of death far behind it, it even in several cases [...] conferred insensitivity to pain. The communist hero, on the other hand, under the Tsar, under Hitler and ever since, sacrifices himself without hope of resurrection. His Good Friday is not mitigated or even cancelled out by an Easter Sunday on which he personally will be re-awakened to life. The heaven towards which the martyrs, in flame and smoke, stretched out their arms is not there for the red materialist; nonetheless the latter, as a professor of faith, superior, dies as only the early Christians or the Baptists were.³⁷

The reason for this attitude towards death lies, according to Bloch, in the fact that the “red hero” does not orient himself in the world only as a single person but as a fighter for a higher collectivist cause:

Personal consciousness is so absorbed into class consciousness that to the person it is not even decisive whether he is remembered or

35 The majority of the book was written in the US, whereto the Jewish-born Bloch had to flee during WW II. He often quotes American literature and popular culture. He is an ardent admirer of the emancipatory side of the history of “the land of the free and the home of the brave” but also an alert observer of those tendencies inside the American society which reminded him all-too-well of the continent he had to leave, e.g., the KKK (ibid., pp. 348–349). Obviously, the very aim of the book is to demonstrate how hope can still be conserved in this most hopeless historical situation.

36 See Bloch, *The Principle of Hope*, pp. 1172–1176.

37 Bloch, *The Principle of Hope*, p. 1172.

not on the way to victory, on the day of victory. It is not an idea in the sense of abstract faith but concrete community of class consciousness, the *communist cause itself*, which holds the head up here, without delirium but with strength.³⁸

Here it becomes clear that hope and faith in a universal goal are inevitably interconnected and entail each other: without hope, this faith stronger than death would not be possible; but without faith, hope would be abstract, without a goal. There has to be hope for something, and ultimately all particular hopes for something point towards the ultimate goal of a just society, for which Bloch uses the word “communism.” – Before we consider this utopian and political aspect of Bloch’s philosophy of orientation in more detail, we will have a look at an example from literature which may help to elucidate the notion of hope further.

2.3. The Paradigmatic Hoper: Emil i Lönneberga

Of course, if everything works sufficiently well mere courage might be enough, if our goal is to cope with the world in a way that serves our individual purposes. However, the borderline between the realms of mere pragmatic courage and a somewhat dubious hope is not so easy to draw. Especially when facing political questions, despair seems to be easily justifiable; and are not – as Stegmaier also acknowledges in the last chapter of *What is Orientation?*³⁹ – ultimately all human endeavors destined to fail for the sole reason of human mortality, if judged from a mere individualist perspective? Do we ultimately need hope in order to remain courageous not just in extreme situations but always? Maybe a person who denies this necessity just denies his or her *implicit* background hope. But just because hope may only become explicit in situations of extreme fear and despair, that does not mean that it is not always there, shaping our most profane endeavors, sheltering our life wonderfully, if we are prepared to let it in.⁴⁰

One last example should illustrate the necessity of hope as a human basic orientation. It is a chapter from the series of books *Emil i Lönneberga* (1963–1997)

38 Bloch, *The Principle of Hope*, p. 1173.

39 Stegmaier, *What is Orientation?*, pp. 275–286.

40 From a more political, slightly Nietzschean perspective, one might argue that hope may be the courage of the oppressed – the courage of those that have no reason for courage.

by the Swedish author Astrid Lindgren.⁴¹ In it, the book's hero, the young boy and prankster Emil, who grows up on a small, remote farm in the countryside of Sweden, acts as a paradigm of hope. This example should also demonstrate that hope is not just an attribute of famous martyrs and revolutionary fighters, but also something that is applicable to everyday life situations.

The story takes places shortly before Christmas. It begins with a rather ordinary, harmless situation. The whole family sits together in the kitchen – Emil's parents, the maidservant Lina, the farmhand Alfred, and Emil himself – and they talk about the upcoming holiday. Suddenly, Alfred curses. He hurt his hand with the sharp knife with which he had cut wood. A few days pass. At the dinner, Alfred complains that his wound is painful. An old woman connected to the farm, Krösa-Maja, immediately notes that he has sepsis. "Sepsis, a dangerous thing that is,"⁴² he says and her eyes shine.

Krösa-Maja exemplifies a world-orientation which is neither systematically discussed by Stegmaier nor by Bloch but is all-too-common in our current age: cynicism. She is a person that is not just desperate but who takes pleasure in the failure and the desperation of others. The cynical world-orientation is a reversed hope: The cynic hopes for the worst. If he acts from this attitude, he might even try in a sadistic manner to sabotage the projects of others actively, just to be affirmed in his pessimistic world view. The advantage of this orientation lies obviously in the avoidance of being disappointed, under the premise that most human endeavors are destined to fail. What the cynic does not understand is that his attitude and his behavior itself let things get worse. As Bloch puts it:

See the outcome of things as friendly, that is then not always foolish or stupid. The stupid drive to a good end can become a clever one, passive belief a knowledgeable and summoning one. [...] Unconditional pessimism therefore promotes the business of reaction not much less than artificially conditioned optimism; the latter is nevertheless not so stupid that it does not believe in anything at all. It does not immortalize the trudging of the little life, does not give humanity the face of a chloroformed gravestone.

41 See Astrid Lindgren, *Michel aus Lönneberga*, transl. Karl Kurt Peters (Hamburg: Friedrich Oetinger, 2008), pp. 307-334. I am using the German translation of the book where Emil is called Michel but will nevertheless use his original name. I will use the names given in the German translation for all other characters, however. When quoting from the book, I translate from this German edition.

42 Lindgren, *Michel aus Lönneberga*, p. 313.

It does not give the world the deathly sad background in front of which it is not worth doing anything at all. In contrast to a pessimism which itself belongs to rottenness and may serve it, a tested optimism, when the scales fall from its eyes, does not deny the goal-belief in general; on the contrary, what matters now is to find the right one and to prove it. For this reason there is more possible pleasure in the idea of a converted Nazi than from all the cynics and nihilists. That is why the most dogged enemy of socialism is not only, as is understandable, great capital, but equally the load of indifference, hopelessness; otherwise great capital would stand alone. [...] Thus pessimism is paralysis per se, whereas even the most rotten optimism can still be the stupefaction from which there is an awakening. [...] It is no coincidence that capitalism has striven to spread, apart from the false happy end, its own genuine nihilism.⁴³

One has to stress, however, that even the cynic, albeit involuntarily, partakes in the human struggle for the realization of hope since he correctly emphasizes certain aspects of the real world that tend to be downplayed by an uninformed hopeful perspective but should be taken into consideration by *docta spes*.⁴⁴ He can say, like the cynical devil Mephistopheles in Goethe's *Faust*, that he is a "[p]ortion of the might / That ever would be bad, but brings the good always to light."⁴⁵

The parents of Emil decide to wait for the next day before bringing Alfred to the doctor, who lives in Mariannelund. On that very night, however, a heavy blizzard begins. Within a short time, the whole region lies under a thick layer of snow and the blizzard even continues. Meanwhile, Alfred's condition gets much worse. He does not attend breakfast. The whole family plus Krösa-Maja gathers in his chamber where he is lying in his bed. Again, Krösa-Maja speaks the obvious facts, as it is the devil's job: "If these [red stripes] reach the heart, then it's over, then he dies."⁴⁶ She keeps on telling how many people she knows

43 Bloch, *The Principle of Hope*, pp. 445-446.

44 Bloch emphasizes this point on several occasions in *The Principle of Hope* (e.g., p. 150).

45 Johann Wolfgang Goethe, *Faust. A Dramatic Poem*, transl. John Wynnatt Grant (London: Hamilton, Adams, and Co., 1867), p. 42.

46 Lindgren, *Michel aus Lönneberga*, p. 315.

who have died from sepsis; at least half a dozen. As a solution, she offers to use a magic spell she knows.

Emil is enraged by this cynicism and by the hopelessness of the situation. He insists that Alfred has to recover and has to be brought to the doctor immediately. His parents, however, see the ugly truth:

In this moment, mom and dad looked at each other in a particular way. They knew that it was utterly impossible. No, it was simply unthinkable to get to Mariannelund today. [...] Emil's mom and dad wanted to help Alfred too, of course. They did not know, how, though, and thus they also didn't know what to respond to Emil. Emil's dad left the chamber without saying a word. But Emil didn't give up. He followed his father closely and cried and begged and screamed and threatened and was out of his mind. But, imagine, this time his dad did not get angry, he only said silently: "It's not possible, Emil. You know it yourself, it's not possible."⁴⁷

Emil's parents exemplify a merely courageous orientation towards this situation. They do not want something bad to happen; they genuinely try to find a realistic way to save Alfred. They are not willing, however, to do something stupid in this situation. Every adult would probably make the same decision: It would be careless if not utterly mad to go to Mariannelund in this situation and risk that not only one but more people to die.

Emil is deeply moved by this situation, since Alfred is his closest friend. He stays in his chamber with him until the next early morning. Then he makes a decision: "Finally, as it was four o'clock in the morning, Emil knew what he had to do. He had to bring Alfred to Mariannelund to the doctor, even if they both, he and Alfred, should die."⁴⁸

This is not courage, it is hubris. Emil is only a child. But it is still *docta spes*: Emil knows how to drive the farm's carriage and he has been to Mariannelund before. Before anybody awakes, he prepares the carriage and starts the journey. Even his horse is skeptical, however: "Lukas, however, turned his head towards him and looked at him suspiciously. It was mere madness to drive into this snow! Did Emil not understand this?"⁴⁹

⁴⁷ Lindgren, *Michel aus Lönneberga*, pp. 316-317.

⁴⁸ Lindgren, *Michel aus Lönneberga*, p. 318.

⁴⁹ Lindgren, *Michel aus Lönneberga*, p. 319.

Emil understands this well – but he sees no other option: “‘One gets strong when one *has to*,’ he explained to Lukas.”⁵⁰ The blizzard is so heavy that Emil has to shovel the way. After a while, he gets tired. He remembers the words of his father – but he stills keeps shoveling. Suddenly, the carriage gets stuck in a ditch. Emil tries to get it out until his nose starts to bleed – but the carriage does not move an inch.

Again, he is about to give up all hope. He just wants to lie down and sleep. But then he gets an idea: “But wasn’t there a farm somewhere nearby? It was the farm that Emil called the pancake farm. And suddenly he saw a gleam of light. An ounce of hope flared up within him.”⁵¹ He gets up and walks to the farm. The “pancake farmer” is reluctant but he sees that he just has to help in this situation. He gets this horse and helps to free the carriage.

He is not committed enough to escort Alfred and Emil to Mariannelund, however. Here again we see a merely courageous world-orientation at work. Emil, Alfred, and Lukas proceed on their journey through the blizzard alone. After a short while, Emil feels exhausted again. The horse is also tired and Alfred is silent, maybe even dead already. Emil falls asleep.

He dreams of Alfred and him swimming together in a lake in summer. Suddenly, the noise of a snow plough wakes him up. The way to Mariannelund is free for a short while! Finally, Emil reaches the doctor’s practice. Alfred is treated immediately. The doctor has a skeptical look on his face, however, which reminds Emil of Krösa-Maja. “I will do what I can do but I won’t promise anything,”⁵² he says. Here again, we see a courageous attitude.

On the day before Christmas Eve, a cured Alfred and Emil return to the farm. All are happy and celebrate Emil as a hero. Only Krösa-Maja cannot rid herself of her cynical attitude and insists that the sepsis might come back. All agree at the Christmas dinner that Emil will surely become something great when he gets older, maybe even the president of the local borough council.

The point of the story is that it almost perfectly illustrates how *docta spes* realizes itself. Of course, Emil is lucky. But ultimately, he is not saved by mere coincidence or an external *deus ex machina*; his bravery, equally driven by hope and friendship, combined with a sober assessment of the possibilities of the situation, is the main force behind Alfred’s rescue. The “pancake farmer”

50 Lindgren, *Michel aus Lönneberga*, p. 320.

51 Lindgren, *Michel aus Lönneberga*, p. 322.

52 Lindgren, *Michel aus Lönneberga*, p. 326.

does not appear out of nowhere and neither does the snow plough. Ultimately, Alfred is saved by modern medicine. These are all probable events, not wonders.

Obviously, in reality such hopeful attempts of heroism often fail and even end in tragedy. But the concrete alternative for Emil would have been to do nothing and watch Alfred die; an unbearable thought to him. He would have surely died – by taking the risk of bringing him to the doctor, Emil saved at least a small chance of rescuing him. A hopeful orientation enables one in such situations – which we all know from our everyday experience – to choose the right thing to do.

Again, we see that hope only works if one transcends mere individualism. Of course, Emil acts ‘selfishly’ inasmuch as he does not want to lose his closest friend. But it would be cynical to judge his care as a mere form of subliminal narcissism. From an egoist point of view, Emil could only have chosen to stay at home. Genuine hope does not exist as selfish hope – it broadens the horizon and helps one to also consider the well-being of others; and the consideration of the well-being of others helps us to develop a strong sense of hope.

2.4. Orientation Toward Utopia

To sum up the difference between Stegmaier’s and Bloch’s approaches towards the topic of orientation, it might be helpful to take a quick glance towards a most interesting aspect, that is only discussed briefly in Stegmaier’s analysis but plays a major role in Bloch’s work: the etymological origin of the word ‘orientation’ from the Latin word for the East, *oriens*, the direction of the rising sun (*sol oriens*). Stegmaier highlights the fact that the East possesses a special meaning not just in Christian Europe but in many cultures. The East is associated with Life and Light and thus has become the focal point of shared collective orientation. Before the invention of the compass, most maps were oriented towards the East and still today in most churches the altar points in this direction.⁵³ To stretch this point a little further, one might even say that from its beginning the Occident has understood itself by its shared orientation towards the Orient, which was associated with Christ, paradise, and eternal salvation.

In Bloch’s major work, the topic of the premodern West as a culture collectively oriented towards the East is such a major theme that it can be

⁵³ See Stegmaier, *What is Orientation?*, pp. 22-23.

touched here only very briefly. Four times in the book, he refers to the Latin phrase *Ex oriente lux*, 'The light (comes) from the East', with originates from the biblical book of Ezekiel: "[T]he glory of the God of Israel came from the way of the east"⁵⁴. Firstly, he applies this motto to Friedrich Hölderlin's hymn *Am Quell der Donau* ('At the Source of the Danube') from 1802, which Bloch enthusiastically interprets as an ode to youth and rebirth.⁵⁵ Already in this hymn, various aspects of the notion of the 'East' are mixed – it is associated (to name only a few aspects) not just with youth and rebirth, but also with the resurrection of Christ, the Jewish prophets, the literal rising of the sun, and also the geographical East, i.e., Asia.

In a second instance, Bloch quotes this motto when speaking about India as the earthly manifestation of paradise in medieval times and, because of the already well-known spherical shape of the earth, the actual goal of the great European expeditions.⁵⁶ Moreover, he also applies it to the light composition of Rembrandt's paintings⁵⁷ and, finally, to the current political struggle between the socialist East and the capitalist West.⁵⁸ In great detail, Bloch also analyses European phantasies about the Orient as a fairyland populated by incredibly rich and powerful sultans, heavenly beautiful women, and ghosts, demons, and other mythical creatures of all kinds.⁵⁹

Thus, Bloch demonstrates that the East used to be a focal point for Western utopian aspirations, a goal of courageous endeavors of all kinds, a powerful source of inspiration for both high and low culture in all its branches. Only this shared collective orientation in the literal sense of 'easternization' gave the West its unity and its political and cultural consistency. It was not a particularistic orientation, however, but intrinsically connected to ultimate values and phantasies that are, according to Bloch, shared by all cultures alike and define the idea of the Good, namely the overcoming of death, the glorification of youth and rebirth, and the victory of the Light over the Dark.

Without any doubt, Nietzsche (and, accordingly, Stegmaier) is right: "God is dead," and thus we have lost the utopian sense, which now seems mad and

54 Ch. 43, v. 2; King James Bible.

55 See Bloch, *The Principle of Hope*, p. 121.

56 See Bloch, *The Principle of Hope*, p. 762.

57 See Bloch, *The Principle of Hope*, p. 802.

58 See Bloch, *The Principle of Hope*, p. 1371.

59 He goes even so far as to claim: "[M]ost of the material for fairytales comes from the Orient, especially from India" (Bloch, *The Principle of Hope*, p. 362).

crazy to us. Postcolonial theory has taught us to be ashamed and very critical about the “orientalist” phantasies of our ancestors⁶⁰ and the vision of an entire culture oriented towards a single point of reference seems at least dubious to us. Accordingly, even terms such as *‘Abendland’* or ‘the West’ have lost almost all their meaning. Europeans of the past knew their place in the world by referring to somewhere else – they knew they were here by being there, by being no-where in the original sense of u-topia. Now they are anywhere – an entire continent has lost its orientation, its borders, its purpose.

With Bloch, we might ask if this apparent amplification of our horizon has not been an actual contraction. Without any doubt, we have lost the vast amplitude of utopian hopes which defined ‘the West’ in the past. If at all, it is either defined by a mere negative notion of liberal freedom or negatively by depicting ‘the East’ as a dystopia (be it socialist or Islamist ‘barbarity’). The utopian, universalist project of the West has been lost.

In another passage, where Bloch uses the term ‘orientation,’ he sketches a fundamental alternative to modern Western nihilism while speaking about the utopian vision of a “City of the Sun” proposed by the Italian philosopher Tommaso Campanella (1568–1639):

Order is here the Novum: *democratic centralism*, it is common organization of the processes of production, a common unified plan of human information and cultivation. Just as the detached political state dies away, so culture now loses its detached reification and hovering abstractness; it acquires a concrete framework, a concretely cohesive relief. Culture loses the arbitrary and aimless element, it gains the sharply orientating background of a What For; a new order of salvation, namely for human material^[61],

60 See esp. Edward W. Said’s often-quoted study *Orientalism* (New York: Pantheon Books, 1978), where orientalism is depicted one-sidedly as a “Eurocentric” particularistic tendency, not as an utopian element within Western culture which implies an universalist vision of a better society for *all*, Europeans and Non-Europeans, Christian and Muslims alike. Surely, this utopian element cannot be separated easily from the brutal side of European colonization – but neither should it be overlooked. – We will return to Bloch’s own criticism both of postmodernist cultural relativism and Eurocentrism later in this essay.

61 This sentence may sound a little bit odd to anyone familiar with the German notion of ‘*Menschenmaterial*,’ referring to ‘human resources’ used for militaristic or economic purposes. In the German original, Bloch speaks here of “*Menschenstoff*” (Bloch, *Das Prinzip Hoffnung*, p. 621; my emphasis), referring to the Aristotelian notion of the immanent potentialities of matter (Greek: *hylē*; in German often translated as *Stoff*) that are liberated by practice. Bloch, who already vehemently opposed WW I, makes his resolute rejection of any attempt to reduce men to mere “cannon fodder” (Bloch, *The Principle of Hope*, p. 425) very clear. In a good society, *Menschenstoff* would be salvaged in the sense that all men would be able to explore and develop the inherent potentialities of their bodies freely without blocking others from doing so.

approaches. Solely through this order does freedom attain its content, a defined, or at least more and more precisely articulated one. But what possibly emerges in the figure of order is and remains precisely nothing other than defined freedom; order is in contrast solely the space, which is nevertheless indispensable, for the defined freedom-content. Only the path via ‘Campanella’ (conceived as a pathos of order) thus leads to a democracy of ‘More’^{62]} (conceived as a pathos of freedom), in which no liberalist *juste milieu* is possible, in whatever form, but a realm of individuals could begin who have left behind them the freedom of isolated robbery and mild unorderedness and know well the best legacy of federation and centralization: profusion in unity. This is the same as *solidarity*, the richly animated harmony of individual and social forces.⁶³

It has to be noted here, that Bloch should be judged according to the same standards as other great philosophers such as Nietzsche and Heidegger: Obviously, he erred when glorifying “democratic centralism” or speaking about the Soviet Union in almost religious terms as the earthly paradise of the 20th century. After having moved to the GDR after 1945, where Bloch got an academic position for the first time in his entire life as a professor of philosophy at the University of Leipzig, he quickly became very critical of actual “democratic socialism” and actively supported the opposition against the communist regime. Accordingly, Bloch himself and many of his disciples were punished, and Bloch emigrated to Western Germany in 1961. He remained a *person non grata* in official Eastern Bloc philosophy until 1989. In his inaugural address at the University of Tübingen from 1961 he, the former admirer of Stalin, goes even as far as to compare him directly to Hitler and the Roman emperor Nero; such figures he sees as manifestations of “the exact opposite” of “true humanism.”⁶⁴

What should matter here is Bloch’s major point, that is not political but philosophical: He asks whether actual freedom, even on an individual level, can only be reached in a society that is collectively oriented towards a shared vision of the common Good. Given the current crisis of liberal democracy, this

62 As the German original (Bloch, *Das Prinzip Hoffnung*, p. 621) clearly shows, this is not a wordplay with the word ‘more,’ but Bloch speaks here merely about Campanella’s precursor Thomas More.

63 Bloch, *The Principle of Hope*, p. 534.

64 Ernst Bloch, “Can Hope Be Disappointed?” transl. Andrew Horon, in: *Literary Essays* (Stanford: Stanford University Press, 1998), pp. 339–345, here p. 343.

is a question that is of uttermost importance. The dream of a society based not on mere individualism but on solidarity, and thus on a richer notion of individuality, remains vivid and it surely does not necessarily imply any form of totalitarianism. At least, it may help us to reflect upon the boundaries of liberalism, even if we do not wish, for good reasons,⁶⁵ to follow Bloch's more radical conclusions about completely abolishing it.

2.5. Kluge's and Negt's Criticism of a Humanist Orientation

A possible objection to Bloch's philosophy has been raised by the philosophers Oskar Negt and Alexander Kluge in their study *History and Obstinacy*,⁶⁶ a very fragmentary work comparable to Gilles Deleuze's and Félix Guattari's major contribution to postmodernism, *A Thousand Plateaus*.⁶⁷ They dedicate a whole chapter of the book to a critical analysis of the "desire for orientation."⁶⁸ their first conception of orientation, they develop from the experience of naval navigation, namely the navigation at sea using the stars or the coastline as fixed guides. Generally, the "desire of orientation," in their analysis, is the desire to have fixed points of orientation to cope better with an everchanging world. In this sense, it is "the original form [*Urform*] of theoretical labor."⁶⁹ This conception of orientation differs from Stegmaier's as for him, orientation is not necessarily directed towards fixed points of orientation; on the contrary, he prefers flexible forms of orientation that change in accordance with the situation in which they are used.

They introduce a second kind of orientation, however. Referring to Theodor W. Adorno's and Max Horkheimer *Dialectic of Enlightenment*, they present the seafarer Odysseus as a paradigm for European civilization. According

65 One of the major objections that can be made against Bloch is his excessive optimism regarding the possibility of a good state apparatus that will ultimately abolish itself. The fate of socialism demonstrated clearly that liberal skepticism in this regard might be more justified than Bloch would concede.

66 Transl. Richard Langston et al. (New York: Zone Books, 2014).

67 *A Thousand Plateaus: Capitalism and Schizophrenia*, transl. Brian Massumi (Minneapolis: University of Minnesota Press, 1987). In the introduction to *History and Obstinacy*, Devin Fore remarks: "In its nonlinear construction, historical breadth, and catholic methodology, *History and Obstinacy* is comparable only to the philosophical nomadism of Deleuze and Guattari's *A Thousand Plateaus*" ("Introduction," in: Oskar Negt and Alexander Kluge, *History and Obstinacy*, transl. Richard Langston et al. (New York: Zone Books, 2014), pp. 15-67; 22-23).

68 See Alexander Kluge and Oskar Negt, *Geschichte und Eigensinn* (Frankfurt am Main: Zweitausendeins, 1981), pp. 1001-1012. I have to rely here on the book's original edition because this chapter was left out by the translators of the English translation because it was, as they remark in the beginning, "[d]eemed inessential by the authors for a book intended for an English-language audience in a new century" (Kluge/Negt, *History and Obstinacy*, p. 69). (Why this is the case seems unclear to me.) – All translations from this chapter are my own.

69 Kluge/Negt, *Geschichte und Eigensinn*, p. 1002.

to them, the continental desire for orientation as “being oriented towards herding [*Hütung*] of the immovable” is alien to the Greek hero who in contrast sails through a maritime, fluid world which is characterized both by everchanging dangers and the permanent possibility to change one’s situation by moving. Thus, Odysseus orients himself not as much towards a fixed point but to changing footholds. In this second mode of flexible orientation,

[a] merging of horizons takes place. It is entailed by the fact that each woe, each surprisingly appearing danger in history adds its own context of orientation autonomously to the previous contexts. It is a natural [*naturwüchsig*] anarchic production of various horizons of experience. Orienting abstraction has attempted to decrease the excess of confusion [*das Zuviel an Durcheinanderlauf*] of these horizons by selection and subtraction. The humanistic horizons thereby selected pay for it by being not at all the actual ones: deferral of horizons thus also insofar as the attempt of enlightening reason, i.e. reduction, has manipulated the horizon. This method is opposed to the kind of rationality which was developed in the classic period of Greece and Rome. The security of classical orientation is a yearning [*Sehnsucht*], no practice.⁷⁰

In the subsequent chapter, they distinct between four modes of orientation which are characterized by a growing abstraction from immediate experience: 1) Practical, natural orientations according to one’s own needs, desires, and one’s own historical situation, which gets its security from custom; 2) discursive orientation, which gets its security from the presence of another person; 3) orientation towards the far which characterizes the experimental curiosity of modern sciences; it lacks security; 4) orientation towards powerful social institutions, i.e., “classical orientation,” which is characterized by exclusion and repression; it is monstrous and opposed to the natural practical orientation but also to the other two modes.

Within this theoretical framework, Bloch would be a defender of “classical orientation” which according to him is not mere abstract “yearning” but concrete hope and is always present within concrete human endeavors. Even when a newborn child cries for food, it is, according to Bloch, already oriented towards

70 Kluge/Negt, *Geschichte und Eigensinn*, p. 1004.

utopia. He demonstrates this by showing how the desire for food inspired even the most sublime cultural, political, and scientific endeavors.⁷¹ Thus, for him, there is not a split but a continuum between practical, theoretical, and, ultimately, political forms of orientation. He is critical, however, when these 'higher' modes of orientation detach themselves from the 'lower' ones. To use a trivial example: If politicians forget about providing enough food for all citizens but orient themselves towards other goals, this is obviously bad according to Bloch. But he is also critical when people care primarily about their own well-being and detach themselves from a broader utopian horizon.

Thus, Negt's and Kluge's merging between an orientation towards existing social powers and the "humanistic horizon" of "classical orientation," that also Bloch uses, could not be farer from the truth. Quite on the contrary, the "classical orientation" allows a rigid critical assessment of existing social powers and inspires political resistance against them if necessary. Precisely because it allows one to detach oneself from one's historical situation, it is the strongest antidote against the danger of making false compromises with the existing social powers.

The failure of Negt's and Kluge's one-sided condemnation of fixed 'abstract' orientations becomes obvious when one considers their own example, Odysseus. Odysseus is not a mere adventurer who strays across the Mediterranean for its own sake; nor his desire to return home is a mere yearning detached from his concrete practice: He hopes to return home and his whole practice is guided by this both concrete and fixed goal. Only by upholding this hope on every day of his journey, Odysseus survives his many encounters with dangers of all kinds and manages to return to his beloved wife.

71 See esp. Bloch, *The Principle of Hope*, pp. 472-473, 886. Hunger is a major topic throughout *The Principle of Hope*. Besides the philosophical discovery of hope, it is Bloch's second great merit to be the first philosopher who analyzed the philosophical significance of hunger in great detail. This common philosophical ignorance with regard to 'base' desires like hunger, shelter, or clothing – which are all discussed by Bloch – can also be observed in Stegmaier's philosophy of orientation. – Interestingly, Kluge and Negt polemicize precisely against Bloch's recognition of hunger: "By reducing everything to an unambiguous materialistic point – it is something that can be grasped – Bloch is misled into making a violent proposition: that hunger is central. [...] It is the tendency to grasp and cling that motivates Bloch to take corporeal privation, and not any unnecessary eroticism (from the Protestant standpoint), as the foundation for the edifice of his thought" (Kluge & Negt, *History and Obstinacy*, p. 148). Only a point of view which is completely detached from actual practice can justify the claim that the "proposition: that hunger is central" is "violent" or even "Protestant." Of course, Bloch also deals with more sublime cultural hopes and also erotic desires in his major work; but he agrees with the famous maxim from Bertolt Brecht's *The Threepenny Opera*: "[T]ill you feed us, right and wrong can wait!" (Bertolt Brecht, *The Threepenny Opera*, transl. Eric Bentley [New York: Grove Press, 1964], p. 67.)

In *The Principle of Hope*, Bloch gives the myth of Odysseus yet another turn. For him, “Odysseus did not die in Ithaca, he journeyed to the unpeopled world.”⁷² According to various ancient and medieval sources, Odysseus did not stay in Ithaca after his return but set to sea again, exploring the borders of the known world and dying there. For Bloch, this ‘second Odysseus’ is yet another paradigm of a man inspired by hope who can never be satisfied.

Thus, the dualist approach of Negt and Kluge, and their one-sided appreciation of the allegedly ‘concrete,’ practical orientation against more abstract modes of orientation, is insufficient to account for actual human practice, which is always inspired by the two apparent opposites, hunger and hope, alike. Negt and Kluge cannot even imagine a society in which ‘lower’ and ‘higher’ human orientations are not antagonistic but resonate with each other. As we will see, this pessimistic model cannot even be used for the interpretation of scientific development. Negt’s and Kluge’s Odysseus would surely have stayed with the lotus-eaters, the Sirens, or Calypso, or would have sunk at some point – the actual Odysseus oriented himself towards a single fixed, but yet concrete and practical, goal and succeeded.

3. The Utopia of Digitization

One of the last utopias that is left these days seems to be precisely the utopia of digitization. In *The Principle of Hope*, not even the term ‘computer’ (or, in German, *Rechner*) is used,⁷³ but technological utopias play a major role in Bloch’s thought. In the lengthy 37th chapter of the book, *Will and Nature, The Technological Utopias*,⁷⁴ he deals with the entire history of technological insight from the invention of the fire until the most advanced technologies of his lifetime and demonstrates in great detail, how the histories of technological progress and technological phantasy (‘science fiction’ in the broadest sense of word) have always been interlinked. He argues that without (allegedly) mad and crazy visions of a technological improvement of the world oriented towards the bold vision of a common Good, technological progress would not have been possible at all.

72 See the title of the chapter on Odysseus (Bloch, *The Principle of Hope*, pp. 1023-1027).

73 The term ‘robot’ appears three times, however (see Bloch, *The Principle of Hope*, pp. 440, 899, and 901). It is used by Bloch only when discussing the dystopian possibility of a totally inhuman technocracy.

74 Bloch, *The Principle of Hope*, pp. 625-699.

Here, Bloch definitely has a point: Decisive technological innovation is rarely solely a result of a mere courageous, sober attitude and practical affordances, but it is often driven by insane obsession and apparently lunatic dreams. Often these experiments and endeavors in fact only led to disappointments – but technological progress is perhaps even accelerated more by all these failures than by actual successes. Moreover, crucial developments have often been the by-product of research attempts that turned out to be completely futile. Just as social and political, technological and scientific progress is without any doubt as much a result of hope, speculation, phantasy, and imagination, even outright madness in some cases, as it is a result of hard work, soberness, modesty, and mere courage.

Bloch demonstrates in detail the birth of modern science out of the spirit of medieval and early modern phantasies. In one short passage⁷⁵ he speaks about the vision of a perfect computation device, as it was first conceived by the medieval scholar Ramon Llull (1232–1315/16) and later taken up by the philosopher and mathematician Georg Wilhelm Leibniz (1646–1716). They both shared the conviction that a machine could be construed that, by itself, could judge the totality of human knowledge and bring it into a system of logical consistency. In fact, the bold attempts of these men laid the foundation for modern computers; Leibniz, for instance, already had the idea that binary coding could be used to construct such a machine in an efficient manner – an insight that was firmly linked with the conviction of the sacredness of the binary system which Leibniz believed to perfectly mirror the biblical history of creation.⁷⁶ One would have to add the importance of machines that could compute astronomical constellations, which were already known in ancient times⁷⁷ – whose purpose was to predict the future by means of astrology.⁷⁸

The advances of digital technologies from the Second World War on – a development which we precisely have in mind when using the term

75 Bloch, *The Principle of Hope*, pp. 651–654.

76 He claimed, for example, that it was no mere coincidence that the number seven, i.e., the number of the last day of the creation of the world, is written as '111' in binary numbers. See Georg Wilhelm Leibniz: *Brief an den Herzog von Braunschweig-Wolfenbüttel Rudolph August*, 2. Januar 1697, *Bibliotheca Augustana*, https://www.hs-augsburg.de/~harsch/germanica/Chronologie/17Jh/Leibniz/lei_bina.html (accessed September 1, 2022) and *Zwei Briefe über das binäre Zahlensystem und die chinesische Philosophie*, transl. Renate Loosen and Franz Vonessen (Stuttgart: Belser, 1968).

77 See the so-called 'Antikythera mechanism,' which is often presented to be the first computer, a small machine which could compute a large number of astronomical constellations and dates.

78 The connection between 'sober science,' utopian thought, and astrology is another major general theme of *The Principle of Hope* (see, e.g., Bloch, *The Principle of Hope*, p. 526).

‘digitization’⁷⁹ – have, of course, trumped even these mad visions of bold and crazy scholars. Who would have imagined and even hoped, for example, that the entire knowledge of humanity would be available from small devices such as smartphones? That audio-visual communication would be possible across the globe? That entire libraries could be stored on a small chip?

It can be easily demonstrated that the development of crucial digital technologies was accelerated by military necessities. Computer technology made a huge leap forward during the Second World War, the internet was designed as a decentralized network which should enable communication even after a major nuclear attack.⁸⁰ One of the main driving factors behind the rapid development and spread of digital technologies during the last few decades was, without any doubt, mere economic greed and pragmatical necessity, and not so much utopian hope.

It is hard to overlook, however, the utopian hopes that accompanied, inspired, shaped, and in some cases surely even *caused* the development of these technologies even in our ‘sober’ times. The design of many computer devices such as clamshell phones and touch screens was inspired by science fiction series like *Star Trek*, for example. Many of the developers of the 60s and 70s came from the alternative Californian counterculture. And one should not forget bold philosophical visions such as the philosophy of cybernetics of Gotthard Günther (1900–1984) who developed, partially inspired by contemporary science fiction in popular culture,⁸¹ almost at the same time as Bloch was working on *The Principle of Hope*, the idea that cybernetic technology could lead to a fundamental spiritual rebirth of humanity, a complete reshaping of human reality in the direction of Christian and Buddhist values.⁸² And also on the other side of the iron curtain intellectuals developed the idea that by

79 This broad, ‘bottom-up,’ definition of digitization as the process of increasing influence of digital technologies, most prominently computers, robots, and the internet, on the lifeworld is allegedly vague and could be seen as circular. More precise, ‘top-down,’ definitions, however, risk to either abstract from certain important features of digitization by narrowing it down to a certain ‘core’ or by defining it too broadly, thus missing the specifics of current social dynamics. Both failures at the same time can be found in Armin Nassehi’s study *Muster* (‘Patterns,’ *Muster. Theorie der digitalen Gesellschaft* [München: C. H. Beck, 2019]) for example, where he defines digitization from an Luhmannian perspective as being the art of organizing data by recognizing patterns in it. While this is certainly a central feature of digital technologies, it does 1) allow only to describe one element of digitization and 2) it is obvious that in this broad sense, even Stone Age men used ‘digital’ technologies somehow. (For the distinction between ‘bottom-up’ and ‘top-down’ approaches to digitization, see Abigail Bergeron’s submission to this essay prize competition.)

80 See Stegmaier, *What is Orientation?*, p. 255.

81 See Gotthard Günther, *Science Fiction als neue Metaphysik? Gotthard Günthers Kommentare zu “Rauchs Weltraum-Büchern,”* ed. Dieter von Reeken (Lüneburg: Dieter von Reeken, 2016).

82 See Gotthard Günther, *Die Amerikanische Apokalypse* (München/Wien: Profil, 2000).

means of cybernetics the obvious weaknesses of a centrally planned economy could finally be overcome and a viable alternative to market economy could be reached (a vision that was hardly taken up by the political elite, however – such as Bloch's philosophy; possibly, they could have learnt from Bloch's ethics of *docta spes* in this regard).⁸³ Also the German engineer Konrad Zuse, who is commonly recognized as being the builder of the first modern computer in the 1940s, dreamt in his later years of a "computer socialism" which could solve humanity's economic and ecological problems: "I imagine something like a kind of computer socialism [...], to accomplish what the idealists in the socialist countries in the East thought of but which they didn't manage to realize entirely."⁸⁴ – And even spiritist and occultist phantasies played a decisive role in the development of technologies that have been crucial for digitization such as the telephone or television.⁸⁵

The rise of the internet went likewise hand in hand with similar utopian visions of a liberalization of society, the democratization of knowledge, and the replacement of private property due to more collective forms of labor. Wikipedia was often portrayed as the realization of the dream of 18th century encyclopedists for example, a complete mirror of the knowledge of our time, easily comprehensible, available for almost anyone, and never fixed, thus easily keeping pace with the ever-growing speed of the change and growth of

83 One of the major intellectual figures of this short-lived interest in cybernetics was the Marxist GDR philosopher Georg Klaus whose works on cybernetics were also discussed internationally. See Sebastian Bähr, "Hammer, Zirkel, Kybernetik. In der DDR forschten Wissenschaftler an Grundlagen einer digitalen Planwirtschaft," in: *Neues Deutschland*, 3 Oct. 2020, <https://www.neues-deutschland.de/artikel/1142563.kybernetik-in-der-ddr-hammer-zirkel-kybernetik.html> (accessed September 1, 2022), Tom Strohschneider, "Der kurze Frühling der Kybernetik. Georg Klaus, die ökonomische Reformperiode in der DDR und die Planungsfrage" and "Kybernetik in der Welt des Menschen," in: Timo Daum / Sabine Nuss (eds.), *Die unsichtbare Hand des Plans. Koordination und Kalkül im digitalen Kapitalismus* (Berlin: Dietz, 2021), pp. 53–67 and pp. 68–75; for the Chilean "Cybersyn"-project, developed under the short reign of Salvador Allende, arguably the peak of these endeavors, see esp. Felix Maschewski and Anna-Verena Nosthoff, "Zwischen Science-Fiction und Science Fact. Die Kybernetisierung des Politischen," in: Timo Daum / Sabine Nuss (eds.), *Die unsichtbare Hand des Plans. Koordination und Kalkül im digitalen Kapitalismus* (Berlin: Dietz, 2021), pp. 215–230.

84 Quoted from Timo Daum / Sabine Nuss, "Einleitung," in: Timo Daum / Sabine Nuss (eds.), *Die unsichtbare Hand des Plans. Koordination und Kalkül im digitalen Kapitalismus* (Berlin: Dietz, 2021), pp. 9–21: p. 12; my translation. See also Arno Peters and Konrad Zuse, *Was ist und wie verwirklicht sich Computer-Sozialismus? Gespräch mit Konrad Zuse* (Berlin: Neues Leben, 2000).

85 With regards to television, see Stefan Andriopoulos, "Okkulte und technische Visionen," in: 1929. *Beiträge zur Archäologie der Medien*, ed. Stefan Andriopoulos and Bernhard J. Dotzler (Frankfurt a. M., Suhrkamp, 2002), pp. 31–53 (which even begins with a quote by Bloch). See Jeffrey Sconce, *Haunted Media. Electronic Presence from Telegraphy to Television* (Durham/London: Duke University Press, 2000) for a comprehensive study on the peculiar association of new electronical media with spiritism and occultism within American culture since their invention.

knowledge.⁸⁶ Open-source software was seen as a glimpse of communism⁸⁷ and even companies such as Facebook, Apple, Amazon, and Google were, at least in their founding years, driven by bold visions of not just technological, but also political and cultural progress.

Apple for example presented itself in the past as being a somehow ‘subversive’ alternative to the ‘evil’ companies IBM and Microsoft. In a famous TV spot from 1984, which is seen today as one of the most significant commercials of all time, Apple alluded to the novel *Nineteen Eighty-Four* by George Orwell. Its competitors, especially IBM at that time, are compared to the book’s “Big Brother,” while the slogan of the advert is: “On January 24th, Apple Computer will introduce Macintosh. And you’ll see why 1984 won’t be like 1984.” More recently, Apple coined the image of being the brand that ‘creative people’ use and its co-founder Steve Jobs became an idol for a whole generation of young and enthusiastic members of the ‘creative class,’ to which now also managers and entrepreneurs belonged.

Similarly, in its early years Google used the slogan “Don’t be evil” as its motto. In a *Letter of the Founders* of Google from 2004, the year in which Google became a ‘public company,’⁸⁸ one could read the bold words:

Google is not a conventional company. We do not intend to become one. Throughout Google’s evolution as a privately held company, we have managed Google differently. We have also emphasized an atmosphere of creativity and challenge, which has helped us provide unbiased, accurate and free access to information for those who rely on us around the world. [...] Our goal is to develop services that significantly improve the lives of as many people as possible. In pursuing this goal, we may do things that we believe have a positive impact on the world, even if the near term financial returns are not obvious. [...] We aspire to make Google an institution that makes the world a better place.⁸⁹

86 See for the dream of a comprehensive encyclopedia and esp. the last problem Stegmaier, *What is Orientation?*, pp. 271–272.

87 For a critical assessment of this perspective from a Marxist point of view, see Michael Heinrich and Sabine Nuss, “Freie Software und Kapitalismus,” in: *Streifzüge*, no. 1, 2002, pp. 39–43.

88 I use this term in quotation marks because it seems to be a bit misleading since ‘public companies’ in the common sense remain privately-owned. ‘Public’ means only that anyone can in principle buy shares of these companies on the stock market. A true public company would be either state-owned or would be directly owned and controlled in other ways by the ‘re-public’ in which it is located. – Thus, the term ‘public company’ appears to be intrinsically ideological.

89 Sergey Brin and Larry Page, “Letter from the Founders. ‘An Owner’s Manual for Google’s Share-

In 2012, Mark Zuckerberg similarly stated when his company went ‘public,’ that Facebook “was built to accomplish a social mission – to make the world more open and connected.” In 2017, he announced a slight change to the social network’s mission: “Give people the power to build community and bring the world closer together.”⁹⁰

More recently, Facebook tried to revive this old spirit by announcing that it wants to become not a mere social network but a “metaverse.” Zuckerberg describes this vision using the following words:

[Y]ou can think about the metaverse as an embodied internet, where instead of just viewing content – you are in it. And you feel present with other people as if you were in other places, having different experiences that you couldn’t necessarily do on a 2D app or webpage, like dancing, for example, or different types of fitness.⁹¹

The term “metaverse” was coined long ago to describe virtual realities, namely PC games like *Second Life* (2003), *Minecraft* (2009), and *Fortnite* (2017) – *Minecraft* being the best-selling video game of all time – in which a whole world, a parallel universe, is simulated which the players can manipulate; much like the real world, only with incredibly more possibilities. The massive change that these games induced within the world of video games is illustrated by a YouTube sketch by the Canadian comedian Ryan George.⁹² In this sketch, a reporter from the 90s used a time machine to enter our decade and tells a moderator from his time about his experiences. The moderator does not understand the point of the game at all in which you are entirely free to do what you want to do and have no laid-out goals or winning conditions.⁹³ Classic video games had little world-building elements in them; they were set in a given world and

holders,’ in: *Google Registration Statement*, August 18, 2004, https://www.sec.gov/Archives/edgar/data/1288776/000119312504142742/ds1a.htm#toc59330_1 (accessed September 1, 2022), pp. 27-33

90 Kathleen Chaykowski, “Mark Zuckerberg Gives Facebook A New Mission,” in: *Forbes*, June 22, 2017, <https://www.forbes.com/sites/kathleenchaykowski/2017/06/22/mark-zuckerberg-gives-facebook-a-new-mission/?sh=4c-1d2e001343> (accessed September 1, 2022).

91 Casey Newton, “Mark in the Metaverse. Facebook’s CEO on Why the Social Network Is Becoming a ‘Metaverse Company’,” in: *The Verge*, July 22, 2021, <https://www.theverge.com/22588022/mark-zuckerberg-facebook-ceo-metaverse-interview> (accessed September 1, 2022).

92 *Time Traveler Discovers Minecraft – THE FUTURE IS DUMB*, Ryan George, <https://www.youtube.com/watch?v=FczU-bofEok> (accessed September 1, 2022).

93 George produced a series of similar sketches which illustrate very well the huge technological and cultural leap that happened within the last 30 years.

you had definite goals you had to reach. Modern games in which you have neither make it much harder to orient yourself within them – but also give the players much more options to realize their own phantasies. They challenge the player’s creativity – not so much certain skills like dexterity, speed, or cleverness. While games that work according to a more traditional logic will surely remain popular, these new games interestingly get closer to the idealist notion of “play” as developed for example in Friedrich Schiller’s famous *Letters upon the Aesthetic Education of Man* from 1794⁹⁴ in which he defines playing as a truly free activity, an activity which has its goal in itself. By playing in this sense, aesthetic playing, human beings transcend the affordances of everyday life and the narrowness of mere functional reason. Thus, playing is seen as both the highest achievable realization of liberty and an education for liberty. The political significance of these considerations was especially emphasized by Herbert Marcuse in *Eros and Civilization* where he developed a philosophy of liberation very similar to Bloch’s: “In Schiller’s idea of an ‘aesthetic state,’ the vision of a non-repressive culture is concretized at the level of mature civilization.”⁹⁵ From this point of view, the recent developments within gaming culture are certainly “of the light.”

Additionally, Zuckerberg refers here to the increasingly improvement of technologies such as augmented reality glasses which allow a user, for example, to walk through virtual 3D spaces and blur the difference between real life and virtual reality. Zuckerberg gives utopian descriptions of this new ‘metaversal’ future: “You have your avatar and your digital goods, and you want to be able to teleport anywhere.”⁹⁶

This new world would have without any doubt a massive impact on our world-orientation. A truly new world of possibilities would arise. But what if this “metaverse” is as controlled by a few large companies as the internet is today? Would it resemble even more a dystopia in which commercial interests control even bigger parts of our life than today? Although Zuckerberg emphasizes in this interview that he envisions this new metaverse as being a common space in which, such as on the internet today, various models of organization (non-profit, government controlled, privately owned, ...) can coexist, such concerns were

94 Friedrich Schiller, *Letters upon the Aesthetic Education of Man*, in: *Internet Modern History Sourcebook*, ed. Paul Halsall (Fordham University, 2021), <https://sourcebooks.fordham.edu/mod/schiller-education.asp> (accessed September 1, 2022).

95 Herbert Marcuse, *Eros and Civilization: A Philosophical Inquiry into Freud* (Boston: Beacon Press, 1966), p. 197.

96 Newton, “Mark in the Metaverse.”

expressed, for example, by Miko Matsumura, the founder of the cryptocurrency exchange service Evercoin, in a post on Twitter:

[T]here isnt [sic] a “The Metaverse” that I want anything to do with. A single monolithic metaverse means a monopolist. We want a multiverse. A single metaverse is an impediment to human freedom. We need alternative places where we can escape to if the “main one” turns out to be a scam.⁹⁷

Interestingly, the “multiverse” is a conception used famously by Bloch. Bloch did not invent this idea but probably borrowed it from the scientific discourse of his time, namely the speculation about an infinite number of worlds which exist parallel to ours. (Which again demonstrates his interest in the utopian potential of scientific enquiry.) In his *Tübinger Einleitung in die Philosophie* (“The Tübingen Introduction in Philosophy”)⁹⁸ he develops the idea of a “multiverse” or even several “multiverses” “of cultures”⁹⁹ to contradict both the relativist conception of several independent cultures which can hardly communicate with each other (as can be found for example in the ultraconservative philosophy of Oswald Spengler, but also in various strands of postmodernism) and also the Eurocentric Hegelian idea of one single, straight development of humanity towards greater freedom:

This conception of freedom [Bloch’s own; PS] tolerated no “circles of culture” [*Kulturkreise*] where time is nailed upon space in a reactionary manner. One needs, however, instead of the conception of one single line [*Einlinigkeit*] a broad, elastic, utterly dynamical multiverse, a constant and often intertwined counterpoint of historical voices. To do justice to the vast non-European material one cannot work using the conception of one single line [*einlinig*], not any longer without bulges within the row, not any longer without complex new time-manifolds (problem of a “Riemannian” time).¹⁰⁰

97 Miko Matsumura, Tweet from July 23, 2021, *Twitter*, <https://twitter.com/mikojava/status/1418388763437195265> (accessed September 1, 2022).

98 Bloch, *Tübinger Einleitung in die Philosophie* (Frankfurt am Main: Suhrkamp, 1970). All quotes from this work are translated by me.

99 Bloch, *Tübinger Einleitung in die Philosophie*, p. 129.

100 Bloch, *Tübinger Einleitung in die Philosophie*, p. 146.

We see here once more how Bloch uses scientific ideas, this time of the German 19th century mathematician Bernhard Riemann, to inspire his own philosophical conception, in this case his ontological idea of the world not as a universe but as a united manifold of several multiverses with unique times. In the same passage he emphasizes, however, that the ultimate goal of all these cultural multiverses, their “Zielinhalt,”¹⁰¹ is one: the utopian struggle for a human world. Thus, they do not coexist independently but share common characteristics which enable a genuine dialogue between them.

“[A] broad, elastic, utterly dynamical multiverse” would be a good formula to describe the utopian vision associated with the internet in its ‘golden age’ as it is evoked both by Matsumura and Zuckerberg alike. A variety of multiple worlds, interconnected, which allows their inhabitants to jump from one world to the other and which enables multiple forms of interactions with the ‘real world,’ thus maximally expanding it.

Bloch’s conception of the multiverse goes beyond a mere pluralism, however. Neoliberalism in general often goes hand-in-hand with a narrative of a new ‘colorful’ world of infinite possibilities waiting to be conquered by the brave, in which multiple world-orientations are equally allowed. This idea is contrasted with the ‘old world,’ “the conception of one single line,” of universalism in which only one kind of world-orientation was permitted and others were seen as barbaric, crazy, or inferior.¹⁰²

By his conception of the multiverse, Bloch demonstrates clearly that a universalist approach can be reconciled with an acknowledgment of the incredible variety of cultural world-orientations: While all cultures are thought to have the same basic fundamental orientation, Bloch recognizes that these orientations can be realized in very different manners. This agenda, both universalist and pluralist at the same time, is already at work in *The Principle of Hope* where Bloch’s demonstrated how hope is the grounding motivational force in all spheres of life and all cultures alike, without synthesizing these particular hopes in a Hegelian totalizing manner. While in socialism, in his account, all

101 Bloch, *Tübinger Einleitung in die Philosophie*, p. 145.

102 See, e.g., the major works of postmodernism Jean-François Lyotard, *The Postmodern Condition. A Report on Knowledge*, transl. Geoffrey Bennington and Brian Massumi (Minneapolis: University of Minnesota Press, 1984) and *A Thousand Plateaus* by Deleuze and Guattari. The affinity between the postmodernist vision of a borderless, decentralized new world of infinite possibilities, which is celebrated enthusiastically by these thinkers, and the internet is demonstrated by the book cover of the German edition of *A Thousand Plateaus* (Gilles Deleuze and Félix Guattari, *Tausend Plateaus. Kapitalismus und Schizophrenie*, transl. Ronald Voullié [Berlin: Merve, 1993]), which uses a word cloud long before it became an ordinary way of presenting content online.

particular hopes can find their proper place, he follows a more Nietzschean, i.e., perspectivist, approach in this regard. In his inaugural address for the University of Tübingen from 1961, Bloch declares: “The act of going beyond takes many forms; philosophy collects and contemplates all of them, under the sign of *nil humani alienum* [nothing human is alien].”¹⁰³

The problem of the pluralistic approach, the mere vision of infinites openness, is first and foremost that it cannot give a guideline of how one should orient oneself in this new world of endless possibilities. This results not only in a relativist state without orientation – but also in its opposite, a narrowing of one’s own perspective as a desperate attempt to stay oriented in a confusing situation, the retreat to individual ‘filter bubbles.’ Both tendencies presuppose and reinforce each other; they are only apparent antagonists.

In recent debates, this original goal of an open world has already been criticized heavily. On the one hand, it is said that it allows dubious opinions that are dangerous for society to spread freely as well as information; on the other hand, it is said to be a pseudo-openness as it is ultimately controlled not even by democratically elected governments but by private enterprises (this is Matsumura’s concern).

Bloch’s conception of the multiverse could help to orient oneself towards the multiple orientations enabled by digital technologies: All orientations are permissible that are connected to the ultimate orientation of a just society, a human world, i.e., are “of the light.” This perspective includes these two above criticisms but gives them a broader justification. The vision of an open, colorful world is not seen as an end in itself but is embedded into a broader narrative of human history as a common endeavor to work and fight for a better world. Only this point of view allows to criticize certain parts of the internet, and digitization in general, as being ‘of the dark’ without referring to vague ideas of political correctness, public order, or a particular moral codex of how people should behave.

Of course, the question whether orientations are “of the light” and which are not has to be an object of public, open debate; it cannot be determined once and for all by politicians, intellectuals, or philosophers. But in order to have meaningful debate, one has first to determine its basic orientation: Liberal values? Human rights? Scientific truth? Ordinary morality? The problem of

103 Bloch, “Can Hope Be Disappointed?”, p. 345.

current debates on the openness of the internet is obviously that they lack such a shared outlook and thus remain idle.

Steve Jobs died ten years ago, Google abolished its former motto in 2018, as it perhaps made the company too vulnerable to moral criticism,¹⁰⁴ and Apple, along with its competitors, is now seen itself as an Orwellian “Big Brother” which cares little about the privacy of its users and employs digital technologies to surveil them and to control their behavior.

All these hopes from the ‘golden age’ of the free internet (which lasted approximately until the 2010s, when it became more and more controlled by big business) have not been entirely naïve, however. If we put on maybe not rose-colored but at least slightly pinkish glasses, if we orient our gaze towards utopia and its concrete manifestations in the actual world, it can hardly be doubted that the world has in many regards been made more open, more democratic, and more liberal due to the advance of digital technologies – or at least, that digital technologies could have the potential to foster such developments.

One could easily image, for example, that in the near future, roads will be much safer and transportation much more efficient due to automatic driving, or that a lot of labor, now painful, will be done by robots that do not even have to be programmed because they will learn by themselves how to do their tasks in the most efficient way. Even problems such as loneliness and sexual dissatisfaction might be significantly mitigated by digital communication and robots – maybe in ten or twenty years, there will be affordable robots that serve as prostitutes or even charmante conversational partners for more subtle needs. Moreover, the search for a human partner will surely be further simplified by digital technologies and it will be even easier and more satisfying to be in a long-distance relationship.¹⁰⁵

More and more parts of our knowledge will be made publicly accessible and completely searchable – and it will be translated into all languages to a

104 The motto of Google’s new parent company, Alphabet, became “Do the right thing” in 2015. In 2018, Google removed this sentence from the preface of its code of conduct.

105 I stress these two aspects not only following Bloch’s principle of “*nil humani alienum*” – which allowed him also to investigate sexual, erotic, and romantic utopias in great detail –, but because one of the main usages of the internet is in fact for pursuits of pornographic and/or romantic nature; an aspect which is often overlooked in philosophical investigations of this matter. Both dating and pornographic website are among the most popular – and most profitable. In 2021, among the ten most visited websites worldwide were two porn sites for example (see J. Clement: “Leading websites worldwide 2021, by monthly visits,” in: *Statista*, March 22, 2022, <https://www.statista.com/statistics/1201880/most-visited-websites-worldwide/> [accessed September 1, 2022]). Often this aspect of the internet is morally condemned and criticized especially by feminist activists. While I acknowledge that in many regards these possibilities are clearly ‘of the dark,’ I attempt here to present them in a less moralistic manner.

reasonable quality. Maybe even daring utopias such as the universal translator devices of Star Trek will be a reality in a few decades – and new advances in 3D printer technology already boldly go in the direction of replicators. And the “metaverse” as envisioned by Zuckerberg comes close to a world in which ‘beaming’ is possible.¹⁰⁶

In principle, digitization could also contribute to the democratization of society. All protocols of public institutions could be made easily accessible, one could follow every meeting of any public council and comment on it. One might also introduce digital ballots in which the majority of the population could vote over major decisions live from home. The dissident GDR philosopher Rudolf Bahro developed already in the 1970s the idea that computers and digital communication technologies could serve as a tool for a radical democratization of society and of economic planning in particular. In his opinion, digitization had solved the ancient problem of the popular assembly in a pragmatic regard: an idea, that was directed against Western representative democracy and Eastern centralism alike.¹⁰⁷

If not democratized, the economy could at least be made significantly more efficient by using algorithms for the distribution of goods: They could predict the need for certain goods in certain areas at certain spots in time and manage both their production and their delivery automatically. If automatization proceeds further, this could be turned even into an entirely effortless process (at least from a human point of views): A computer program could direct the construction of entire factories, residential buildings, shops, of entire cities according to the calculated needs of the population. And this could also help a lot to organize the economy in a more ecologically healthy manner.¹⁰⁸ Cockaigne has possibly never been so close ...

106 See Newton, “Mark in the Metaverse.”

107 See Alexander Amberger and Inja Jacobsen, “Ökologische Planwirtschaft bei Harich, Bahro Havemann – und Malm,” in: Timo Daum / Sabine Nuss (eds.), *Die unsichtbare Hand des Plans. Koordination und Kalkül im digitalen Kapitalismus* (Berlin: Dietz, 2021), pp. 76–90: p. 84.

108 For recent debates about the new possibilities for a global planned economy using digital technologies, see the comprehensive anthology Timo Daum / Sabine Nuss (eds.), *Die unsichtbare Hand des Plans. Koordination und Kalkül im digitalen Kapitalismus* (Berlin: Dietz, 2021). Throughout the entire volume, esp. Amazon is discussed as an example of how state-of-the-art digital technologies and Big Data could serve as a tool for efficient socialist planning (see in particular Armin Beverungen, “Kybernetischer Kapitalismus? Amazon, algorithmisches Management und Aneignung,” in: Timo Daum / Sabine Nuss (eds.), *Die unsichtbare Hand des Plans. Koordination und Kalkül im digitalen Kapitalismus* (Berlin: Dietz, 2021), pp. 95–109). Unfortunately, Bloch’s contributions to a utopian perspective on digitization is completely overlooked by these articles. – China is already using digital technologies to a large extent in order to make its mixed economy more efficient (see Sun Wei: “Sozialismus im Anfangsstadium.” China zwischen Plan und Markt,” transl. Oliver Hörl, in: Timo Daum / Sabine Nuss (eds.), *Die unsichtbare Hand des Plans. Koordination und Kalkül im digitalen Kapitalismus* (Berlin: Dietz, 2021), pp. 125–139, and Timo Daum, “Real existierender Plattform-Sozialismus? Voraussage-Ökonomie with Chinese characteristics,” in: Timo Daum / Sabine Nuss (eds.), *Die unsichtbare Hand des Plans. Koordination und Kalkül im digitalen Kapitalismus* (Berlin: Dietz, 2021), pp. 140–153).

And even the boldest of all utopian hopes, the dream of eternal life, comes astonishingly tangible when you imagine that even now one could easily store all the data he or she has collected over the course of his or her life (including, for example, all short messages, all e-mails, all photos taken by cell phones, all GPS data, ...) on a relatively small device for a virtually infinite timespan. Future generations, given humanity will not fall prey to a major catastrophe, will be able to reconstruct even the most intimate details of our everyday lives with a precision unimaginable decades ago.

And this list could proceed almost endlessly: Without any doubt, digitization has broadened the scope of human endeavors to such a large extent that even the broadest utopian perspective might still be too narrow to make an overview of even a small portion of it; it has accelerated human progress to such an extent that human phantasy, in former times outperforming actual technological possibilities by far, now struggles to keep pace with the incredible speed of their appearance.

4. Digitization's Harsh Reality

... and yet Cockaigne is as incredibly far as ever. This is demonstrated strikingly by the trouble that even the most digitized countries of the world have to face at the moment: Digital technologies made lockdown policies bearable from a social and political point of view – they could not prevent its (apparent) necessity. In Germany, for example, the *Corona-Warn-App* which was developed by a conglomerate of 25 leading tech firms and was promised to be a major weapon within the 'war' against the virus, turned out to be relatively useless not just because too many people were afraid to install it but because of several technological issues.¹⁰⁹ And even if digital technologies helped to predict climate change, global warming remains a major threat to humanity. Thus, the possibility that within the next decades a major catastrophe could occur that would wipe out the entire digital civilization cannot be ruled out completely – and, similarly, the possibility that precisely these utopian technologies might be used for the most dystopian causes.

109 See Markus Beckedahl, "Die Corona-Warn-App hat ein Kommunikationsproblem," in: *Netzpolitik.org*, July 29, 2020, <https://netzpolitik.org/2020/kommentar-die-corona-warn-app-hat-ein-kommunikationsproblem/> (accessed September 2, 2022) and Andreas Becker, "Corona-App: Zu viel Datenschutz oder zu wenig?" in: *Deutsche Welle*, 17 Dec. 2020, <https://p.dw.com/p/3mowb> (accessed September 2, 2022).

Every point just listed surely raises dozens of questions and objections, provokes different kinds of fear and sorrow, possibly even despair. A dream is sometimes not that far from a nightmare: Cockaigne could realize itself as a dystopia of a humanity enslaved by machines as depicted in the *Matrix* movies. From the early 20th century on, science fiction has been obviously more a dystopian than a utopian genre: Even in *Star Trek*, the Borg collective depicts the nightmare of an entirely digitized humanity in which all individuality is lost and already in the 40s Georges Orwell envisioned a society of total thought control in his novel *Nineteen Eighty-Four*, which is often quoted today to describe current political and technological developments. Sometimes, these objections obviously stem from a particularistic perspective and are thus almost neglectable from a philosophical point of view: Of course, it might, for example, be a social problem if even skilled workers such as translators or prostitutes lose their jobs – but in principle, digitization also creates many new jobs which are often more attractive and less monotonous. Also, while simple translations or basic erotic services could be easily accomplished by computers and robots, more complex and difficult tasks such as translating poetry or helping to realize more subtle erotic phantasies will probably not be doable by computers anytime near in the future – and such services might be held even in higher esteem and paid better. Certain powerful elites in culture, economy, and politics may accordingly fear for the devaluation of their privileges – but we should be more than ready to simply ignore these concerns in the name of overall social progress.¹¹⁰

Other concerns are more grounded. In principle, the power of digital new media could be used to democratize our political discourse – but in fact they

110 Such a critique is developed in great detail in Paul J. D'Ambrosio's and Hans-Georg Moeller's study *You and Your Profile* (New York: Columbia Press, 2021). Here they criticize the common critique of social media as being somehow 'unauthentic' and 'primitive' as elitist, cultural conservative, and even racist in some cases since the uncontrolled use of social media is often attributed to Asian people. On the contrary, they describe the rise of social media to cultural dominance as a liberating tendency which has helped to democratize public discourse and has changed the life of millions for the better. Although Moeller's and D'Ambrosio's perspective is a little naïve and at times even apologetic – they praise social media not for their potentials but they praise their capitalist usage which is so obviously harmful in many cases –, their study presents a good antidote to reactionary criticisms of social media as they are developed prominently by the neo-Heideggerian German-Korean philosopher Byun-Chul Han (see his works *The Burnout Society*, transl. Erik Butler [Stanford: Stanford University Press, 2015] and *The Transparency Society*, transl. Erik Butler [Stanford: Stanford University Press, 2015]), and D'Ambrosio/Moeller, *You and Your Profile*, pp. 70, 77–78. They rightly emphasize the fact that social media are tools that can be used in more or less informed ways – although they tend to underexpose the subtle mechanisms with which social media providers are manipulating their customers. – Interestingly, Moeller and D'Ambrosio refer to Stegmaier's *Philosophie der Orientierung* when discussing Luhmann's conception of second-order orientations (see D'Ambrosio/Moeller, *You and Your Profile*, p. 267; fn. 3). They view the permanent presence of second-order observations as one of the main characteristics of social media (e.g., when I post a picture on Instagram because I think that my followers will like it).

give power to cunning demagogues and their skilled supporters. Open discourse means all-too-often openness for right-wing populism and conspiracy ‘theories’ which can indeed be spread by the internet more easily than ever before. There was the hope that digitization could be an opportunity for small business and courageous entrepreneurs – but now we mainly see the usual process of concentration of capital and monopolization.

Instead of a liberating, digitization is often portrayed as a repressive force. Its power enables governments and companies to control and manipulate billions of people by one click of the mouse. Highly skilled workers lose their jobs and find themselves in poorly paid positions in the delivery industry. Housewives are forced to sell knitted material or private pictures for almost no money. Even Wikipedia has been on many occasions turned into a mere intensifier of mainstream ideology and a repressor of truth.¹¹¹ And this list could be continued endlessly.

How can this striking ambivalence if not absurdity of digital progress be explained? The answer for this can already be found in Bloch, who was not naïve at all, especially regarding technological developments.¹¹² For him, the decisive problem does not lie within the new technologies themselves but within the sociocultural context in which they are used. Virtual reality has, for example, often been described as a major threat to cultural life since it allegedly hinders people from confronting themselves with reality and enables them to flee into a merely imaginary world of their dreams. This is obviously, indeed, a major problem – but is it not a problem of reality as such and not of virtual reality in particular? If there was not such a huge gap between reality and dream the need for a flight into virtual reality would not even exist – but maybe this bad reality should be altered. If virtual reality technologies would just be abolished, their consumers would simply find new ways to avoid painful experiences – or become psychologically ill.

Also, it is obvious that in a capitalist society monopolization takes place and that in representative democracy powerful groups try everything in their might to manipulate public opinion in their interest. In the republican Athens and Rome, politicians paid philosophers to teach them clever rhetorical tricks,

¹¹¹ See, ironically, the comprehensive article “Criticism of Wikipedia” on Wikipedia itself: https://en.wikipedia.org/wiki/Criticism_of_Wikipedia accessed September 2, 2022.

¹¹² See, e.g., Bloch, *The Principle of Hope*, p. 477.

later the press was used, in the 20th century mass media, and now Facebook, Twitter etc. This comes to no surprise.

Moreover, the problem of mass unemployment or precarization could be solved easily within a just society without using bad means such as simply forbidding the introduction of certain technologies or cutting wages in order to make labor so cheap that their introduction would make no sense economically. People could get paid a decent unemployment benefit and be supported by the state to reorient themselves professionally. Moreover, the collective working time could be distributed more fairly so that all would benefit if one sector is automatized to a large extent.

In fact, Bloch correctly points to the fact that capitalism in many cases systematically hinders technological progress instead of fostering it as it is often claimed: New technologies are only introduced as soon as they can be applied in a profitable way – which means either that technologies are introduced that are bad for the overall society (such as, possibly, nuclear energy which is incredibly profitable only because the whole society takes its ecological risks – and the same goes probably also for fossil fuels) or that technologies are not or very late introduced because they would not be profitable. The classic examples are, of course, technologies that would save labor but are not introduced when labor is too cheap.¹¹³

5. How Could Digitization Serve Us Today?

Accordingly, both the conservative pessimistic stance towards digitization and the naïve Silicon Valley utopianism should be equally rejected. Neither is digitization bad in itself – on the contrary could it help to solve many of humanity's most ardent problems such as hunger, the climate change, or even sexual frustration and social isolation. Nor is it in itself beneficial: Just as the same knife can equally serve as a deadly weapon and has a harmless kitchen tool, digital technologies can equally serve good and bad, universalist and

113 See the section *Late bourgeois curbing of technology, apart from the military kind* within the chapter on technological utopias (Bloch, *The Principle of Hope*, pp. 658–661). The main thesis of this section, that is already revealed in its title, is at least plausibilized by the fact that most technological advances of the last few decades originated mainly in the military sector. If you compare the technological advance within the military sector to that in other fields, a certain imbalance can certainly hardly be overlooked. This was, however, both the case in the Eastern and in the Western sphere. – Ironically, Bloch calls the discovery of atomic energy “the colossal discovery of our age” (ibid., p. 660) in this section and praises the SU for having built the first nuclear power station while the US dropped the first atomic bomb (This is true by the way: Whereas the first experimental nuclear reactor was built within in US in 1951, the first actual nuclear powerplant was built near Moscow in 1954.)

particularistic purposes. Accordingly, our debate should focus on our overall economic, social, and cultural system not just on a symptom of it.

It is easy to say, of course, that in a perfect society we would have a perfect digitization. In this last section, I would like to dare to consider the question more concretely what particular steps could be done in order to give back digitization a more human face – and by this, I mean steps beneath a worldwide revolution. Evidently, these considerations could, at best, give some footholds for orientation, they should not be understood as a ‘masterplan.’ Both Stegmaier and Bloch agree that serious philosophy can deal with the concrete affordances of actual practice only from a rather abstract, detached point of view. It is exactly this philosophical view from afar, however, that might help us to get a broader outlook and thus comprehend complex phenomena such as digitization more concretely than a merely practical, particular perspective would allow.

5.1. Against Digital Monopolies

The most important and ardent step towards to more democratic digitization would be a consequent breakup of digital monopolies, trusts, and syndicates just as it was undertaken before and after the Second World War. We need a Digital New Deal.¹¹⁴ Today, digital infrastructure is even more important than services

¹¹⁴ This term was taken up by a European thinktank. On its website, its president founder, Olivier Sichel, states its mission as follows: “We must create an enlightened, European and humanist Internet” (“Our missions,” *Digital New Deal*, <https://www.thedigitalnewdeal.org/en/our-mission/> (accessed September 2, 2022)). The thinktank gives a rather well description of the current situation and its ambiguities, highlighting esp. the particular difficulties of the Europa Union in this regard: “Far from being a sector on its own, digital has become a transformative force of all human activities. The scaled effects that stem from the digital economy favor a *winner-takes-all* logic. This new paradigm has allowed the emergence of large companies often called *platforms*, so as to better underline the pivotal role of data in the value chain reorganization of numerous economic sectors. This digital reorganization undermines competitive, economic and geopolitics balances. The United-States enjoys certain dominance upon the operators of this transformation, followed closely by the main emerging zones that are Asia and South America. With only 2% of the global capitalization of digital companies, Europe is pushed into the background as a passive witness of the digital revolution. This contributes to reducing Europe to a consumer’s reservoir that is passively producing personal data, thus rendering it dependent on these American and Asian platforms. The current distribution of forces raises fears about a European economic *feudalization* and forces us to answer every question regarding the digital revolution. It is essential to address these issues if we do not want to relegate the thinking of our digital future to the current dominant platforms. The sovereignty of States is challenged. Large companies providing important services, considerable by some as utopian, undermine the role, and by extension the sovereignty of States. These services are relevant of numerous responsibilities of the state, such as taxation, security, or even the creation of new money. The obsolescence of current legislation becomes obvious: copyright, intellectual property and media laws turn out to be abruptly unsuitable when faced with the reality of current practices. We must ensure the emergence of new legal concepts such as net neutrality or the right to be forgotten. Apart from the economy and the law, the very conception of our lives is subject to disruption. Ethics must be called in when it comes to the evolution of privacy, or in the face of the digital-biotechnology alliance, as a harbinger of deeper changes. Faced with a dynamic digital revolution, the main concern is to actively participate in it, not only to endure it. This demands an extensive analysis

such as the post, the railroad network, public health, or education. Regarding these four examples, almost no one would deny the fact that such crucial public services should not be solely and predominantly in private hands; especially those that are essential for public safety. Surely, also state ownership would not be a good solution but could even pose a greater danger to public freedom than private monopolies which (hopefully) pursue no political agenda. An alternative would be either to radically split up trusts such as Apple, Microsoft, or Amazon into smaller companies¹¹⁵ – or to transfer them into the hands of non-profit foundations. Well-established institutions such as Wikimedia Foundation, Mozilla Foundation, and also the messenger Telegram demonstrate to a large extent that such corporations act in a more responsible manner than profit-oriented organizations – although they are not perfect, of course.¹¹⁶

Equally, many non-proprietary software projects such as LINUX or OpenOffice demonstrate that non-profit-oriented software projects can yield astonishing results. It is simply not true that technological innovation can only take place under the pressure of the marketplace: Also the creative ambition of developers can lead to great results – without having the many disadvantages of commercial software such as its vulnerability to virus attacks, its high cost, and its tendency to observe, control, and patronize customers.

The growing power of digital trust is not just an economic problem (since it prevents the fair access to digital markets both to smaller providers and to customers; and controlling the access to digital markets nowadays means more and more controlling entire markets¹¹⁷) but also a political one. Most of these digital trusts are to a smaller or larger extent also media companies, which could easily use their power to foster a specific ideological agenda. The political influence of this lobby is obvious for example when you have a look at the major taxation scandals in which they have been enlaced over the last couple of years: Their very business models allow them to place their formal

of the current transformation mechanism in order to formulate concrete and balanced regulatory measures, enabling a smooth evolution which would not restrain innovation” (ibid.).

115 For a critical analysis of Amazon which comes to a similar conclusion, see Danny Caine, *How to resist Amazon and Why. The Fight for Local Economies, Data Privacy, Fair Labour, Independent Bookstores, and a People-Powered Future* (Portland: Microcosm, 2021).

116 The collectivization of digital infrastructures and its problems are discussed in detail in Dominik Piétron, “Öffentliche Plattformen und Datengenossenschaften. Zur Vergesellschaftung digitaler Infrastrukturen,” in: Timo Daum / Sabine Nuss (eds.), *Die unsichtbare Hand des Plans. Koordination und Kalkül im digitalen Kapitalismus* (Berlin: Dietz, 2021), pp. 110–124.

117 For an in-depth analysis of this aspect of digital capitalism, see Philipp Staab, *Digitaler Kapitalismus. Markt und Herrschaft in der Ökonomie der Unknappheit* (Berlin: Suhrkamp, 2019).

headquarters wherever taxes are lowest easily, thereby depriving states from billions of dollar each year. Their political power is, apparently, so strong that even left-leaning politicians are very reluctant when raising this issue, although it has been taken up by many politicians recently.¹¹⁸

It has been striking too, how the digital trusts have supported, in various regards, the lockdown policy regarding the Corona plague.¹¹⁹ They have been very collaborative, for example, in supporting governments to prevent the spread of “fake news” concerning the plague, censoring or at least marking even statements made by powerful politicians such as Donald Trump. The lockdown policy was obviously strongly endorsed by major figures of digital industries such as Bill Gates,¹²⁰ Mark Zuckerberg,¹²¹ and Jeff Bezos¹²² alike – all of which profited from it directly economically to a massive extent,¹²³ while

118 Actually, it has been at least one minor topic of the last election battle in Germany. If the new government will take sufficient measurements in this regard remains to be seen.

119 Since ‘pandemic’ is a very specific term of art that has been problematized by many scholars as being not objectively but a result of systematic lobbying by the pharma industry, I consciously refrain from using it in a scholarly context using the broader term ‘plague’ instead which leaves open the controversial question how dangerous the ‘Corona pandemic’ actually is and if it deserves this name (see, e.g., Michael Bonsall, Benjamin J. Singer, and Robin N. Thompson, “The effect of the definition of ‘pandemic’ on quantitative assessments of infectious disease outbreak risk,” in: *Scientific Reports* 11, 2547 (2021), <https://doi.org/10.1038/s41598-021-81814-3> (accessed September 2, 2022)).

120 He was not just one of the main supporters of the vaccination policy (for example, he was given ten minutes of airtime to state his point of view on this issue on the major German newscast *Tagesthemen* on April 12, 2020 [see *Tagesthemen*, April 12, 2020, 9:45 pm, <https://www.youtube.com/watch?v=fg8b5v1TQow> (accessed September 2, 2022)]). In April 2020, he also publicly demanded an extension of the US lockdown for 10 more weeks (see James Crump, “Coronavirus: Bill Gates calls for 10 more weeks of lockdown,” in: *Independent*, April 3, 2020, <https://www.independent.co.uk/news/world/americas/coronavirus-lockdown-how-long-when-end-bill-gates-shut-down-a9446966.html> (accessed September 2, 2022)).

121 He endorsed lockdown policies publicly (see Munsif Vengattil, “Clash of tech titans: Zuckerberg praises coronavirus lockdowns; Musk sees ‘fascism’,” in: *Reuters*, April 30, 2020, <https://www.reuters.com/article/us-health-coronavirus-siliconvalley-idUSKBN22C099> (accessed September 2, 2022)). In the interview mentioned above, he claimed that Facebook has helped “I think it’s more than 2 billion people around the world, access authoritative information about COVID over the course of the pandemic by putting it at the top of Facebook and Instagram” (Newton, “Mark in the Metaverse”).

122 While Bezos himself did not endorse the lockdown politics publicly (at least not prominently), his company was accused of censoring a book which criticized lockdown policies (see Lucy Sherriff, “Everything Musk Go. Elon Musk calls out ‘insane Jeff Bezos’ over ‘censorship’ of COVID lockdown book & says Amazon should be ‘broken up,’” in: *The U.S. Sun*, June 4, 2020, <https://www.the-sun.com/news/934732/elon-musk-jeff-bezos-insane-break-amazon-up/> [accessed September 2, 2022]) and “price gouging of health products during the coronavirus.” Additionally, Amazon allegedly has misused his massive economic influence to control the access to the market in an unfair manner taking advantage of the crisis (see Alana Semuels, “Many Companies Won’t Survive the Pandemic. Amazon Will Emerge Stronger Than Ever,” in: *Time*, July 28, 2020, <https://time.com/5870826/amazon-coronavirus-jeff-bezos-congress/> (accessed September 2, 2022)).

123 For example, online gaming experienced a major boom during the lockdown and was even promoted by the World Health Organization and other institutions as a tool to decrease psychic and emotional stress (see Joel Billieux et al., “Problematic online gaming and the COVID-19 pandemic,” in: *Journal of Behavioral Addictions*, vol. 9, no. 2, 2020, pp. 184–186). In an interview at the Singapore FinTech Festival in 2020 Bill Gates praised the ‘pandemic’ as being an accelerator of the “digital revolution” (*Building Infrastructure For Resilience: A Fireside Chat With Bill Gates | SFF 2020, Singapore FinTech Festival*, <https://www.youtube.com/watch?v=eASVSwnJmFQ> [accessed September 2, 2022]). Accordingly, Apple, Microsoft, and Google’s parent company Alphabet have made record profits since

entrepreneurs with a more analogous business model such as the billionaire Elon Musk or the owners of small shops, pubs, or restaurants, denounced the lockdown legislation as “fascist,”¹²⁴ obviously fearing for their profits. While in the latter case, this political intervention in the name of one’s own economic interests has often been criticized as immoral, cynical, and dangerous to public health, the problematization of the political engagement of digital entrepreneurs in favor of the lockdown policy has either not taken place – to the opposite it has often been presented as being of mere philanthropical nature – or has been discredited as being a mere ‘conspiracy theory.’¹²⁵ – Historicists of the future will have to deal with the question, if and to what extent the lockdown policy has been supported by digital trusts before and behind the eyes of the public.¹²⁶

the outbreak of the plague (see, e.g., Tom Bateman and Reuters, “Record profits for Apple, Microsoft and Google amid COVID-19 boost for Big Tech,” in: *Euronews*, July 28, 2021, <https://www.euronews.com/next/2021/07/28/record-profits-for-apple-microsoft-and-google-amid-covid-19-boost-for-big-tech> [accessed September 2, 2022]). Also Facebook more than doubled its profits in some time periods (see Eddie Corp, “Microsoft, Google and Twitter double their net profit in the third quarter of the year thanks to digital advertising,” in: *Digis Mak*, 26 Oct. 2022, <https://digismak.com/microsoft-google-and-twitter-double-their-net-profit-in-the-third-quarter-of-the-year-thanks-to-digital-advertising-economy/> accessed 2 Sept. 2022. “Collectively, the market value of Google, Amazon, Apple, Microsoft and Facebook is now worth more than a third of the entire S&P 500 index of America’s 500 largest traded companies, as their share prices have soared during the pandemic” (Rupert Neate and Dominic Rush, “Google, Apple and Microsoft report record-breaking profits,” in: *The Guardian*, July 27, 2021, <https://www.theguardian.com/technology/2021/jul/27/google-apple-and-microsoft-to-report-record-breaking-profits> [accessed September 2, 2022]). – But not just the market value and profit of these companies skyrocketed: During the pandemic, Jeff Bezos became the richest person on earth by almost tripling his private wealth to almost 200 bn. US dollar. Gates’ private wealth grew sixfold, Zuckerberg’s more than doubled. All these people are among the 10 richest persons on earth. Meanwhile, the plagues combined with lockdown politics hit the poorest of the world most severely, hundreds of millions of people were thrown into poverty by it worldwide. (See “Wealth increase of 10 men during pandemic could buy vaccines for all,” in: BBC, January 25, 2021, <https://www.bbc.com/news/world-55793575> accessed September 2, 2022). It is “said that Mr Bezos’s worth had climbed so much between March-September 2020 that he could have given all 876,000 Amazon employees a \$105,000 bonus and still have been as wealthy as he was before the pandemic.” Even if some of these multi-billionaires (esp. Bill Gates) are actually donating huge sums for philanthropic causes, these sums are still neglectable compared to their massive wealth.

124 See Vengattil, “Clash of tech titans.” He also criticized Amazon for allegedly censoring a book which criticized lockdown policies (see Sherrieff, “Everything Musk Go”).

125 The problem with the philanthropy of people like Bill Gates is, by the way, not to so much that they have a secret ‘dark agenda’ (as actual ‘conspiracy theorists’ – if one wants to use this highly polemical term – claim) or that they are working for their own profit. The actual problem is a more fundamental issue of orientation: The activities of organizations such as the Bill & Melinda Gates Foundation lack any utopian aspirations; their goal is not so much to solve the ultimate roots for social problems such as poverty or inadequate public health but to merely cure the symptoms by use of technologies. While this may indeed help millions of poor people and is an activity “of the light” in this regard, it remains ambiguous from a broader perspective.

126 See for the massive involvement of Big Tech in the US corona policy and politics in general Naomi Klein, “Screen New Deal,” in: *The Intercept*, May 8, 2020, <https://theintercept.com/2020/05/08/andrew-cuomo-eric-schmidt-coronavirus-tech-shock-doctrine/> (accessed September 2, 2022). – Of particular interest in this regard is the case of Denmark: There, it has been proven that in March 2020 the lockdown measurements were not proclaimed in accordance with the advice of the responsible public authorities (as prime minister Mette Frederiksen told the public) – but these agencies were on the contrary pressured by the government to support its policy of a harsh lockdown. At the same time, in a national emergency taskforce assembled to deliberate the Danish anti-corona strategy major Danish companies were involved, for example the big pharmaceutical company Novo Nordisk. (See Reinhard Wolff, “Notlügen zum Shutdown?” in: *taz*, June 2, 2020, <https://taz.de/Corona-Massnahmen-in-Daenemark/5690305/> (accessed September 2, 2022).)

What is indisputable, is that the old question of ‘*Cui bono?*’ or ‘To whom is it a benefit?’ has obviously one simple answer: probably many people who would have died without these measurements¹²⁷ – and surely digital monopolies. Their political influence will certainly even grow in the future. That this could mean a severe, possibly even deadly, threat to democracy is taught by history: It has been demonstrated often that major political players behind National Socialism have been the immensely influential German steel and chemistry trusts, who aimed for a strong government supporting their economic agenda without moral and political constraints.¹²⁸ *At least* fair taxation of digital trusts would be a first step to prevent such a dangerous development from happening.¹²⁹

5.2. Toward an Open Internet

We have already tackled the question of the openness of the internet above when discussing Bloch’s conception of the world as a “multiverse.” The problem is obviously, how this idea could serve as an orientation for concrete practice.

First and foremost, it implies that the openness of the internet should not be granted to institutions that inhibit it by their acting, namely monopolist private enterprises. To guarantee *material*, not just formal, openness the state should impede the development of such monopolist structures as much as possible and to ensure that essential internet infrastructure is in actual public hands or at least controlled by the public and not by commercial interests. Google could for example be replaced by a public search engine with a transparent search algorithm similar to Wikipedia. Also, there could be a standard e-mail service and a standard web browser run by public foundations.¹³⁰

At the same time, direct state intervention in the internet should be the last resort. The openness of the internet should be seen as a value in itself indeed when it comes to the free flow of information of any kind. This openness for

127 It is still a contested issue among scientists to what degree lockdown measurements actually have helped to stop the spread of the plague. A Danish study claims, for example, that the difference of the spread of the virus within municipalities with more strict and more moderate measurements in November 2020 was neglectable (see Christian Bjørnskov and Kasper Planeta Kepp, “Lockdown Effects on Sars-CoV-2 Transmission. The evidence from Northern Jutland,” in: *medRxiv*, 2021, <https://doi.org/10.1101/2020.12.28.20248936> (accessed September 2, 2022)).

128 See, e.g., Franz Neumann’s classical study *Behemoth. The Structure and Practice of National Socialism 1933–1944* (New York: Harper & Row, 1966).

129 For the growing political influence of Big Tech and its dangers, see, e.g., Ilke Adriaans et al., “How Big Tech is becoming the Government,” in: *SOMO*, 5 Feb. 2022, <https://www.somo.nl/how-big-tech-is-becoming-the-government/> (accessed September 2, 2022).

130 The latter already exists of course with Firefox.

the uninhibited flow of knowledge and information of all kinds is the biggest advantage of the internet and its biggest contribution to human development in a better direction, especially since it means a radical democratization of knowledge that has not been seen since the invention of the printing press. Knowledge of all kinds is not just available for those lucky enough to have a well-equipped public library nearby or enough money to buy all books they need: It is accessible relatively easily for everyone on the planet.

To guarantee the material openness of the internet, however, one has not to forget that it is still not easy for everyone on the planet to actually access it: 1) There are still some parts on the world where no sufficient network infrastructure exists. 2) PCs and other devices are still not affordable for everyone. 3) Another factor that inhibits the free access to the internet are language barriers. Especially for those who do not know English sufficiently large portions for the internet are only theoretically accessible. 4) Certain skills are and particular knowledge is necessary to orient oneself within the internet. – Luckily, with the wider distribution of wireless broadband networks,¹³¹ the steadily sinking of costs for electronical devices, the development of better translation software, and both the wider spread of these skills and the simplification of internet services, all these factors play a lesser and lesser role.

In 2005, 15,8 % of the world's population used the internet, in 2019 a little bit more than half of it, in 2021 it grew even up to around 2/3.¹³² This is an impressive rate – but at the same time it means that still one third of humanity is not able, or, surely to a marginal extent, not willing, to use it. Given the growing importance of the internet for all spheres of human life and the huge benefits it brings, this still presents at major issue for global justice, especially if you take into consideration how uneven access to the internet is spread throughout the globe: In 2019, 87 % of the population within developed countries were using the internet while only 19 % within less developed countries; in Europe, almost 90 %, in Africa less than one third of the population.¹³³ Besides the lack of

131 Access to wireless broadband networks is actually more widespread than one would expect. At the end of 2020 even 85 % of the world's population had access to 4 G networks (see International Telecommunication Union, *Measuring digital development: Facts and figures 2020* [Geneva: International Telecommunication Union, 2020], p. 4. In rural areas in less developed countries, 17 % of the population has still no access to mobile networks at all, however (p. 5).

132 See L. Rabe, "Anteil der Internetnutzer weltweit bis 2021," in: *Statista*, 3 Dec. 2021, <https://de.statista.com/statistik/daten/studie/805943/umfrage/anteil-der-internetnutzer-weltweit/> (accessed 2 September 2022). This increase shows again the striking impact of the corona crisis on internet consumption.

133 See International Telecommunication Union, *Measuring digital development*, p. 7. It is important to note here that especially in developing and less developed countries, men are using the internet much more than women (see

infrastructure and devices, insufficient skills in using the available technologies play a major role in preventing people from accessing the internet.¹³⁴

Given the growing importance of internet access for the proper execution of all other human rights, providing free high-quality access to the internet should be seen not as a luxury but as a human right for every person on earth in itself and global institutions should do more to promote this goal. In many countries such as Estonia, a public WiFi network accessible gratuitously for all citizens already exists – why is this not possible everywhere?

One may ask if such a right could not imply the duty to ‘digitalize oneself’ and thus has to be accompanied by an equally strong right to digital abstinence.¹³⁵ In fact, it has to be guaranteed that people who do not want or are not able to participate in digitization, do not lose their basic human rights and the possibility to take part in crucial elections. But an equal right to digital abstinence would unavoidably mean that the huge possibilities of digitization for democratic participation, which we will discuss in the next section, could not be actualized fully. As it is the – implicit – duty of every citizen to learn how to read and write or to learn the language of the state in which he or she lives, even if it is not the codified national language, in order to make full usage of his or her rights, especially the right to political participation, it will in fact be the implicit duty of every citizen to become a digital citizen. That does not mean that it will be forbidden to abstain from digitization – but it means that one must accept certain disadvantages if doing so. In truth, this is already the case, and this is precisely the reason why we need a right to digital access. A right always implies certain duties, but also the possibility not to make use of it – one can choose not to vote or not to utter one’s opinion publicly –, but that does not mean that a ‘right not to vote’ or a ‘right to not utter one’s opinion’ are necessary or even meaningful: A right that would have to be accompanied by an equally strong ‘counter-right’ could never be a right. The state would just not know what to do and courts not how to decide.

ibid., p. 8). – How digitization is both reproducing gender inequalities and could be a tool to overcome them see Katharina Volk, “Was die Kybernetik vom Feminismus lernen kann. Oder: Warum wir der Technik nicht das Feld überlassen sollten,” in: Timo Daum / Sabine Nuss (eds.), *Die unsichtbare Hand des Plans. Koordination und Kalkül im digitalen Kapitalismus* (Berlin: Dietz, 2021), pp. 200-214 (with reference to the classic text on ‘cyber feminism’: *A Cyborg Manifesto. Science, Technology, and Socialist-Feminism in the Late Twentieth Century* by Donna Haraway (Minneapolis: University of Minnesota Press, 2016)).

134 See International Telecommunication Union, *Measuring digital development*, p. 12.

135 See, e. g., Andreas Urs Sommer, *Eine Demokratie für das 21. Jahrhundert. Warum die Volksvertretung überholt ist und die Zukunft der direkten Demokratie gehört* (Basel/Freiburg/Wien: Herder, 2022), pp. 199-200.

Another important factor in this regard is the question of “net neutrality,” i.e., if all users should be treated equally by internet service providers. The most important concern in this regard is of course the question if providers should be allowed to grant user who pay more a better internet access. While net neutrality is legally prescribed by many countries, in others, like the US, providers are relatively unrestrained in this regard. The problem is obviously that it is comparatively difficult to forbid private companies to make special offers for customers who are willing to pay more to have a faster internet connection. The main issue about net neutrality is, however, to prevent companies from building up monopolies by providing faster access to their own services than to those of their competitors. Especially in order to prevent such situations, the conception of net neutrality is a crucial orientating principle to ensure the openness of the internet.

Not only private companies, but also states are more and more controlling the access to the internet, however. This is done by a broad range of measurements from outright censorship to legal regulation and more informal cooperation between states and service providers. While in non-western countries, censorship is used rather often, also in western countries it is applied to a growing degree, especially to prevent the alleged spread of “fake news” which are said to undermine democratic discourse.

In former times, the orientation towards information was rather simple: One had a bunch of allegedly trustworthy sources which one could rely upon when orienting oneself within the world, e.g., mainstream newspapers, TV channels, information provided by the government, and institutions like schools and universities. These institutions were providing a kind of pre-orientation towards the complexity of the world. With the rise of the internet, people are said to be overburdened with a stream of information of all kinds in which they cannot find footholds any longer – legitimate information becomes increasingly indistinguishable from “fake news.”

The problem with this narrative is, again, that it sees digitization in itself as the deciding factor of this development. To choose a simple example, Hitler came to power in a world without the internet, however. One could as easily argue that, in principle, the internet could make it harder to spread fake news because it allows anyone to investigate the validity of news himself very easily.

As stated above, it is indeed a major problem that the free flow of information often leads to a counterreaction, the retreat into individual ‘safe

spaces' and 'filter bubbles.' What seems to be the actual concern of people engaging in this discourse, however, is not so much this phenomenon per se but that people seek refuge in the wrong places: They trust their friends in their social networks or certain youtubers more than government agencies or established newspapers.

The actual problem lies elsewhere, however, namely in a changing overall cultural and political climate of growing distrust in certain established institutions. It is a highly naïve idea to assume that these institutions work in an entirely objective way. In fact, even science is in reality often as oriented towards power as it is towards truth; and even more so publishers, TV stations, editorial boards etc. If the free flow of information on the internet undermined naïve trust in these institutions, this is actually a good thing. This is exactly what 'democratization of knowledge' means: Less trust in intellectual elites and alleged 'experts.'

Authoritarian measurements as they were taken up especially during the corona crisis against critics of the mainstream handling with it, can hardly serve to restore this lost trust – on the contrary they are an obvious sign of weakness on the side of those in power. Of course, the easy digital dispersion of fake news poses a major threat – but it seems to be more problematic when states intervene within the public discourse with such drastic measurements. Censorship is not bad as such – in many cases, it lies well within the public interest to prevent for example the uninhibited flow of pornography (in this regard there could be done even more) or the spread of hate speech. But as soon as something like 'truth commissions' have been established that determine what counts as 'fake news' and what as 'legitimate information,' the realm of free discourse may diminish quicker than one may anticipate.

The principle of hope applied to this problem should teach that, in the long run, Truth will always be more powerful than ideology and lie. Without this firm belief in the inherent power of Truth or, as Jürgen Habermas put it famously, "the unforced force of the better argument,"¹³⁶ science and education would be doomed to failure anyway. Of course, the ethics of active hope teach in this regard not to wait until Truth somehow unveils itself but to actively promote it and to fight against lies and ideologies with all *proper* means necessary – but censorship is definitely not a proper means in the regard. That so many

136 See Stegmaier, *Philosophie der Orientierung*, p. 572; fn. 65.

intellectuals, even leftists and liberals, tolerate and approve the application of censorship as an instrument to guide public discourse in the ‘right direction,’ is clearly a symptom of a loss of scientific ethos and a spread of dangerous cynicism even amongst scientist and intellectuals themselves. An attitude which might be, in the long run, more harmful to science and intellectual endeavor in general than any ‘fake news.’ The maxim of the protestant theologian Jan Hus, “*Super omnia vincit veritas*,” ‘Truth prevails all’ should be written above every educational and scientific institution as a guiding principle of their orientation – and even better if whole states such as the Czech Republic adopt it as their official maxim.¹³⁷ Of course, ‘Truth’ should not be understood as a given metaphysical insight but as something that is never fully given¹³⁸ – and this is the very reason why intellectual discourse should be as free as possible.

At the same time, more should be done in order to foster free access to important scientific and cultural information and to crucial political documents online. Of course, this is easier said than done since this content has to be produced somehow and also scientists, intellectuals, and artists have to make a living somehow. In this regard, digitization should draw our attention towards new models of reconciling these two equally legitimate interests. One way of stimulating the free spread of high-quality, non-commercial content on the internet might be the introduction of a public institution that funds the creators of such content either from tax money or from a special fee that each citizen has to pay, similar to the license fee which finances the public broadcast services in many countries.¹³⁹ This money should be distributed to anyone who produces freely accessible cultural or scientific content on the internet that meets certain quality criteria. Of course, measurements have to be installed in order to prevent the misuse of this funding for indirect political censorship. In the long run, however, such measurements might be more useful against the spread of fake news, which is obviously in many cases caused by mere economic greed and facilitated by the high costs of proper journalistic, scientific, and intellectual

137 The case of Jan Hus is similar to that of Müntzer and Bonhoeffer: despite he was executed for spreading heretical ideas, the truth of his teachings could not be killed and spread over the whole world, forcing even the catholic church to fundamentally reform itself. His daring motto was not refuted by his death – to the contrary, it was confirmed.

138 See Stegmaier, *What is Orientation?*, p. 192. In this section, also Stegmaier highlights the fact that science depends upon the normative orientation towards this ideal of Truth, even if it is only fictional. The decisive point is, once more, that exactly by pursuing this ideal in a not just courageous, but hopeful manner, science actually proceeds and continually explores new aspects of reality.

139 A more radical approach would of course be a universal basic income.

research, than the instalment of ‘truth commissions.’ It would be a measurement driven not by desperation but by hope: the firm belief that truth will prevail if public free discourse is encouraged.

Moreover, countries that block the free internet access of its citizens for political reasons should be penalized by the international community. Of course, this policy should not be an excuse for enforcing access of certain digital trusts inside the market of a specific country: Countries should be justified to ban certain website for the protection of their own digital industry but not for political reasons. It should be forbidden, for example, to block the access to a non-commercial institution such as Wikipedia, but it should not be forbidden to impede or even forbid the activities of digital trusts such as Amazon, Google, Microsoft, or Facebook. It might be even advisable for the European Union to prevent these companies from monopolizing the European markets further and subsidizing the foundation of an independent European digital industry (a model in this regard could be China).

5.3. Digitization as Democratization

One actual reason of declining trust in ‘mainstream’ institutions is the overall crisis of Western democracies. More and more people have, apparently, the impression that these democracies are less and less democratic. Just as scientists seem to orient themselves more and more not towards the idea of scientific truth but towards economic and political interests or personal career goals, politics are often perceived as orienting themselves not towards the classical idea of the “general will” as developed for example by Jean-Jacques Rousseau, i.e., the long-term public good, but towards certain particular wills (namely of small but powerful pressure groups and wealthy multinational companies) and short-term elections results. This is a tendency which manifests itself not only in the wide spread of ‘fake news’ but also in election successes for populist parties and candidates, movements such as “Black Lives Matter” and “Fridays for Future,” and events like the 6th of January in Washington, D.C. Obviously, throughout different political camps and social milieus, a widespread distrust and dissatisfaction with the current political order can be observed which articulates itself in more or less violent forms.

The corona crisis itself demonstrated the alienation of certain parts of the population to a large extent. While most people supported the chosen policy of

maximal containment, a still remarkably large number of citizens protested it given all the efforts to convince the population and to silent critical voices.¹⁴⁰ It is remarkable that even in such a crisis Western democracies are apparently not capable to organize a political consensus in such crucial matters.

Obviously, this widespread feeling of alienation has social causes which need to be tackled; poverty, unemployment, injustices of all kinds. In this regard, digitization can play a major role in improving the situation but social reforms are more important.

Another factor are *political* problems in a narrower sense. What methods could be used in order to guarantee a better consideration of popular demands within the political system? Digitization could play a major role in this respect.

The advantage of digital compared to classical participation procedures is that such surveys can contain much more complex questions and choices than just 'Yes' or 'No.' Algorithms could be used to process even complex responses by the participants in an efficient and representative way. Also, the participation in regular elections could be significantly simplified and the election platforms could also be used to provide voters with background information on the issues at stake and serve as a forum to exchange arguments. The crisis of Western democracies could possibly be overcome if they reinvented themselves as digital democracies.

Attempts to solve the rising distrust with mainstream politics by reforms of the political system have already been made. In France, for example, President Emmanuel Macron tried to calm down the Yellow Vest protests by declaring a "Grand National Debate," in which major issues of French politics should be discussed among the participating citizens and between the citizens and politicians, including himself. Digital technologies played a major role in enabling this experiment, almost two million questions and comments were submitted to the campaign's website.¹⁴¹ Additionally, Macron organized the "Citizens Convention for Climate," a council comprised of ordinary citizens who proposed a catalogue of measurements which should help to realize France's goal of reducing its carbon emissions by 40 % compared to its 1990 levels. In

140 In Switzerland, for example, only 60 % of the electorate supported the COVID-19 Act proposed by the government in a referendum held on June 13, 2021.

141 See Valérie Mazuir 2019, "Le grand débat national," in: *Les Echos*, April 8, 2019, <https://www.lesechos.fr/politique-societe/politique/gilets-jaunes-le-grand-debat-national-347046#Xtor=AD-6000> (accessed 2 Sept. 2022).

this case, digital technologies were used to form a group of random participants which was statistically representative.

While experiments like this show definitely in the right direction, their biggest problem is that they are widely perceived as being of merely symbolic nature. The result of the “Grand National Debate” is unclear and also to what extent the proposals of the “Citizens Convention” will actually be applied. They are acts of grace, short-term institutions that have no proper place within the constitutional framework of the country and thus no legal power to enforce their results.

Another attempt of using the internet for more civic participation was organized by the Commission of the European Union in 2018. In an online survey, the question was raised whether daylight saving time should be abolished on a European scale. 4,6 million citizens participated. More than 80 % of them voted for an ‘eternal summertime.’¹⁴² Despite this clear result, up to this day nothing was decided in this matter. Possibly, it was only a populist measurement in order to gain a higher voter turnout for the elections to the European parliament in 2019.

This survey had another major problem, however. Three million of its participants came from Germany, where the annual time change is particularly controversial. Citizens from countries that would be affected more severely by the abolishment of the daylight-saving time such as Greece or Spain hardly took part. This is another general issue of such surveys: Often, they lack representativity. More attempts would have to be made in order to convince citizens also from these Southern countries to vote. Why should one take the time to participate in a survey of merely symbolic nature, however?

Thus, the potential of reorienting democracy by usage of digital technologies remains largely unused by mainstream politics. The question here is ultimately what basic orientation to politics is in place: A more Schmittian one which favors arbitrary decisions made by legitimized institutions (whereby this legitimization can only be an implicit one), or a more deliberative one in which democracy resists upon public, open debate and votes with as many participants as possible. While the Schmittian understanding of politics is certainly more effective from a pragmatic point of view, the deliberative understanding

142 See shs/rt, “EU citizens feel time’s up for changing clocks,” in: *Deutsche Welle*, August 29, 2018, <https://p.dw.com/p/33v96> (accessed 2 September 2022).

points more towards the bold goal of a “real democracy” as a society “without expropriation and alienation,”¹⁴³ which Bloch evokes at the end of *The Principle of Hope*. The Schmittian model of politics tends to serve powerful minorities, while the deliberative model points towards a broader consideration of the interests of the less powerful.

Obviously, the problem of the deliberative model is, as discussed above, that also public discourse can be manipulated by powerful particular interests. Thus, deliberative formal procedures alone do not guarantee that the interests of the lower classes are *materially* represented in a better way. Carl Schmitt himself demonstrated this immanent paradox of liberal democracies (between their ideal of deliberative debate and their actuality of arbitrary decisions in favor of certain powerful social factions) in his writings.¹⁴⁴ Additionally, in times of social crisis it is obvious that a Schmittian understanding is more applicable. The question arises then, however, as Schmitt correctly points out, who defines when a social crisis takes place.¹⁴⁵ In the situation of an actual crisis, time might be too short to wait for a broad public debate to decide whether the current situation is in fact a crisis or not. Digitization might help to tackle this paradox of democracies by accelerating the speed even of broad public decision making. – Meanwhile, the internet will, beyond political control, hopefully remain a powerful accelerator of grassroots activism and, thus, lived democracy.

5.4. The Limits of Digitization

This is, to emphasize it once more, not meant to be a comprehensive list of possible measurements that could be set in place to give the process of digitization a more ‘human’ face. But it should demonstrate how a hopeful orientation could be used in order to see positive possibilities (“possibilities of the light”) in the face of a concrete problem.

The last aspect, that should be mentioned, however, is, that such a humanist shaping of digitization should also always contain a genuinely ‘conservative’ element. Not just with regard to elder people, who may have troubles to orient

¹⁴³ Bloch, *The Principle of Hope*, p. 1376.

¹⁴⁴ See esp. his major work, *The Concept of the Political*, transl. George Schwab (Chicago: University of Chicago Press, 2007).

¹⁴⁵ According to Schmitt’s famous definition, the sovereign is he who decides on the state of exception; see Carl Schmitt, *Political Theology. Four Chapters on the Concept of Sovereignty*, transl. George Schwab (Chicago: University of Chicago Press, 2002), p. 5.

themselves with regards to digital technologies,¹⁴⁶ it appears to be paramount that even if it might be costly from an economic point of view, non-digital spaces should be cherished and preserved. The deliberate preservation of such zones can already be observed – but often in a problematic way: while until a couple of years ago, the use of digital technologies was often perceived as a luxury that only wealthy people could afford, this tendency is now being reversed and the digital version becomes the cheap mass product, the analogue version is seen as the classic (and, thus, precious) ‘original.’ As discussed above, this may be a business opportunity for skilled specialists which can still provide such services – but, of course, it also has a problematic side when it becomes a privilege, for example, to consume printed instead of digital books, magazines, and newspapers or when some people can afford to go to the football stadium, while others have to watch the game from home. Of course, this development is not problematic per se: at first glance, it is only desirable that more people than ever have access to texts without much effort or can watch sport events in high quality from home. Current societies – the Corona crisis demonstrated this to a large extent – tend towards a very problematic direction in this regard, however, namely in the direction of a three class societies: 1) A new proletariat which has to work either in very low paid jobs from home or which has no choice but to work outside (esp. those working in the delivery industry) – but which can more and more only afford digital leisure activities with all negative side-effects (social isolation, loss of life quality, lack of physical activity, ...); 2) a new middle class of people who can easily work from home in decently paid jobs, most of them digital experts by profession, which are enabled by their relatively high income to spend much time in the ‘real world’ as well; 3) those lucky enough to choose entirely freely between the digital and the ‘real’ world in all regards. While the first group, i.e., the majority of the population, mainly experiences the negative side effects of digitization, the second group may see it mainly as a liberating tendency – and the third group may even ask why it should be a problem at all.

While even under the most hopeful perspective, the emergence of these three new classes is unavoidable within the current social framework, it should be of the highest public interest to prevent the further division of society into these three groups. It is especially dangerous because it means precisely the

146 See Stegmaier, *What is Orientation?*, pp. 259-260.

quite literal division of the population between entirely different life-worlds. People living in the ‘first’ of these worlds may fall prey easily to cunning digital demagogues or to attempts by digital monopolies to gain more social influence, while people from the second and third class may lose all understanding of the problems of the majority of the population. Digitization is not something that affects ‘all of us’ equally.

Thus, public efforts – possibly financed by special taxation of the profits of private digital companies and/or by the income of public digital companies – should be taken up in order not just to make digitization available to everyone but also to give everyone a realistic chance still to enjoy the benefits of the ‘old’ world. Public libraries should, for example, still stock analogous copies of all important books and cultural and sport events should not take place only virtually without an actual audience. The same goes, for example, for the academic world in which more and more courses and conferences take place solely virtually. It is obvious that actually studying in a physical university, participating in an actual conference, or reading an actual book instead of scrolling through it on a screen are things that possess a certain quality in themselves and can hardly be replaced by digital alternatives. The Corona crisis confronted us with the concrete possibility that some of those things that we cherish might actually vanish in the foreseeable future or become a privilege of the happy few – certainly not a promising prospect.

Just as Stegmaier writes, digitization essentially means an unprecedented concentration of one’s entire world orientation inside of single device, mainly “*the smartphone in your hand*.”¹⁴⁷ This concentration is of course useful in many regards but implies also the danger of an unprecedented impoverishment of one’s world orientation. As Stegmaier correctly highlights,¹⁴⁸ human world orientation is, normally, a multi-faced process in which all kinds of sensual perceptions (smell, taste, hearing, ...) is involved – and also Bloch emphasizes the essentially bodily and sensual nature of human world-orientation. Digitization means, in many regards, the intellectualization and de-sensualization of one’s world-experience. Experiences such as touching a book, the skin of another person, or just smelling the forest, cannot yet be simulated by digital technology and it remains dubious if they ever will sufficiently even in a “metaverse.”¹⁴⁹

147 Stegmaier, *What is Orientation?*, p. 254.

148 See Stegmaier, *What is Orientation?*, p. 46-47.

149 In his study *Resonanz: Eine Soziologie der Weltbeziehung* (Berlin: Suhrkamp, 2016), the German sociologist

This ‘conservative’ limitation of digitalization would also have to entail its deceleration. One major issue of digitalization might not be the emergence of new technology as such but its unprecedented speed. Almost every year, new digital technologies are introduced, often completely outdating their precursors. That so many fall prey easily to “fake news” and other kinds of digital manipulation may just be due to the fact that they just do not have the time to build up the proper competences to deal with new digitized media. Moreover, even the ‘quickest’ human capacities – human thought and human phantasy – have troubles with keeping pace with digital advance. One may ask if Man becomes indeed outdated in such a situation.

The immense acceleration of technological advance is certainly linked to the overall acceleration of our lifeworld as it has been described by sociologists such as Hartmut Rosa.¹⁵⁰ It could only be stopped by an overall deceleration of economic and cultural development – a radical reversal of the historical mainstream since the 18th century at last. A reversal, which might even be a bare necessity in order to impede climate change and to stop similar plagues such as Corona from developing. How to carry it out is a question that would demand at least another essay if not an entire book. A deceleration of digitization might be a first step, however, to regain human control over human progress.

6. Conclusion: Beyond 0 and 1

The tendency of a potential annihilation of man (not so much as a physical being but in the sense of a humanist conception of humanity) as a result of technological and scientific progress, has been described by philosophers for decades. While German philosopher Günther Anders described this development as an apocalyptic doom of mankind,¹⁵¹ postmodernist philosophers like Michel

Hartmut Rosa utters a similar criticism of this aspect of digitization in regard to the dominance of screens for our world-experience (pp. 155-160), the monotony of sitting in front of one's computer (see p. 178), and the loss of direct eye-contact because of permanent smartphone usage (pp. 311-312; he speaks even of an emerging ‘culture of lowered gaze’). Especially the two last-mentioned phenomena clearly contradict Bloch's ethics of “[w]alking upright” (Bloch, *The Principle of Hope*, p. 147).

150 See Hartmut Rosa, *Beschleunigung. Die Veränderung der Zeitstruktur in der Moderne* (Frankfurt am Main: Suhrkamp, 2005).

151 See esp. his major contribution to the philosophy of technology, *Die Antiquiertheit des Menschen* (“The Obsolescence of Humankind”), from 1956 and 1980: Günther Anders, *Die Antiquiertheit des Menschen Bd. I. Über die Seele im Zeitalter der zweiten industriellen Revolution* (München: Beck, 2018) and *Die Antiquiertheit des Menschen. Bd. II: Über die Zerstörung des Lebens im Zeitalter der dritten industriellen Revolution* (München: Beck, 2018). For a current ‘Andersian’ pessimist perspective on digitization, see Achim Szepanski, *Kapitalisierung Bd. I: Marx' Non-Ökonomie* (Hamburg: Laika, 2014) and *Kapitalisierung Bd. II: Non-Ökonomie des gegenwärtigen Kapitalismus* (Hamburg: Laika, 2014).

Foucault¹⁵² and Deleuze and Guattari¹⁵³ praised it as being the liberation of humankind from obsolete humanist ideals. In his later writings, Heidegger gave a similar apocalyptic outlook on the situation of Man within the technological civilization but combined it with a kind of pseudo-hope inspired by a sentence from the German poet Friedrich Hölderlin: “But where the danger is, grows / the saving power also.”¹⁵⁴

All these approaches make the same mistakes of 1) describing only the reality of technological development, abstracting from their actual potentiality and 2) viewing it as an objective tendency which can only be applauded or condemned by us as if we were its mere spectators and not its subjects. While Anders misses to see modern technology as the realization of humanist dreams and visions, postmodernist thinkers like Foucault and Deleuze accept this one-sided description and only change its evaluation. But what should be good about human beings losing their ability to act and to create their world according to their deepest desires as they are expressed in humanist philosophy? Only a weird, one-sided misunderstanding of Nietzsche’s philosophy of *amor fati* as the blind affirmation of anything, not as the utopian desire to create the world in such a way that allows one to affirm one’s destiny,¹⁵⁵ can allow such a crude misorientation; a misorientation which is not just theoretically wrong but which also has helped to spread a cynical spirit of pseudo-optimism among Western intellectuals. It blocks to see the “possibilities of the light” and fosters an attitude of intellectual quietism to which Bloch’s ethics of “critical-militant optimism” are vehemently opposed.

Also Heidegger’s dark later philosophy is no alternative in this regard. Following the mainstream of modern philosophy, he fails to acknowledge “the working, creating human being who reshapes and overhauls the given facts”¹⁵⁶ as being the “root of history”¹⁵⁷. While it is clear that the human potential of determining his own living conditions is blocked under current social circumstances in many regards, even in the darkest social situation Man is never simply determined by it; in the final analysis, humankind remains their

152 See esp. Michel Foucault, *The Order of Things. An Archaeology of the Human Sciences*, transl. Alan Sheridan (London/New York: Routledge, 1970), pp. 421-422.

153 See *A Thousand Plateaus*.

154 See Martin Heidegger, “The Turning,” in: *The Question Concerning Technology and Other Essays*, transl. William Lovitt (New York/London: Garland, 1977), pp. 36-49: 42.

155 See for such a utopian interpretation of Nietzsche’s philosophy Marcuse, *Eros and Civilization*, pp. 119-124.

156 Bloch, *The Principle of Hope*, pp. 1375-1376.

157 Bloch, *The Principle of Hope*, p. 1375.

root and it is its implicit mission to change all social conditions in which this capability is repressed.

For Heidegger, the only ‘hope’ that remains is the self-destruction of technology as its inherent nihilism becomes more and more apparent. But this ‘inherent nihilism’ itself is only apparent: Technology, even in its most dystopian forms, is still a humanistic enterprise to realize humanity’s boldest goals. It is truly nihilist, to abstract from this great potential and to act as if technology does not help to tackle humanity’s most important sorrows, even the problem of death.

A Blochian orientation towards digitization shows clearly that it should neither be seen as a straight path towards a technical utopia nor as a dark fate which we cannot avoid – rather, we should orient ourselves towards it as being a process which we can, collectively and to a certain extent also individually, shape actively in an either humanist or an indeed dystopian direction. With regards to digitization, one would have to turn Hölderlin’s verses around: Where the saving power is, grows the danger as well. As even the sober analysis of Stegmaier demonstrates, it could mean either the end of Man as such – or the reinvention of Man and the fulfilment of many of his most ancient aspirations, an unprecedented unleashing of his positive potentials. Ultimately, the choice is only ours which path we take. To use the famous phrase by the French historian Ernest Renan: “The existence of a nation is [...] a daily referendum.”¹⁵⁸

One may argue that digitization has already diminished the possibilities even of individual action to such a large degree that a rhetoric like this is entirely naïve. Often, digitization is associated with the complete loss of all subjectivity and agency even on a collective scale. This perspective can hardly be refuted, but it can only be repeated what we have shown above: both hope and despair are emotions that tend to realize themselves. A hopeful orientation, if understood correctly as waking hope, will always yield hopeful results, a desperate orientation will always make things only worse. If we deny the possibility of effective action, of course we will not act and bad things will happen – only if we, even in an apparently desperate situation, act *as if* we could act effectively, things could indeed change for the better. This is a clear ethical principle that could serve as a basic orientation not just with regards to digitization, but of course to each situation in which all hope seems to be lost: act as if it may not be lost – and

158 Ernest Renan, *Qu'est-ce qu'une nation nation?* (Paris: Calmann Lévy, 1882), p. 27; my translation.

you will at least have a chance that it might change for the better. Without this fundamentally metaphysical and utopian orientation, possibly no good things would come into existence at all.

Eventually, this ‘utopian orientation’ is a very simple, very base one: It begins with an individual’s first cry for food, it ends with the tears at his funeral. Man is never satisfied with his situation. The very last word of *The Principle of Hope* proposes a very simple expression for the ultimate goal of all human aspirations: “homeland”¹⁵⁹. For Bloch, humanity is like a collective Odysseus searching for a way back to Ithaca – but realizing that in fact that this search can never lead backwards but only forwards, toward new coasts and new adventures.

Some of us feel very at home within the digital “metaverse,” maybe even more at home than in the ‘real world.’ For them, the ‘virtual world’ is in fact their ‘reality’ already. Others are still strangers within it and look at this ‘brave new world’ with amazement and concern. If applied with the right orientation, digitization may help to make the world a homeland for everyone.

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¹⁵⁹ Bloch, *The Principle of Hope*, p. 1376.

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