Digital **humanism**

From nursing care robots to language assistants such as Alexa and Siri or electronic control systems in your car, digitization is literally drawing closer to our everyday lives. For a long time, the issue of ethics has been on the table in order to keep the use of artificial intelligence within reasonable limits. Our author advocates reviving humanistic ideals for the digital world. His main concern is that people should take center stage.

TEXT **JULIAN NIDA-RÜMELIN**

For many historians, the greatest innovation in human history is the invention of arable farming and livestock farming. The ancient hunter-gatherer culture that still exists to some small degree today was replaced by settled farmers and livestock breeders. However, in terms of its most important features, the human species was still designed to cope with the old, outmoded way of living. While arable farming and livestock

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The big data economy is casting a pall over the beautiful new world of the Internet

breeding enabled many more people to live in a certain area than before, at the same time, general health deteriorated and epidemics developed, as did myopia, tooth decay and flat feet.

Industrial technologies played a huge part in shaping our current way of living. The steam engines of the early industrial period, the electrification pro-

cess at its most intense, as well as the continuous shift from industrial production to service provision in recent decades, have created a standard of living in the most highly economically developed regions of the world that has never existed before in the history of humankind. Average life expectancy is increasing all the time, even though the way of life of the late industrial period is not always conducive to good health.

Possibly, digitization will turn out to be the fourth great technological, even disruptive, innovation. Certainly, both its convinced proponents and equally convinced critics alike agree that the human way of life will again be subject to fundamental change as a result of digitization. However, the euphoric chorus that accompanied the early digital period – such as the expectation that with the establishment of the Internet, the age of individual freedom and global democracy would find its highest form on the net – is now turning into an anxious swan song mourning the passing of constitutional democracy, with electoral manipulation by Cambridge Analytica and Russian bots. A kind of hangover has taken hold. Leading representatives of the Internet ideology of anarchic freedom, such as Jaron Lanier, are revising the assessments for which they

Photo: Alamy

Human or machine? In the age of artificial intelligence, the boundaries appear to be becoming more fluid.

became famous decades ago, and which shaped an entire generation of Silicon Valley employees. The projection of hippie visions onto the Internet age, which spread right up to CEO level at Google, Microsoft, Amazon and Facebook, now already appears

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According to the logic of AI, there is no freedom of will

to be a thing of the past. The beautiful new world where everyone is connected to everyone else, all have the same access to information, where dictators cannot survive and the American way of life dominates the global village, has palled. In the era of the big data economy, commercialization has become all too obvious.

One feature is now becoming clear that used to apply to other technological innovations in the past, namely that technologies are always ambivalent; they can be used to both good and bad purpose. There is no mechanism inherent to technology that guarantees to provide the perfect way of human life. The assumption that in each case, it is technical progress – the development of human productive forces and the conversion of natural assets into consumer goods that leads to advances in human history – that can be regarded as the real driver of progress, is a Marxist legacy that we should abandon. People decide on how to use technological options; they decide whether digital opportunities contribute to a humanization of the world and to economic and social progress, or whether they lead to a loss of political control, dependence on the media and the atomization of society. Digital humanism counters both the IT and Internet enthusiasts and the apocalypticists with its message that technical progress is shaped by humans.

From antiquity through to present-day Hollywood, the relationship between human and machine has inspired many myths. Computers are algorithmic machines or Turing machines (named after the

mathematician Alan Turing). People and other highly developed life forms are not machines. Nature as a whole is not a machine. Digital humanism does not transform people into machines, nor does it interpret machines as being people. It adheres to the particular nature of human beings and their abilities, and uses digital technologies to expand, rather than to limit them.

If people were to act with the same degree of predetermination as Turing machines, all our behavior could in principle be predicted in advance. Since our behavior depends on our convictions, it should in principle also be possible to forecast the convictions that we will have in the future. However, this would mean that we would also be able to forecast the knowledge held by future societies, which however is incompatible with the genuine progress of knowledge and also raises logical problems to which Karl Popper pointed in the past. He argued that the assumption that all future knowledge can be predicted on the basis of what we currently know leads to a logical contradiction, since this knowledge is already contained in our current knowledge; therefore, there is no knowledge in existence that has not yet been realized today. However, one precondition of a real knowledge revolution is that the later knowledge is not already covered by what is currently known. With this assumption, comprehensive determinism finds itself in an unresolvable conflict.

According to the logic of AI, there is no freedom of will. Machines do what they are programmed to do. They behave in the way they should. If they don't, this is due to anomalies in the system, in other words, random irregularities or damage. Additionally, some software-controlled systems have probabilistic functions, which assign a probability distribution of successor states to a state, rather than a fixed successor state. They make it possible to construct "learning" robots and more complex software systems. The transition from deterministic to probabilistic machines not only leads to a suspension of the categorial difference between human and machine. The alternative is not a choice between determinism and probabilism, but between determination and freedom.

Humans reflect on their actions, and are in a position to tailor their actions to a certain rationale. This ability to make decisions that accord with the best rationale is what constitutes human freedom and responsibility, and what separates us from animals and machines. If the action in question were already determined every time before any consideration or deliberation is made (or even just the distribution of probability of the potential actions), the actor would not be free, and also not responsible. In fact, strictly speaking, there wouldn't be an actor at all. Then there would not be an action, but simply pure behavior.

Another topic that is frequently the subject of discussion in the Internet era is "virtual communication". However, the term is misleading, since in the so-called "virtual world", communication is generally real. Every item of communication uses different media. The oldest medium came in the form of signs and soundwaves, while later cultural techniques such as reading and writing used lettering as a medium, and the invention of the printing press at the dawn of the modern age made this medium available to the mass population. In contrast to what some postmodern theoreticians say, digitization will not bring about an end to the rationality of the Gutenberg era, neither will a new world of images be created without a logical structure; to a far greater extent, the medial spectrum of acts of communication will be expanded by a further dimension. There is nothing virtual about this.

However, the same rules apply for communication on the Internet as for communication in general. Philosophers of language agree that successful communication practice is only made possible when those involved in the communication stick to certain constitutive rules. These include the rule of truthfulness. This requires that if I make a claim, I am also convinced that it is true. Equally, we can expect our communication partners to trust us, in other words, that they assume that the claims that I make are in line with my own convictions. These rules are only trivial on the surface. After all, they subject the communication partners to the obligation to orient themselves on what they regard as good rationale in the way they express themselves, rather than on their own individual interests. In many cases, purely individual interests

would contradict the requirement to observe the rules of truthfulness and trust. If we were always to be untruthful when this was in our interest, the act of communication would immediately lose its value.

In the same way as overall everyday communication is based on the observance of certain norms and rules, such as truthfulness, trust and reliability, and these rules must be generally accepted as general limitations in order to enable us to treat each other humanely, it is also true of the Internet that communication is eroded without functioning ethos norms. At times, the anonymity of Internet communication, the lack of a face-to-face situation and the possibility of communicating under a false name enable manipulative practices that fail to conform to the rules of truth, trust and reliability.

Fortunately, the practice of targeted deception can only function on a parasitic basis, in other words, only when the majority of the communication partners adhere to the rules of truth, trust and reliability. It appears that this is still the case. Most social media

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Access to the World Wide Web should be a basic human right

groups, whether closed or open, are noticeably characterized by honesty, stability and reliability. An indication of this is the positively excessive use of rules of behavior and the rigid sanctioning of shitstorms and individual expressions of displeasure. When fewer legally sanctioned norms apply, cultural practice takes on greater importance.

For many people throughout the world today, sending e-mails, presenting themselves on the Internet, communicating and accessing all kinds of information is a part of everyday life. However, not everyone has the same access to the Internet everywhere in the world. This is known as the digital divide, or the gap between so-called "onliners" and "offliners".

Even if the number of offliners is declining year by year, there are plenty of reasons why access to the

Internet should be declared a basic human right – today and certainly in the future. The basic underlying principle of human rights has not changed: the right to self-esteem is inviolable. This is the core of human dignity, as expressed for example in the ethics of Immanuel Kant or, in the present day, in the ethics of Avishai Margalit in systemic form. The conditions of human society change with the times and cultures, however. The definition of exclusion and discrimination practices is not set in stone, but depends on cultural and economic conditions. Human rights apply in traditional cultures as well as modern ones, although a general education guaranteed by the state only recently became a human right in the modern age, since the conditions for this were not provided in traditional societies. Participation in communication, the free expression of opinion and information freedom are a human right; the media of communication and information change with the times.

The more digital technologies are used in everyday life, the louder the call will become for digital education. For example, in 2014, the head of studies of the International Conference of the Learning Sciences, Birgit Eickelmann, complained in an interview with the Frankfurter Allgemeine Zeitung newspaper that too many children are not able to work independently on the computer, to create presentations and documents, and that for this reason, we "in Germany have lost access internationally in many areas." She demanded better digital education, which in general means teaching media skills and how to handle the new technologies. With this in mind, in 2016, the German Federal Ministry of Education started the "Education campaign for the digital knowledge society", which is designed to promote learning with digital media and the teaching of digital skills. The aim is to make increasing use of new learning apps, virtual libraries and virtual reality glasses in classrooms, lecture theaters and companies.

However, the problem with these forms of digital education campaign is that their goals remain too vague, and they focus only on the ability to handle technologies, something that is already taken for granted by the younger generations. The grotesque consequence of this is that *digital immigrants* teach *digital natives* a language that they have painstakingly learned, while the pupils, who have learned it since childhood, can speak it with ease.

In the case of digital technologies, products are also changing so fast that knowledge of how to use them must constantly be updated, making it not par-

The ability to make independent judgments – a humanistic ideal – is becoming more important

ticularly suitable as school learning material. If the characterization of Wilhelm von Humboldt still applies today, i.e. that school knowledge is of a canonical nature – in contrast to scientific, research-oriented knowledge – then practicing how to handle digital end devices cannot be classified as a useful classroom subject. What, therefore, could digital education be like?

Digitalization changes the availability and archiving of data stocks. Broad areas of the humanities, historical and philosophical research (sources, texts, interpretations) are becoming generally available to an increasing degree. Today, research and travel that used to take up so much time, as well as hours spent in specialist libraries, is often no longer required. The full digitization of museum stocks currently in progress, along with mandatory digital documentation in the sciences, will further improve this situation. Since the amount of time and money involved in acquiring data is decreasing, this form of accumulated knowledge is losing value. As a result, methodological skills are becoming more important than data skills. This is already reflected in study programs, where entire areas of knowledge are regarded as non-essential and are being replaced by methodology training.

As a result of the digitization of data provision, numerous "gatekeepers" such as librarians, publish-

ing editors, journal reviewers, and newspaper, TV or radio editorial boards are no longer required. This means that there is an increasing demand for the ability to make an independent judgment. Data provision does not replace the ability to evaluate and examine data as to whether it is reliable and what arguments can be based on it.

The World Wide Web is confronting us with a far greater variety of interpretations, theses, theories and ideologies, making it more difficult to form an opinion. As a result, the old humanistic education ideal formulated in Plato's *Theaitetos* dialog 2,500 years ago, which places the independent power of judgment, the ability for theoretical and practical common sense at the forefront, has gained enormously in value. People who tend to follow suggestively formulated convictions, or who screen themselves off from unpalatable facts, quickly lose their bearings in the new, digital data universe. They enclose themselves in "bubbles", such as those provided by the social media in particular, or they lurch about through the data world, pulled in different directions by different influences. As a consequence of digitization, we are not living in a knowledge society, but rather in a data society, or better, in a data economy.

Ultimately, many aspects of digitalization point to a further key goal of humanism, namely the formation of personality. Today, this topic is of greater importance than ever before, and its significance will further increase as our methods of communication become digitized and during the course of interactions, transfers of data and services and digitalized production (key word: Industry 4.0). The reason for this is quite simple: the more varied, volatile and complex personal connections, community networks and ways of living become, the greater the need for the individual ability to be the author of one's own decisions, convictions and projects. Digital opportunities create new personal freedoms and trigger an enormous impetus for change, both culturally and economically. They therefore also strengthen the potential for autonomy among individuals, while at the same time exposing them to the stress of an increasing need for orientation. ◄

Photo: Andreas Müller

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