How should IT work?

**Defending human rights
in the age of digitalization**

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giordano bruno *stiftung*

Ethical challenges posed by digitalisation

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Technological progress provides people with ever more effective tools. The increasing digitalization of the global community allows states, companies, other organizations or individuals to pursue their interests with unprecedented efficiency. Productive and destructive forces are both growing in equal measure. This brings us enormous opportunities, but also considerable dangers.

The many profound changes of our age create a confusing world that feeds a longing for orientation, order and control among many people. They long for "islands of security" in a "sea of confusion" – which is exploited by ideologists and populists worldwide. In order to counter the danger of a new totalitarianism, it is important to strengthen the idea of *the one humanity*, which was expressed 70 years ago with the adoption of the *Universal Declaration of Human Rights*.

The focus of human rights is on individuals – not nations, religious communities, ethnic groups or multinational corporations. It is important to defend this *central standard of humanist ethics* – especially in regards to the social changes triggered by the digital revolution.

But how do we strengthen human rights in times when

- different value systems enter into intensified competition due to worldwide communication and mobility
- enlightened formation of opinions as the basis for reasonable decision making is under pressure from targeted disinformation
- we are increasingly dependent on IT systems
- computers are increasingly making ethically relevant decisions
- several states and companies know almost everything about us
- individual persons (presidents, whistleblowers, terrorists) can trigger enormous effects in practically no time at the push of a button?

We are convinced that the digital revolution demands a changed code of ethics that is only slowly developing. We consider a number of issues to be particularly urgent. From a humanist point of view, we have therefore proposed some guidelines that should define our actions in the near future.

A

Advance in labor and social participation

The increasing productivity of machines leads us to new questions on redistribution. Jobs are changing or becoming redundant on a large scale. Growing social inequality contrasts with new models of participation. Here it is important not to react retrospectively, but to actively shape conditions in the sense of social balance.

Until recently, full employment was still a political promise intimately connected with social peace and prosperity. But the role of gainful employment is changing dramatically. Entire sectors are being restructured at incredible speed. Estimates assume that up to 60 % of individual occupations can be partially or completely taken over by computers in the near future.

Certainly, this would not to be regretted for many tedious low level jobs. But for us humans a lot depends on our workplace: income, quality of life, social participation, social exchange and a meaning of life. Where else will we find all this?

Profits have increased in recent decades, not least due to the outsourcing of production to low-cost countries. As today, human labor is increasingly being replaced by machines that produce around the clock when needed, without ever going on strike for better working conditions. And this revolution in production technology through big data, artificial intelligence, virtual realities, 3D printers, etc., will have serious social consequences that must be under societal control.

Since the increasing problem of overproduction and underconsumption can no longer be solved, it is possible that reductions in working hours and granting basic incomes will soon be regarded as economic necessities. It is already becoming apparent that the further the digital replacement of human labour progresses, the more people will no longer be needed as producers but as consumers – and for this purpose must also be "remunerated". (This may be financed, for example, by the taxation of data, robots, financial transactions, carbon dioxide emissions, etc.).

However, a widening gap in society must be avoided, in which an elite of 10 to 20 percent of the population has the say, while the overwhelming majority is sedated by cheap products and virtual triviaty.

Therefore the decline of gainful employment and the relief of economic pressure should be used to allow people to play an active part in shaping society – for more justice and equal opportunities, an intact environment and a sustainable recycling economy, better care, nursing and education services, neighbourhoods worth living in and a rich culture. It is therefore important to strengthen citizens' interest in the public realm, the *Res Publica*. They should also be much more directly involved in political decision-making processes (and also much more effectively by means of digital instruments) in the future.

B
Better education, media literacy and freedom of expression

Information technology is changing our perception of the world. Today, many people have a much more comprehensive view of what is happening around the globe, than ever before. But not a few are trapped in a cycle of fears, conspiracy theories and filter bubbles conveyed by social media. A media competence that opposes this is developing too slowly. The process of establishing the truth is repeatedly influenced by disinformation, hatred and – sometimes as a reaction – by inappropriate censorship.

Social networks use their algorithms to promote whatever attracts attention. As a result, they sometimes mutate into "echo chambers of hysteria" in which facts no longer have a chance. In the USA, for example, this has noticeably deepened the segregation of society. New laws push social media companies into evaluating contents legally and to delete them in any case of doubt. This in turn leads to overblocking, i.e. the

suppression of content that is absolutely permissible under the right to freedom of expression. The effect is damaging social pluralism and the silencing of dissenting opinions that are necessary for the advancement of society.

At this point, we need a positive re-evaluation of diversity of opinion and individual freedom, as well as of critical rationality. It should be clear: The state must and must only intervene where laws are clearly broken and personal rights are violated. This is the basic prerequisite of any liberal constitutional state: In an open society, it is not freedom that needs to be justified, but any restriction of freedom.

For this reason, e.g., the German *Network Enforcement Act* (NetzDG) must be revised in such a way that the overblocking of legally compliant content is subject to penalties that are just as severe as the non-deletion of illegal content. As long as social media platforms are only held accountable for deleting too little, there is an incentive to decide „in case of doubt against the accused", which runs counter to any sound legal practice and the principles of an open society.

The Code alone will not do enough to counter hate speech and fake news. The only way to combat stupidity is through clarification. Independent critical reading, questioning and understanding of content must be practiced as a cultural technique as early and sustainably as possible. To this end, educational institutions must be much better equipped, teachers must be specifically trained and curricula revised. Democratic maturity doesn't mean that pupils accumulate dead factual knowledge (which is only a mouse click away anyway), but that they learn to assess the quality of information rationally and based on evidence.

C

Capabilities of information technology

Having a critical look at technological developments does not mean being hostile to technology. On the contrary: we should acknowledge that information technologies and artificial intelligence offer tremendous opportunities for solving pressing problems. They must however be used with sense and understanding and for the common good.

A vital democracy, transparent political decisions, a lean administration, medical progress, smart mobility and high energy efficiency – these are just some of the promises of the IT age. Not only the progress made by large corporations is remarkable, but also the solutions made possible "from below" by the voluntary cooperation of countless people, for example:

- Cooperative knowledge projects such as Wikipedia, which show what people are capable of if they can freely exchange their knowledge.

- Open source software that makes us less dependent on large corporations

- Blockchain technologies that allow transparent and anonymous processes

- Encryption and anonymization techniques such as PGP, Tor networks, etc., with the help of which politically persecuted people, dissenters or whistleblowers can evade surveillance (remember: we are far from having only exemplary democracies in this world).

- New methods of anonymization that allow us to collect and evaluate data on a large scale (Big Data, Smart Data) without violating privacy.

These examples are encouraging. They strengthen civil society – and yet they are threatened by lobby interests, ignorance or simple bungling. The abolition of net neutrality, the German *Network Enforcement Act*, a short-sighted digital rights management , the self-chosen dependence of many people and institutions on corporations like Microsoft, Google, Apple and Facebook or the deliberate state sabotage of data protection are typical manifestations of this.

Despite these undesirable developments, we seek for a positive view of the possibilities offered by IT. Big Data is not necessarily "evil" and data minimization is not necessarily a virtue. Everyone can benefit from a wealth of data, provided it is wisely regulated. E.g. we will only enjoy effective person-centered medicine if researchers (or AI systems) are able to evaluate extensive amounts of data from as many people as possible.

However, data for use in Big Data must be delivered strictly anonymously. The damage that can result from the misuse of sensitive information (e.g. about unfavourable genetic constellations of a patient) is too big. In this context, politicians must ensure that human rights are safeguarded in the digital age – and, above all, that the interests of individuals have priority over state and corporate interests.

Digital self-determination and internal security

In order to receive benefits, comfort, bonus points or attention, we give away control over our data on a daily basis. Not everyone who has an interest in this means well with us. The following must apply: Even if we share information about ourselves, i.e. grant others rights of use for the time being, it is essentially inalienable. Laws, business conditions and technical solutions must do justice to this. *Privacy by design* and *privacy by default* must become the standard in practice. Pseudonymised identities could also contribute to improved privacy protection in some areas.

Terrorism and organised crime unsettle society and regularly raise calls for more surveillance. They must, of course, be fought decisively and effectively. But an unjustified, total mass surveillance is counterproductive: it is unfocussed and allows the observed to hide as "needles in a digital haystack". Mass surveillance also weakens data security and creates an uncontrollable power that can be abused at any time.

The news shows us daily terror and serious crimes emanating from government agencies. In Germany, the last dictatorship was less than 30 years ago. And even today secret services show a tendency to do everything technically feasible, even if contrary to the constitution. Every form of surveillance in democracies must therefore be targeted, controlled and strictly limited.

Progress in history has often been made possible by people who were initially regarded as dissidents: Those who advocated freedom of opinion, the abolition of slavery, freedom of religion, women's suffrage, the rights of minorities used to be subjected to harsh persecution – and still are in some parts of the world today. Many journalists, informants or environmental activists are still threatened when working for the common good and against illegitimate individual interests. We know from our own experience, for example by supporting persecuted atheists in Arab countries, that human lives may depend on anonymous communication. To say „as a decent person I have nothing to hide" is no longer an option. Political ignorance was rarely an advantage in human history.

Our data give deep insights into our behaviour, our heads and hearts. Respect for informational self-determination, the right to anonymity, to unobserved communication and encryption are and remain touchstones for an open, liberal society – especially since we cannot know in which direction the political systems will develop in the coming decades. Current developments such as those we see in the US, Russia or Turkey should urge us to be cautious: Political conditions in Western Europe, including Germany, might also change dramatically in the near future.
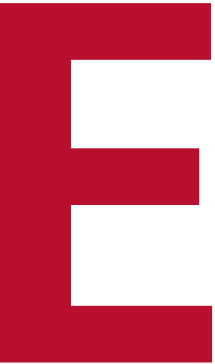
E Ethical conflicts

History teaches us that each time period and every generation must develop its own ethical standards. We humanists, of course, do not regard values as "God-given", but rather know that they must always be renegotiated – taking into consideration the interests of all concerned as fairly as possible.

Ethical considerations in a rapidly changing world are naturally difficult, since there are many variables that cannot be assessed. But there are also many constants that we can refer to. One which is particularly important is humanism's general compass of values, the model of human rights: Everything must be condemned that harms people, degrades them to servants, restricts their right to free information or expression of opinion, diminishes solidarity or deprives them of a self-determined life.

With regard to digitisation, these harmful developments include, among others

- algorithmic echo chambers and filter bubbles in social networks
- targeted disinformation and censorship
- all-powerful social credit systems (as already tested in China)
- unjustified mass surveillance
- Expropriation and unscrupulous utilization of personal data
- Concentration of power with omniscient and intransparent corporations or authorities
- targeted or negligent weakening of the security of software and protocols
- increasingly perfidious instruments of automated warfare.

A particularly complex field is discrimination due to ethically inadequate decision-making algorithms, such as those used for staff selection, insurance calculations, social predicting, etc.
This goes as far as decisions about life and death, e.g. in driving assistance systems or autonomous weapons. In addition, technical solutions sometimes rule out better alternatives or are ambivalent in their consequences. For example, more surveillance cameras are supposed to improve security while this could be achieved more sustainably through improved social conditions.
The use of care robots may improve care, however it can also have the opposite effect if the purpose is purely profit oriented. And anyone who trains artificial intelligence on false premises at best achieves artificial stupidity.

To date, artificial intelligence only imitates the mechanisms of our perception and information processing. But even if one day strong AIs were to achieve something like "real consciousness", this would be no reason to sacrifice our freedom to them. For our imperfect existence as human beings (and that of all sentient beings) would then still appear significant and worth protecting to us.

Whatever the future may look like, the demands of ethics must be the basis of our actions, not merely a decorative attachment. We therefore see it as our task to promote a fair and rational discourse on the aims and consequences of technology.
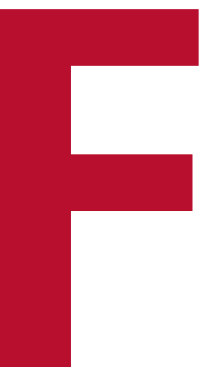
Formulation and enforcement of digital human rights

70 years ago, on 10 December 1948, the UN General Assembly in Paris adopted the *Universal Declaration of Human Rights*. The digital revolution was then still a long way off. A resolution of the General Assembly of 18 December 2014 stated that human rights also apply online and that privacy must also be protected in the digital sphere. In addition, we consider that an explicit recognition of several digital fundamental rights as human rights by the UN General Assembly is required in order to give them a correspondingly high priority. We are convinced that the following points should be taken into account:

1. The right to privacy, the right to informational self-determination and the equal right of participation in media information and communication are recognised as human rights.

2. Any personal observation of an individual, his behaviour, social contacts, use of the media or communication without his explicit consent shall be regarded as an unlawful interference with his private life in accordance with Article 12 and his freedom of expression and information in accordance with Article 19 of the *Universal Declaration of Human Rights*. Everyone has the right to legal protection against such surveillance, interference or impairment. When exercising the state's responsibility to protect, narrow constitutional limits must be observed. Unjustified mass surveillance is impermissible.

3. Everyone has the right to the protection of his personal data. The confidentiality and integrity of all relevant information technology systems must be ensured.

4. Everyone has the right to determine for himself the collection, use, analysis, storage, correction and deletion of personal data relating to him, unless this conflicts with civic obligations. The obligatory collection of personal data by state authorities must be limited to an essential minimum. Everyone has the right to receive information about all data and information relating to him in a reasonable time and format.

5. Everyone has the right to protect his data, information and communication against the knowledge of third parties by choosing suitable means, in particular with regard to public authorities.

6. Everyone has the right to know which algorithms, procedures, controls or criteria have become effective in automated assessments or decisions concerning him and to have them verified by a human being. Automated decisions and artificial intelligence must be taken responsibility for by natural or legal persons. They must not violate human rights or discriminate people for exercising their fundamental freedoms.

7. Everyone has the same right to non-discriminatory access to information and communication services. Access to the Internet must be a fundamental component of public services without restriction, even in times of political unrest. Network neutrality must be guaranteed.

8. Participation in public elections and votes and the exercise of other fundamental rights must not be tied to the use of digital media.

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not nations, religious communities, ethnic groups or
multinational corporations. It is important to defend
this central standard of humanist ethics, especially in
regards to the social changes triggered by the digital
revolution."

Editorial note

This text was written following a workshop held in Berlin in March 2018, that was conducted by Peder Iblher on behalf of the Giordano Bruno Foundation and the Humanistischer Pressedienst.

Discussion on humanism and transhumanism, currently fuelled by the rapid progress of Genetic Engineering, Nanotechnology and Robotics technologies ('GNR'), was outside the scope of this workshop; the Giordano Bruno Foundation will deal with these issues in a separate publication.

Regarding this brochure, see also the Draft Charter of Fundamental Digital Rights for the European Union: https://digital-charta.eu/.

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