Essay: Technologies impact on the geostrategic and democratic landscape

## 1. Introduction

Modern civilisation results from technological innovation. Whilst most technological developments are related to the flaws of human nature, e.g. its week senses, they still demonstrate distinctive human features: a complex language, consciousness, and sociality. They enabled a variety of social structures, with specific norms for legitimate emotional or rational behaviour - seldomly strict ones. Instead, they framed institutionalized, semi-formal arenas of social coordination, dependent on individual resources, learning processes, social interaction, and dominant beliefs, values, and ideas. In short: Social coordination depends highly on information, knowledge and social interaction (communication), nowadays institutionalized e.g. in various formal laws or political and administrative processes.

Consequentially, innovations in human communication technology always affected social organisation. Digital communication technologies differ from prior innovations, because of a) the speed of data communication and processing, b) the global reach of communication networks, and c) the features of digital information, a machine-readable reduction of comprehensive information. As platforms able to personalize content advanced in combination with social scoring and nudging technologies, options for algorithmic governance (context design) and decision became visible – and attractive to public services.

From a government perspective, current achievements and prospects in digital data collection, analysis, and communication offer an option for a fully-fledged, efficient, and global democracy<sup>1</sup> - dependent on the optimization goals of digital tools and devices, their technological design, and their regulation by law, infrastructure, or human decision.

# 2) Prospects of algorithmic regulation in social coordination

The industrial revolution and the development of modern transport resulted in a growth in production and distribution of goods and services that escaped the boundaries of local markets and potentially formed national and global ones. But due to the lack of adequate information and communication technologies, production, distribution, and consumption could hardly be coordinated. Therefore, frequent market failures occurred and inspired developing communication technologies, e.g. post, telephone, or television (Beniger 1986).

With Amazon, a network-based platform became successful in structuring market information in many areas of living efficiently, thereby solving many old supply and communica-

<sup>1</sup> A social order based upon the control of political and administrative power, the rule of law (protecting fundamental human and civil rights), and a voice and vote of people in affairs of their community.

tion problems. Based upon a de-central, data-based communication structure coordinating actors on different market sides largely by technical means, it represents effective self-regulation. But next to the personalized comfort, the platform offers to well-being customers, it destroys local business, exploits human resources, and exaggerates traffic as an ecological risk. Its negative external effects seem to overweight the common benefits. But considering the risks of climate change and the immediate need to transform the global economy into a system supplying essential goods and services sustainably for all – are there any options to add 'reduction of climate risks' to its optimization for business, e.g. as a product-scoring according to resources spent on production and distribution? Incentives were given to the production of sustainable, basic goods and services instead of luxury ones, best consumer practices as well as smart forms of delivery. With the right goal and methods, the platform could catalyse market transformation, assigning responsibility for constructive behaviour to people while creating competition for better products.

Similarly, a change in content-ranking by combining the amount of media interaction with the amount of its social or cultural variety or with the amount of people reading texts before interacting might advance Facebook in supporting information-based, constructive discourses, a fundamental asset for democracy. A sector-ranking in LinkedIn, advancing e.g. the jobs in critical infrastructure development (energy, water, health, administration etc.), might help coordinating rare professionals, globally – thereby advancing security for all.

### 3) Challenges of algorithmic regulation in social coordination

The examples show the potential platform regulation: Changed modes of collecting, processing, and communicating information relevant to human interaction (Spinner XXXX) resulted into an efficient form of technological coordination of social interaction, by automating the process of information exchange between all market actors, and delegating human decision partly to machines. The machine-driven efficiency strengthened the impact of the underlying logic of each business - with hardly any exception. Code displays very concrete norms - in comparison to rather general human ones. In the absence of political dispute over goals and methods underlying the network-based optimization of social coordination, platforms were obviously designed according to traditional norms guiding specific markets. As a result, they optimized social coordination to the benefit of their own instead of society and exaggerated dysfunctional modes of social coordination, efficiently.

Setting goals and standards for social coordination of different social arenas in order to advance the well-being of the whole community, constitutes the core responsibility of politics. Following the development of international networking and economy, national regulation lost its ability to meet these expectations - regulatory objects escaped national boundaries. International regulation could not fill the power gap, lacking institutions and procedures suited to reconcile the variety of global cultures and interests for a common good.

# 4. Bringing back politics to algorithmic governance in social coordination

Effective global governance could be defined as international coordination being able to identify global problems and potential solutions and to provide means for adequate action - in consideration of specific traditions guiding local, social coordination. This includes:

- the exploration of global data related to human problems, economy, and ecology to identify pressing problems and their causes, to develop a ranking due to urgency;
- the effective coordination of information related to problems and solutions, considering/ combining the global variety of technological and human analytical resources
- Instruments to develop/ to decide for concrete strategies, based-upon machine-supported displays of major options and to assign responsibility for coordination/ action
- Instruments to transfer global solutions to local forms of social coordination,
- Instruments to constantly assess progress or problems (in reducing risks and harms, for now) in order to react appropriate, e.g. using different resources, ideas, or tools

Most of these requirements could be supported by existing digital tools . But is there any reason to believe that political or economic stakeholders or international communities trained on nationalist ideologies would agree to disruptive changes in global regulation? They would probably fear loosing their position, opting for transforming existing standards.

# 5. Conclusion

Choosing the reduction of little risks instead of potential benefits is a common choice driving human behaviour (Nudging). Sticking to conservative norms, values, and beliefs is consequential, but prevents the exploration of benefits produced by socio-technological change and adaptation in arenas of social or political coordination. Therefore, I recommend rapid innovations in democracy – to prove its ability to care for the people, to inspire competition and innovation, and to adapt if necessary. Technology has many options for social and political change, but its effects depend on goals, tech design, and political decision.