Digital Capitalism's Crises of Sovereignty

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Since the 1990s, the internet has been described as a place that generates systematic challenges to sovereignty in modern societies. In these debates the central point of reference used to be the challenges of enforcing state sovereignty on the web, in particular, the question of whether national law can be enforced in the online world. "Code is Law" is the key formula that Lawrence Lessig coined to describe the deficient enforcement of traditional rule of law in "cyberspace" (Lessig 1999). According to his classical dictum, the rules and procedures of nationally constituted political entities – ideally the representation of the will of the people – do not apply on the internet. Instead, system architectures and their constructors govern it.

In the course of its development, the debate around the (non-) enforcement of law on the internet has taken several turns and has been occupied by different actors. The first references to the concept of sovereignty were still buoyed by euphoria about possible new forms of autonomous self-government in a lawless space. John Perry Barlow's *Declaration of the Independence of Cyberspace* from 1996 is probably the most striking example of the initially positive association with the internet's distance from the traditional constitutional state.

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A counter-position then coalesced around dealing with the dark sides of this legal vacuum: Spam, malware, "revenge porn," "trolling" and other phenomena were described as problematic aspects of a digital sphere beyond the jurisdiction of the state (Johnson, Crawford and Palfrey 2004; Froomkin 2015). Finally, a third position emerged in the wake of Edward Snowden's revelations: The enormous scope of state surveillance in the digital sphere made the internet of the 2000s appear to be a place of national and especially US American hyper-sovereignty, which in turn implied the loss of sovereignty of other state bodies – just remember the surveillance of the German chancellor's communications by US security authorities.

Succeeding as well as in distinction to the outlined positions, I would like to elaborate the following argument in this essay: Specific developments on the internet of the 2000s require a more complex understanding of sovereignty in the digital age. It is not sufficient to conceive of sovereignty as a purely political capacity for self-government and self-determination carried out by the nation-state. Instead only a systematic analysis of the connection between the radical commercialization and oligopolistic domination of the internet (Staab 2019) as well as its political control (Deibert et al. 2008; 2010) can reveal the extent of the sovereignty crises in digital capitalism. To elaborate this claim, I will at first briefly describe some key elements and events in the recent history of the capitalist development of the internet. Then I will look at the specific production model of the leading companies of the commercial internet that have matured in this context and outline some of its most important socio-economic effects. These descriptions lead me to the diagnosis of three sovereignty crises systematically linked to the expansion of digital capitalism. In a concluding point, I outline elements of a possible reaction to this constellation of crises in the European context. The analytical framework for my remarks is the concept of digital capitalism originally developed by Dan Schiller (2000; 2014) and recently updated by myself and others (Staab 2016; 2019; Staab and Nachtwey 2016; Nachtwey and Staab 2017).

The legacy of the crash

Digital capitalism isn't just an evocative metaphor for the growth of digital technologies in numerous areas of work, life and the economy – in other words, to denote a process that has been advancing consistently since at least the late 1970s in the highly developed economies of the OECD world (Schiller 2014). From an analytical perspective, it only makes sense to speak of digital capitalism in association with a new quality of both economic activity and social integration of citizens. This new quality developed after the dotcom crash of 2000 in the course of the digital economy's reorientation, which is due not only to the immense worldwide expansion of the digital infrastructure but also to the emergence of power structures in the commercial internet (Srnicek 2016). As a result of these two developments, new threats to sovereignty in and of digitalized communities have emerged that go far beyond the original sovereignty problem of the internet's inadequate state regulation.

The boom in digital technologies in the 1990s was (as it is today) driven by large amounts of venture capital. After the dotcom bubble burst, it became increasingly evident that many of the companies hyped in the 1990s didn't actually have any viable business model. Eventually, the collapse worked as a form of market cleansing that only companies with an "economically sound model" were able to survive. One must not forget that even Google was in serious danger of bankruptcy at the turn of the millennium. It was the invention and the rapid expansion of the market for online advertising after 2000 – to this day the only truly profitable business model on the commercial internet, besides the comparatively new cloud computing – that prevented this.

The market cleansing caused by the crash also paved the way for the domination of the World Wide Web by the monopolies and oligopolies of what today is often referred to as Big Tech or the Big Five: Google, Amazon, Facebook, Apple and Microsoft. These companies, all of which are now in the top 10 most valuable companies in the world (at times they even occupied the top five places), are the gatekeepers of the commercial internet. They provide the hardware and operating systems, own the marketplaces of the digital economy and, as cloud computing gains in importance, increasingly control the crucial infrastructure elements of the internet (Staab 2019). As

digital capitalism's leading companies (Dolata 2015), they form the blueprints that the technological transformation of other industries and enterprises is based on (Nachtwey and Staab 2017).

Consumption, not productivity

From a political economy perspective, this role model status is quite astonishing. Usually, the implementation of new technologies in the economy is perceived of as an instrument to increase company productivity. To this day, however, it is highly controversial whether the introduction of digital technologies in the world of work since the 1970s has made any significant contribution to economic growth at all (Gordon 2016). The productivity paradox concisely formulated by Robert Solow in the 1980s – "You can see the computer age everywhere but in the productivity statistics" (Solow 1987) – has still not been replaced by the new growth constellation longed for by advocates of digitalization (Brynjolfsson and McAfee 2014).

The growth of the leading companies of the commercial internet does not derive from productivity gains they initiate. It is, instead, based on their implicit promise to generate surplus profits in the area of consumption (Staab 2016): Online advertising (Google, Facebook, Amazon), e-commerce (Amazon), new distribution channels (platforms, app stores) – the so far all-dominant sources of profit for the leading companies – are entirely driven by the expectation of bringing about consumption that would not be realized under different conditions.

Online advertising promises a detail-rich *individualization* of consumption offers, which is supposed to make customers ask for products that they would otherwise not have noticed, let alone bought. In addition, the data collected during advertising, the act of buying and, in general, almost every interaction on the internet is used to set in motion a process of *recursivity* that is intended to create customer loyalty: Suppliers and potential customers remain in constant contact, usually unawares, which is supposed to enable companies to capitalize on new user preferences immediately and directly. Furthermore, digital technologies enable an enormous *acceleration* of consumption processes: In the subway, on the toilet, during lunch breaks – with a smartphone the world of goods is always just a few clicks away. Digital capitalism's service proletariat delivers the purchases right away.

Thus, in analytical terms, it is not so much efficiency gains in the production sector that have been at the core of digital capitalism till this day. It is characterized instead by the radical combination of technological innovations with strategies for rationalizing the consumption apparatus of contemporary societies (Staab 2016).

Privatized Keynesianism 2.0

In this respect, digital capitalism stands in a tradition of a post-Keynesian demand policy, which Colin Crouch has described as "privatized Keynesianism" (2009). Since the 1980s, consumer debt has systematically expanded in order to maintain demand. This debt helped replace purchasing power that was lost due to wage stagnation. Digital capitalisms' privatized Keynesianism 2.0 has not yet copied this direct way of generating demand. Rather, it is based on the subsidization of consumption by venture capital (e.g., trips with Uber are subsidized by the company), on profits made elsewhere (e.g., advertising revenues finance Google's free services) and on the cannibalization of 'analogue' competitors (i.e., the margins of e-commerce dry up the profits of bricks-and-mortar retailers). Nevertheless, the subsidization of demand pursued as part of Silicon Valley-style growth-before-profits strategies, ultimately aims at a maximization of private consumption – just like the credit-driven model.

From a macroeconomic point of view, the strategies mentioned could only be considered engines of economic growth if they actually tapped into otherwise untouched reservoirs of demand – in other words, if money is spent that would not enter the commodity cycle under different circumstances (Staab 2016). Private savings or assets could be worthy of consideration in aiming for this economic development.[1] However, unlike income, which usually flows back into the economic cycle, high levels of wealth are usually removed from the commodity cycle (Kumhof and Rancière 2010; Kumhof, Rancière and Winant 2013) and the strategies of Big Tech do not suggest anything is going to change in this respect.

Quite the contrary, the vast amounts of capital reserves that the leading companies themselves hoard and thus withdraw from the economic cycle are striking. In spite of financial pressure caused by

1 Due to restricted space, the large and important field of public demand, which is admittedly of great relevance in the present context, is not included here.

the COVID-19 pandemic, Apple alone is still credited with reserves of 193 billion US dollars. If one makes this connection, the leading companies certainly appear to be part of the problem that their strategies for rationalizing consumption are purported to solve.

In times of wage stagnation or even real wage losses, which of course have a negative impact on private demand, rationalizing consumption resembles fishing in overfished waters. Big Tech may be able to claim growing shares of the fishing industry for themselves through the incredibly detailed measurement of fish populations and the use of electrical nets. However, they make no significant contribution to the reproduction of fish stocks. What one fisherman gains, the others therefore lose. These strategies do not represent a growth model for society as a whole.

At the same time, growing numbers of venture capital (in the case of unlisted companies) and excess reserves (in the case of Big Tech) encourage expansion into new markets. The smart home market, i.e., the connection of private living spaces with the consumption networks of the commercial internet, follows the established pattern of rationalizing consumption. Amazon Echo or Google Home bring potential consumers even closer to the digital department store. If the smartphone is too far away or if both hands are occupied elsewhere, you can still shout your wishes at a networked microphone. As usual, user data on lifestyle and, above all, consumption preferences are collected and serve as a valuable resource for targeted advertising, which in turn is fed back directly to potential customers via the devices.

On the other hand, the movement into industrial core sectors such as the automotive industry at first glance seems to open up new markets. So far, however, it is by no means clear whether this expansion is really intended to move away from established patterns of intensifying consumption opportunities. It has not been announced that Big Tech want to build cars themselves. Their aim might instead be to act as platforms for the networked car of the present and future on the software side. Paired with autonomous driving, this would simply mean an extension of the platform companies' access to the lifetime of users: If you have to keep your hands on the steering wheel, the consumer networks of the commercial internet cannot reach you. If the car drives by itself, time is freed up for activities such as online shopping or music and video streaming, which can then be handled

by the exclusive ecosystem of the respective company. If this assessment is correct, all the hype about new business models ultimately conceals the old pattern – and the old problem that private demand does not fall from the sky.

Against this background, Big Tech's plans for "smart cities," "smart infrastructures" or "smart health," which are often touted as measures of altruistic world-improvement, are easily understandable. They conceal a two-part strategy: Firstly, the public sector is moving into the focus of giant internet companies. It entails the promise of capitalizing fields that are still partly removed from the market (e.g., private homes, which have recently found their way into the market via portals such as Airbnb) as well as stable demand via public contracts (e.g., in the health and education sectors). The well-known neoliberal privatization program is being relaunched. In a second step, all the basic strategies of the commercial internet can be applied to these new fields – from data mining, third-party financing (e.g., running advertisements during the red phase of the traffic light) to individual "pricing" for infrastructure services (e.g., the price of privatized public transport can be adjusted to then increasingly transparent individual customers' willingness to pay – as is already the case with Uber rides or Amazon products).

Sovereignty in digital societies

The outlined transformations of markets and industries, but also of cities and the public sector, alter mechanisms of social integration and represent attacks on sovereignty in digital societies in three ways.

Consumer sovereignty

Firstly, the opportunities for citizens' self-determination as market players are already systematically undermined at present: The market power of the leading commercial internet companies perverts market processes, because gatekeeper platforms control who is given access to digital markets, dictate conditions and, in terms of visibility, can systematically give preference to their own offers. At the same time, the transparent consumer is at the mercy of fully automated, market-distorting processes such as personalized pricing algorithms. It is only at the cost of integration into the consumer networks of the leading companies that one obtains access to basic internet infrastructure services: Without Android or iOS, for example, it is difficult

to use any mobile internet services. With the purchase of a smartphone, people automatically become part of the economic ecosystems of the internet giants.

Civic sovereignty

Secondly, as we have known at the latest since the Snowden revelations in 2013 and more recently through the debates on "hate speech" and advertising-financed fake news in the US election of 2016, these developments by no means leave the sovereignty of citizens as political agents unaffected. Presumably, the second most important use for the huge amounts of data accumulated by the leading commercial internet companies after the intensification of consumption is for espionage, influencing and controlling public opinion as well as targeted disinformation in the service of state and economic actors. On the one hand, the sovereignty of nation states comes under attack when they cannot protect their citizens' (or domestic companies') data from access by foreign agencies, or when foreign "hackers" destabilize public debate. On the other hand, the sovereignty of citizens *vis-à-vis* their own state is increasingly at risk – if the latter, through surveillance, hacking or cooperation with key companies, appropriates a historically unprecedented amount of their personal data – whereas it should actually guarantee their citizens' liberal rights.

Economic sovereignty

Thirdly, economic sovereignty, which forms an important basis of self-governing communities, is in many respects subject to considerable transformation. The most obvious example of this is the tax avoidance policy of numerous leading digital companies.

However, no less important and politically far more sensitive are questions of changing patterns of accumulation. If the commercial internet, in which the decisive gatekeepers and market owners reap their monopoly profits, was indeed to act as a blueprint for the restructuring of numerous other business areas, then the established mechanisms of appropriation – and distribution! – of economic profits would be called into question. Imagine an automotive industry that really is attached to the ecosystems of the leading companies. Following the platform logic, large parts of the profit margins would fall to the dominant software companies and thus be removed from both the systems of collective bargaining and public taxation.

In addition, there are all those direct and indirect effects on the system of industrial relations, forms of employment ("crowdwork") as well as power and control in the workplace, which can shake the foundations of entire economic sectors.

European-style digital capitalism?

When asking about a European answer to this three-pronged sovereignty crisis, one can observe the coupling of various aspects which could help tame digital capitalism. For example, approaches to an unagitated and hitherto uncoordinated, but potentially very effective *digital regulatory policy* can be observed at various levels in Europe today. "From below," numerous European cities have significantly restricted the scope of action of companies whose goal is the commercialization of urban space. The most popular examples are the multi-billion-dollar start-ups Uber and Airbnb, which have systematically been restricted, initially by local and subsequently by national legislation. In some cases, the regulation has harmed their business models to such an extent that the profits from wage dumping and the commercialization of public or private space no longer appears worthwhile. "From above," the European judiciary has initiated various lawsuits against companies such as Google and Apple, one focus is tax evasion, which could shore states up against the loss of economic sovereignty with regard to global corporations. In the field of the digital public sphere, first attempts to establish a democratic culture of debate on the internet can be observed. Germany, for example, subjects the actions of a corporation like Facebook to the public interest. Take the case of the controversially discussed Network Enforcement Act of 2017, which holds Facebook at least rudimentarily responsible for rights violations on its platform. Economically significant might be attempts to use and update antitrust law to address the problem of digital monopoly power and to create a "level playing field" (Zysman and Kenney 2017) in the commercial internet, which could set tighter limits on monopoly profits.

However, in order to really tackle digital capitalisms' sovereignty crises, one might have to gain greater distance from the market-driven regulation playbook. Consequently, questions of digital infrastructure ownership (which are particularly significant in the field of cloud computing) or the topic of the *internet as a public* good are being increasingly politicized again, with congruent interests emerging

between citizens, states and companies in Europe. This is a politically extremely sensitive area of sovereignty policy, the successful configuration of which cannot be guaranteed without a combination of legislative taming of the leading companies, on the one hand, and investment in a digital infrastructure for citizens, states and companies (at least partially) organized in the public interest, on the other.

The central point of reference for a digital capitalism with European characteristics is, politically, already well established: data protection. Data protection is widely misjudged as a variable of economic development: Commercial internet lobbyists never tire of emphasizing the absolute necessity of unrestricted access to ever more data, as this is supposed to be the only way to achieve technological developments regarding the buzzword of artificial intelligence – currently the big favorite of venture capitalists. But what is left for Europe to gain here? No digital Marshall Plan, no matter how much money it provides, will be able create competition for Google and Apple – at least not without breaking the political taboo of open markets in the style of the Chinese firewall.

However, the operating range of the leading companies certainly can be restricted in the interest of sovereign communities. This would favor European companies. Even today, the best sales pitch for medium-sized business-software firms in Germany is that they host data under the jurisdiction of German data protection law. For these companies, tightening data protection laws further would in no way be detrimental. On the contrary, if properly designed, they can help citizens and companies benefit from locational advantages and possibly even make the European data architecture an export hit in the future. At the same time, with the help of an entrepreneurial state (Mazzucato 2014), the chance exists to enter future markets not yet dominated by leading American companies: In the industrial internet of things that is yet to be built, hardly anything is more important than guaranteeing a functioning data protection system. Smart data protection could thus form the basis of a genuinely European digital production model: A digital infrastructure based on security guarantees and a European data policy that works to preserve economic, civil and market sovereignty.

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