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DIGITAL CAPITALISM – HOW CHINA IS CHALLENGING SILICON VALLEY

AT A GLANCE

Over the past 20 years Facebook and Co. have successively risen to a position of global dominance over the internet. Today, however, the rise of several Chinese internet companies presents a serious challenge. These firms play key roles in the Chinese version of digital capitalism. In China they form a link between highly flexible industrial production and digitally supported distribution and consumption processes as well as ubiquitous state surveillance.

The commercial internet as known in the West has for some time been in the hands of a very small number of very large corporations. The key “leading companies” (Dolata 2015) of digitalisation, often summarised by the acronym GAFA (Google, Apple, Facebook, Amazon), have successively built up their market power since the collapse of the dot-com bubble in the late 1990s. Today they dominate the commercial internet market in much of the world.

THE GEOGRAPHY OF DIGITAL CAPITALISM

If one limits one’s perspective to the commercial internet of the West, one overlooks the places where the GAFA complex has been unable to achieve the position of dominance it occupies in the US and Europe. Two regions of the world, in particular, stand out. In the Russian-speaking world, in the environment surrounding companies like Yandex (originally a search engine, today a complete digital ecosystem) and the Mail.ru group (Vkontakte, Odnoklassniki), players outside of the GAFA complex have been able to hold their ground on the market. In China a handful of corporations have developed – especially a trio comprising Baidu, Alibaba and Tencent (owner of Qzone), subsequently referred to as BAT – that have already closed the technological gap separating them from the giants of Silicon Valley. In terms of market power in China, the BAT firms leave the GAFA companies in the dust. From an analytical perspective, as well, they exhibit several distinctive characteristics.

If we look at the digital economy with regards to geostrategy, economic dominance is not as unilateral as one might think from a Western perspective. What lies behind BAT? Is the success of these companies the first step in the rise of the fortunes of Chinese business? Does this mark the beginning of the ascent of China, which, as the workshop of the world, has in the last few decades played a significant yet secondary role when compared to Western brands, finally to the status of economic superpower?

STATE INVESTMENT

In works on the development of the digital economy on the American West Coast, critical researchers have often pointed out that, by opposition to self-descriptions in the field, not only “disruptive” (Christensen 1997) technologies and entrepreneurial personalities (Thiel 2014) but primarily the state played a decisive role in the rise of the digital economy. Dan Schiller has, for example, shown in his groundbreaking works on digital capitalism (2014), that more than anything Keynesian military investment programmes laid the foundation for the later success of the leading digital companies. Marianna Mazzucato (2014) has, for example, impressively demonstrated to what extent publicly financed research played a pioneering role in the development of the key patents of the first iPhone.

In China today we see a specific structure of state investment that significantly exceeds that which is known about the history of Silicon Valley. Chinese high-tech strategy is based on a strategic industrial policy with the goal of establishing technological and economic autonomy. This policy is an expression of a state capitalism 3.0, which has been identified as typical of large developing countries (Brink 2016),

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but which goes much further than that of other nations in terms of the intensity of strategic planning and its entwinement with authoritarian surveillance policy.

The ten-year plan adopted in 2015 titled “Made in China 2025” (MiC 2025) aims to support the strongest Chinese companies in a number of industrial sectors. Discontent to continue to play a lower role in global production networks, the plan aims to create new China-centred structures of production by exploiting the dynamic growth of the domestic market. These structures are intended to create strength through their own innovative capacity (Butollo/Lüthje 2017). In this respect, MiC 2025 is not simply an agenda for digitalisation. Neither is it a rip-off of Industry 4.0, even if this term has been broadly adopted in China.

MiC 2025 is augmented – and this is especially relevant to the questions raised above – by the so-called “Internet Plus” agenda. MiC 2025 focuses primarily on companies in the industrial sector and aims to support them in updating their technology by employing automation and networked information technology. The “Internet Plus” agenda takes the reverse route by supporting the systematic exploration of the economic role of the internet. The combination of these two initiatives puts China in a favourable position to benefit from digital capitalism. The country is home to a gigantic yet relatively low-tech industrial sector and at the same time possesses strong players in the digital economy. To summarise, compared to the situation in other developing countries, American companies have been unable to dominate the commercial internet in China.

POLITICAL INTERESTS IN THE COMMERCIAL INTERNET

Through a mixture of economic protectionism and targeted state support of key digital companies, in particular the BAT complex, national conglomerates have formed in the commercial internet which have since joined the ranks of the world’s most valuable companies. Tencent, for example, became the first Chinese internet company to join the club of corporations to rise above a market value of more than \$500 billion (Perez 2017).

The political support of the leading companies of the Chinese commercial internet and their connections to all areas of the economy and life does not simply follow economic-political considerations. Rather, the Chinese version of the internet has been transformed from a place of potential subversion into a space which is deliberately used to secure political control.

Edward Snowden’s revelations a few years ago impressively revealed the enormous possibilities for state surveillance and control that lie in the interconnection between the national state security apparatus and the leading commercial internet companies. In light of what exists currently or is being developed in China, the fervent data collection of Western intelligence organisations and the willingness to cooperate by the GAFSA complex appear to be merely the first steps of digital state surveillance within the context of the merging of corporations and state control mechanisms.

In China, this refers not just to the more than two million censors – many of whom are employed directly by the BAT corporations – who actively monitor public opinion. Even more significant are two recent large-scale projects which underscore the close relationship between the BAT complex with the agents of state surveillance and control. The first is the development of a system of Social Credit Scores. Modelled on the example of a private credit rating system developed by Alibaba not unlike the German SCHUFA, the social scoring system is designed to consolidate and index all traces left by individuals online, resulting in a single number reflecting the quality of each citizen and consumer (Mau 2017). The resulting score regulates people’s access to individual opportunities: access to credit, educational institutions and job markets, even the right to use commercial airlines or high-speed trains is determined by the banal behaviour bundled in each person’s score. The overarching principle of this instrument for disciplining the population can be summed up as such: “If trust is broken in one place, restrictions are imposed everywhere.” (Denyer 2016)

While the Social Credit Score system is still primarily concerned with collecting data on the internet, a new co-operation between state authorities and the internet company Baidu (often referred to as “China’s Google”) revolves around the control of data in the non-virtual world. Currently the company is systematically installing cameras in critical public spaces. Not only does the system employ highly developed facial recognition software (Chen 2017), it can also identify people whose faces are covered by profiling their gait. Both online and offline, individuals are supposed to be permanently traceable.

GROWTH MODEL: DIGITALISATION OF THE DOMESTIC MARKET

The threatening face of state control changes nothing about the fact that the digital economy could become an important driver of industrial development. This is not due to the existence of BAT per se. It is rather the effect of the combination of internet giants with strategic industrial policy and a fast-growing domestic market. Digitalisation is therefore the driving force behind the development of Chinese brands that tailor their products for the specific requirements of local consumers.

A variation of this approach is being tried by the more technologically advanced companies of the consumer goods industry. The leading manufacturers of household appliances, for example, advertise that their highly automated, “networked” factories – in line with the “Industry 4.0” model – produce personalised products. Though this form of customisation remains limited to insubstantial, superficial features of the goods, the companies are able to create customer loyalty but also bind consumers to them via their user platforms, through which, for example, recipes are shared. And so the customer is buying more than just a fridge, washing machine or air conditioner. In fact, the industrial companies are marketing the personal data of their customers as their unique selling point.

A thoroughly different variation of product personalisation is being built using the advantages of digital platforms. The strength of Chinese internet corporations was in part achieved through the rapid growth of e-commerce. This is especially true in the case of Alibaba's platform Taobao and Tencent's WeChat app, but also when it comes to many small specialised platforms. A key for the success of Alibaba was the role of the company as a b2b (business-to-business) platform, which connected foreign purchasers with Chinese suppliers (often downright sweatshops). Through the platform, suppliers could be found for the specific requirements of foreign companies – a different type of product-on-demand.

The b2c (business-to-consumer) division of Alibaba was able to build on these strengths and apply them to the domestic market. The platform offers relatively low-tech companies the opportunity to win contracts. The so-called Taobao villages have received much attention: Often backwards in economic terms, these are clusters of small and tiny producers who are systematically integrated into the digital economy (Rüesch 2014). The technological level of the individual supplier is not a significant factor when it comes to belonging to the on-demand economy of the platform companies. The required flexibility and the matching between companies and customers, which is performed entirely by the platform, satisfies the diversified network and precisely herein lies its potential for gradual technological advancement.

The growth of the huge domestic market offers favourable conditions for this to occur, not just on the basis of the resulting economies of scale, but mostly due to the specific structure of the consumer base. The mid-level quality segment of the market is especially competitive. Chinese companies can compete with Western firms because they offer comparable quality at lower prices. The race for these markets has been identified as a driver of industrial advancement (Brand/Thun 2010). By employing digital resources, Chinese firms can build on their most important advantages: direct access to the market and the capability to deliver goods according to the specific demands of local consumers.

This impressive progress should, however, not distract from the underlying problems of the Chinese economy. The weakness of the innovation system and the relative technological backwardness compared to the West remain perennial issues, not mentioning the problems of growing labour disputes due to ongoing poor working conditions and the macroeconomic imbalance thanks to (relatively) weak domestic demand. Still: the digital economy is a powerful catalyst that shows that the Chinese government's plan to catch up with the US and Europe technologically by 2049, is no pipe dream.

THE COMING EXPANSION?

Beyond the continuing digitally supported integration of the domestic market, one must, in this context, address the question of the transnational expansion of the BAT companies. Alibaba and Tencent, in particular, play important infrastructural functions and form crucial nodes for the digital

model of domestic consumption. However, in the area of global integration of Chinese companies in the context of an export-driven growth model lies a second significant aspect of Chinese economic policy. With the "One Belt, One Road" initiative, the development of transcontinental transport routes over land and water, an investment programme of an unbelievable scale has been put into action. The plan's aim is the seamless integration of Chinese companies into the world market.

At the same time, one can observe how parts of the BAT complex are themselves internationalising. Not only are all three corporations listed on the New York Stock Exchange, Alibaba and Tencent, in particular, have embarked upon expansion beyond their home market. The remaining "neutral" markets are currently being targeted in the expansion efforts. In particular, Southeast Asian countries with a rising middle class that enjoys considerable spending power, show similarities to China. Meanwhile, in India, Alibaba and Amazon have been engaged in a fierce price war for a significant share of the growing e-commerce market.

If one takes account of the specific qualities of the Chinese version of digital capitalism, one can assume that the internet platforms will also play a significant strategic role in the development and integration of the Chinese export model. Already today so-inclined customers in Germany can order Chinese hardware through Aliexpress, though they still have to wait for about two weeks for delivery. With the combination of state investment in infrastructure ("One Belt, One Road") and the stronger international role of Chinese internet platforms this time span could be reduced to a period of a few days and the domestic digital consumption model of China could expand globally through these leading digital companies.

The economic interests of the GAFA complex and the venture capital that supports these companies would be affected by these developments. Until now the platforms based on the American West Coast have formed the key gateways for digital consumption processes in large parts of the world (Staab 2016).

IMPENDING COMPETITION OF NETWORKS?

The potential expansion of Chinese internet corporations into GAFA's territory raises several questions: for example, under which conditions could co-operations between GAFA and BAT be possible in tertiary markets? What would the balance of power look like in the case of open conflict for market supremacy? On the one hand, the case of UBER in China has shown that co-operations under Chinese leadership are conceivable: following a phase of destructive competition, the \$70 billion American start-up quit the field after it was offered a hefty share in competitor Didi. On the other hand, one sees in the aforementioned battle between Alibaba and Amazon over the Indian market that lengthy price wars are thinkable. Decisive for the duration and outcome of such battles for market power will be the depth of the coffers of the Chinese companies that are closely tied to the Chinese state and its vast state funds. Finally, one

must raise a question relevant to security policy: will the expansion of Chinese platforms result in a shift in control of global internet user data from the American West Coast to the Chinese East Coast?

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Notes on the text

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