GOVERNING PLATFORMIZATION IN EUROPE

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Introduction

Online digital platforms have deeply penetrated every sector in society, disrupting markets, labor relations, and institutions, while transforming social and civic practices; more than that, platform dynamics have affected the very core of democratic processes and political communication. After a decade of platform euphoria, in which tech companies were celebrated for empowering ordinary users, problems have been mounting. Disinformation, fake news, and hate speech spread via YouTube, Twitter, and Facebook poisoned public discourse and influenced elections. The Facebook-Cambridge Analytica scandal epitomized the many privacy breaches and security leaks dogging social media networks. Further compounded by charges of tax evasion and the undermining of fair labor laws, big tech companies are facing a serious "techlash". As some argued, the promotion of long-standing values such as tolerance, democracy, and transparency are increasingly compromised by the global "exports" of American tech companies, which dominate the online infrastructure for the distribution of online cultural goods: news, video, social talk, and private communication (Geltzer and Ghosh 2018).

The evolving digitization and "platformization" of societies involve several intense struggles between competing ideological systems and their contesting actors, prompting an important question: Who is or should be responsible for anchoring public values in platform societies that are driven by algorithms and fueled by data? This paper tries to tackle this question, concentrating on the challenges Europe faces when trying to govern societies that are increasingly dependent on global networked infrastructures. I will first explore what position Europe occupies amid competing (Chinese and American) platform ecosystems in the current online world order. Next, I will zoom in on the American ecosystem and its mechanisms. After briefly elaborating on what public values should be anchored in this system and who are the responsible actors, I will focus on the challenges facing Europe. How can European citizens and governments guard certain social and cultural values while being dependent on a platform ecosystem which architecture is based on commercial values and is rooted in a neolibertarian world view?

A New Geopolitical Order of Platform Ecosystems

The global online world is dominated by companies and by states. Two platform ecosystems dominate the online world in terms of geopolitics: one is American, the other Chinese. China governs an ecosystem that is controlled by the state and is operated by its own Big Five companies: Baidu, Alibaba, Tencent, Jingodon Mall, and Didi (the Chinese Uber). Alibaba and Tencent have lately become extremely powerful, branching out from their core businesses into every sector of society. They have become gatekeepers to the entire economy, wielding power over brick-and-mortar enterprises, pay-systems, communication channels, social networks, groceries, pharmacies, and so on. America has its own platform ecosystem, which is dominated by the Big Five tech companies Alphabet-Google, Facebook, Amazon, Apple, and Microsoft (GAFAM). Over the past two decades, this powerful ecosystem has spread to the rest of the world, and it is dominant in Europe, most of Asia (except for China), Africa, and South America (Jin 2015). In terms of market value, the Big Five form the world's fifth largest economy, after the United States, China, Germany, and Japan. Seven companies – the American Big Five plus Tencent and Alibaba – are in the top ten of public corporations ranked by market capitalization (Statista Portal 2018).

On the face of it, these two ecosystems are each other's ideological antipodes. The Chinese state exerts strict power over their tech companies, protecting the internal market through its "firewall". In the American system, the market controls the online infrastructure, which the US government hardly seeks to regulate. Closer inspection reveals the two ecosystems are not as isolated as they appear. American tech companies are increasingly adjusting their technologies to be allowed to enter the Chinese ecosystem, caving in to the regime's censorship laws or aligning with Chinese companies. For instance, Google is developing a search engine (project Dragonfly) that adapts to Chinese censorship rules, and Chinese tech companies have obtained stakes in American companies (e.g., Didi in Uber). Although I cannot go into details, the two systems that appear to be entirely separate are interconnected at many levels.

Squeezed in between the United States and China is the European continent, which has few major technology companies and operates a relatively small percentage of all digital platforms. By and large, Europe has become dependent on the American platform ecosystem, which techno-commercial architecture is rooted in neoliberal market values. But beyond market value, the platform ecosystem revolves around societal power

and influence. The Big Five increasingly act as gatekeepers to all online social traffic and economic activities; their services influence the very texture of society and the process of democracy. In other words, they have gained rule-setting power. There have been many clashes between American tech companies and European regulators as well as national legislators over public values, including privacy (resulting in the EU's General Data Protection Regulation), fair competition (resulting in the EU levying substantial fines on Google in 2016 and 2018), tax evasion (resulting in Facebook changing its tax-base policy), and the condemnation of fake news and hate speech (resulting in the German parliament imposing a twenty-four-hour deadline on social networks to take down such expressions). Fighting on several fronts, the EU tries to strictly enforce its laws in a new global networked space.

We often hear from Silicon Valley CEOs that Europe is "cracking down" on American Big Tech out of "jealousy" (Solon 2018). I take a different stance on this issue: The American platform ecosystem hardly allows for public space on the internet and tends to favor commercial values and private interests over public ones. Therefore, Europe should articulate its own governance strategy based on its appraisal of a strong public sector, independent institutions, fair taxation, and the common good. According to Peters and Weggeman (2010), the Rhineland model presumes an active government that is involved in major social issues, such as minimizing poverty and environmental protection, advocating a strong public sector, and government regulation and enforcement. Protecting the Rhineland model of a social market economy should not be considered an economic liability but rather an asset: A loss of public trust is ultimately a loss of business value. In the wake of the Cambridge Analytica scandal, Facebook lost an estimated thirty-five to eighty billion dollars in market value. As Mazzucato (2018) argues, it is important to assess what constitutes societal value in addition to market value, because both types of values are integrally part of a nation's economic strength. Before getting back to my basic question how can European societies guard public values and the common good in an online world – we first need to examine how the American platform ecosystem is structured.

How Does the American Platform Ecosystem Work?

Platformization is an enormously complex phenomenon, which has disrupted not just markets and sectors, but has started to uproot the infrastructural, organizational design of societies (Helmond 2015; Plantin et al. 2016; Van Dijck, Poell & Nieborg, 2019). It is crucial to study how platform

ecosystems operate, because we still know too little about big platforms' technical operations, their governance and business models - partly as a result of those being trade secrets. Roughly put, the Big Five operate infrastructural platforms (e.g. cloud services, data centers, satellites, etc.), intermediary platforms (e.g. social networks, pay systems, login and identification services, cloud services, advertising agencies, search engines, app stores, navigating services, etc) and sectoral platforms (e.g. educational apps, health apps, etc) (Van Dijck, 2020; Van Dijck, Poell, and De Waal 2018, chapter 1). The potential to integrate dataflows both horizontally and vertically at the back-end of these platforms constitutes the invisible power of these five Big Tech companies across the different layers of the ecosystem. In the meantime, nation-states increasingly rely on the global system's datafied and commodified mechanisms for their vital economic and democratic functions, such as Google's and Facebook's advertising systems and Facebook's and YouTube's role in the distribution of news and video content. Besides owning and operating the infrastructural core of platforms, the Big Five are also branching out in a variety of sectors that are progressively interwoven with this online infrastructure. Indeed, platformization affects all sectors in society, both private (e.g., transport, finance, retail) and public (e.g., education, health), hence also affecting the common good.

The accumulation of platform power happens at two levels: (1) through ownership relations and partnerships between tech companies that operate both infrastructural and sectoral platforms and (2) through the invisible mechanisms underlying the platform ecosystem, such as the steering of data flows, envelopment of users, invisible selection criteria, and algorithmic lock-ins that facilitate path dependency. (Van Dijck, Poell & De Waal, chapter 2). At both levels, power is exercised between infrastructural and sectoral platforms, as well as across sectors. Tech companies leverage control over data flows and algorithmic governance not just through a few major infrastructural platforms (e.g., Alphabet-Google in Search and Cloud services) but extend these powers across many sectors (e.g., Google Apps for Education, Google Health, Google Shopping). Unprecedented network effects across the global online ecosystem are thus gained through the potential of horizontal, vertical, and "diagonal" integration of data flows, creating user lock-ins and path-dependency (Van Dijck 2020).

The platform mechanisms underpinning the ecosystem are largely opaque and out of sight for users and governments. Platformization is overwhelmingly driven by commercial interests that often take precedence over societal values. Some of the main problems are an almost total lack of transparency into how data flows are steered within and between sectors, how algorithms influence user behavior, how selection mechanisms impact the visibility of content, and how business models favor economic transactions over the public interest. In addition, public sectors that historically serve and protect the common good, such as education and health, are rapidly encapsulated in the American platform ecosystem, where they risk being turned into privatized commodities. Platform companies inadvertently take over vital functions from state and public bodies once they become major gatekeepers in the circulation of health and educational data flows as well as in news and information cycles. Platforms thus increasingly become the new infrastructural providers. As Mark Zuckerberg observed in 2017, Facebook wants to be a "social infrastructure" - a term that resonates with the notion of public utilities. Global social infrastructures, as we know, come with awesome responsibilities not just for the welfare of the company and its shareholders, but for the wellbeing of the people as societal stakeholders

Who Is Responsible for Public Values and the Common Good?

If European societies want to guard public values and the common good in an online world, they first need to articulate what kind of public values they want to foreground when designing an ideal digital society. Norms and values are often left implicit. Looking at regulator's disputes with tech companies over the past few years, it seems clear that values such as privacy, security, accuracy, and transparency are at stake; Europeans insist on protecting their private information, securing their internet access, relying on accurate information, and pursuing transparency in terms of service. But beyond these principles relating directly to the internet as a digital environment, there is also a need to articulate public values that pertain to much broader societal issues, such as democratic control of the public sphere, a level playing field for all actors, anti-discrimination practices, fairness in taxation and labor, and clarity with regards to (shared) responsibility and accountability. Public values are not a simple set of rules that you can buy "off the shelf" and implement in society; on the contrary, they are disputed and negotiated at every level of governance - from schools and hospitals to local city councils, and from national governments to supra-national legislators.

The negotiation of public values is historically anchored in institutions or sectors, where it is moored in laws, agreements, or professional codes. For instance, in news journalism, public values such as accuracy and fairness in reporting are (self-)regulated via professional codes; in education, the norms for privacy, fairness, and accessibility are controlled partly by the government and partly by a school's agreements with parents; urban transport is regulated by city councils and local governments. Remarkably, tech companies over the past decade have preferred to bypass institutional processes through which societies are organized – sectoral regulation, public accountability, and responsibility - by claiming their exceptional status. Facebook, Google, Uber, and other big platforms have argued they are mere "facilitators", connecting users to creators or producers, and connecting content to users. By insisting on their status as "connectors" and avoiding regular legal categories, platforms and their operators have avoided taking responsibility. Until 2017, Facebook firmly denied its functioning as a "media company" although more than half the news consumed by Americans comes to them through Newsfeed. And Uber's refusal to accept its status as a "transportation company" was fought all the way up to the European court, where it was finally confirmed in December 2017.

So who is responsible for guarding public values in a digital society? The simple answer to this question is: all of us. But that answer is not very helpful. Let me break down "all of us" into three types of actors we need to identify: market, state, and civil society. In the Chinese system, the state obviously controls market and civil-society actors. In the American system market actors – from big corporations to micro-entrepreneurs – are left to themselves to organize a "fair" market, leaving a small role for state or civil-society actors. The European Rhineland model ideally balances the powers of state, market, and civil-society actors in multi-stakeholder organizations. Obviously, these multiple stakeholders do not have the same interests, so government bodies need to take the roles entrusted to them as legislator, regulator, moderator, and enforcer to negotiate the public interest. However, because the architecture of the American ecosystem is uniquely engineered by market actors – and its infrastructure is dominated mostly by the Big Five – it is difficult for state and civil-society actors in Europe to put their stamp on these negotiations. Governing the platform society has turned out to be a big struggle over public values and the common good.

Most visible to the public eye are the outcomes of a wide range of negotiation battles; the concerns underlying these negotiations involve a wide variety of public values, but it is not always immediately evident what the common denominators are. We read about EU regulators levying big fines upon American tech firms and understand this is about the principle of "fair access" and a "level playing field" of markets. We witness national

governments such as Germany impose strict rules on social networks to ban hate speech and fake news; of course, such judgment involves a fine balancing act between the right to free speech vis-à-vis the public values of accuracy, fairness, and nondiscrimination. In 2016, the EU asked Facebook, YouTube, and Twitter to sign a voluntary "hate speech code" that requires the companies to review and remove illegal forms of hate speech from their platforms within twenty-four hours and makes it easier for law enforcement to notify the firms directly. Municipalities, schools, and hospitals negotiate contracts with big tech giants such as Google to exchange data for platform services while bartering their citizens', students', and patients' right to privacy and accessibility. Each negotiation between (big) tech companies, government agencies, independent institutions, and citizens discloses how interests sometimes clash, and sometimes converge when negotiating public values. Many of these tradeoffs boil down to a set of fundamental questions such as who owns and exploits data flows, who controls algorithmic governance, and who is responsible and accountable for their impact?

To be sure, there is not a single one-size-fits-all solution to the problem of responsibility and accountability in a platform society. The question how Europe can live up to its preferred Rhineland model of protecting public values and the common good while lacking control over a corporately driven platform infrastructure is a thorny one. Therefore, we need to look at various (supra-)national, local, and individual levels of involvement to define which strategies may help Europeans tackle the multitude of complex challenges facing them in the online world. Below, I will articulate five such recommendations or strategies, directed at companies, governments, and researchers.

Five Recommendations for Europe

The *first* recommendation is leveled at the supra-national level, which is by far the most influential when it comes to countering the rule-setting powers of the Big Five and protecting public values in multisided platform markets: Europe should take a comprehensive approach to regulating platforms and data flows, not just as markets but as societies. Over the past few years, we have seen an assertive enforcement of antitrust laws, resulting in two substantial fines for Alphabet-Google, the first one (in 2016) for giving preference to its own retail service (Google Shopping) over other services; the second one (in 2018) for forcing phone manufacturers to incorporate a dozen of its own infrastructural apps in mobile devices. On the policy side, the EU has energetically assumed its responsibility to govern digital markets, by initiating the Digital Services Act and Digital Markets Act in 2020 (EU 2020). At the same time, the EU realized digital societies cannot simply be governed as *markets*; markets are integral parts of societies that also encompass public space and public services. In response to the pervasive spread of online fake news, the European Commission commissioned a comprehensive report, which in 2018 concluded the problem requires taking a multi-stakeholder approach and entering negotiations at various levels with the big tech companies (European Commission H-level Expert Group 2018). After years of political deliberation, the General Data Protection Regulation (GDPR) took effect in May 2018; the encompassing directive shows how the European definition of privacy fundamentally differs from the American one.

Despite its major efforts, the EU has not yet managed to articulate a comprehensive view on platform societies – a set of principles that would provide more clarity about what the EU expects from companies, states, and civil-society actors when it comes to fairness and democracy in a digitally connected world. In 2016, a survey among European stakeholders (market, state, and civil society) revealed a number of key issues concerning data flows and platforms, asking for more clarity about the legal status of platforms and the specific activities they are engaged in, as well as for better enforcement of existing legislation (European Commission 2016b). This inventory has not yet led to a broad set of principles on the basis of which countries, municipalities, institutions, or citizens can rely to negotiate specific public values in specific contexts. Every single day, new platforms enter the daily lives of citizens, defining the conditions for local transport, schooling, health care, and so on. More principled guidelines concerning the status of platforms, the ownership of data flows, and algorithmic governance could help everyone to negotiate public values from the stage of platform design to their implementation in daily practices.

This brings me to a *second* recommendation, leveled at companies: public values need to become visible as part of a platform's architectural policy and design. As a result of an avalanche of problems, Facebook and Google were forced by citizens, public opinion, advertisers, and governments to take responsibility over their role as "societal" influencers. The impact of Facebook in the American elections, the social network's role in fueling hate speech in Myanmar, Google's and Apple's moves to abide to censorship laws in China - each new controversy forces the Big Five to articulate where they stand on major societal issues such as hate speech, fake news, democratic control, and authoritarian censorship. Western-European governments put increasing pressure on tech companies to acknowledge and accept the responsibility that comes with size; they demand transparency when operating in their markets. In 2016, the EU asked Facebook, You-Tube, and Twitter to sign a voluntary "hate speech code" that requires the companies to review and remove illegal forms of hate speech from their platforms within twenty-four hours and makes it easier for law enforcement to notify the firms directly. Advertisers, for their part, have forced tech companies to adapt their algorithms to make sure their products are not associated with hate speech or fake news. And Google's own employees have critically interrogated their managers and CEOs to reconsider project Dragonfly as part of the company's disputable move to accommodate Chinese rulers.

The explicit articulation and endorsement of public values, however, should not have to be the result of external pressure and ad hoc remedies, but ought to be discernably integrated in a platform's policy and algorithmic design. Transparency and accountability go hand in hand, and it is obvious that self-regulation of platform operators can never work if the most basic conditions for public oversight and accountability are lacking. Public values by design requires courage on behalf of platform owners, and it likely takes some pushing from state and civil-society actors to force companies to act responsibly. Eventually, a company's efforts to engage multiple stakeholders in its design lead to more public trust in platforms and their operators. If voluntary codes and public pressure do not work, additional regulatory efforts are necessary.

Which brings me to the third recommendation: the need to update and retool regulatory frameworks. The current national and supra-national European frameworks for regulating platform societies (such as the DSA/DMA) are still inadequate; legal discourse often lack the appropriate vocabulary to capture the techno-economic changes in the online world. Indeed, competition and antitrust laws protect a level playing field; privacy law concentrates on individual citizens' right to privacy; we have consumer protection law, taxation laws, and trade law that each deal with a specific piece of legislation and enforcement. But the sum of each set of laws may not be sufficient to deal with the platform ecosystem as a whole. For one thing, the increased significance of data-driven, platform-based, and algorithmically governed interaction is hardly reflected in legal discourse. Besides, the legal system is built on a division between infrastructures and distinct market sectors - distinctions that are no longer tenable in an ecosystem run

by multihoming platform companies on top of a multilayered inscrutable architecture. Neither do prevailing regulatory frameworks account for the data flows that run both between infrastructures and sectors and between sectors, nor for the algorithmic lock-ins between (partnering) platform companies and rivaling markets. Indeed, platformization is so powerful precisely because it is sector-agnostic, device-agnostic, and border-agnostic.

In order to update regulation within the EU, we need to look more principally at how platforms function in society and adapt our instruments accordingly. One major problem is that the boundaries between infrastructural, intermediary, and sectoral platforms and services have become inherently fluid; the same holds true for the boundaries between private and public sectors. Mechanisms such as combining data flows, algorithmic selection, and user envelopment – adding another group of customers on one side and using those revenues to reduce the price charged to another side of the platform – steer the invisible "underwater" dynamics of the platform ecosystem. A handful of companies seem to have more power than nation-states over the digital infrastructure without the necessary checks and balances that come along. So the real question is: Are societies going to grant GAFAM infrastructural, rule-setting power or will tech companies collaborate with European governments and civil-society partners to define these principles, laws, and rules?

My fourth recommendation pertains to national governments: stimulate and empower state and civil-society actors to develop nonprofit and public platforms. The commercial ecosystem of platforms has currently no public space and very few nonprivate competitors. If European governments are serious about pursuing a tripartite balance between market, state, and civil-society actors, they have to seriously invest in the public and nonprofit sector. In order to prevent involuntary outsourcing of important – even democratically vital – public tasks to a corporately-driven ecosystem, European states may need to stimulate civil society and public initiatives. Estonia has set an interesting example by launching its e-government services: a transparent online identification system that forms a portal to services for e-voting, e-residency, and other online facilities in the educational and health sector. In taking the lead, the Estonian government not only articulates transparent public standards for an open digital society, but also promotes innovation. In other European countries, civil-society groups have initiated the development of public identification and authentication systems, such as IRMA in The Netherlands and Bank-ID in Sweden. The Estonian, Dutch, and Swedish examples are very interesting types of platform innovation involving multiple stakeholders, but they are rather isolated from the current concerns about the platform ecosystem as a systemic whole.

At the institutional level, this recommendation also applies to schools and universities, stimulating them to create and distribute their own open online course material, rather than adopting software and administrative monitoring systems that Google and Microsoft offers them "for free" or, more accurately, in exchange for precious student data (Kerssens & Van Dijck, 2021). If hospitals relied more on their collective, collaborative power to negotiate data-analytics systems with companies before adopting patient data exchanges, this might strengthen the public sector as such. Schools and universities also have a specific role in the empowerment of data-conscious citizens and skilled public servants. Digital innovation at institutions and local governments should be encouraged if only for the reason that this keeps the public sector an attractive and innovative place to work for. The White Paper on Digital Platforms, published by the German Ministry of Economic Affairs and Energy in 2018, argues that investing in public institutions to develop their own platforms and technologies is crucial for many reasons, but one important motive is to close the knowledge gap with companies and keep the public sector competitive for engineers.

Finally, my fifth and last recommendation is leveled at researchers at universities and engineering labs around the world: to pursue a collaborative interdisciplinary approach towards designing a responsible platform society. Scholars from various disciplines cannot solve the complex challenges facing Europe and other continents by keeping their technical, legal, philosophical, or social science expertise isolated from each other and from societal needs. More than ever, academics have to combine their expertise, both methodologically and practically, to tackle questions of privacy-by-design, algorithmic governance, and trust in data usage and storage. Researchers can help set the agenda for an interdisciplinary and multifaceted approach to the big questions we are facing in the age of datafication, platformization, and digitalization. Responding to urgent questions about (competing) public values and the common good in a platform society – such as issues of privacy vis-à-vis security, efficiency vis-à-vis surveillance – is conditional for successful multi-stakeholder efforts. Academics may need more incentives to collaborate with companies, civil-society actors, and public partners to experiment with new technologies and test policies – each while guarding their specific interests in the face of a common challenge. Exchanging best practices among stakeholders will certainly enhance the development of a uniquely European approach to creating responsible digital societies.

Conclusion

Europe can indeed do more to carve out public space in an online world. It needs to design and present a strategy that clearly explicates where its stands on public values, public sectors, and the common good. Needless to say, that requires political will and courage. The ideal platform society does not exist, and it will be hard to recalibrate the Western-European Rhineland model to make it fit with the American ecosystem's infrastructural architecture that privileges commercial values over public ones. Indeed, its architecture is currently firmly cemented in an American-based neoliberal set of principles that defines its operational dynamics. If European countries and the EU as a supra-national force want to secure their ideological bearings, they need to understand the ecosystem's underpinning mechanisms before they can start fortifying their legal and regulatory structures built on it. The implications of platformization on society are profound, as these systems are shaping not only norms and values, but the very fabric of society.

Governing digital societies in Europe takes a serious effort at all levels, from local municipalities to national governments, from schools to collaborating universities, and from city governments to the European Parliament. Squeezed in between the Chinese ecosystem and the American one, European countries need to realize the limitations and possibilities of these competing networked infrastructures and articulate their position in the wake of these emerging online superpowers. Public values and the common good are the very stakes in the struggle over platformization around the globe. Viewed through a European looking glass, governments at all levels, independent public institutions, and nonprofits can and should be proactive in negotiating those values on behalf of citizens and consumers. Implementing public values in the technological and socio-economic design of digital societies is an urgent European challenge that cannot be left to companies alone. If we want the internet to remain a democratic and open space, it requires a multi-leveled, multi-disciplinary, and multi-stakeholder effort from governments, companies, citizens, and researchers; after all, they are jointly responsible for building it.

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