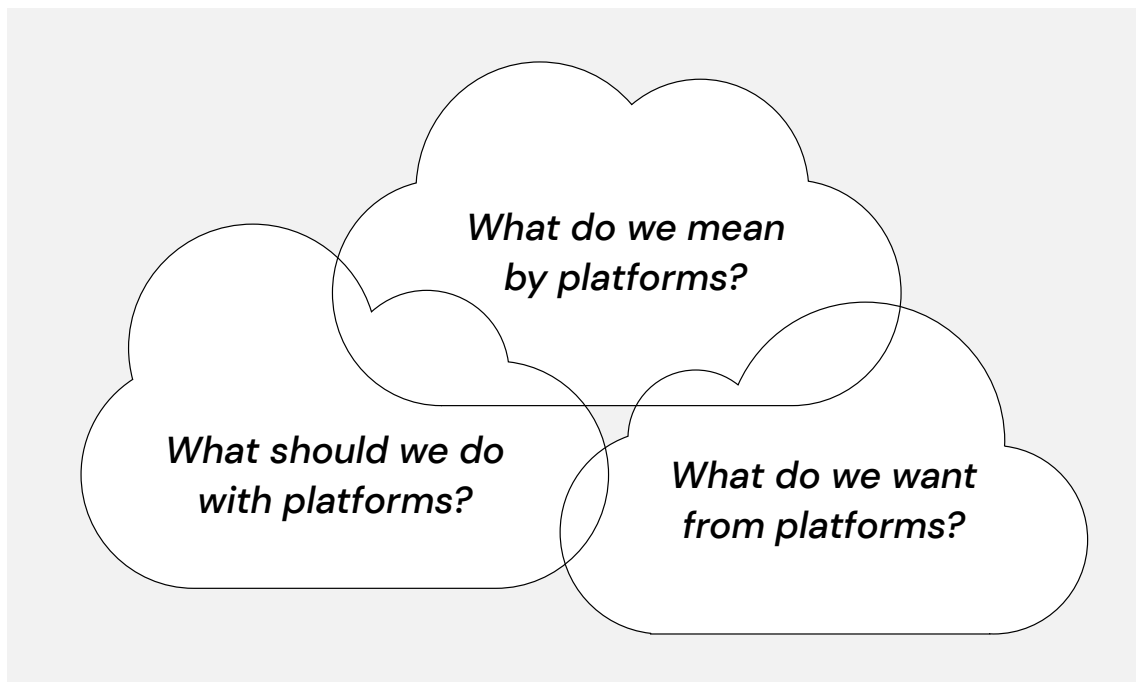


Platforms – a clarification

*There must be some kind of way outta here
Said the joker to the thief
There's too much confusion
I can't get no relief*



Three confusions of the current platform debate



About Demos Helsinki

Demos Helsinki is a globally operating, independent think tank. We conduct research, offer consultancy services, and reimagine and experiment futures with a global alliance, Untitled.

Demos Helsinki has been built on the idea that change can only happen together. That is why we carry out consultancy and research projects with hundreds of partners around the world.

Unlike many think tanks, we are independent and 100% project-funded, without any political affiliations or external baseline funding.

Platforms – a clarification

Johannes Koponen

Foresight and business model specialist

Juha Leppänen

Chief Executive, Demos Helsinki

Layout design by **Kirmo Kivelä**

MAY 2021

Contents

Foreword: Three confusions on platforms	4
Confusion 1: What are platforms?	5
Confusion 2: What to do with platforms?	8
Platforms and governance	9
Confusion 3: What do we want from platforms?	13
ACTION: Social contract for governance through platforms	16
VISION: Global governance of platform societies	19
Bibliography	21

Foreword: Three confusions on platforms

The writers of this paper have followed and have been worried about the so-called emergence of the platform economy for the past decade. During this decade, their urgency of the worries has been magnified. The direction of the development of the technology is the wrong one. We publish this paper today as an attempt to show that in order to make the most out of platforms, we need to delve deeper into the fundamental logics of what platforms are and steer the course of history out of the current stalemate.

The public debate about digital platforms has been sidetracked. In short, we are in the early days of the platform era. *Decisions made during the next decade will determine whether this era will be successful or not.* In this paper, we break down the confusions regarding digital platforms and prove a way forward that avoids the discernible tragedy surrounding platforms.

Currently, there are three confusions in discussions about platforms:

The first confusion is to analyse platforms through the metaphor of the business model predominantly. *Instead, we should analyse platforms through the metaphor of governance.*

Second confusion arises from the fact that the ongoing vivid debate on platform governance is conceptually unclear. *At least three distinctive approaches for platform governance can be identified: Governance of platforms by the public administrations, governance within platforms through self-regulatory mechanisms and, finally, governance*

through platforms by initiating public-platform collaboration mechanisms that enable setting direction with democratic legitimacy yet can tap into the efficiency of governance enabled by the platform.

Third, we confuse current digital platforms and the idea of a platform. *Current digital platforms are merely the first generation of platforms – proto-platforms – that already illustrates the potential of a superior mode of governance. Yet, the focus should be on how this potential can be unleashed for the benefit of humanity – whether platforms can emerge as a new mode of governance that transcends national boundaries and enables humanity to work together in order to solve the greatest challenges of our times.*

The confusions will be analysed and discussed in this paper. We believe that each of the three should be further debated in order for us to avoid the looming tragedy of platforms.

Platforms have the potential to emerge as a new mode of governance for humanity. This requires fundamental discussion not merely on platform governance but also on the political economy and political philosophy of platforms. Most importantly, we need to fundamentally challenge our premises regarding the platform discussion. Neither the Silicon Valley nor the Chinese alternative provides sufficient promise when moving forward.

The way forward may be more at hand than thought. The notion of a social contract – so important in the formulation of the legitimacy of the nation-state – may hold answers also in the context of platform governance.

Confusion 1: What are platforms?

New metaphors are needed to clarify what platforms are.

Currently, there are three definitions of a platform in business literature, none of which explain their most significant features. According to the first definition, platforms are “product platforms”. Product platforms are the basis for product differentiation inside a company (Hendrickson et al., 2014). For example, Volkswagen uses the same MQB platform for Audi A1, SEAT Arona, Škoda Scala and Volkswagen Polo.

The second definition of the word platform means a strategic technology that defines the success of companies within an industry (Hagedoorn 1996; see also Cooper 2006). Microsoft Windows and Intel processors are some of the typical examples given about this type of platform.

These two definitions focus on *platforms as tools or technologies* are often considered too narrow to explain many features of current platform companies. For this reason, the third definition of ‘platform’ has evolved around the

concept of “business models”. According to the third definition, a platform is an organisation that creates value primarily by enabling direct interactions between several distinct types of “affiliated customers” (Hagiu & Wright 2015). Following the last definition and according to Choudary et al. (2016) and McAfee and Brynjolfsson (2017), platforms are often defined as infrastructures that enable two or more groups to interact. Thus, they are intermediaries that help various groups – Choudary et al. (2016) list “customers, advertisers, service providers, producers, suppliers, and even physical objects” – to interact, for example, by helping some participating group to build their own services or marketplaces.

From the business model perspective, platforms are not understood as tools but instead, they are considered *stories of how companies create value* and are thus conceptually placed within the institution of markets (see Figure 1).

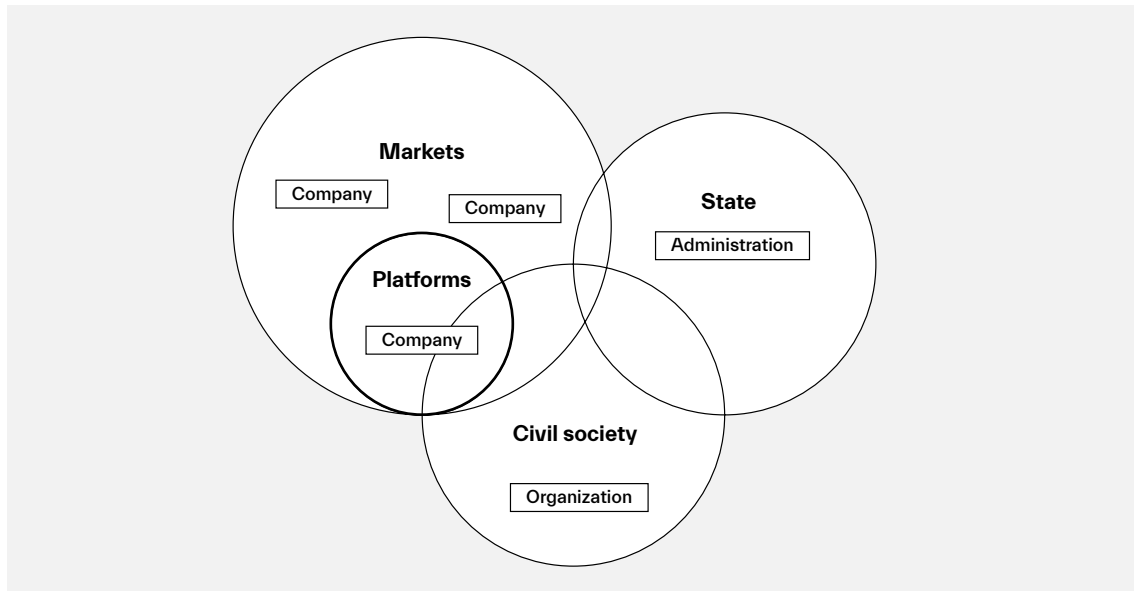


Figure 1. Platforms, understood as business models, are placed within markets and contain companies

The business model perspective to platforms helps to explain some of their features, including, but not limited to, concepts such as reduction of transaction costs and network externalities. **But for many other important phenomena, its explanatory power is limited.** These hidden perspectives include creation of common goods and social value on platforms, commodification of actions to transactions (driving a Tesla improves the autonomous driving abilities of every Tesla driver) and even the rapid rise of platform companies to completely dominate not only entire industries but also sectors of public life. Further, and more importantly, many if not most social researchers have noted that the business model perspective is hopelessly insufficient to

discuss the internal and external power dynamics of platforms.

A broader perspective on platforms is needed. For example, Sunderarajan (2016) has argued that platforms like Uber should be understood as a new type of institution, enabling decentralised market relations between individuals. And according to van Dijck, Poell and de Waal (2018), platforms are gradually infiltrating in and converging with all of the legacy institutions through which democratic societies are organised. From this broader perspective, digitalisation changes practices in all institutions. Platforms emerge not just within the institution of markets as a “platform economy”, but between and around other institutions as well.

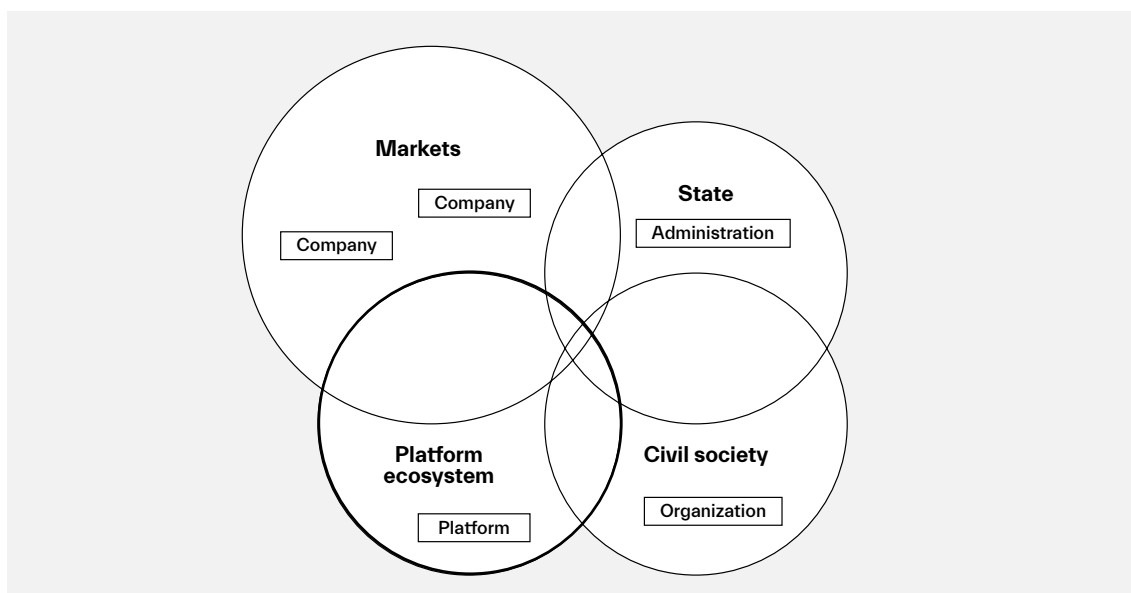


Figure 2. Platform ecosystem emerges as a new institution, rendering the society a “platform society” (van Dijck et al., 2018).

When platforms are considered not only as a new business model in the markets but more broadly as an institution, new metaphors are needed to understand them. A platform ecosystem, according to van Dijck, Poell and de Waal (2018), is a collection of interlinked platforms, governed by mechanisms that shape everyday practices of people. From this perspective, platforms participate in producing the social structures (Couldry and Hepp 2016) because markets, the state, the civil society and the platform ecosystem itself need to create separations and dependencies to all other institutions to maintain their autonomy. Autonomy relies on the right kind of institutional balances that allow platforms to be free and independent from interferences that harm their potential while not being isolated to a preexisting static notion of what defines platforms. Thus, similarly to the freedom of individuals that is built on both freedom from and reliance on various aspects of life and living, platforms can only exist as separate institutions if they rely on other institutions in fruitful ways.

Even though platforms threaten to undermine many established societal arrangements, most nation-states do not have the heuristics to capture the sociotechnical finesses of platforms (van Dijck, Poell, de Waal 2018). The previous conceptualisations of platforms are insufficient in explaining how the separations and depen-

dencies between platforms, states, markets and civil society are created and how power is used within, towards and through platforms. Platforms are indeed a source of organisational efficiency, as emphasised in the business model perspective. Still, they are also the node of power relationships within communities because of embedded governance towards organising production, exchange and value distribution (Carballa Smichowski 2016). For this reason, **we have found the metaphor of governance to be more helpful than the metaphor of a business model in explaining and understanding platforms.** Platforms are governance systems within the platform ecosystem.

Considering platforms as institutions through the metaphor of governance renders the global privatisation of institutions of power immediately evident: the governance of global digital infrastructure is completely privatised. But the metaphor of governance is useful not only as a tool for the contemporary critique of dominance. It also provides means to bring clarity to the second confusion, enabling a better discussion about the beneficial uses of platforms. Furthermore, the metaphor helps address the third confusion about the possible way forward for societies with platforms. The following two chapters explain how this is done.

Confusion 2: What to do with platforms?

New heuristics on platform governance are needed to clarify what to do with platforms.

Governance means the steering and decision-making mechanisms in systems such as societies, ecosystems or organisations. As an example, nation-states can make strict governance decisions. The whole capital city region in Finland was quarantined to stop the spreading of Covid-19 from spreading when it first emerged.

A physical quarantine was the most effective measure against the plague in the 14th century. But times have changed. The quarantine in Finland was quickly dissolved because it was impractical and expensive. To react to the second wave of the virus, the Finnish government created an app to identify and quarantine only the people that need to be quarantined. The app was installed in days by more than 50% of the adult population. While the app has been a mixed success, it demonstrates how the *means* to govern is in motion.

Currently, we live in the context of the nation-state as the foundational mode of governance – the best we imagine humanity can achieve – and identify answers to tackle the emerging risks, challenges and opportunities that digital platforms provide from this position. Thus, experts, politicians and increasingly the public are only debating on how to regulate digital platforms. Regulators are working hard to limit the impacts of platforms. However, the current debate on platform governance is about regulating them or letting them run amok. This is a false dichotomy. If this remains the sole approach to take, we will miss what digital platforms are about.

During 2020, two topics have dominated political discussion in the United States congress: covid-19 and restricting the role of tech giants in the US economy. CEOs of Facebook, Apple, Google and Amazon have become regular guest stars at congressional hearings answering why they produce more benefits to society than harm. There are many drivers for the increasing scrutiny towards the tech giants, but one turning point can be identified during the 2016 presidential elections, specifically regarding the role of digital platforms in society. The role of Facebook in influencing the outcome of the US presidential elections started a new phase of political scrutiny towards the digital economy that had before been mainly recognised as a driver of innovation and economic development.

Scrutiny towards new production technologies is hardly new. In the first decade of the 20th century, the US Federal government was discussing its response to the emergence of robber barons. With the lead of Theodore Roosevelt, new ideas and regulatory levers started to emerge. Some called for breaking up the new industry giants; some wanted stricter rules and legislation. In the end, the pioneers and builders of the industrial production backbone in the US were cut down in size and limited in power. Production was aligned more with the needs of the wider society at the latest when the First World War started.

The beginning of the 2020s has many similarities to the era of breaking down robber barons. The rise of the so-called tech giants has been more apparent than ever after the financial crash caused by Covid-19. Even before, many

have called for stricter regulation of gigantic tech corporations. Similar to the 1900s, some also call for anti-trust solutions, for instance, breaking up Amazon by splitting its incredibly popular marketplace platform which will force Amazon to compete as a vendor with many smaller companies.

As was apparent concerning the example on digital quarantines, few would argue against the benefits of digital platforms. The increase in efficiency through e-commerce services such as Amazon or convenience to urban audiences illustrated by Uber is hard to ignore. The current societal and policy debate demonstrates that public opinion on digital platforms and their role in society is formulating right now. There are multiple aspects of the new phenomenon that are recognised in the context of transforming markets and industries and changing consumption habits. However, there is little synthesis on the role and potential of digital platforms in society at large.

Currently, the debate on digital platforms is on whether platforms should continue to be private companies pushing new products and services for consumers or whether they should be constrained through regulation. There are three arguments for unleashing the platforms:

- Platforms enable more flexible job markets with reduced transaction costs
- Platforms encourage innovation and create useful products
- Platforms create a significant competitive advantage to the US economy as a whole

On the other side, you find a group arguing that the negative external effects of digital platforms have started to outweigh potential gains. The arguments for regulating digital platforms are:

- Platforms increase the accumulation of capital and profits into the hands of the few.
- Platforms have a negative impact on markets through monopolisation or market control.
- Platforms have an undesired impact on key processes in the society through influencing democratic elections and eradicating labour laws

Both groups have valid points. Platforms indeed have an enormous positive impact on the digital consumption economy. At the same time, there are multiple and often significant negative impacts derived from digital platforms. Our impulses on potential responses on platforms are based on the perspective from which we are looking at the problem. Too often, our analysis regarding platforms is simplified into an ideological distinction between whether companies should operate freely in the market economy or whether they should be regulated to tackle negative externalities that their business models cause. The negative externalities of platform business models are sometimes more significant than those caused by companies in traditional industries, but nevertheless, the logic for market intervention is the same.

Extending the ideological battle of the industrial era into digital platforms doesn't serve much purpose. At its worst, the main purpose and potential of platforms get lost into an ever-growing choir of arguments fighting the past wars.

In fact, the previous categorisation of arguments regarding digital platforms is based on the unsatisfactory conceptualisation of platforms as business models. The most important question on platforms is not about whether platforms should be unleashed in the consumer markets or restricted through existing policies and regulatory frameworks. We find that the dichotomy will resolve itself when platforms are considered a means of governance.

Platforms and governance

Platforms are sets of rules that enable cooperation. In other words, they are one way to organise human activity. This makes them a mode of governance.

The governance of platforms should not be understood in a narrow sense. At first glance, the issue of platform governance appears to be an issue of **governance of platforms** in the market by the state and an issue of how much freedom should platforms get. This is merely a first perspective of governance regarding

platforms. The perspective of platforms as governance needs to be further enriched with two other perspectives.

Concerning the second perspective regarding the governance of platforms, there is an interesting, largely academic discussion happening beneath the surface of legislative struggles. This other discussion doesn't concern itself so much about the governance of platforms but instead tries to understand how platforms themselves govern their users.

Platforms set the rules for participation within the platform, define the value units that are available on the platform via regulations they set and put up filters to make interactions on the platform intelligible. There is a growing body of research (Hein et al. 2016) that looks at platforms from this perspective of **governance within platforms**, focusing their analysis on, e.g. entry and re-entry rules, user and provider rights within platforms and algorithmic pricing.

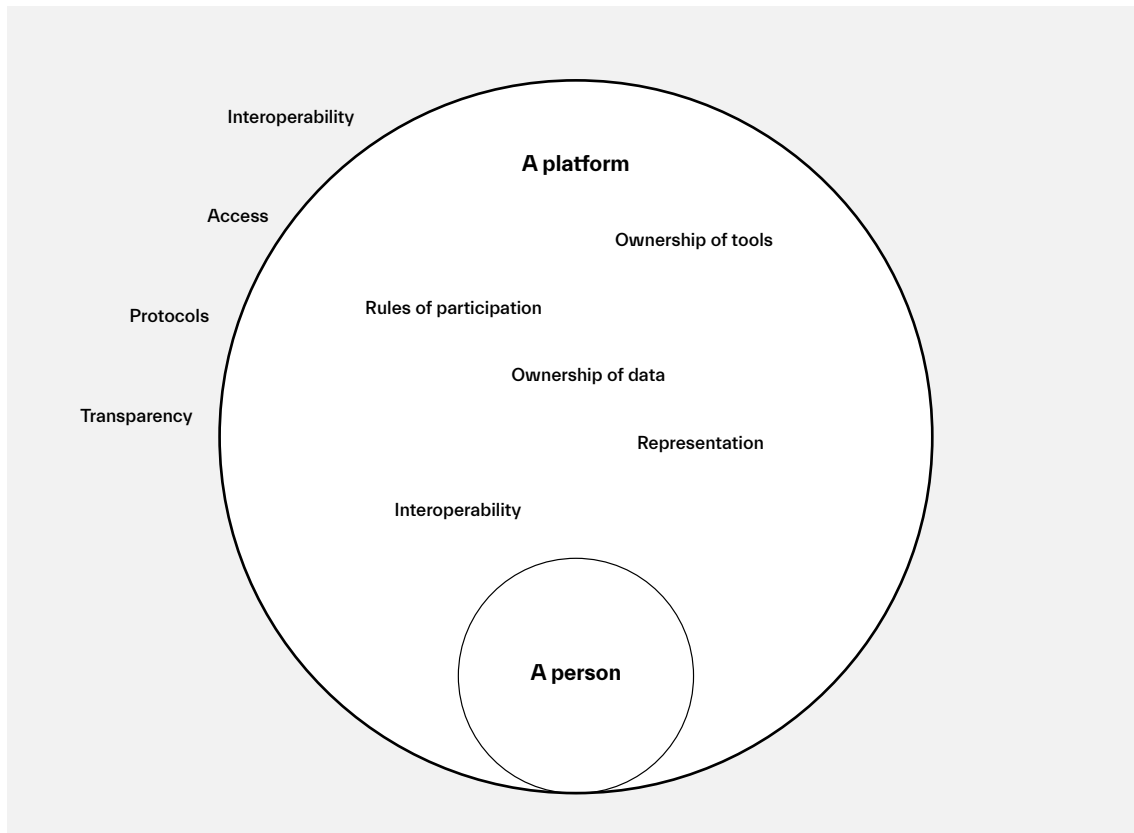


Figure 3. Governance within platforms

While the research on governance within platforms is important, it is also insufficient. Similarly to platforms being markets for the platform participants and at the same time competing on the markets against other companies, often very successfully, platforms are not only a mode of governance within themselves. Considering them from this narrow angle leaves out of consideration the third form of platform governance. According to this perspective of **governance through platforms**, platforms can be a mode of governance *in general*.

Platform governance is not only about how we govern platforms or how platforms should organise their self-governance. It is also about platforms governing us and how we can use this new mode of governance to achieve jointly set goals in our societies.

The perspective of **governance through platforms** emphasises platforms as a new mode of governance that is more akin to nation-states, cities and tribes than business models such as franchising, advertising-based dual market models, and brick-and-mortar stores. This perspective shouldn't be mistaken as an approach in which the government tries to take advantage of the superior governance attributes of the platform. Instead, most likely, some new control or even ownership approaches are needed to legitimise emerging public-platform partnerships.

As an apparent reminder, the nation-state didn't emerge overnight as something that is universally recognised as the foundational mode of governance for humankind. It required thinking and experiments. Most importantly, it required a basic level of **trust** from individuals towards the new mode of governance. This trust was established through conflict, discussions and finally, a synthesis in the form of a social contract. While such a social contract is lacking from platforms, some features of governance through platforms can be identified by comparing platforms to other modes of societal governance. Such an analysis reveals that platforms are more precise, transparent, anticipatory, behavioural and reflective means for governing. Like a compound microscope revealing germs in all of these categories, governing through platforms improves the resolution of governance:

- **Precise.** Previously, public sector governance interventions have been directed at the level of the whole population or at best at the level of identified category groups, such as workers, dog-owners or politicians. Platforms function on the level of the individual with all the complexity of different roles and groups that a person can have. For example, a digital quarantine can identify and separate only the individuals that should remain indoors, rendering the city level quarantines inefficient and expensive in comparison.
- **Transparent.** Because of the features of digital information, platform governance can be transparent in any direction. Furthermore, it doesn't have to be transparent in every direction. This one-directional transparency is one important context to elaborate the trust in platforms. For example, the source code of the digital quarantine application can be published for anyone to view. This source code can be reviewed to increase trust on its ability to maintain privacy of the users, i.e. its ability to *not* be transparent on who uses the app.
- **Anticipatory.** As they use large troves of data and social and behavioural analysis, platforms can act upon probable and possible outcomes before they occur. For example, very early signals of anticipated future learning difficulties can be used to nudge a teacher to help a pupil, or a city to help a school.
- **Behavioural.** Platforms don't have to incentivise only outcomes. They can also incentivise behaviours. The resolution of behavioural nudges on platforms can be very detailed and biopolitical. Sometimes, platforms even nudge people with direct hormonal responses, such as dopamine that is released with Facebook likes. As an example of the benefits of increased resolution in behavioural governance, people can learn to live in healthy ways by reaching daily exercise goals negotiated between them and the platform.

- **Reflective.** On platforms, learning is distributed, and decision-making is centralised. This structure enables finding rapid solutions to massive problems much faster than what can be done on markets or by the governments. Markets are a similar distributed information-gathering mechanism, using price and demand to aggregate solutions in rapidly scalable ways. But markets lack centralised coordination of shared direction. Governments sometimes try to provide market direction with external incentives such as tax reliefs to climate-friendly technology, but the comparative size of these incentives is minuscule to the centralised coordination of incentives and behaviours that can happen on platforms. On the other hand, governments have the ability to set goals fast. But governments' ability to reach the goals that are set is small. Governments are slow to learn what works because they don't have a distributed means to incentivise a massive scale of action to reach their goals. Instead, they rely on brute-forcing their way to the essential goals and moving very slowly via consensus towards their less essential or urgent goals. An example of increased reflectiveness on governance is the ability of Google to AB test all new features and optimise their use according to the actual behaviour.

Platforms magnify the resolution to governance. They improve the resolution by setting up more *precise* governance rules, by making parts of the governance more visible by increasing *transparency* via better resolution in activity within the governed context, by improving the resolution of *anticipated* outcomes based on big data, by increasing the resolution of *nudges* even to the level of manipulating single hormonal reactions and by allowing *distributed learning* in the context of centralised decision-making.

Because of the increased resolution, they are a more efficient way to reach the desired outcomes of governance than the other modes of governance. Markets rarely incentivise coordinated action towards a shared goal. Governments do incentivise coordinated action, but they lack the means to learn about what works. Platforms show that it's possible to have both coordinated direction and distributed action, enabling fast scale and quick responses.

We have, however, failed to see platforms as a mode of governance. We have failed to understand that governance of not just misbehaving users but also autonomous communities and societies can be done through platforms. Instead of developing an eloquent political philosophy on platforms, we have created just a part of it: the political economy of platforms. This has led to confusion on what to do with them.

To bring clarity to this confusion, we have proposed **a heuristic of platform governance** that includes governance of platforms, governance within platforms and governance through platforms. Furthermore, we have proposed **a taxonomy of features of governance through platforms**, arguing that it is more precise, transparent, anticipatory, behavioural and reflective means for governing than the current alternatives.

The heuristic of platform governance and taxonomy of features of governing through platforms clarify what platforms can be used for. They help in understanding the potential of platforms. The ability to do something, however, does not mean that something is desirable. For this reason, we now turn to the third confusion with the improved conceptual and methodological understanding of platforms and argue for a *vision of platform societies*.

Confusion 3: What do we want from platforms?

Aspirational visions of what platforms can provide for humanity are urgently needed.

The current mode of governance that is based on the nation-state and international and supranational entities such as the EU, the WTO and the UN developed during hundreds of years of experiments, arguments, mistakes and theoretical work. This mode of governance could be said to have reached its peak in the “End of History” of the 1990s and then started to crumble. Rana Dasgupta writes in the Guardian:

”20th-century political structures are drowning in a 21st-century ocean of deregulated finance, autonomous technology, religious militancy and great-power rivalry. Meanwhile, the suppressed consequences of 20th-century recklessness in the once-colonised world are erupting, cracking nations into fragments and forcing populations into post-national solidarities: roving tribal militias, ethnic and religious sub-states and super-states. Finally, the old superpowers’ demolition of old ideas of international society – ideas of the “society of nations” that were essential to the way the new world order was envisioned after 1918 – has turned the nation-state system into a lawless gangland; and this is now producing a nihilistic backlash from the ones who have been most terrorised and despoiled.” (The Guardian, 2018)

This demise of the current world order has caused a backlash of “back to the great” to maintain the representation and thus legitimacy of *any* mode of governance.

At the same time, when this backlash started to gain momentum, a new digital mode of governance started to emerge. It was first built on top of globally shared standards such as TCP/IP and DNS, then became commonplace as the HTTPs and HTMLs of the Internet. The Internet was first a playground of art and anarchism. Then it was increasingly a good business opportunity to many. And now it is a massive business opportunity to few.

But it could be so much more. The promise of the digital mode of governance is located in its transparency and negation of physical boundaries. The higher resolution on governing human interaction that digital platforms allow could enable an immense period of flourishing for human civilisation, a glimpse of which we have seen with the practical tools provided to us by the “platform economy” and the Internet. For the world struggling with problems such as the climate crisis or pandemics, this potential is far too substantial to ignore. Yet, currently, the trajectory is the opposite. Instead of transcending current national and regional boundaries, digital technologies appear to be more and more restricted by these boundaries.

The potential of digital technologies in our societies and economy has been much debated. Less has been talked about the role of platforms in these digital societies. But they are crucial because they emerge as new institutions that force a rearrangement of the previous institutional configuration. More than just a technology or a business model, platforms weave the potential of digital technologies into the everyday lives of people. They *are* the institutions of the digital era.

The greatest and scariest promise of digital platforms is that they increase the resolution (read: breadth) of governance. The importance of this fact cannot be understated. Think, for example, what happened with our understanding of molecular biology during the past 400 years. From speculating reasons for frequent infections, we can now recognise and understand the impact bacteria have on our bodies. This has led to the unforeseen development of medicine and treatments. The average lifespan of a human has expanded from c. 30 years to almost 70. Because of new medicine, as a species and as individuals, we are in a much better place. There are multiple reasons for the increase in understanding of molecular biology, but the short explanation is the improved resolution. Since the invention of the compound microscope, our perspective on nature has transformed. The recognition of the fact that we can both perceive and also impact the microscopic has opened a new landscape derived from the increase of resolution: new theories, inventions, and experiments have helped our species to progress.

Digital platforms are for governance what the compound microscope was for molecular biology: a technology that enables far higher resolution of transparency in human behaviour and capability to steer interactions. Few would argue that the existing steering mechanisms such as legislation are not archaic – the low level of resolution is best visible when a nation-state sets national legislation that hardly recognises local, not to mention individual attributes. Digital platforms also mean that governance is capable of transcending territorial aspects, limiting human development. At the

same time, transparency of interactions enables far less blunt measures in order to achieve jointly set goals more efficiently.

On a front face, platforms are a technology and business model invention. But under the surface, they are enablers for formulating new social institutions and a new mode of governance.

Unfortunately, the platforms are currently a normatively bad mode of governance. In *Platform Society* (2018), van Dijck, Poell and de Waal write that the platform ecosystem

” looks egalitarian yet is hierarchical; it is almost entirely corporate, but it appears to serve public value; it seems neutral and agnostic, but its architecture carries a particular set of ideological values; its effects appear local, while its scope and impact are global; it appears to replace “top-down” “big government” within “bottom-up” “customer empowerment”, yet it is doing so by means of a highly centralised structure which remains opaque to its users.” (van Dijck, Poell, de Waal 2018)

When such paradoxes exist in any mode of governance, the governance is not representative, it is not collectively beneficial, its values are not mutually agreed upon, its focus is not in the communities, and its power dynamics are not fair. In other words, such a mode of governance is authoritarian.

Robinson and Acemoglu describe in *The Narrow Corridor* (2019) how successful societies emerge through time from travelling a narrow corridor between absent and despotic Leviathan. They argue convincingly that the long term success of societies can be guaranteed only by simultaneously increasing the abilities of the civil society *and* the abilities of elites effectively running the state. If the abilities of the elites grow too much in relation to the civil society, the societies turn authoritarian; if the abilities of the civil society grow too much in relation to the state, the societies cannot function well either due to the absence of institutions.

The platforms might be the biggest short term increase of governance capabilities humankind has ever encountered. If they only ben-

efit those who Acemoglu and Robinson call the elites, the only way for societies to remain in the “narrow corridor” that guarantees success in the long term is to prohibit the use of platforms in governance. As we have argued, this essentially means prohibiting the use of platforms – also as a business model.

On the other hand, any common needs a governance system to exist (Carballa Smichowski 2016). Because of the features of platforms presented in the taxonomy of governance through platforms, they are superb governance systems for almost any kind of common.

Clarifying the third confusion requires clarification on what we want from platforms. Based on this chapter, we know three things about this:

1. We want platforms to be more than just mechanisms for governing business transactions – they can be more than that.
2. We *don't* want platforms to strengthen only the states or the elites that control the state – they can do more than that.
3. Platforms are especially well-suited to govern commons – this is exactly what we want them to facilitate.

For these reasons, we can only imagine one way *forward* for platforms, and it includes strengthening the power of civil society by creating a new social contract.

ACTION: Social contract for governance through platforms

Humankind has developed by adopting new ways of social interaction, enabling an ever-growing community of individuals to work closer together in order to achieve common goals. These development phases have often been preceded by new technological innovations in dialogue with social innovation, leading to institutional change. For instance, the emergence of new agriculture technologies finally bore fruit when larger villages were formed to take advantage of large-scale agricultural production. Production technology and social interaction have typically walked hand-in-hand.

A more recent example is the emergence of a nation-state. The nation-state, the codification of which was formulated at the Treaty of Westphalia in 1648, orchestrated human interaction in a new way. From the 17th century onwards, philosophers worked on the legitimacy of this new mode of governance. Step by step, a social

contract started to emerge. The increased organisation with the aid of the concept of the nation-state was crucial to benefit from the emerging productivity innovations of the industrial revolution. Until the late 20th century, the dialogue between the nation-state and the industrial economy was the key driver for institutional change. Different mechanisms to increase the trust and mandate of the nation-state were innovated during this long process. Hobbes proposed the rule by an absolute sovereign in *Leviathan* in 1651, Montesquieu created the separation of powers in 1748, and Rousseau pointed out that “people are the state” in 1762. The outcome of this dialogue, the social contract for nation-states, still composes the mode of governance of our Western societies.

The birth of nation-states was due to a series of technological *and* social innovations that converged into a mode of governance. Just as nation-states in their infancy, the current

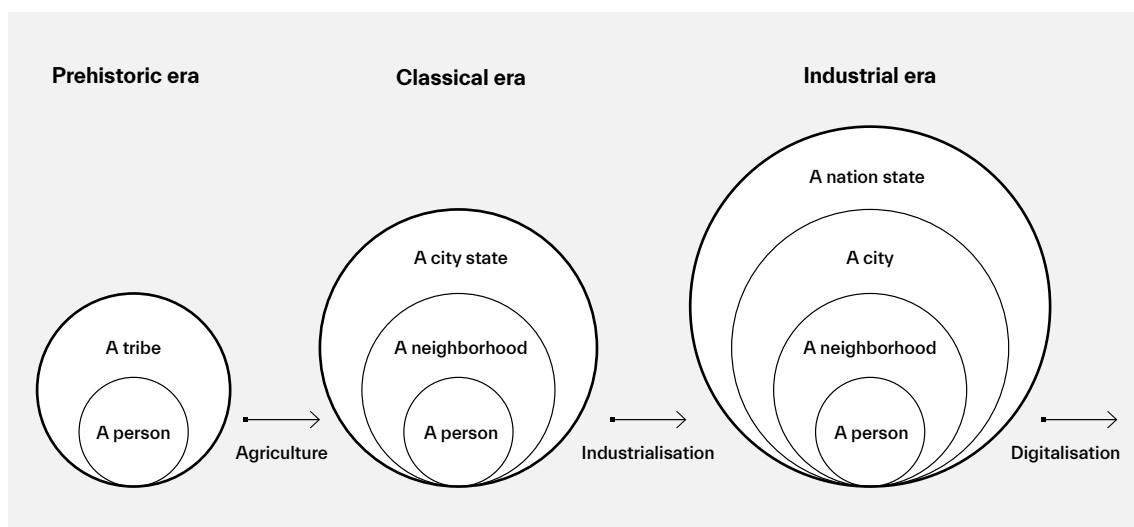


Figure 4. Increasing complexity in modes of governance is based on both technological and social innovations

platforms lack a social contract that would legitimise them as a mode of governance. The primary reason for the lack of a social contract is simple. We are yet to recognise that digital platforms are a new mode of governing human interaction, as argued in this text.

The people running platforms have been reluctant to accept this role fully. They did not choose to become CEOs and founders of something else than simple IT companies, nor did they foresee the development while they were busy working their way up to where they are now. The times they did understand that something more fundamental was on the move – for example, in 2009, Mark Zuckerberg said in a [press release](#) that “Companies like ours need to develop new modes of governance” and implemented a failed [internal participation system](#) – they only implemented a part of the potential social contract, and when that didn’t measurably increase their legitimacy in the wider public, they quickly backtracked to their old ways, telling governments to leave them alone.

However, platforms cannot be left alone, nor can they survive by themselves. It’s not enough to say that they need to be free from regulations. They also need to understand the dependencies that *allow them to be a new kind of institutions*. Thus, in the metaphorical sense, the platforms are like teenagers moving out from home for the first time. They still are dependent on their startup narrative, but they are not startups anymore, and they will never be *just* companies. Platforms are starting to realise that they have to come up with something new by themselves, supported both by their past and their possible futures as institutions. If they aim to be nothing but companies, growing regulations will make them weaker, smaller and less interesting. If they seek to become institutions, they need to become more powerful *while* simultaneously allowing their users to have more power over them (compare to Robinson & Acemoglu 2019). They need a social contract to become what they could be.

The role of governance in the context of platforms is not a new idea. For example, in 2009 Mark Zuckerberg said in a [press release](#) that “Companies like ours need to develop new

modes of governance.” Facebook implemented an internal voting system to let users participate on [site governance](#). The promise for the users was that if more than 30 percent of all active registered users participated, Facebook would apply the proposed changes. But only 0,3% of the 665,654 Facebook users at the time voted. The last community vote held by Facebook three years later was about getting rid of voting altogether. Approximately the same number of people voted, while the number of users on the site had already grown five times, to a billion.

Facebook’s 2009 experiment with user democracy failed. Many would suggest that such problems of legitimacy of platforms come from e.g. the lack of transparency of algorithms, lack of access to data, and issues with workers’ rights. While these issues are real, they are merely subtitles to the solution to the conflicts caused by the platform. The main title of the problem regarding platforms is the lack of social contract on platforms.

For platforms to emerge from their infancy into a new mode of governance, we need a social contract in analogue to the one first designed and then experimented with in the context of the emerging nation-state from initial agreements of the year 1215 into the institutional experimenting during the late 18th century. In a similar manner, a social contract was set for private companies that enabled the accumulation of capital needed to build the production facilities of the industrial era. This social contract was created in the context of the emerging nation-state and was an organic process of thought and experiment in the past 300 years.

Similarly, the potential of the liberal democratic model of the industrial society started to fully translate into wellbeing and progress of humanity only when we started to formulate its key premises into rights and responsibilities – this deliberation constituted much of the past 300 years of political philosophy.

Regarding a social contract for platforms, a much quicker process can be hoped for. Societies are encountering challenges that look to be even grander in scale than the ones from the past century. Platforms are the most efficient form of massive scale cooperation we

have so far encountered. They can govern and coordinate people with rules, limitations and incentives. We need platforms to step forward and help our species in tackling the challenges of the 21st century. Stronger platform societies could more effectively tackle the complex issues of these times.

Thus, we should come up with a social contract based on shared trust lens to allow the emergence of platforms as a new mode of global governance. For this reason, we propose four initial actions that might help to find the means to build trust between platforms, platform participants and society at large.

1. **Make use of a new kind of regulatory power explicitly.** It should be made explicit that platforms use regulatory power in their specific contexts. This regulatory power is of higher resolution and more dynamic than the power of the nation-state. This means that the platform is often more capable than the nation-state or the city in steering and coordinating human interactions. Currently, this ability is used to, for instance, match market demand and supply efficiently and to increase time spent within a specific platform. By making this power explicit, we enable people using the platforms to recognise the role platforms have in their everyday lives and make better assessments on what role they want a platform to play in their lives.
2. **Identify responsibilities of platforms.** One should make explicit the responsibilities platforms have both on a universal and a specific level. At the first phase, these responsibilities are a collection of existing policy measures analysed through a lense of platforms as a mode of governance. The final formulation of the responsibilities is based on the values of the society in which platforms operate, but suggestions can be such as transparency of algorithms, data portability, and increased involvement of platform participants in decision-making.

3. **Deliberate and propose laws.** To achieve social contract for platforms, the responsibilities have to be synthesized and codified in understandable fashion. This requires both policy and public deliberation.
4. **Legitimise platforms.** Regarding the rights of platforms, a wider public deliberation is needed when there is understanding of the set responsibilities. These rights can be such as the right to exist as a privately owned company when the platform operates within the boundaries of the responsibilities jointly set or the right to protect parts of its intellectual property if the platform acts within the guidelines that are publicly set. The final set of rights for platforms is decided based on a more holistic deliberation regarding which role we want platforms to take in our societies.

These initial actions support the civil society to gain power that is relative to the increase of capabilities of the state and elites through platformisation. With the help of a social contract, we can transcend the current institutional configuration that limits our imagination regarding platforms.

The triple clarification for the confusions presented in this text included changing the metaphor of platforms from business model to governance; creating a heuristic of governance that includes governance through platforms; and focusing the visions of platforms not around the current companies but on the idea of the platform-as-governance. With these clarifications the discussion regarding platforms can be broadened from unfair gig work on platforms to good life in a platform society for all; from filter bubbles to listening publics, from monopolies to institutions, and so forth.

The third confusion we had identified was “we don’t know what we want from platforms”. So far, we have argued that a social contract is required for platforms to strengthen, not weaken, our societies. But the actual vision – the what-we-want – only emerges after such a social contract exists. What do our societies look like after the transition to platform societies?

VISION: Global governance of platform societies

According to the argument we have laid out in this text, Facebook is an institution of global governance. A private institution of governance, but an institution of governance nonetheless. Moreover, in some governance tasks, Facebook is a remarkably efficient institution of governance, as is evident for example when there is an earthquake somewhere, and Facebook activates the Safety

Check feature for all the people in the area.

Such an insight is remarkable if one considers all the work that has been done to establish various kinds of institutions for more effective global governance. Indeed, platforms are not only a more effective mode of governance of societies, they can also be a more effective mode of global governance.

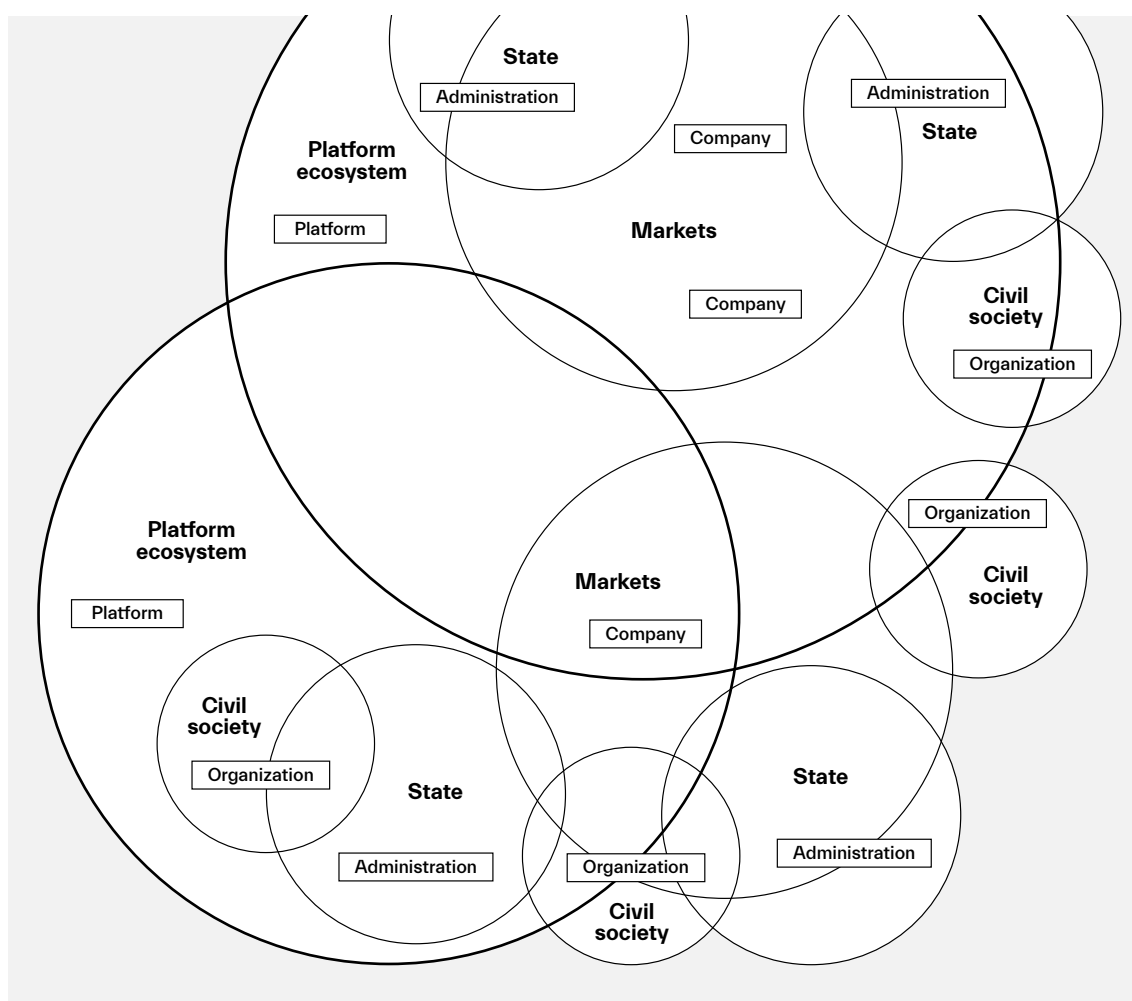


Figure 5. Together, platform ecosystems create global arrangement of platform societies

Platforms are not territorial, but they require a mechanism of access. The nation-state has been the predominant tool for human interaction for the past 300 years. During this period, it has had two structural advantages. Firstly, the nation-state constitutes a specific area of land. Similarly to the physical space that is taken up by a single human being at any given time, a nation-state also occupies a territory where no other nation-state can exist. Secondly, the nation-state exercises a monopoly of violence within its territory. In addition, during the formation of a nation, a project of symbolic construction of the imagined community has taken place, which today means that identities and social projects often happen within the territorial borders of the nation-state.

A new mode of global governance through platforms can look different. When platforms transcend territorial boundaries, they create an opportunity for a new kind of global government that is more precise, transparent, anticipatory, behavioral and reflective than the UN or the multilateral trade and climate agreements that currently construct the system of global governance.

- **Global transparency and precision.** Previously, global governance interventions have been mostly focused on aggregate outputs and inputs of whole nations, measuring and monitoring for example gross domestic product or carbon outputs. Governing through platforms can establish globally comparable measurements and even regulations on the level of each individual or group.
- **Global anticipation.** Using global precise and transparent data provides previously unseen possibilities for anticipation. The new information links between different groups and subcultures, paired with AI analysis, can for example reduce whiplash effects in trade, jobs, and production and help in early interventions regarding poverty and war.

- **Global-conscious behavior.** A better collective visibility of the impact of actions can create new kinds of norms and practices.
- **Global learning.** Distributed learning coupled with centralised decision-making can enhance global coordination in science, innovation and problem-solving. While each person, group, organisation and state has their own environments and specific conditions, formalising the probable causes of decisions can help them to better actualise their values and desires.

While there is a dire need for such a global governance system based partly on platform ecosystems, there are two massive risks too. The first risk is that it would be problematic to establish a global governance system on fully privatised infrastructure without collective deliberation. This risk calls for exploration of new ownership models for global platforms. What would a global governance mode owned by the people it governs, look like?

The second risk is that the more powerful global governance system would require a more powerful global civil society to avoid the despotic Leviathan controlled by a superior global elite. What are the preconditions needed for civic society to understand, and provide oversight, on global platforms?

Thus, this vision of global platform governance comes with a caveat. The three confusions described in this text can have serious consequences, if they are only partially clarified. The potential of platform governance is immense, but this potential contains dangerous risks for collective well-being and freedom. The need for a social contract for platforms is immediate and grave. Yet, it is important that the design of such a social contract doesn't only start from the current and apparent tensions, but also has a more aspirational perspective. In the 21st century, we should put thinking and action also in reimagining how we want to be governed.

Bibliography

- Carballa Smichowski, B. (2016). Data as a common in the sharing economy: a general policy proposal.
- Cooper (2006). From Wifi to Wikis and Open Source: The Political Economy of Collaborative Production in the Digital Information Age
- Couldry, N., Hepp, A. (2016). *The Mediated Construction of Reality*. Wiley.
- Dasgupta, R. (2018). "The demise of the nation state". *The Guardian*. Accessible at: <https://www.theguardian.com/news/2018/apr/05/demise-of-the-nation-state-rana-dasgupta>
- Hagedoorn, John. 1996. "Trends and Patterns in Strategic Technology Partnering since the Early Seventies." Review of Industrial Organization. <https://doi.org/10.1007/bf00214825>.
- Hagiu, Andrei, and Julian Wright. 2015. "Multi-Sided Platforms." <https://doi.org/10.2139/ssrn.2794582>.
- Hein, A., Schreieck, M., Wiesche, M., & Krcmar, H. (2016). Multiple-case analysis on governance mechanisms of multi-sided platforms. *Multikonferenz Wirtschaftsinformatik*.
- Hendrickson, Kenneth E., III. 2014. *The Encyclopedia of the Industrial Revolution in World History*. Rowman & Littlefield.
- McAfee, A., Brynjolfsson, E., 2017. *Machine, platform, crowd*. W. W. Norton & Company.
- Parker, Geoffrey G., Marshall W. Van Alstyne, and Sangeet Paul Choudary. 2016. *Platform Revolution: How Networked Markets Are Transforming the Economy and How to Make Them Work for You*. W. W. Norton & Company.
- Robinson, J. A., Acemoglu, D. (2019). *Narrow Corridor*. New York: Penguin.
- Sunderarajan, A. (2016). *The Sharing Economy*.
- Van Dijck, J., Poell, T., de Waal, M. (2018). *The Platform Society*. Oxford University Press.