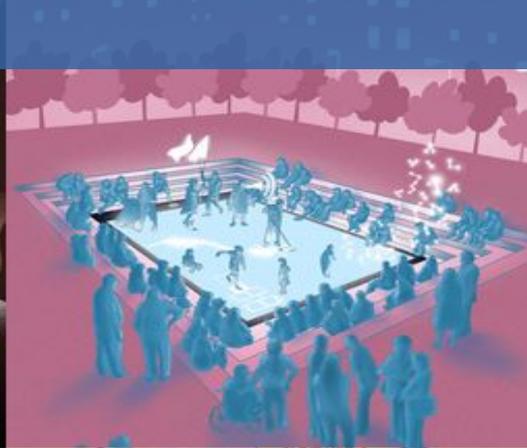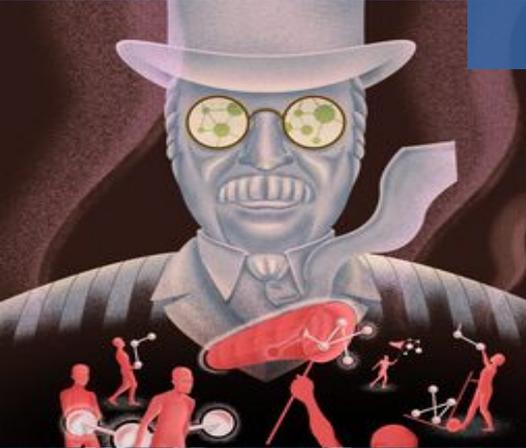# SHARED PERSPECTIVES
FOR A DIGITAL NEW DEAL

Shared Perspectives for a Digital New Deal

This draft was written using the conceptual mapping of the Digital New Deal essays. The maps are generated by the tool Desmodo/Scrutari and available at desmographies2.desmodo.net/digital.

By François Soulard, coordinator of the Dunia communication platform dunia.earth, member of the Forum for a New World Governance world-governance.org.

Numerous authors recently wrote twelve essays for *A Digital New Deal. Visions of Justice in a Post-Covid World* promoted by the IT for Change network. Considering the circumstances resulting from the pandemic, these essays summarize the vision of specialists based on the five continents and in different thematic fields, summing up the evolving digital reality and offering perspectives. Having personally contributed to these essays, I propose here to draw some common guidelines that emerge from them. It is necessary to encourage a comprehensive vision of issues that sometimes appear to be enclosed in their inherent specialization or complexity. Interesting similarities can be observed for example with the perspectives addressed around the Digital Justice Manifesto – which was also added to this conceptual mapping - or in Latin America with the Internet Social Forum. As is often the case in this kind of open contribution, views are heterogeneous and not exempt from divergences. But common perspectives are very significant and they form the canvas of the following reflection.

The pandemic has exposed a world in transition

The essays strongly stress that the **COVID-19 pandemic has played the role of extensively triggering changes** already underway which have been greatly accelerated by the pandemic. It has laid bare an extremely connected world in terms of exchanges and human mobility, but one that is politically precarious and fragmented, marked by rivalries and reflections of sovereignty that contrast with transnational challenges. **The pandemic has stressed the dividing lines**. It has exposed the weaknesses of the dominant economic models which grew in the 1970s and rely—among other things—on long globalized supply chains operating in a just-in-time flow at the expense of goods storage. As in the 2008 financial crisis, States have sustained the capitalist economy's survival and recovery by supporting the financial sector and the platformization of the economy, accentuating the phenomena of transnational concentration and the financial dependency of the real economy. On the other hand, **States have reasserted themselves**—although many have been weakened by the crisis or taken over by corporate interests—in their role as civil protector and gatekeeper of geostrategical balances. The latter remain mainly unchanged, while the race between the United States and China is rapidly intensifying.

In this sense, COVID-19 has been a kind of confirmation of a "post-American" world, putting the spotlight on the rise of Asia and the decline of the West. As computing technologies have been mainly shaped in the unipolar period led by the United States, this country still dominates their governance. But the growing bipolar rivalry is now having structural consequences on the strategies of influence. From now on, technological interests and alliances will weigh more on geostrategic balances.

While many hoped the pandemic would reset the economic paradigm by revealing its faults and structural vulnerabilities, **it was clearly wishful thinking that the crisis could be a kind of end point for market economies**. On the contrary, the responses to the pandemic were not mainly built

on the identification of an endogenous fracture in global capitalism, to the extent that political elites in general have done everything to keep the existing economic paradigm afloat. This issue does not have a clear consensus in the twelve essays. Various authors, like other social actors, are naturally questioning ideologically the fundamentals of capitalism, pointing to them as the cause of the pandemic. Others prefer to approach the pandemic as a central factor that is accelerating the curves, and opt to address the structural trends that were visible before. Others still accept the current shifts and explore realistically and pragmatically the opportunities for adaptation or transformation, some of which are ongoing in the economic field. But **there is no clear and obvious common position on the crisis**, making it more difficult to define a united strategy for transformation. This is also true regarding long-term digital transition with regards to many strategies that have yet to be brought together and organized.

A new rush of digitalization boosted by COVID-19

There is no doubt that **the accelerated change generated by the health crisis was reflected in the rapid advance of a wave of computerization**. On one hand, computer networks prevented the real economy from collapsing under the pressure imposed on physical exchanges. The rising digital wave has been boosted. IT and network resources have been heavily deployed in response to the emergency, contributing to making the internet an essential tool. It has often forced governments to ensure wider access to the internet in order to make social distancing possible. Various governments and organizations have also seized the opportunity to deepen their own IT processes. This has also helped to develop local exchanges and solidarity chains through micro-payments, social collaboration, producer-consumer direct linkage, and sometimes bartering. Against the backdrop of imbalances in the pandemic, some observe a more critical perception of high tech within civil society.

On the other hand, the new rush toward digitalization has acted as an **amplifier of previous monopolistic dynamics and concerns**. Progress in terms of the platformization of public services, corporate-led economic ecosystems, and datafication of workers and customers has been observed mainly in education, health, security, food systems, work organizations, and other areas. Tech behemoths have used the COVID-19 moment to strengthen their political capital and position themselves as reliable actors in the face of government shortcomings. A massive shift has occurred from office working to working from home. Workers and households increasingly rely on cloud services. Since January 2020, Big Tech (GAFA plus the Chinese BATX) had reached historic levels of market capitalization, incomparable to any industrial trajectory. The **capture of value by large operators** and their association with financial asset managers has changed in magnitude. Many actors, big and small, have taken the opportunity of the emergency to practice predation, fraud, feudalism, surveillance and control, and, why not, cyberwarfare. Economic austerity and structural adjustments can also be seen as a part of this wide family of predation.

However, this picture of a victorious big tech is not so clear-cut. Many smaller or medium companies in the IT sector have been experiencing losses during the pandemic, just as other sectors have suffered significant economic damage. Some of the yesterday's monopolies have continued their decline (AT&T, IBM, AOL, ALCATEL...etc). At the same time, in both authoritarian regimes and liberal democracies, States have in general made **a huge leap in control and surveillance**. Taking advantage of the emergency, they have mobilized computerized technologies to reinforce their security policies, often with relative results or confusion that reflect the importance of the whole sociopolitical context of which technologies are part.

Unanimously in the essays, such evolutions are not perceived as conjectural behavior. Although the geopolitical landscape has remained stable during the pandemic, the twelve essays stress that the major actors in computer technologies are pushing forward a **long-term restructuring in the**

global economy and governance models. Today, digital corporations are breaking more into the field of state governance, generating a kind of public-private outsourcing or partnership (synthesized by the concept of *gov techs*) that modifies the legitimacy and the face of public action. Technological solutions developed by private transnational entities in the sectors of agriculture, security, education, health, migration, biotechnology, energy, etc., are now more embedded **in the sovereign functions of States and institutions** at international level. An illustration of this reality can be seen in the appointment of high tech figures to the new US administration[1], as well as the corporate partnerships in the European sovereign cloud project[2]. Data capture and technological narratives are naturally reinforced by this phenomenon. But the leading transformation mentioned in the essays concerns goes further to orient the action of the States and shape policies of public interest.

One essay ponders whether corporations are hijacking the post-COVID-19 future. Is this a new stage of a machine-dominated age marked by a peak in monopolies, or a "screen new deal" as Naomi Klein suggested in the middle of 2020, referring to how big tech was largely profiting from the pandemic[3]? The pandemic has no doubt been **a powerful magnifier of the deep behaviors of digitalization**, in terms of predation and threats. In other words, these behaviors hastened a reality that organizations, norms and ethics are not yet ready to embrace and react to. But although it demonstrates more severe threats and digital powers, the reality is complex and needs to be shown in a more nuanced way. Numerous essays implicitly assert that power in cyberspace is far from being the mere sum of big tech powers. It is made up of a systemic combination of hardware and software capabilities, network infrastructure, intelligence and knowledge, innovation capabilities, decision-making, and ambition. The current anti-monopolistic response to Facebook and Google in the USA, for instance, as well as Alibaba in China, exemplifies the role of the political will to counter soaring hyper-concentration. Indeed, the essays largely underscore the centrality of ambition, perspicacity, protagonism in networked communication. In short, ethos and intelligence are key conditions to wage struggles and modify the power balances in the digital realm.

Ultimately, the critical perspectives in the essays for *A Digital New Deal* address a broken equation at the heart of **the current third industrial revolution**: in the emerging economic landscape **a growing separation** is unfolding **between newly-created wealth, social cohesion, and the capacity to govern our collective destiny**. COVID-19 has been a driving force in stressing even more this unbalanced equation which is now steering societies to the threshold of another stage. This kind of troubled transition is relatively well-known in the history of the industrial revolution. Some signs seem to indicate that this new stage might partially take the form of a re-engagement of politics, at a time when the power vested in technology has never been greater, to transform the global economic system. In Europe, a new awareness is timidly emerging around digital security and sovereignty. In China and the United States, digital monopolies are starting to cross a red line along with a re-assertive national sovereignty. They are being assailed on several fronts. One of them is a digital tax that aims to deter multinationals from exploiting tax loopholes between countries. Alibaba in China has been taken into administration and will eventually be nationalized. Backlash is growing over automated decision-making. There are few signs at the multilateral level where free competition and the status quo are ruling above the fragile multi-stakeholder architecture. In institutions, worker organizations, and in civil society in general, there is still a huge deficit to be filled in the advance of the digital frontier. In addition, the very nature of digitalization prevents us from thinking about a pure "break-for-control" strategy, or an exclusive regulation-centered compass.

---

[1]   Mark Schwartz from Amazon, Nicole Isaac from LinkedIn, Austin Lin from Chan Zuckerberg Initiative, Clare Gallagher from Airbnb, Michael Hornsby from Saleforce, Matt Olsen from Uber.

[2]   Called "GAIA-X" that includes, among others, Microsoft, Google, Palantir, Alibaba, and Huawei.

[3]   "How big tech plans to profit from the pandemic", The Guardian. https://www.theguardian.com/news/2020/may/13/naomi-klein-how-big-tech-plans-to-profit-from-coronavirus-pandemic

That's why the perspectives in *A Digital New Deal* are not so much a list of changes as **strategic guidelines to build collectively and embody change**. They encourage new ways of thinking, acting and organizing. In this respect, the proposals expressed in the essays follow the **four cardinal points**.

Embrace a new understanding of the digital space

The first perspective emerging from the essays is **to embrace a new understanding of the digital space**. Each essay describes structural changes caused by the ongoing industrial revolution, showing that it is essential to mentally model its permanent evolution. Here, understanding not only means the capacity to forge an advanced idea of IT networks and their interaction with different fields of activity; rather, it means to grasp the underlying phenomenon of reconfiguration generated by a new socio-technical system, against the backdrop of a transitioning world order. Beyond a merely digital innovation or digitalization, **the combination of microelectronics, software and ubiquitous connectivity** generates an anthropological shift that modifies meaning, values, human intentions and actions, knowledge, and organization. This is a major transformation that implies a perceptive and conceptual leap. Hence, each essay tries to update the meaning of the ongoing digital transition. Their common position tends to assert that we are irreversibly involved in an industrial revolution that opens a new landscape of innovation and modes of acting and thinking. With greater reliance on automation and datafication transforming vast industrial domains, this revolution is now reaching a new threshold.

The **difficulty in enacting this perceptive leap is a key pivot** in the strategy for transformation. Different insights mention that narratives used by a large part of social actors are oscillating between descriptions that are defensive or fascinated, Promethean or Orwellian, rejecting or mimicking the digital sphere. The grammar of critical postures is often oriented defensively, focusing more on the forms of threat and emerging violence than on a complex understanding of IT. The instruments of thought inherited from other industrial cycles fuel a general inertia, restricting the possibility of elevating vision, such as in the case of workers' unions who think about short-term issues caused by technological changes, i.e., job losses. **Cultural lag and the lack of protagonism** are also a significant obstacle.

Instead of sustaining a race against machines, the perspectives featured in the essays tend to assert that the solution is rather to think with the machines, lucidly and pragmatically . This does not mean a renunciation of or permissiveness toward the new machine age. It rather means that machines are here to stay so it is necessary to be part of the direction, the grammar, the means, and the project they are deploying. It is essential to reinvest this area, by regenerating values and updating the bond between intentions and means. Anita Gurumurthy and Nandini Chami stress in their paper "Feminist Frames for a Brave New Digitality" that "Digital and data technologies are not extraneous objects. Our sense-making frames cannot afford a nostalgia about human supremacy. They must recognize non-human materialities, putting an environment in which all matter share existence, front and center." In our current philosophical environments, information technologies are "framed as an inevitable step toward progress." "Technological determinism is reflected in the willingness of governments to keep the artificial intelligence regulatory environment minimalist" mentions Jun-E Tan in her contribution.

A new way of thinking has to be introduced to face a new emerging nature. The inherited vocabulary, comprising a reductionist conceptual framework, is an obstacle. "The myth of data as a disembedded, non-rivalrous, ever-flowing resource obfuscates the systemic relationalities of the network-data-nature-culture assemblage in intelligence capitalism" stresses the essay "Feminist Frames for a Brave New Digitality." Hence the need to refresh the vocabulary and modes of knowledge. The latter should be rooted in practices, experiences, and contextualized environment.

They also have to be less homogeneous and global, more capable of combining unity and diversity. For example, it is unquestionable that the digital realm is developing predatory, feudal behavior in the economy, creating a growing divide between the idealistic goals promoted by innovative entrepreneurs and ongoing transformations. The rising reliance on algorithms and automated processes leads to renewing the cognitive models on which regulations are conceived and then tackled.

Because fragmented and dividing approaches are largely in use (through the prism of neutrality, technical determinism, culture versus technique, positivist rights, etc.,) it is necessary to prioritize systemic, complex, relational and pragmatic approaches capable of managing relationships and interdependent processes. Updating the bond between intentions and means entails thinking about what values IT systems should promote. In short, **computer networks are enabling subjectivities, realities, cultures, and powers that have to be reintroduced in our understanding and the political framework**. In 1770 and 1875, at the beginning of the previous industrial revolutions, some thinkers were capable of reformulating the bases of knowledge. The same commitment is necessary today.

On the tactical ground, this perspective entails developing intelligence in computer system evolution. This point doesn't refer exclusively to spreading updated data and information. More profoundly, it suggests that knowledge has to be co-produced, internalized and connected to strategic processes in organizations.

Laying the basis of a new economy

The essence of the second perspective is that a computerized economy modifies the foundations of the traditional economy. The new digital economy is not merely a new industrial sector that distorts at the margins or adds a kind of new layer to the previous structure. As we mentioned above, networks and computer technologies have systemic effects in the mechanized industrial economy. In fact, computerization is the new form of industrialization. It is **upgrading the economic architecture,** while a huge lack of both understanding and regulation is increasing as mentioned above and also in the next chapter.

First, all the essays largely emphasize the multiple forms of predation and feudalism fueled by the power of networks and computers embedded in the economy. **Digital neocolonialism** refers to the dependency of local digital systems on a foreign power often from the global North, be it a State or a corporation. **Value extractivism** is the extension of wealth creation in the digital realm through the discretionary capture of data allowed by transnational networking. **Corporate monopolies**, central to the contemporary economy, are literally oppressing the real economy and societies. They encourage predation in many areas, causing political instability, social polarization, economic concentration and fraud, and erosion of the rule of law. **Judicial authoritarianism,** in response to legal disarray or homogeneity, refers to the legal measures oriented to improve public security at the expense of human rights and civil liberties. The **precariousness** and **atomization** of labor, and **surveillance**, are part of these collateral damages as well. New risks also come from digital technologies as they interfere with ecological and social processes. The case of food systems, for instance, is strongly emphasized.

All these end-of-pipe trends are no mistake. They constitute **patterns of a neofeudalism** in which a set of actors—sometimes called data lords—are able to impose transactions on others and fuel **dominance, exploitation, and dependency** in the economy. In this way, it is impossible to ignore that the contemporary economy is the theater of a new dialectic between predation, balanced

exchanges, the rule of law, and the return of feudalism in a modernized form that is threatening the pillars of the social contract.

Digital transformations are naturally addressed from the perspective of these disruptive and negative effects. However, **it is much harder for the essays to go deeper into the layers of this contemporary economy.** On one hand it is often said that technology is not the main culprit of this collateral damage. This pseudo neutrality is frequently criticized. On the other, the focus is intensely made on the Hobbesian competition for control and profit led by economic actors that commit fraud and evade existing regulations. In the midstream, few insights point out the effect of mismatches between the economic foundations coming from the inherited mechanized economy and the new ones underpinning the digitized matrix. As mentioned above, the new socio-technical system is shifting the ways of thinking and acting.

Basically, a more computerized economy means that activities are relying more on the power of computing and automation. As physical and mental human tasks are becoming increasingly automated, the fixed costs invested in the conception stage of any production process is increasing. The marginal cost for reproducing a product unit is lower when the incorporation of computing elements is higher. Thus, the average cost of a product tends to become a decreasing function of the quantity that has been produced. It tends to push the economy toward **regimes of fixed costs, increasing returns of scale, monopolistic competition** and a logic of maximum risks. These emerging characteristics directly exacerbate monopolistic and predatory behaviors.

This new matrix is **ultra-capitalist** to the extent that it particularly relies on financial assets and wealth invested in the initial phase of the conception of production. Hence a strong convergence with the financial realm is observed. Digital innovators are also encouraged to **wage war and control market competitors**. Furthermore, various essays clearly stress that neoliberal mindsets, norms, and institutions accelerate predation in the digital realm. "After 1975, technology firms were at the forefront of a growing consolidation of wealth. The shareholder value business revolution put pressure on managers to lower their production costs, and so they introduced productivity-enhancing technology to rationalize production, increase worker surveillance, and restructure production beyond the boundaries of the firm." "Neo-classical economists have understood the role of tech companies as generating efficiency and productivity gains for individuals and markets as a whole." Neoliberalism naturally amplifies predatory behaviors. It is also mentioned that the neoclassical thought that developed from the 1970s coincided with the beginnings of computerization. Some argue in the essays that the postulates of neoliberalism have been fed by the wave of destabilization caused by the new emerging technological system.

The digital economy is also becoming unsustainable because current economic frameworks and regulations have amplified its destructive side. This is why there is a need to **draw a new map for the digital economy**. This means reviewing the foundations of the liberal economy rooted in the principle of balanced exchanges. This doctrinal effort also invites us to renew relationships of equity, freedom, and efficiency. It means **envisioning what could be a sustainable, efficient and fair digitized economy**. The contents of the twelve essays demonstrate that this imaginary does not really exist yet. It is only on the surface, with condemnatory and denouncing positions prevailing. The main imaginary, be it optimistic or dystopian, is led by mainstream players. A **collective will** is essential in moving forward a fair digitized economy. It is closely connected to the following perspective.

Promoting a new regulation contract of the digital realm

The third perspective concerns **a new regulation of the digital realm**. In some ways, innovations have caused an inversion between ends and means in governance. In the absence of political

ambition and ideological framework, **technological innovations have taken the lead**. The low regulation consensus that has mainly ruled digital affairs until now is obviously a central problem when digital systems are more interdependent and disruptive. The existing international law is out of date and provides insufficient data privacy protection. As mentioned above, new technologies are generating clashes in terms of inequalities, distribution of wealth, and social rupture. The digital Wild West still exists, but the international community has started to realize the importance of regulatory provisions. Facing multiple problems caused by unfair competition and monopolistic practices, the European Union has started to discuss more stringent regulations as part of a new EU Digital Services Act package. In recent years, Big Tech firms have formally become more accommodating to the idea of regulation, while a movement toward artificial intelligence constitutionalism has begun. Workers are finding ways to resist the precariousness to which they are subjected in the platform economy. In the introduction, I also emphasized that the political dimension is reasserting itself in the digital sphere.

Thus, a new momentum for regulation is needed from States and regulators in general. This momentum is currently seen to be increasing. But it means going further in terms of behavioral and legal changes. The challenge is "to overcome our own lethargy, establish new laws and new authorities at the national and global level." "Many data protection regulations across the world, even those aimed exclusively at consumers, are weak." Although apparently more favorable to regulation, Big Tech has sought to water down any attempts to tackle its market power, holding on to the view that excessively strict rules might curtail individual freedom, stifle innovation, and inhibit the benefits of digitalization. In the essays, regulation is expressed in the sense of **reintroducing political will into the digital realm**.

The States are called on to moderate the advances of private interests. But they are fundamentally a **contradictory actor intertwined** in the dispute between geopolitical power, technologies, security, civil rights, and economic interests. The pandemic has ushered in a **shift in State governance, with new arrangements of public policies relying on private-public partnerships** and government technologies. Governments are now incorporating corporate models as part of their policies to improve their influence and governance. These models are favored because of their supposed efficiency, innovativeness and scope. But they are implemented in a conceptual and regulatory vacuum. Some private companies have acquired a monopolistic hold over the metadata governments need to operate. One of the consequences of COVID-19 has been the rise of public reliance on tech firms, as well as their influence on public debates and civil society.

At global level, the essays stress that the multi-stakeholder model is actually hegemonized by business decisions that operate under the guise of cooperation. This governance model has been employed as a means to circumscribe the power of national governments and intergovernmental organizations vis-à-vis private transnational corporations, fostering the geopolitical interests of the United States. In addition, a de facto governance has been constructed that permeates such things as labor agreements, bilateral treaties, and multilateral trade agreements.
Some examples can be seen in the current proposals to create a Digital Council for Food and Agriculture at the FAO, and in the United Nations convening a Food System Summit in 2021. These proposals are driven by agribusiness proponents who have elevated digital solutions as an organizing theme with agroecology. An earlier landscape characterized by "data for development" treated primarily by the State is now being replaced by a more distributed landscape of governance where power accrues to those who hold the most data. The myth of the private sector being more dynamic than the "sluggish" State is benefiting this movement. Now artificial intelligence is producing a top-down, self-regulatory approach, essentially based on ethical principles.

This global landscape does not summarize the exact realities of all industrial sectors and local territories where different experiences can be handled. But it sketches a general trend that is

unfolding at international level and in many national States. It shows that a **corporate-driven governance** is reinforcing, shifting the underpinning approaches toward a corporate-centered, top-down, enclosed, exclusive, and non-transparent form.

Faced with this situation, the responses that need to be constructed are related to regaining citizen control of the governance of digital resources. In fact, as Richard Hill stresses, "many in the international community are beginning to realize the importance of regulatory provisions for the digital sphere." But the responses are not linear and a new conceptual approach **for a digital contract is placed at the forefront**. Upgrading those approaches is necessary to tackle the challenges. "The regulatory exercise for internet intermediaries is complex […] this calls for the formulation of meta-regulatory models which have a sufficient degree of flexibility built into them." "The regulation of social networking sites has emerged as one of the most important and complex policy problems."

But it is not enough to take back control and decision-making by citizens, or to focus exclusively on the decision-making process. It is necessary to consider digital regulation as a whole and thus broaden **current visions**. In practice, many national legislations are unable to address the challenges posed by data processes. Some essays stress the idea of an asymmetric regulation or functional sovereignty, placing at the center the relationship between responsibility and the platform's power (the more power a platform has, the more responsibility and accountability it recovers.) Neutrality and the argument of a dumb conduit are considered no longer tenable given that intermediaries are also shaping user content. In this respect, the essays once again point out that the key issue is a new conceptual background.

Thus, policy-making processes should be particularly open, inclusive, participatory, and rooted in social contexts. They should consider visibility, digital engagement, and avoid data-driven discrimination. They should account for procedural justice and sanctions, both essential to achieve data justice. In fact, the essays propose that the whole modality for policy-making should rely on **responsibility** and a **new relation between unity and diversity**. Approaches have to be simultaneously anchored in local contexts and at the same time reach a transnational insight. However, approaches based merely on individual human rights are considered inappropriate. In a systemic context, regulations have to become more end-compliant than means-compliant. Instead of laying down specific rules and means of enforcement, the regulator should use a combination of inducements and sanctions to incentivize outcomes based on clearly-defined public interest objectives. **Common public interest**, **social perspectives, equity, and territorial rootedness** are among the objectives that should guide a new framework beyond corporate interests. A strong re-assertiveness of objectives cuts across proposed insights in governance.

It's important to stress here that this shift in governance approaches is not exclusive to the digital domain. It is part of a major transition in governance in a period when societies have to forge a path toward sustainable models against a backdrop of profound geopolitical and institutional change. Responsibility is at the heart of these models. Responsibility breaks with segmented models based on human rights, a property-centered model, or vertical corporate interests. It moves toward the idea of assuming **relationships**, **power and interdependencies**. It also comprises the idea of responding to a lack of power. When a situation of dominance or a regulation vacuum exists, it means that citizens or the community have to **build new collective actors** capable of modifying the balance of power and eventually changing the rules.

At international level, some initiatives are trying to modify the status quo. For example the draft for a European Union Digital Services Act regulation, proposing that Big Tech companies "shall not use data collected on the platform for [their] own commercial activities. If approved by the European Parliament, this regulation would force digital platforms acting as gatekeepers in the

single market to share the customer data they collect." Others point out the need for a new transnational treaty, a kind of a Convention for Data and Cyberspace, particularly focusing on certain key domains.

Meanwhile, a more transformative method suggested by the essays is to forge new governance models at the level of territories and economic sectors. These sectors, for instance peasant organizations, trade unions, or food systems, should reclaim their data sovereignty, and move toward a comprehensive global system of participatory technology assessment. The challenge is to design new socio-technical arrangements, according to sectors, themes and territories, capable of taking back control of data, generating value and intelligence, improving human rights, and generating fair governance. These arrangements are by themselves innovative and complex in terms of governance. They are multi-functional, combining various objectives at the same time. They can take the shape of data trusts, cooperative platforms, workers' data collectives, or local data protection laws. Citizenship and social organizations are inseparable from this perspective. They are the places where a **subjectivation of these new issues** can concrete and push an **institutionalization of data systems**.

Strategies and horizons for change

The breakthroughs mentioned above bring to the forefront **strategies capable of enabling transformations**. Here too, realities are complex and nonlinear. These strategies are the product both of an imaginary, collective capabilities, and historical circumstances.

First of all, it is necessary to **envision a more active horizon for change**. This horizon refers to a stronger imaginary capable of mobilizing and enacting transformations. In other words, it's not enough to oppose counter-slogans and agendas. The history of the internet and computers shows the decisive importance of an active protagonism to shape power in the digital realm. "The trade union movement needs an ambitious agenda for the future, one that does not just restore but also reimagines." "Our action must situate itself in the quest for a new sensibility, mobilizing new modes of social subjectivity." "Any alternative to this corporate-led technological food future will have to contain strategies to counter this tsunami and challenge the ideologies behind it." "We must seize this moment to take control of the narrative and determine what is important for our collective future, and how artificial intelligence can help us achieve this vision." These questions lead to **a new debate on values and philosophical underpinnings**. We can observe in the proposals that an integral approach, bearing a stronger meaning, should drive this imaginary. In fact, the underlying question is the one raised by the call for essays: **what might a Digital New Deal for our computerized societies look like**? What does it mean for our **values**, for our **economic models** and our **governance architecture**?

These questions are an opportunity for societies to intertwine more social and political issues in a new way. This aspect is all the more important to address when, on the other hand, promise narratives coupled with an emphasis on humanist values, lobbying and ethical posturing are used to mythify innovations and whitewash the practices of predators. In practice, the pandemic has provided a golden opportunity for the powerful to strengthen their predation in the digital realm. Various essays insist on the need to build counter-narratives and fuel the imaginary and mobilization.

Regarding the current circumstances, various contributions underline a favorable context. The current aspiration to social justice and the shift toward a more intersocial world represent an opportunity that digital justice movements can seize. The global aspiration for greater social justice, demonstrated in 2018 and 2019, is an opportunity to push forward a digital justice movement. There

is growing civil resistance. "It is now possible to imagine a global strike of Amazon workers." In the artificial intelligence realm, "there is mounting resistance against corporations and their maneuvering of ethical self-regulation." "Some surveys suggest that up to a third of consumers in the United Kingdom are buying more locally-produced foods." I commented above that to some extent politics is returning to digital affairs. All these resistances are progressing, but they are still loosely unified and coordinated. Inertia and lethargy also remain high.

This is why a main strategy is to **develop alliances, from local to global**, to progress with an alternative agenda. This is a main point in the different essays. "Civil society organizations already participating in digital spaces must reach out to new partners, including social movements involved in public services, to help rethink their strategies, languages, and ways of engaging with the general public and policymakers." Some of these alliances are to be reinforced or built between tech activists and grassroots movements. Others are within the same economic sector, such as worker organizations, human rights organizations, consumers, and social movements. **The common perspective is to build new collective actors**, capable of going beyond the existing borders between specific issues and organizations. Upstream, it is necessary to understand that perspicacy, protagonism, and intelligence can generate breakthroughs in the form of resistances and counter-powers. Whether among workers unions, small enterprises, farmers, cities, or activism, the reality is rich in experience guided by such a spirit.

Concrete alternatives are leveraging this movement. In practice, different experiences are opening up breaches for social justice models, demonstrating that alternatives are possible. The European Union has started to discuss more stringent regulations as part of a new EU Digital Services Act package. Some countries, like Argentina, have introduced cutting-edge legislation that grants workers engaged in remote working the same rights as face-to-face workers. In food systems, the pandemic has fostered mutually supportive relationships between producers and consumers. In many countries, flourishing mutual aid often took on a digital character, enabled by existing communication technologies and often non-proprietary software for social collaboration and micro-payments. Given the mounting confrontation against corporations, resistance is likely to grow in the future. The essays also point out that such alternatives are not occurring within thematic "silos" and one-dimensional environments. On the contrary, they develop **at the interface between issues and social contexts**. This is an important point to reckon with for activists and networking.

Ultimately, these strategies are far from leading us to a merely technological terrain. They are first and foremost **cultural** and **organizational**. As in the domain of governance, **willingness** and **relationships** between issues and actors are key leverages. Weaknesses can be transformed into strengths with time, knowledge, and organization. Therefore, the **role of political and economic elites is becoming essential** on the extent that they are the central players shaping the cyberspace. This is perhaps the most important "digital divide" to curtail. These points are basically part of the new language of the computing wave that started fifty years ago. It challenges us to learn. The current digital era can sound very unfair and asymmetrical. But this does not mean that citizens are excluded from the struggle to shape their digital destinies, or at least to reduce the destructive effects of the current escalating predation. Citizens and social organizations are wholly part of this adventure. It's up to them to rise above themselves and envision this destiny.