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The Generational Aspects of Platformization

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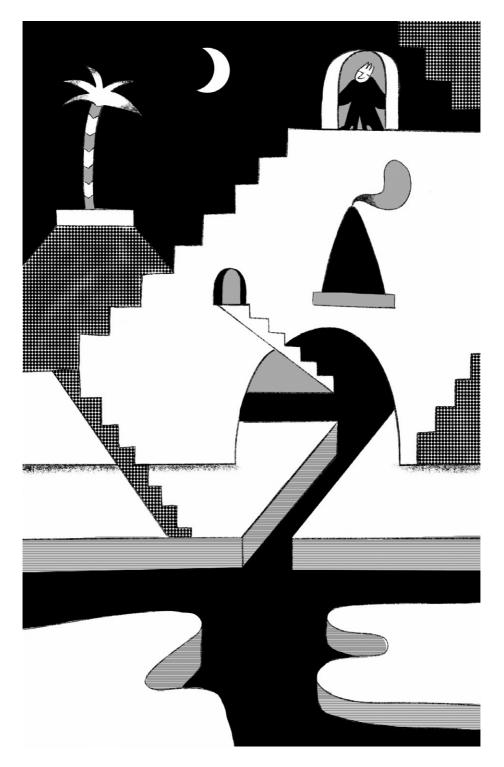


Fig. 5: Platform as Synthetic World

THE GENERATIONAL DIMENSION OF PLATFORMIZATION

INTERVIEW WITH DAVIDE BERALDO AND GIOVANNI ROSSETTI

Davide Beraldo is assistant professor of New Media, Data and Information at the department of media studies, University of Amsterdam. Giovanni Rossetti has been conducting ethnographic research with food-delivery riders in several countries. They are both part of the Dutch-Italian connection that has been central in the development of these interviews. During the interview, the theme of "generation" emerged in different senses of the expression: different generations of platforms; different generations of attitudes towards platforms; different attitudes of different generations towards platforms; as well as how platforms are generative mechanisms. Hence, if this interview was a meme, it would be: "Are platforms actually overrated?" The interview took place in October 2021 at the Institute of Information Law (IVIR), while drinking some fine beers.

Could you describe what a platform is? How would you define it?

Rossetti: From an economical angle, the classical definition is that of a multi-sided market, a central actor that relates different parties. The most canonical example is Facebook, which is primarily connecting different actors, such as users and advertisers. However, I think this definition alone draws clear-cut lines that risk ignoring many nuances. For instance, in the last couple of years, fast delivery apps like Gorillas and Flink have thrived in Amsterdam. Even though they are very similar to food-delivery platforms, they don't work with third parties but with a network of dark warehouses, so they shouldn't be considered platforms. In Argentina, the fast-groceries-delivery service is offered by food-delivery platforms; but there the dark warehouses are franchises, thus third parties. Paradoxically, the same person in Argentina is considered a platform worker, whereas in the Netherlands no. Then it makes sense to complement the economical understanding of what a platform is by adding that they are first and foremost digital infrastructures that collect and process data.

Beraldo: I would start from a more software studies perspective to highlight aspects of reprogrammability and interoperability. A definition would be one of a technical system that enables a number of operations, based on forms of reprogrammability, modularity, and interconnectivity. I would also immediately emphasize the rhetorical aspect of the term 'platform', the fact that it became a discursive device to be perceived as neutral intermediaries that do not implement specific rules (while they do), and thus evade responsibility.

^{1 &}quot;Is Fortnite actually overated?" is a Youtube viral video where three boys seriously discuss the video game's development on a sofa: https://knowyourmeme.com/memes/is-fortnite-actually-overrated.

What metaphor would you use to describe the platform?

Rossetti: I usually think of a platform as the pipe network of a hydraulic system. Users have the freedom to tailor the periphery of the system, installing sinks and bathtubs or placing valves or taps; they can control the flow of water and determine how much of it should return to the system through the drain. All the liquids will pass through the system, sooner or later. Ultimately it is the system that regulates how and how much liquid flows through it.

Beraldo: I have to say that explaining to people what a platform is, or why it is relevant to theorize about platformization, is sometimes hard. The easiest starting point is to refer to the most obvious idea of platform, the closest to the general discourse: a platform is a piece of wood on which people can stand on. However, this idea of 'being just something on which people stand' is the trick that corporations use to avoid responsibility.

So it's important to add another metaphor, in order to provide a critical perspective on platforms, since platforms do not only 'enable', but also subsume - they subsume different aspects of human life. I would then compare them to some kind of organism that eats and grows over others. A super-organism that creates forms of asymmetrical symbiosis, where smaller organisms are lured and then enslaved, in a sense. It is true that platforms allow for new types of activities, or allow us to do stuff in a smarter or funnier way. At the same time, however, they become more and more needed, and they incorporate more and more through relations of capture and dependence. Then a metaphor for it would be some kind of creature, a monster that grows by incorporating more and more things in itself.

Now that I think about it, my metaphor resembles the representation of the Leviathan. The platform Leviathan is made of our lives, our affects, our identities, our social relations. Our lives have always been mediated by technologies and institutions, but probably the level of control and heterodirection that platforms exercise is in some senses unprecedented - and more subtle.

Are platforms companies or are they more than that?

Beraldo: They surely are companies, and forgetting that they were companies was the mistake that some enthusiasts of their revolutionary power (me included) made. But they are surely more than that. Google rules not only its employees, but also its so-called users. That is probably the main difference. Of course, consumers are in asymmetrical power relationships with corporations, and the idea of the "social factory" has expanded the realm of capitalist influence beyond the walls of the factory a long time ago - but people as consumers are not directly managed and exploited (in a Marxist sense) by traditional corporations as much as platforms' users are by platform corporations. This is related to the whole debate on digital labor, data capitalism. Platforms, in this sense, are companies that rule more on what seem formally to be consumers or partners, rather than on what legally are their employees. They are new generations of organizations that blur the boundaries between established categories.

Rossetti: When they are companies, they are often more than that. They are markets and they sometimes try to be states. Indeed, if I think about Uber, I think about a market. Whereas the platform attempts to frame it as "The Market," where demand and supply match at the equilibrium point, what we actually see is "a" market, featuring artificial price surges and drops that are centrally planned. It looks like the inconceivable dreams of cyberneticians working on economic planning.

How did you start to research this topic and what motivates you to study platforms?

Beraldo: Well, I have started using platforms to study society, more than studying how platforms influence society. During the process of figuring out a topic for my Master's thesis, I knew I wanted to do something with protest movements and digital media, but I was struggling on the methodological part. Then some colleagues told me: why don't you use Twitter data to study movements, rather than researching how movements use Twitter? It was the year of the Arab Spring, the 15M (also known as *Indignados*) and Occupy - the enthusiasm around "Twitter revolutions" was at its peak. I got some programming skills back in high school, so I turned to Twitter APIs to do research on Occupy.

During my PhD I continued with this line of research, but I started to problematize more the relation between the medium and the object. After getting more in touch with the literature in media studies, I realized how some of my assumptions, and some of the assumptions of certain "computational social science" approaches in general, were a bit naive. You can't use platforms to study society in a purely instrumental way, because platforms are society - and society is platforms.

I think that platformization is one of the most important tendencies of the last decades, so it brings intrinsic motivation for its study. And now indeed I am interested more in how platforms' algorithms might influence society, rather than how we can repurpose platforms' algorithms to collect juicy data. You could say that we entered a new generation of studies based on social media data - one that cannot ignore the materiality and politics of the platforms.

Rossetti: I approached my research topic coming from two different positions. From a theoretical perspective, I have been interested in how power is exerted and challenged through media, especially in political documentaries. On the other side, I was involved in the activism around the organization of food-delivery riders. During the research master's program in Media Studies at the University of Amsterdam, I was encouraged to follow courses from different disciplines. And in a few months, I came to realize quite naturally that those two perspectives were more connected than I thought. I understood that the political practice had an academic relevance and I found myself with the urgency to try to better understand the phenomenon of platformization in its broader and totalizing development.

How has the study of platforms changed over the last decade?

Rossetti: To a certain extent platforms ten years ago were something quite different than the new generation of platforms. After the 2008 crisis, platforms presented themselves as

emancipatory tools that could solve societal issues disregarding profits. It was what we naively called the sharing economy. Uber, at the time, was a carpooling app that required users to pay little to no fee. Airbnb looked much more like Couchsurfing. But the heavy injections of venture capital should have been a signal for future developments.

In the last years, society has moved from the initial techno-utopianism toward a more realistic understanding of the ideological and economic underpinnings of platforms. Platforms have become much more rapacious, or at least they have been more obvious about it. Platforms have changed and so has the study of platforms. The field has become much more prominent and has expanded. Its initial focuses were mostly social networks and search engines, but as these platforms have grown larger — creating ecosystems and incorporating the quasi-totality of social, political, and technical activities — the study of platforms has developed connections with other disciplines, creating a growing multidisciplinary understanding of platformization.

Beraldo: I would say that it changed from platforms being perceived as tools to platforms being perceived more as actors. Before, they were seen as tools, not just by researchers, but also by activists: during the Arab Spring or the Occupy protests, many, even anti-capitalist activists, would truly believe that Twitter and Facebook were empowering people. Castells' idea of the power of "mass-self communication", or Rheingold's idea of the "smart mob", inspired a whole new generation of activists. You also had people like Morozov, very skeptical towards these imaginaries of empowerment. Besides those, there were several skeptical activists - especially the older generation of media activists, those who were used to having the infrastructure in their hands, rather than relying on third-party corporate services: they already knew that the "platform revolution" idea was in large part a false hope.

Many, myself included, really believed in it, falling into some kind of technological determinism: the logic and the imagined affordances of the medium seemed way more relevant than the ownership structure and business model. Metaphors of horizontality were hiding the material structure - not a very Marxist thing. It is not a completely wrong idea, I would say - and activists are and were in many cases also critical, while trying to hijack the potential of platforms. But I think many (and, again, myself as well) got a bit too high on network society ideology. Today, after disillusions as well as revelations about surveillance and manipulation, there is more awareness: platforms are not only tools, but also and especially actors with interests and strategies. We became dependent on them as we rely on them more and more without noticing - we are enveloped, "eaten up" if you wish.

There seems to be a foundational paradox of digital environments: are the means of empowerment at the same time those of manipulation?

Beraldo: Marx always knew that, right? The factory was the means of exploitation of the working class, but also the condition for the emergence of a collective identity, by making workers aware of each other's condition. I guess these types of paradoxes are more the rule than the exception. Think about the impact of platforms on identity dynamics. Ten years ago, the idea was that social media were connecting people; now, that social media is pulling people apart. The academic discourse has moved from being overly interested in Twitter

revolutions and "connective action" to seeing filter bubbles and hate speech everywhere. Sure, this is also due to underlying empirical transformations, especially cultural ones - such as the rise in popularity of the so-called "alt-right", or different attitudes towards data collection prompted by various scandals. But I think it's also a matter of shifts in academic and public opinion discourses, and in trending topics that have some kind of self-reinforcing logic.

Rossetti: I agree. We have come to this awareness through specific scandals that have catalyzed the attention of public opinion and have contributed to making society much more receptive to the more threatening aspects of digital technologies. Events like the Snowden revelations and the Cambridge Analytica scandal have exposed the risks of these environments, while lighting the spark for the development of other tools and modalities that empower the user. These events form part of a continuous cycle of deterritorialization and reterritorialization of technology that, in turn, are followed by the appearance of both alternatives and new forms of exploitation and manipulation.

We could be speaking for quite a while about this. Cambridge Analytica has been a turning point. It is the ultimate fragmentation of the public sphere. But earlier you mentioned Castells, and his idea of the network is still very important for platforms; but there is an exploitation of the network logic.

Beraldo: Castells recognized that the notion of network doesn't imply horizontality, so it can be used to look at very different things. However, I think it created a lot of confusion. You have network as in network analysis; you have network as in Castells; you have network as in social network platforms; you have network as in actor-network theory - and people sometimes tend to conflate them, or are tempted to treat all these different meanings together. The network can be a specific, historical form of organization, as in Castells, or a specific lens to look at anything, as in Latour. The medieval power configuration was also a network of loyalty, and quite a complex one - more horizontal than the modern state in many aspects. This equivalence of the idea of network with that of horizontality has created a lot of confusion, though - nobody would say that the medieval organization of society was a horizontal structure.

Once I was reviewing a paper, and the authors classified Facebook as a peer-to-peer medium. Anyone slightly interested in infrastructural matters would say that a peer-to-peer medium is quite the opposite of Facebook, which is very centralized: Facebook is a huge, single node where all data goes. This of course relates to the rediscovery of the infrastructure - we cannot assume that the topology of the network depends on one layer: the users. Only looking at the user level is the foundation of the ideology of platforms: that we should not care about what happens beyond the interface, because we might not like it.

Do you think that platformization is going to last?

Rossetti: Platformization is such a totalizing and global tendency that I find it very difficult to imagine it could end anytime soon. It might change in different local contexts: in Europe, for example, there is a growing push toward policy-making; but this is often undermined by the lobbying efforts of platforms themselves. Reworking Mark Fisher, I see through the

lens of platform realism, where it is easier to imagine the end of the world than the end of platformization. I really don't see it ceasing very soon. If it does, I would be afraid of the next step then.

Beraldo: I don't know, for the way that platforms are designed and strategically oriented, I am tempted to say that platformization cannot fall all of a sudden. I would not see a strong incentive; it would be chaos. At the same time, it is also a matter of imaginaries, because until five years ago I could not imagine a future without Facebook. Actually, the brief history of digital platforms shows that they change quite a lot, they rise and fall at a surprising pace - every two years there is a new platform that becomes the rising star. How quickly Facebook replaced MySpace and MSN, and was then replaced by Instagram, and then replaced by TikTok?

Platformization is always there, but platforms do not seem to last so much - or at least they change in their significance. It's interesting to notice how it is a generational thing - just like teenagers would not go to the same bar their older siblings or parents or grandparents go, TikTok is now for the younger, Instagram is in-between, and Facebook is slowly being populated by older generations.

Boomers?

Beraldo: Yeah. Instagram is also becoming for older people now, apparently - that makes me feel old. I remember my confusion when, some years ago, someone I met at a party asked to exchange Instagram contacts instead of Facebook contact - I was like, "uh, now you use Instagram to keep in touch with people you meet?". I only used it to post pictures, while for me Facebook was "the" messenger platform. So there is this succession, this reshuffling of what the platform of the moment is, and what you use to interact with your friends. From a generational perspective that makes me think: maybe the process itself is not so irreversible; but on the other hand, it also makes me think that platformization as such will last, because it can reinvent itself and find new ways to enable new forms of creativity and capture new data for monetization. Anyway, I don't think it is sustainable in the long term, when we hit the ecological dimension. But then the question might be: will the planet outlast platform capitalism?

Rossetti: I totally agree. Indeed, the micro-history of platformization is scattered with platform casualties, platforms that arose as stars but didn't pass the test of time. But now we see platform conglomerates like GAFAM and BATX² that have reached an unimaginable financial scale. They acquire the new "rising platform" and just inglobate it into their ecosystem. This dynamic, together with the expansion of their material infrastructures, has situated these companies on a planetary scale from which they cannot evade the global ecological discussion.

² These acronyms refer to the biggest tech firms: Google, Apple, Facebook, Amazon, Microsoft (GAFAM) and Baidu, Alibaba, Tencent, Xiaomi (BATX).

The issues of global warming and biodiversity loss have many things in common with that of platformization, to the point where you cannot separate the two. They are both total social facts - or hyperobjects, to use a more recent vocabulary.

Rossetti: Precisely. We see this issue very clearly in how platforms try to push the rhetoric of greenness, reframing themselves from problem to solution. We constantly get extraordinary promises of carbon neutrality that are just greenwashing claims supported by carbon offsets. These commitments based on carbon equivalences have been proven to be insufficient at least, if not even counter-productive. Meanwhile, the same tycoons sell us space travels and interplanetary futures.

Speaking about futures...What would be your futurable imaginary of platformization? What interventions shall be taken and at what level?

Beraldo: It all depends on the degree of utopianism that you allow me to adopt in the answer. The main issue at stake, an issue involving imaginaries and interventions, is that platforms have a responsibility toward the public, precisely because they inglobate us all, and within their current ownership structure and legal framework they are not accountable enough. In theory, accountability could be achieved through regulation within the current limit of compatibility of the system, but only to a certain extent. Private property and freedom of enterprise is the ultimate boundary against which regulation cannot go without some kind of system change.

However, the idea that public services need to be in control of the public is a socio-democratic idea, not a communist one. And in many senses, platforms resemble public services: because we are made to rely on them, more and more, through this "inglobation" we were talking about - they allow us to do certain things, but then we are dependent on them; and due to network effects they generally operate as monopolies or quasi-monopolies, so the ideology of the free market crumbles here. Since they work as public services, but are really private corporations, to be socio-democratic about platforms means going against the more basic principles of private property. I remember a couple of years ago there was an article by *The Guardian* that was advocating, not sure how provocatively or not, that Facebook and Google should be nationalized. But again: not sure if the nation-state is the ideal scale, even though perhaps the more realistic one?

Futurability is also a matter of power, not only of imaginaries. And although super-national or urban-level interventions seem better equipped in terms of scale (because lives today are either local or global, way less "national"), they generally lack the power to intervene in radical terms on domains, such as in the structure of ownership and the business model. Also, I think that the term platform is too abstract and generic for this type of reflection. So far I have been mostly thinking about things like Meta/Facebook, Google, TikTok, private platforms in the "front business" of leisure and entertainment. But of course, there are also non-private platforms promoted to manage and control other aspects of our lives, and those are already promoted by public actors.

Rossetti: It is true that platformization is a process that transcends the private sector, but my imaginary regarding the future of platformization is mostly circumscribed to the implementation of alternative models of ownership. And in this sense, I think the tension of scale that Davide was mentioning is crucial. Platforms are feasible and effective on a larger scale. However, cooperative modes of ownership tend to become more complicated as the scale grows bigger. In this sense, I am skeptical of approaches that tend to valorize the cooperatives that reach proportions comparable to traditional corporate groups.

Whereas I find Trebor Scholz's platform cooperativism a valid proposition, I think it fails to recognize how cooperatives like Mondragon Corporation restore dynamics similar to one of conventional business organizations, especially between worker-owners and common workers. That is why I believe the best realistic configuration would be a common framework to be repurposed and tailored in the local context to support the needs and the peculiarities of each situation. In practical terms, this would mean having a lot of different platforms that would be partially interoperable because they would be based on the same infrastructure developed on a national or transnational level. Concretely, I would imagine it being developed on a European level in order to leverage the costs while maintaining the public configuration usually expected for critical infrastructures.

The usual counter-argument is that this might work in a place like Europe, where there is some kind of protection of fundamental rights, but it might be very dangerous in autocratic regimes. There is also a different relation between technology and politics.

Beraldo: Sure. This also relates to the limitation I highlighted before: it is difficult to talk about platformization in the abstract, and different contexts reveal different problems and different solutions. When discussing platforms I more often tend to think about Silicon Valley-style data colonization of life, which is a biased perspective based on my personal experience. Of course, the problems of platformization in political systems based on strong state control are different from the problems of platformization in political systems based on strong corporate control.

Rossetti: I think it is more a matter of which values are prioritized. For example, in Europe we see a dogged defense of private property. As a result, several European states ban websites like Library Genesis or Sci-Hub and punish the streaming or the peer-to-peer sharing of copyrighted material.

Do you think that platforms could be mandated to set up the affordances they create according to legal rules?

Beraldo: Your question makes me think about the relation between the state and the platform as an organizational form in general. In a sense, the state has always functioned as a platform, and this always involved some forms of planning. The market is an institution with material and infrastructural preconditions — aside from the dreams of neoliberal microeconomics - and this, historically, required the state be built upon. Therefore, the state has been a platform for the development of markets. States created legal conditions for markets to operate, as well as the material conditions for goods to be transported. Providing infrastructures by investing

resources, putting together certain kinds of actors, enabling certain kinds of behavior, while pretending in an ideological manner not to be playing an active role: to me this sounds similar to what platforms do today.

As for your question more specifically, I guess that the state could or should provide such a legal framework. But the real challenge is that platforms seem to be organizational forms that evolved to evade and frustrate such attempts at pre-regulation- by blurring boundaries between legal categories, by making processes opaque by-design, by strategically adapting to local conditions. So this could maybe work with a very different idea of platforms?

Rossetti: To a certain extent affordances are pre-regulation in themselves, since they determine the universe of possibilities in a certain environment. The choice to afford or not to afford something is always political and produces a discursive way of regulation. To complicate things, platforms' architectures make it extremely easy to adjust and modify their settings at an incredible pace also through A/B testing³. Personally, I am not entirely sure about the ability of the legal system to keep up with the speed of platforms' constant mutation. On the other hand, it is also worth noticing that platforms' affordances are often creatively reinterpreted and repurposed by users to conform to their own needs.

However, there have been examples of successful legal interventions to mandate certain affordances. Getting back to the issue of copyright that I was mentioning previously, states have imposed directives on platforms to collect particular data in order to automatically censor copyrighted content. This is happening by mandating against this kind of data collection. This can be programmed. For instance, the copyright directive pressures platforms to censor certain kinds of content automatically, so in this sense it mandates how to set up the affordances.

Are these platforms subject to acts of reappropriation?

Beraldo: I think there is always space for reappropriation, contestation, hijacking, hacking. But also in reverse, for cooptation, manipulation, and hegemony. Hall's idea of subversive decoding and encoding is not only valid for media content, but also for media affordances. Affordances can be imagined and subverted, to a certain extent of course. This creates space for resistance from below, but this also means - connecting to the previous question - that it is very difficult to pre-regulate platform affordances and their consequences, because they are fundamentally unpredictable. Platforms create new domains of life, a lot of things that cannot be anticipated; and regulators require stability, and they struggle to continuously catch up.

You can't even start to imagine what kind of affordances will be generated by platforms thirty years from now, hence what kind of challenges to norms and values they will pose. This makes it difficult to state "these are the values that platforms have to obey, and so have

³ A/B testing is a user experience research methodology. It is employed to compare two (or more) versions of something within two (or more) sample groups and to determine which performs better.

to be forever." I am not sure how factual this anecdote is, but I remember reading how the Khmer Rouge in Cambodia forbid the production and use of cooking pots below a certain diameter and size. The idea was to inscribe collectivism into the most mundane artifacts: you cook for the community, not for yourself. The affordance of these tools dictated a certain normative attitude towards cooking and eating. This hidden affordance of pots has been there since forever, and a regime interested in fostering extreme collectivism can leverage such a simple technical feature for its goals. Platforms generate very new and unpredictable situations, where affordances can promote one or another value or attitude.

In this sense, the question for me is: which mechanisms should be created to set up the platform affordances?

Beraldo: The internet started based on protocols that try to inscribe certain values, such as horizontality and open accessibility. In some 15 years, it went the other way around: everything is centralized, access is tightly controlled, you have to pay for certain services and the free alternatives are pushed out of the picture. The internet pioneers tried to build values within the infrastructure, but that infrastructure has been reappropriated for completely different values. This makes me ask: What defines something as a public good, its materiality or its legal status?

A public good is a good that does not imply rivalry in its consumption and that can be accessed by all. Usually, air is used as the ideal-typical example of a public good. But if we were to tax air consumption, and lock people out of access to air if they don't pay their monthly iBreathe subscription, air would not be a public good anymore. The status of a good as public is a matter of affordances - for now we can freely breathe air because of its material properties. But it's not just a matter of its intrinsic affordances: if a certain regulatory framework would define it as such, then a certain good would become a private good. Napster songs became a public good, materially speaking, but then some spoiled billionaire musicians and a new generation of music platforms re-instated privateness and price tags of some kind on it. So what makes a good a public good, its affordances or its legal context? This is to say that yes, affordances bring certain values with them that challenge regulation, but the other way around is also true. So where does the affordance end and where does the value start?

Rossetti: When you mentioned how the internet was created, I think it was also interesting that you were questioning the fact that it is the state that has to set up all the norms and set up a system in which a very different geography of actors was deciding what was going on. But this logic has been appropriated by commercial actors and states. Nonetheless, there are interesting alternatives to the premises of these centralized powers: for example, here I think of figures like Linus Torvalds, the "benevolent dictator" of Linux, whose centralized authority serves the purpose of coordinating horizontal and disseminated labor. In this sense, I believe that, in order to question the process of implementation of certain affordances, it is crucial to first address the power hierarchies within the system and the distribution of responsibilities among users. In other words, it is important to first discuss the process through which affordances are devised.

To which extent is the design of the infrastructure a constitutional issue?

Rossetti: The design of infrastructures is surely one of the most relevant areas to legislate upon nowadays, so possibly also constitutionally. It is a matter of relevance to the public, and this has also to do with the special link that historically related infrastructures and the state; a link that has been corroded by neoliberal reforms. Jean-Christophe Plantin and colleagues have noticed the growing compenetration between the platforms and infrastructure itself — what they called the platformization of infrastructure and the infrastructuralization of platforms.

This tendency contributes to supplanting the modern infrastructural ideal, the belief — originated in the middle of the 19^{th} century — that it was the state or the city that had to provide citizens with a certain basic infrastructure. Today, we see the extremization of the neoliberal privatizations initiated with the deregulation of the '80s: the internet infrastructures, as the critical infrastructures in general, are increasingly built and operated by the private sector and often by the platforms themselves.

The design of the infrastructure is surely a constitutional issue, but it is also an expression of the ideal of the institution that produces it. A public institution is expected to build an infrastructure that spreads evenly, whereas a profit-driven company will necessarily produce an infrastructure mostly developed in the economical centers. It is essential to reclaim the publicness of infrastructures because they cannot be left to develop according to the logic of the market, fragmenting societies and increasing inequalities.

Beraldo: For me this is a crucial point. When I was a kid I was spending the summer in my mother's little home village in the middle of the mountains. Some households did not even have telephone landlines - people would go to the bar for that. I remember my frustration when hearing from friends coming from Milan that they just got access to fiberoptic Internet, and I, living in a mid-sized town just outside Milan's metropolitan area, was stuck another year with 56K, taking 2 days to download a Green Day MP3. I'm afraid those living in that village are still waiting for fast Internet.

Getting back to the issue: what counts for infrastructure counts for platforms, precisely because of this interpenetration that you are mentioning. We have to find ways to re-instantiate the preeminence of the public interest in infrastructure, in platforms, and in the infrastructure of platforms. This has to pass from the level of design. I am not able to assess whether we need a change in the constitution, a new law, a revolution, or a new technology for this to happen. Let's see if a new generation of "public-by-design" platforms will be able to reach the critical mass related to generating network effects and thus value for the end user. In the meanwhile, we should try to resist the complete subsumption of our lives, and try to hijack existing platforms where we can, without forgetting what they are behind the screen.

According to its etymology, the word responsibility can mean both accountability and care. Can we think of an infrastructure that enables care relations?

Beraldo: Platforms can do great things - personally, I do not subscribe to a hyperpessimistic vision of our current socio-technological configuration. This idea of "care" can also be a double-edged sword: what kind of care? At what levels? The state taking care of its citizens can range from welfare to Stalinism. Of course, it all boils down to what you consider care. Platforms are enabling care to many extents, but the main driver is always profit and this, in the long run, goes against the idea of relations of care. Platforms subscribing to the early idea of the "sharing economy" are good examples of at least "wannabe" platforms of care - sharing is caring, right?

Something like Couchsurfing could be considered a platform of care - because when it was created, it allowed hosting and being hosted all over the world for free and in safety; plus it often created sociality between hosts and guests, as well as the participation in a community in every major city in the world. That was the real mission of the platform. But then you see what happens to these platforms: they are engulfed by other logics. This also happened to Couchsurfing I think - now it's subscription-based; not sure what is the exact business model there, but I personally experienced how it stopped working the way it used to. People prefer Airbnb, even though you have to pay and you don't get to hang out with the people that host you.

Rossetti: The examples you make are very interesting and make me rethink what I just said. I refer to how platforms could be framed as "platforms of care" regardless of their infrastructures being collaborative and their code open source. Indeed, Couchsurfing and BlaBlaCar were something completely different. Airbnb and Uber also were different in their initial stage, before becoming the ruthless siblings that made it on Wall Street. But if it is true that their financial flows suggested how they would develop into profit-driven enterprises it does not mean that they could have been something different. Couchsurfing and BlaBlaCar could have remained free services by relying on donations, like Wikipedia. Another donation-based example worth mentioning — not properly a platform, though — would be Signal. With the risk of sounding too conventional, the aspect of caring could be mostly tied to the platform being profit-driven or not.

Etymologically, an institution is something that stays; in this sense, a platform as an institution is somewhat of a paradox, because one of its characteristics is constant change. Are platforms new kinds of institutions?

Beraldo: It might be a matter of degrees of abstractions. We could speculate that platforms hacked institutional logic by making structural change their most stable feature, by turning the delusion of expectations into a meta-expectation. I can see how we could go Luhmannian about this - maybe we should write a paper about it.

Rossetti: I very much like this idea that platforms' most stable feature is their instability. They are for sure new kinds of institutions: even if they change their forms, we can be sure that

they will not change in their substance, while continuously eroding the role of traditional institutions like states to create their own markets, identities, environments, and knowledge.

Further Readings

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