Introduction: Governance of the digital realm between doctrines and practices

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Abstract:

Governance of the digital realm has many referents, ranging from the conduct of a company project involving digital technology to the balance of geopolitical power in cyberspace. Though seemingly distant from each other, these referents come from the same mold: the Internet. The Internet's principles of openness and horizontality have deeply shaped modern societies and economies. While the question of Internet governance is evolving, these principles continue spreading as they are reappropriated in sectors outside the digital realm, such as transportation or energy.

Talk about governance in the digital realm often raises questions about the level of understanding for conducting discussions.¹ The topic of "digital technology" itself has several referents, ranging from the infrastructure to services and uses, from a hyperindividualized approach ("my" smartphone) to an extremely globalizing view of the effects on how society is organized. By adopting the word "governance", itself polysemous, dare we hope to draw coherent, useful conclusions for understanding our digitized world?

This special issue makes this wager: for all its diversity, the digital realm shares factors specific to it — factors stemming from its history of practices, which, though far from evident at the start, have become "ordinary". Some stakeholders have even gone farther. For them, the question of governance is inherent in the digital revolution, which has modified business models, relations between service-providers and users, and even the traditional games of power in economy and society. From this viewpoint, the technical dimension is still essential to the digital realm, evidence of this being the power acquired by engineers and scientists in big Web firms and in various organizations involved in Internet governance. However the word "digital" stretches beyond the question of computers and telecommunications and now characterizes a trend sweeping over all of society.

From this perspective, the Internet has come out of the very definite intention to develop digital technology — a successful idea that, very much in the minority at the start, has radically altered the values borne by the major players (whether or not commercial or political) in this realm. Valérie Peugeot's article recalls the Internet's very close association with the idea of a "common good", *i.e.*, a good managed by a community of geographically dispersed individuals, who never would have come together without this technology. Net neutrality is the most significant example of the principles of governance that, worked out by engineers with solid technical and political convictions, were validated by the open Internet's commercial and public success — to the detriment of models controlled by specific organizations (the government in the case of Minitel, or private interests in the case of the first services providing access to the Internet via mobile telephones).

¹ This article has been translated from French by Noal Mellott (Omaha Beach, France).

Mitchell Baker, CEO of Mozillla, and Serge Abiteboul, a computer scientist and member of the governing board of ARCEP, the agency in charge of regulating telecommunications in France, recall how this principle has proven its mettle and should, perhaps, be extended to others aspects of digital technology (such as terminals).

Valérie Schafer and Francesca Musiani have pointed out that the organization of governance in the digital realm (often associated with "multistakeholderism") is evolving toward "governmentality", which assigns more importance to the role of individuals (beyond the traditional representatives of "civil society"). The recent enforcement of the EU's General Data Protection Regulation reflects this trend in the legal field. The GDPR, as Isabelle Falque-Pierrotin has suggested, prepares more than ever the individual to be the influential player. This quest for "active, aware digital citizens" is part of the effort to defend a "healthy Internet", as proposed by Mozilla and Mitchell Baker. However the power of algorithms and artificial intelligence has cast doubt on such efforts and led to calls for new principles of governance.

The digital realm's increasing complexity no longer keeps purely political issues from seeping into the debate on governance. Objections have been made to the approach to governance that, mainly technical, has prevailed since the start of the Web and at the World Summits of the Information Society in 2003 and 2005. The re-politicization of this debate and the rising power of non-Western countries is, as Julien Nocetti has emphasized, shifting onto the future the risks of a splintered governance as the Internet's universalist ambitions unravel.

On the technical level, the ideals of the Internet's founders have left room for powerful economic interests, which, keeping an eye on new forms of technology, try to discern whether the control of key elements in them might not be a sure source of future profits. In the current contents of a massive diffusion of connected devices, Laurent Toutain has pointed to both the lack of governance for the Internet of Things and the keen competition between open models and proprietary systems.

The paradox of governance in the digital realm: a recognized, documented model has set off a revolution in the economy but with principles that are constantly being challenged when they are to be applied to new issues.

Besides shedding light on the changing debate about Internet governance, this special issue of *Digital Issues* also seeks to explore how the Internet's principles of governance — transparency, decentralization, the importance of technical analyses and specifications — have diffused into other contexts. With regard to "democratic governance", a week does not go by in France without a "citizen consultation" undertaken by the central government or local authorities. This procedure borrows from the digital realm its "horizontality" and its tools for facilitating discussions. The public hearings in 2016 on the bill of law for a "Digital Republic" provide an example of this alignment: the method of consultation (open, multiparty, transparent) and the questions proposed (open data, Net neutrality, data protection). The success claimed for this experience has reinforced the hand of the partisans of a more "participatory" democracy based on digital technology. Bruno Cassette has drawn the same conclusion about the management of the Lille metropolitan area. Ghislain Heude, former director of the Mission France Très Haut Débit, organized consultations for drafting a plan to roll out optical fiber and other VDSL networks, a coherent plan that covers all of France while taking into account the opinions of all parties involved (private operators, elected officials and local authorities).

Arnaud de la Fortelle and Tom Vöge have discussed the governance of data in the transportation sector. Under the brunt of digital technology, the very concept of a "public transportation policy" must be revamped to better take account of the relations between public authorities and the private parties active in this branch of the economy.

As Isabelle Kocher has shown, digital technology has provided Engie with leverage for changing and becoming more competitive. It also sets the model for this energy company to become a "learning organization" that stimulates the creation of communities and reinforces the end user's role in the firm's global strategy. Increasingly shared by managers in firms of all sizes, this vision leads to overhauling the "human resource" function in organizations and introduces new roles for middle-level managers. Constance Chalchat has proposed a grid of interpretation for turning digital technology into a helm for steering such changes in classical organizations, like the bank BNP Paribas.

Finally, Emmanuelle Roux and Jan Krewer have drawn a parallel between the principles of governance in the digital realm and the quest of "liberated firms", where decision-making is collective. The way is thus opened toward a new social contract that, directly descended from the original vision of digital technology, would transpose to a new society the rules created for digital technology. Such was John Perry Barlow's vision of cyberspace, when he drafted the "Declaration of the Independence of Cyberspace" in 1996.²

² John Perry Barlow (8 February 1996) "A Declaration of the Independence of Cyberspace", <u>https://www.eff.org/cyberspace-independence</u>.