#### **Abstracts**

#### 09 Can digital technology save representative democracy? The example of online consultations about the bill of law on a "digital republic"

Axelle LEMAIRE & Florent de BODMAN

In the autumn of 2015, we conducted a first "online consultation" on a text presented by the government: 30,000 cybernauts posted comments about the bill of law on a "digital republic", and 90 modifications were made to the final text of a bill that would be passed unanimously. For the first time and thanks to an innovative digital platform, the government wagered on "collective intelligence" to make the bill more relevant and legitimate before its examination by the French parliament. This experiment has been deemed a success but has not yet been repeated. What does it tell us about the promises of "CivicTech" for renovating representative democracy? Under what conditions can it be repeated and extended to other phases in public decision-making?

#### 14 Disinformation during the digital era: A European code of self-discipline

Paolo CESARINI

Given the strategic role acquired by the social media as the preferred channel of information and the changes wrought by digital technology in the news media, fake news can circulate more easily. It now has unprecedented circulation and penetration rates, and societal impact. Efforts at the European level are described for stymying this phenomenon, in particular, the self-discipline foreseen by the "Code of practice to fight online disinformation" proposed by the big online platforms in October 2018. How effective are these measures in relation to the five types of vulnerability typical of the media? How can they cope with the methods whereby hostile forces, whether governmental or not, manipulate information for the purpose of making a profit or of political subversion?

# 19 Scenarios of catastrophes in Latin America: Combating rumors and fake news

Élodie MARTINEZ

During elections, the political propaganda war is in full swing. All means are fitting to fell opponents, including the massive circulation of fallacious information. Since the concept of disinformation has entered wide usage, mainly since the American presidential campaign in 2016, ever fewer persons have qualms about lying. The 2018 election campaigns in Brazil, Mexico and Colombia, where acts of violence and corruption scandals are rife, were not spared. Fake news circulates even more in Latin America where most inhabitants use the social media as their major, if not single, source of information, a trend bolstered by forfree (or nearly so) access to platforms such as WhatsApp and Facebook. During the French presidential election campaign in 2017, Agence France-Presse launched a fact-checking website, which it has now extended to cover 18 countries. Its goal is to debunk fake news by providing readers with evidence. Herein, the fake news circulating in Latin America is identified along with the context where it has emerged and the efforts for reestablishing facts.

#### 25 Automatic filtering and freedoms: Can we break free from a centralized Internet?

Lionel MAUREL

Whether at the French or European levels, plans are springing up for regulating the big centralized platforms through requirements about the automatic filtering of contents in order to fight on line against counterfeits, hate or terrorism. These technical measures are likely to imperil the exercise of fundamental freedoms, in particular by deeply modifying the rules on the responsibility of technical intermediaries. Paradoxically, they also risk reinforcing the domination of the giants (like GAFAM) by compromising the possibility of re-decentralizing uses on the Internet.

## 31 Democratization: Mixed results? Popular uses of the Internet Dominique PASQUIER

Research conducted between 2014 and 2017 among French employees and workers brings to light how this fraction of the population (who was equipped later than the middle and upper classes with access to the Internet) has appropriated this new medium. Attention is drawn to differences in the preferred means of communication: personal e-mail services are not frequently used; websites and online media are consulted that require the least effort in terms of formal writing skills; and smartphones are used instead of computers. This democratization of access to the Internet has hardly changed forms of sociability; nor has it led to a broader cultural awareness. However it has clearly opened new opportunities for acquiring knowledge and led to a "re-symmetrization" of relations with "experts".

#### 35 Gendered differences in video-gaming

Samuel COAVOUX

The public of video games, perceived as a young, male leisure activity, is diversified; but gendered inequality is still strong. This inequality is examined from the angle of differences in gaming practices between men and women. The results of two recent questionnaires describe these differences and relate them to differences in sociability during adolescence. The consequences on female players' opportunities are pointed out.

### 39 Bibliothèque National de France: A proud presence on the Net

Between President Mitterrand's announcement in 1988 of the creation of a library "of a completely new sort" and its contribution to President Macron's "grand national debate" in 2019, the Bibliothèque National de France (BNF) has become an active public player in the digital realm. Changes over the past twenty years have affected this centuries-old institution's assignments: the collection of documents, their conservation, organization (cataloguing and referencing documents, and producing data and metadata about them) and diffusion. At present, a major issue is how to take into account documents that have, from the start, been electronic. By addressing this issue, the BNF is making available to its community of users the services expected of a big library. Far from what we might think, the National Library of France does not have to prepare for the move toward the Net; it has already done so for a long time now. However it must continue convincing authorities that, for it to remain effective, the investments earmarked must be maintained.

#### 43 Adapting the mass media to new digital uses

Colas COURJAL

When an innovation opens a new possibility, either traditional players appropriate it and grow, or else new players emerge to seize it in their stead. In audiovisual and digital technology, growth used to be based on a utopian idea about the freedom to create — often contrasted with the traditional media, deemed to be too rigid or too regulated. To cope with this rapid innovation that analysts described as a "menace", broadcasters and audiovisual firms had a choice between two strategies: compartmentalization or integration, each with mixed results. Paradoxically, innovators in digital technology have borrowed the principles of mass production, despite the risk of making a break with the original utopia of the freedom to create. In reaction, new hybrid players are looking for a comprise that does not compromise their principles.

# **48** Native to, or naif about, digital technology? Forms of social inequality Sylvie OCTOBRE

The younger generations have been labeled with names that place technology among their presumable characteristics (Y, Z, Millennials, digital natives). These names suggest a homogeneity in the cohort's relation to digital technology — owing to the simple fact that they were born during the digital era. However they keep us from clearly perceiving cumulative, overlapping forms of inequality in the access to this technology and uses of it. The level of education, geographical location, socioeconomic status or membership in specific communities are more determinant factors than the lifestyles or technological and occupational changes that offhanded generational analyses so frequently mention to explain the varying levels of digital inequality among young people.

#### 53 Digital technology and the democratization of culture

Aymeric des ESSEINTES

When asked why they do not have more cultural activities, the French mostly mention three obstacles: costs, the lack of time and the distance from cultural facilities. We are thus tempted to see digital technology as a powerful tool for cultural democratization. For one thing, it abolishes distances and makes instantaneously available a nearly infinite variety of works of culture. Nowadays, a huge proportion on the supply side (pieces of music, books, films or virtual visits of exhibitions) can be potentially accessed via a smartphone. For another, digital technology makes culture available at a low cost, sometimes for free — with the risk of instilling in users the illusion of "everything for free" and of blurring the bounds between legal offers and cyberpiracy. What to conclude about the past fifteen years, a period when digital technology came into massive use in our everyday lives and for access to culture? The answer is equivocal and less simple than it seems.

# 58 Digitization of the public administration: Modernization or a screen for budget cuts?

Côme BERBAIN

For more than twenty years now, the introduction of digital technology in the public administration has centered around "dematerialization". In some services, this has been a genuine success, since dematerialization was in step with social trends in uses. However

the rationale of budget-cutting that often guides dematerialization is encountering its limits in terms of both the value for citizens and the administration's internal operations. Without offering any new innovative uses, it is leading to a lower quality of services for the ten million French citizens who use digital technology very little. Dematerialization must make way for a genuine digital transformation of public services: the first signs of this change exist within the administration but have to be generalized.

### 63 Is the digitization of the labor market in the general interest? Laurent CYTERMANN

The digital revolution is unfurling in the labor market. While one out of two job offerings is posted on the Internet, older channels of recruitment are still important. Major changes are under way, as new players and practices emerge: the social media, search engines and new recruitment methods directly based on skills and know-how-to-be. Nonetheless, the question remains open about whether the digital revolution will improve the operation of the labor market. It has not yet been able to respond to the growing difficulty of recruiting personnel despite the high jobless rate. A few lines of thought are presented for an "augmented public employment service" capable of seeing to it that a digitized labor market will be more conducive to the general interest.

#### 70 Love 2.0: The impact of digital technology on dating

Nathalie NADAUD-ALBERTINI

Online dating services are meeting places for people who want to date. Users are looking for a place for meeting, even when this remains taboo. Dating has two phases: on line and in real life. On line, the meeting is prepared by creating a profile and exchanging messages. Off line, a meeting tells us about changes in the morals related to marriage and sexuality; and it proves, when the relationship lasts, the cogency of the norms of romantic love. These websites lead us to ask questions about our collective ideas on dating, gender identities and the relation between our impression of ourselves and the impression that others have.

### 76 Learning by and with digital technology: Educating the young for a balanced use

Jean François CÉCI

The controversy about the use of screens places parents and educators in a sensitive situation on the question of whether we should promote or oppose the use of screens or even forbid using them. Several opponents and proponents are trying to define and quantify the right and wrong uses of screens, to place screen use in an adapted time and space or simply to screen-gazing less exclusive for the sake of other activities, which are deemed healthier (sports, arts...). Is there a balanced use of digital technology? What role should schools have? After describing this new hyperconnected form of socialization, focus is shifted to schools and the integration of educational digital technology. The concept of a digital culture is examined to conclude by opening a discussion on the balanced and ecological use of this technology.

#### 82 Overexposure to screens and regulations of digital technology

Annie BLANDIN

How to regulate overexposure to screens? This question is examined in particular in the case of the websites and platforms with an architecture and business model based on

capturing cybernauts' attention and collecting masses of data from them. Since the design of many a platform seeks to make visitors dependent, the methods for capture attention are analyzed before discussing how to regulate them. Several legal rules and recommendations have been made for reducing the time spent looking at screens and for limiting short, intense exposure to screens. Meanwhile, the exposure to certain contents (in particular, hate speech) is being regulated, and should be. The regulation of these systems is part of an approach that seeks to reduce the power and impact of platforms and control viral messages. This leads to questions about alternative solutions for limiting overexposure, such as the decentralization of the Web.

### 86 Digital technology and rethinking the impact of migrations Alice BARBE

Since 2015, several digital initiatives have been undertaken to find solutions to the problems experienced by refugees. Many of them directly or even exclusively address these problems by making available a maximum of useful information on asylum, translating and disseminating offers for jobs that could speed up the refugee's integration, and making multilingual translations of occupational and legal documents. However the major issue in the formula of digital technology plus migrations has to do with users' perceptions, evidence of this being the planetary repercussions of Facebook's presumed effects on the American elections. In other words, the diffusion and perception of a story counts even more when it is about immigration. The story about refugees tends to polarize the host society and, as a consequence, its leaders. However the way that the digital media handle this polarization (as well as the role played by the firms that own these media) is decisive: it can have a strong social impact on both refugees and the host society. In Europe and North America, reactions against immigration are rising as sensationalistic information is spread. In this case, digital technology as a set of tools has a twofold responsibility. It provides for the sharing of this information and thus potentially exacerbates negative perceptions, but it also offers concrete solutions to refugees and host countries for creating a more inclusive society.

#### Miscellany

#### 92 Teaching standards in a digital world

Nizar ABDELKAFI, Raffaele BOLLA, Cees LANTING, Ultan MULLIGAN, Alejandro RODRIGUEZ-ASCASO, Lisa THERESA STEIN & Michelle WETTERWALD

Standardization, especially in information and communication technologies (ICT), is an important issue for companies to achieve a competitive advantage as well as for entire industries to thrive. Without standardization, technology may not develop at all or only slowly because of inefficiencies and redundant work. Due to the importance of the topic, industry is in need of experts that have in-depth knowledge in the area of standardization. Furthermore, recruiters give a high importance to soft skills that are inherent to standardization, such as negotiation skills, adaptability, oral communication, etc. Therefore, in recent years, there has been a growing interest in education on standardization. So far, however, formal academic education has neglected standardization, and students generally encounter standards during their engineering courses, but rarely acquire knowledge about the mechanisms of standardization processes and their strategic relevance. As such, companies may not be able to fully reap the benefits of standardization, as even though they recognize its strategic importance, they may not easily find graduates that are well prepared to carry out the standardization work.