Overexposure to screens and regulations of digital technology

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Abstract:

How to regulate overexposure to screens? This question is examined 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 capturing 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.

Depending on whether we focus on addiction or overexposure, our viewpoint shifts. Addiction is defined with clinical criteria, referring to behaviors ranging from use through abuse to dependency. In the case of screens and overexposure, there is no need to consume any substance: the problem is our behavior in relation to screens. At present, only the addiction to video games has been recognized as an illness by WHO, the screen being merely a vector therein. The concept of addiction highlights the ambivalence at the core of our relation to screens, a relation that initially arouses pleasure before dependency arouses a form of suffering (LOWENSTEIN & KARILA 2017). ¹

To talk about overexposure is to focus on the activities that cause people to be "overexposed", a word that clearly expresses our relative passivity or powerlessness in relation to what nails our attention to a screen. However it is hard to tell the difference between exposures that are voluntary or are undergone, especially in the immersion promised by the Internet of things (IoT). How to draw the red line between exposure, overexposure and "hyperconnection" as a function of the resulting physical and/or psychological disorders? While it is warranted to concentrate on the risks to children, in particular during the first three years of their lives, overexposure to screens concerns everyone, in both private and occupational activities. It is inherent in the new activities sometimes called "digital labor".

¹ This article, including any quotations from French sources, has been translated from French by Noal Mellott (Omaha Beach, France). The translation into English has, with the editor's approval, completed a few bibliographical references. All websites were consulted in August 2019.

To complete this preliminary discussion of overexposure, we need to mention screens. The predominance of the word "screen" in our contemporary vocabulary is itself significant, suggesting a form of attachment independent of contents and uses. A screen is thus a sort of doorway toward a realm full of potential. "I search, therefore I am", Mary Aiken (2017) wrote while examining the relation between the dopamine freed during search operations and the human capacity for adapting to a new environment.

I would like to analyze overexposure from the angle of the regulation of digital technology, in particular of the websites and platforms with an architecture and business model based on captivating cybernauts (their attention) and, too, massively collecting their data and capturing value — and thus on forms of human exploitation. Knowing that many a platform has been designed to make visitors dependent, to hook them and keep them connected, let us first examine regulation means when applied to the processes of attention and then to the systems themselves. Take note that the firms concerned are not just the digital giants (GAFAM), nor their Chinese counterparts.

"Regulating" attention

We did not wait until the Internet developed to gauge the impact of the media on our brains, in particular when they solicit the subconscious. Ample evidence of this comes from the regulations about television and advertisements on it. Whereas an advertisement usually seeks to trigger a purchase, digital platforms and video games are intended to capture our attention as long and often as possible — what has been described as an "economics of attention" or an "attention economy" (CITTON 2014a).

What does this have to do with addiction? Let us insist, like Mary Aiken, that none of this is natural. By comparing video games to basketball, she made the point that, in virtual games, the more we play, the harder the rules become; whereas, in real games, fatigue gradually sets in and makes playing less intense. In the latter case, a form of self-regulation arises at the very point where, on the contrary, digital technology pushes back the limits.

So, it is not surprising that the duration of screen exposure is a matter of preoccupation and has led to recommendations or legal rules. To make a parallel with electromagnetic fields, we should take account of long periods of exposure to fields at very low frequencies and of short periods of exposure to high-frequency fields. Current approaches to regulation take account of this two-pronged aspect. Limiting the length of exposure was one of the two pillars for regulating advertisements (including their contents) on television. Rules tightly regulate the number, duration and frequency of ads.

What is possible in point-to-multipoint connections cannot be transposed to the Internet environment. Instead of acting on the source by enforcing obligations on the media, actions tend to be directed at the persons on the receiving end of the Internet. Recommendations, quite pertinent by the way, have been formulated about how to use screens properly. An approach centered on self-determination has advocated an "attention ecology" (CITTON 2014b) for taking back control over our available brain time and choosing our forms of alienation.

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² For example, the age thresholds 3-6-9-12 set by Serge Tisseron, who has authored several articles on this question. *Cf.* https://www.3-6-9-12.org/

The duration of on-screen time should also be limited on the job. In France, the "right to disconnect" has been adopted to protect wage-earners, to keep them from always having to be "reachable" and thus defend the boundary between home and work. Given the current state of health regulations on the stress and strain of work, it is hard to control the risks of screen exposure (sometimes very high or even unbearable) that are inherent in the tasks performed. Nonetheless, an analysis of the work done by Facebook moderators has painted a dark picture of the suffering they endure (CHAHUNEAU 2019).

The time criterion does not suffice, of course, to account for an addiction that stems from a combination of factors, many of them related to online services and contents. To regulate digital technology, a major issue is the overexposure to contents of various sorts (attractive and stimulating or hateful): fake news, terrorism, subliminal messages. In the case of advertisement, regulating contents demonstrated that a high level of protection could be provided during an era when it was still possible to control situations. Nowadays however, everything seems out of control on the Internet. Hate, in particular, has been exacerbated, the Internet usually serving as its amplifier.

The time of exposure to such online contents has been taken into account in measures for fighting against online harassment, which, like any other form of harassment, implies repeated actions. This concept of repetition, now broadly defined, figures among the criteria for qualifying an offense as "mob harassment". In an innovation, the new Article 222-33-2-2 of the French Penal Code no longer requires the repetition of actions for qualifying an offence as harassment whenever several persons act together or at the instigation of one of them or whenever the same victim is targeted successively by the comments or acts of several persons who, even though they have not colluded, know that the comments or acts qualify as a repetition. In other words, the impact and shock, even of short duration, are now brought under consideration; and the focus is shifted beyond the authors of an offence toward the systems.

Also with regard to the contents, the protection of personal data and privacy, in compliance with the EU's General Data Protection Regulation (GDPR), is a way to limit the overexposure of our data and thus of a part of ourselves to an overexploitation by various parties on the Web.

To regulate the processes for capturing a cybernaut's attention is, above all, to regulate the effects wrought by the strategies adopted by digital platforms. Even from this approach toward an "attention ecology", actions on the causes of overexposure still focus on individuals. However the systems have to be regulated. The word "system" refers to the power of the big, so-called "systemic", online platforms, to the procedures that lead to overexposure or even addiction, as aptly described by the phrase "designed to addict".

³ The modification of Article L 2242-17 of the Labor Code in view of regulating the use of digital technology.

Regulating systems

The regulation of online platforms pursues several objectives. For it to have an impact on overexposure to screens, it is necessary to reduce the power of firms that are sovereign: not only do they have the usual attributes of sovereignty but they also have a metaproperty, namely access to information (BLANDIN-OBERNESSER 2016). The major source of law for reducing this power could come from competition law or from an asymmetric sectoral form of regulation. Dismantlement is no longer taboo, and some pundits have imagined it, especially in the United States. For example, Tim Wu (2018) has referred to the breakup of ATT as the origin of the liberalization of telecommunications. Reducing the power of these firms also means making them more responsible ethically and more liable legally — but without delegating judiciary functions to the private sphere, to firms that feed on their control over our cognitive systems. This is the paradox of the solutions for inducing or forcing these platforms to more responsibly moderate the contents posted on their websites.

Another solution is to regulate the procedures that "accelerate" contents and make them go viral (AMELLAL *et al.* 2018) — the features for liking, sharing, retweeting that disseminate contents on a large scale and at top speed. This "programmed virulence" might lie beyond the control of the platforms. If so, they would then be compelled to admit their powerlessness in coping with the propagation of, for example, videos of a murder. The very definition of "viral" contains a degree of unpredictability that makes it hard to control these systems. It is urgent to slow down this virulence, reduce its impact and, perhaps, sanction firms in proportion to the features they offer. This slowdown is imperative, since speed is the key factor in "going viral".

In general, digital technology is literally changing our relation to time. Driving this new relation is a market rationale, which uses the digital revolution in the quest for "a new form of expression of its power" (AUBERT 2004). Speed entails segmenting time, evidence of this coming from the examples of people interrupting what they are doing every five minutes to consult their messages, e-mail, or profiles on the social networks. Very few solutions have been imagined. Tim Berners-Lee has suggested, for example, lowering the connection speed of "bad" users (UNTERSINGER 2019).

In an asymmetric form of regulation, heavier obligations are being imposed on players by legal provisions that take account of the quantitative impact. For example, one way to regulate online hate is to impose obligations on, in particular, the social networks as a function of a threshold number of connections in the country, as foreseen in the French bill of law for fighting against online hate. However this solution is not very satisfactory not only because it is based on a search for stable criteria in a moving environment, but also because it might lead to maneuvers for skirting around the law and to a retreat toward the platforms, which are subject to less heavy obligations.⁴

From a qualitative approach, the impact on mind and health has long been a subject of study. Public health measures could be used to regulate the activities of online platforms. Algorithms must also be regulated in proportion to their influence and power of manipulation. Sanctions related to the lack of control over the proliferation of information could be like the solutions adopted during emergencies, for instance when online rumors, which the social networks were unable to curb in time, sparked acts of violence against Roms in Seine-Saint-Denis. Questions thus arise about reforming the regulations and laws that have lightened the responsibility of "technical intermediaries" on the Internet. The problem is no longer whether or not the intermediary is aware of contentious facts or contents it hosts, and whether or not it has taken posts down within a reasonable time. The problem is powerlessness, the impossibility of taking any action in due course because the system is running riot.

 $https://cnnumerique.fr/files/uploads/2019/20190321\%20-\%20CP_regulations_contenus_haineux_VF.pdf.$

⁴ See the CNN's press release available via

Conclusion

Once legal regulation has reached its limits, the issue of regulation will return back to the sources of the Internet, namely regulation via technical solutions. For the commemoration of the 30th anniversary of the Web, Tim Berners-Lee lamented that the Web has come to be organized in bunkerized platforms and applications, and called for a return to a decentralized Web. He argued for redesigning tools, such as tweets, so that a more reasonable use be made of them. On the other side of these proposals are the users. At stake for them is to take back control over several elements (starting with their personal data), a control that can be leveraged to make systems evolve toward a minimization of overexposure, or even towards pacification.

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