

Civic tech, data and *Demos*

Personal data and freedom issues in
relations between democracy, technology
and civic participation



Democracy is based on such political values as individual freedoms, equality, renewal of leaders and judicial independence. But it is also characterised by technical procedures and systems that implement these founding principles: ballot boxes, electoral lists, voting booths and, more recently, electronic voting machines. Each such technology has aroused debate and controversy, uncertainty and resistance before being stabilised, institutionalised and becoming essential to the functioning of our democracies. It is an established fact that technical mediations and systems transform modalities of political representation.

2018 and 2019 have been marked by a context of institutional mistrust that has called traditional systems for exchanges between citizens and the authorities into question and accelerated the emergence of civic technologies, civic tech. In the wake of the “yellow vest” movement, initiated by mobilisation on social networks and followed by the Great Debate organised by the Government, such technologies are helping redesign the relationship between public debate and private engagement, direct representation and new forms of democratic expression.

The same debate is now going on simultaneously in official bodies and on social networks, and major private and community actors are now in a position to lead and even take over debates independently of the public institutions more legitimately in charge. More generally, it is essential to ponder political decision-makers' possible use of feedback from online civic participation: how much value can be put on contributions when not everybody is participating? How do you analyse the representativeness of the opinions expressed, which cannot be completely separated from participants' social and geographical situations? And finally, how do you match such digital expressions with other modes of civic participation, by physical participation in workshops or engagement in associations? If we want civic tech to reach maturity, we will have to construct virtuous models, respectful of individual rights and the foundations of democracy, by organising a form of permanent methodical questioning while avoiding the temptation of technological solutionism.

This seventh IP Report is very much in line with the CNIL's ethical mission; since the 2016 Act for a Digital Republic, the Commission has been giving thought to the ethical issues and social questions raised by the evolution of digital technologies. After focusing on exploration of algorithms in the upcoming age of artificial intelligence in 2017, this year we decided to tackle the subject of civic tech and, more generally, the growing use of digital technologies for purposes of political participation and representation, around an event held on 9 December 2019 at the Economic, Social and Environmental Council and the 2017 publication.

We hope that this Report provides a useful overview of present and future political technologies, contributes to thought on the subject, and sketches out recommendations that will help define new forms of political debate.

Marie-Laure Denis
President of the CNIL

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From Internet
to civic tech:
when digital technology
appropriates politics

From Internet to civic tech: when digital technology appropriates politics



The rise of abstention, the weakening of intermediary bodies and rejection of professionalisation of political staff are all symbols of a legitimacy crisis of the democratic operation of our societies. CEVIPOF's *Political Trust Barometer* for January 2019 measured the extent of such distrust, with 69% of respondents asserting that they were “mistrustful” of politics¹.

Technologies are regularly presented as a solution to our democracies' ills and a response to the crisis of political representation. The close relationship between technology and politics also permeates the Internet imaginary, the activist movements of the 1990s, electronic democracy

systems and the emergence of civic technologies (civic tech). Although technology provides real opportunities for inventing new democratic forms, it falls within the context of social, economic and institutional dynamics and is no more than a mean at the service of political ends.

¹ Political Trust Barometer (Wave 10), OpinionWay for SciencesPo-CEVIPOF, January 2019 https://www.sciencespo.fr/cevipof/sites/sciencespo.fr/cevipof/files/CEVIPOF_confiance_vague10-1.pdf.



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INTERNET'S POLITICAL IMAGINARY

The network of networks raised numerous hopes of a renewal of traditional political systems. Internet's pioneers championed a conception of politics no longer organised around a Nation State, but rather in an open, deterritorialised, non-hierarchical space. John Perry Barlow's Declaration of the Independence of Cyberspace symbolises this ideal of the autonomy of self-organised virtual communities². In addition to the libertarian discourses of these pioneers, which have

left an indelible mark on the Internet imaginary, its technical characteristics respond to three central concerns identified by theoreticians of democracy: information, deliberation and mobilisation³.

Internet is first of all a powerful tool for production and dissemination of information that can be put at the service of democracy. New technologies can overcome the perceived lack of transparency in liberal democracies and improve information of citizens, so enabling them to take "informed" decisions.

Internet also encourages revitalisation of the public space by providing alternative forms of political discussion without traditional intermediaries (the media, elected representatives, etc.). The distributed technologies on which Internet is based enable anyone to be a receiver or sender of information. *"Internet, unlike radio or television, puts sender and receiver in a situation of equality; and is therefore, at first sight, the ideal tool for a participatory democracy in which citizens can take part in the public debate on a regular basis"*⁴. Forums, chats, blogs and discussion lists are all platforms for expression and debate, where everyone can express themselves. Hence, even though it has evolved with the emergence of social networks, Internet is often compared to a Habermasian public sphere⁵: a debate between equals where rational arguments prevail and where users seek to develop common positions.

Finally, by reducing coordination costs, Internet promotes formation of collectives, mobilisation and civic engagement. In this respect, social networks are powerful tools for coordination of individuals and mobilisation around collective causes. They promote new forms of political participation, above all for activist groups with few organisational resources.

² John Perry Barlow, "A Declaration of the Independence of Cyberspace", EFF website, 1996, <https://www.eff.org/fr/cyberspace-independence>

³ Thierry Vedel, "L'idée de démocratie électronique : origines, visions, questions", ins Pascal Perrineau (ed.), *Le Désenchantement démocratique*, La Tour-d'Aigues, Éditions de l'Aube, 2003, pp.243-266.

⁴ Patrice Flichy, "Internet et le débat démocratique", *Réseaux*, 2008/4 no.150, pp.159-185.

⁵ Jürgen Habermas, *The Structural Transformation of the Public Sphere*, 1962.

DIGITAL COUNTER-POWERS

Since the 1990s, civil society has progressively assimilated the possibilities provided by new technologies used for political purposes, to create new forms of participation, alongside or on the margins of traditional political and media organisations, or even opposing them.

Internet: a space for political expression and mobilisation

It did not take long for social movements to appropriate the possibilities provided by these new technologies. In the 1990s, Zapatistas at the WTO counter-summit in Seattle, the alterglobalist activists made use of the open publication opportunities they provided to produce alternative media, with the aim of overturning the asymmetries of power⁶. Internet's reticular form matched the structure of such movements⁷, which were organised through a transnational network of activists in between the high points marked by the World Social Forums where they congregated.

A few years later, Web 2.0 marked the advent of everyone's ability to participate in the extended public space online, through creation and sharing of content via blogs and social networks. The fact that there were so few barriers to entering it encouraged the expression of political opinions that were less likely to be disseminated by traditional media, as is evidenced by the 2005 referendum on the European Constitution. The "no" camp made wide use of the web to disseminated their opinions as they found few outlets for expression in the classic media⁸.

In addition to the opening up of informational space, Internet proved remarkably effective in mobilising individuals, aggregating individual actions, forming ephemeral communities and getting enough voices heard to impact the public debate. In 2015, the online campaign platform Avaaz.org, which had been founded in 2007, asserted that over 41 million people in 194 countries had signed at least one of its petitions. Although it was criticised for the low level of commitment required ("slacktivism" or "clicktivism")⁹, the sheer numbers involved created a new balance of power that forced the media to take notice of subjects it had previously avoided.

Social networks in the street: connected mobilisations and deliberations

Social network platforms demonstrated the possibility to mobilise individuals en masse around civic issues, both nationally and internationally. Twitter, Facebook and such messaging solutions as WhatsApp became part of the landscape of digital tools that facilitated bringing people together around common concerns. The role played by the web, social networks in particular, in Arab revolutions and in coordination of such movements as Occupy Wall Street and the Yellow Vests¹⁰ is all too evident. Social networks enabled the aggregation and coordination of individuals with no experience in activism, outside political organisations.

Such mobilisations are marked by strong commitment to democratic procedures and their exercise: *"The 'Occupy' group and the 'Nuit Debout' movement in France created wikis bringing together the work of a hundred or so committees, themselves divided into sub-committees."*¹¹ Such movements' search for horizontality results de facto in a search for consensus, through implementation of procedural models in which each individual is free to express him/herself. Hence, in addition to coordinating the movement, Internet's inclusiveness enables them to create a space for coconstruction of common goals and the means by which to achieve them. Mobilisations which, it should be borne in mind, are also expressed by street demonstrations and physical occupation of squares and roundabouts. As regards *Nuit Debout*, it led to creation of IRL (standing for "in real life") spaces for deliberation, the most symbolic of which was the occupation of Place de la République in Paris, which were seen as a counter-model of classic institutional procedures.

⁶ Dominique Cardon and Fabien Granjon, Chapter 4. Le médiactivisme à l'ère d'Internet", Médiactivistes, Presses de Sciences Po, 2010, pp.81-110.

⁷ Fabien Granjon, L'Internet militant. Mouvement social et usages des réseaux télématiques, Rennes, Apogée, 2001.

⁸ Mona Chollet. "En 2005, Internet refait l'Europe", Le Monde Diplomatique, vol.662, no. 5, 2009, pp.15-15.

⁹ Patrick Kingsley, Avaaz: activism or 'slacktivism'?, The Guardian, July 2011, <https://www.theguardian.com/world/2011/jul/20/avaaz-activism-slacktivism-clicktivism>

¹⁰ Vincent Glad, Gilets jaunes des ronds-points, gilets jaunes des réseaux, même combat, Libération.fr, 7 December 2018 https://www.liberation.fr/debats/2018/12/07/gilets-jaunes-des-ronds-points-gilets-jaunes-des-reseaux-meme-combat_1696396

¹¹ Dominique Cardon, Culture Numérique, p.232, Les Presses SciencesPo, 2019.

Between mistrust of leadership and highlighting of “messengers”

In parallel, these models are characterised by distrust of all leaders. For example, the social mobilisation in Hong Kong in 2019 is based on decentralised organisation coordinated via social networks, with no leader at its head. The refusal of any authority figure is even a basic principle with the informal Anonymous hacktivist group, whose members, as the name suggests, must remain nameless.

Nonetheless, informal leaders tend to emerge from such mobilisations, due to their popularity on the networks, as the sociologist Zeynep Tufekci analyses: *“the dynamics of the online ‘attention economy’ – the struggle to get the most likes or views – create de facto spokespersons. These de facto leaders find themselves in a difficult position: they attract much attention that is desirable for movements, but they lack formal recognition of their role as de facto spokespersons”*¹²

In order to overcome their lack of legitimacy, the Yellow Vest movement’s informal leaders presented themselves as simple “messengers” and were subjected to transparency and accountability procedures, not unlike imperative mandates, via daily live sessions on Facebook, where they had to answer questions put by members of the movement. Broadcasting live videos on Facebook Live has also become a staple of mobilisations, in order to provide immersive documentation of what is happening on the ground in a way deemed to be more authentic than reports by the traditional media. Meetings with politicians are broadcast live in order to prevent any treasonous acts on the part of representatives, raising questions on the limits of political transparency¹³. There is also a participatory aspect to such mediatic practices: live broadcasts consist of “raw” images and commentaries through which internauts react and debate¹⁴.

Transparency, control and “vigilantism”

Digital technology is also made much use of in the implementation of counter-democratic activities, understood as watchdog, prevention and judgement functions designed to exercise control over democracy¹⁵. For such organisations as the Sunlight Foundation, founded in the United States in 2006, the facilitated dissemination of information enabled by new technologies must lead to increased transparency on the part of public institutions. The demands that all public data be open are very much a part of this movement. More radically, certain activists advocate total transparency of power and vehemently oppose the limits imposed on it such as State secrecy.

Mass leaks of confidential information by the WikiLeaks organisation bear witness to such demands for transparency, which are combined with a requirement of secrecy for indi-

vidual communications in accordance with the principle of *“Privacy for the weak and transparency for the powerful”*¹⁶. It is in this context that social networks have become the preferred instruments for dissemination of information subject to censorship in repressive regimes as well as for shining the light on abusive use of governmental power and denouncing practices deemed to be harmful. The circulation of documents, photos and videos on social networks aims to alert public opinion and force police and judicial authorities to take action on infractions. From police

violence to mistreatment of animals, these forms of “digital vigilantism” have become powerful instruments of social mobilisation, which are not without risk when they result in extrajudicial practices that bring discredit to an individual or institution¹⁷.

« *The dynamics of the online ‘attention economy’ – the struggle to get the most likes or views – create de facto spokespersons.* »

Zeynep Tufekci

¹² Zeynep Tufekci, Twitter and Tear Gas, the Power and Fragility of Networked Protest, C&F Editions, 2019.

¹³ For example the meeting between the Yellow Vests’ “representative” Éric Drouet and François de Rugy.

¹⁴ Vincent Glad, Gilets jaunes : la révolution sera Facebook-livisée, Libération.fr, February 2019, https://www.liberation.fr/debats/2019/02/01/gilets-jaunes-la-revolution-sera-facebook-livisee_1706645

¹⁵ P. Rosanvallon, La Contre-démocratie. La politique à l’âge de la défiance, Seuil, 2006.

¹⁶ Loveluck, Benjamin. “Les formes du pouvoir sur Internet”, Jean-François Dortier, ed., La Communication. Des relations interpersonnelles aux réseaux sociaux. Editions Sciences Humaines, 2016, pp.324-335.

¹⁷ Loveluck, Benjamin. “Le vigilantisme numérique, entre dénonciation et sanction. Auto-justice en ligne et agencements de la visibilité”, Politix, vol.115, no.3, 2016, pp.127-153.

ELECTRONIC DEMOCRACY

Since the 1990s, political parties and public institutions have been making use of tools for digitising their activities and renewing their relations with citizens, involving them in the processes of government.

From ICTs to open government, The State appropriates digital technology

The State was not long in making use of digital technology to create a closer relationship with citizens and involve them in political processes. The "e-democracy" movement characterised its determination to use technologies to improve democracy and democratic institutions. However, its failure makes it clear enough that the idea of mimicking representative or participatory democracy's procedures on Internet is less than effective.

From the first government websites to open data policies, public institutions have tried to bring the State and citizens closer together by facilitating access to information. In addition to simply disseminating information, elected representatives wanted to have more direct access to citizens by bypassing traditional media. A few months after his election, Barack Obama answered citizens' questions live on Internet. He also committed the American administration to a policy of "open government"¹⁸. In 2011, he oversaw creation of the Open Government Partnership (OGP), which aimed to promote transparency in public action, public participation and "co-construction" of public action, with a view to making political actors more accountable. Such initiatives are part of a rationale of accountability of public institutions, which are required to account for and justify their actions before the public.

Government institutions also seek to use technologies in order to better involve citizens in law-making. In France, the Act for a Digital Republic of 7 October 2016 introduced an online citizen consultation procedure upstream of the legislative process¹⁹. The subjects of such consultations were gradually extended, from the law-making procedure alone to such major social issues as Nicolas Hulot's "My project for the planet" initiative at COP23²⁰, participatory budgets and regional consultations²¹. In October, the Economic, Social and Environmental Council (CESE) signed a partnership with the Change.org and Mesopinions.com platforms designed to take

better account of their petitions²², while the National Assembly plans to open a petition platform in 2020, which may lead to Lower-Chamber debates²³.

Technologies' ambivalent relationship with elections

Political parties are also interested in these tools, "[...] to counter critics who say they do not take enough account of what citizens have to say and to open themselves up more widely to non-members"²⁴. In 2007, Ségolène Royal made the principle of participatory democracy central to her presidential campaign. The *Désirs d'Avenir* association's website aims to be a "participatory civic laboratory of ideas" to enrich its programme. Experts and non-activist members of the Socialist Party are also requested to take part in the forum. This political experiment generates 125,000 unique visitors a month, along with some 45,000 messages posted in discussion forums.

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¹⁸ President Barack Obama's Memorandum on Transparency and Open Government, 21 January 2009 <https://www.presidency.ucsb.edu/documents/memorandum-transparency-and-open-government>

¹⁹ Online consultation by the Cap Collectif startup in the context of the Act for a Digital Republic, carried out in October 2015 and including 20,000 participants.

²⁰ "My Project for the Planet" online platform bringing together over 190,000 votes and calling for citizens' initiatives.

²¹ Julien Nési, Le CESE noue un partenariat avec les grandes plateformes de pétitions en ligne, Horizons Publics, <https://www.horizonspublics.fr/vie-citoyenne/le-cese-noue-un-partenariat-avec-les-grandes-plateformes-de-petitions-en-ligne>

²² Xavier Berne, L'Assemblée nationale se dotera d'une plateforme de pétitions "au printemps 2020", October 2019, NextInpact, <https://www.nextinpact.com/news/108287-lassemblee-nationale-se-dotera-dune-plateforme-petitions-au-printemps-2020.htm>

²³ Anaïs Theviot and Éric Treille, "Les 'civic tech' à l'épreuve des partis politiques", RESET, October 2018, <http://journals.openedition.org/reset/906>; DOI : 10.4000/reset.906

²⁴ Beauvallet, Godefroy, "Partie de campagne : militer en ligne au sein de 'désirs d'avenir'", *Hermès, La Revue*, vol.47, no.1, 2007,

CREATION OF A CIVIC TECH ECOSYSTEM, (ALL) AGAINST INSTITUTIONS

The first stirrings of the civic tech movement were heard in 2004, largely resulting from the first Personal Democracy Forum, an annual event that focuses on the way in which technologies cause “*politics, governments, democratic societies, and advocacy*” to evolve. An ecosystem that brings together disparate projects, actors and models whose common point is the use of technology to bring about civic and political participation, but whose form and definition are still relatively unstable, depending on whether you are considering it from an American or French viewpoint according to their goals.

Broad and narrow definitions of civic tech

In 2013, the Knight Foundation²⁵ in the United States defined civic tech as “*any project with an openly civic purpose that uses new technologies*”, distinguishing between two poles: open government, as described above, and community action, tools provided by civil society aiming to facilitate cooperation between citizens in order to resolve public problems. A very broad definition that covers a jumble of social networks, YouTube channels, civic and private participation initiatives, petition and crowdfunding tools, peer-to-peer organisations, and even platforms for what was then known as collaborative consumption, such as Airbnb and Waze²⁶. It belongs to the Anglo-Saxon culture of community organising: a civil society mobilised around community concerns.

In France, the civic tech movement is structured around a somewhat narrower definition, which “*encompasses all public, community and private initiatives that contribute to the strengthening of civic engagement, democratic participation and the transparency of governments*”²⁷, as described by Valentin Chaput, one of the cofounders of Open Source Politics, which develops tools for and methods of participation. A good many initiatives have been developed on digital technology’s promise of new forms of engagement that bypass traditional intermediaries. Such tools must promote civic capacitation, enabling citizens to question elected representatives, take part in debates and express their opinions, and access pluralist information.

Actors on this new market include petition and citizen lobbying platforms (Make.org), collective action platforms (Citizers), platforms for dialogue with elected representatives (Fluicity), and participation and participatory budget platforms (Cap Collectif). Such initiatives’ originality lies in the fact that they were essentially developed by operators in the digital innovation sector rather than civic participation markets’ traditional organisations.

Goals that sometimes clash and blurred boundaries

Marked by Internet’s political imaginary, the civic tech movement includes organisations that subscribe to a rationale of counter-power and advocate radical transformation alongside projects that collaborate closely with public institutions in order to provide them with new tools²⁸. Although such different approaches are complementary, their links with the powers-that-be are not always the same, and neither is their role in democracy.

In this respect, it is helpful to distinguish between civic technologies (civic tech), technologies with electoral aims (pol tech) and government technologies (gov tech). Pol tech corresponds to tools implemented by political parties and movements with a view to increasing their election campaigns’ effectiveness; Gov tech comprises platforms implemented by government institutions in order to improve their operation; and finally, civic tech is limited to initiatives promoted by community actors and private entrepreneurs independent of the public authorities, designed to increase citizens’ participation; Definitions of civic tech and its role in the democratic process vary considerably and respond to multiple goals. But such boundaries remain blurred and are not always relevant from the viewpoint of its actors’ activities.

²⁵ Publications by the Directorate-General of the Treasury’s Economic Services on “Civic tech in the United States”, 30 June 2016 <https://frenchtreasuryintheus.org/wp-content/uploads/2016/11/Note-Civic-Tech.pdf>

²⁶ <https://knightfoundation.org/features/civictech/>

²⁷ Que peut la civic-tech pour les démocraties?, Digital Society Forum, June 2018, <https://digital-society-forum.orange.com/fr/les-actus/1115-que-peut-la-civic-tech-pour-les-democraties->

²⁸ Clément Mabi, Citoyen hackeur, Enjeux politiques des civic tech, La Vie des Idées, 2 May 2017, <https://laviedesidees.fr/Citoyen-hackeur.html>

A typology of digital democracy

By the Nesta Foundation



This typology of the various stages in digital democracy is taken from the publication "Digital Democracy - The Tools transforming political engagement", by Julie Simon, Theo Bass, Victoria Baelman and Geoff Mulgan, published in February 2017 by the Nesta Foundation. (Nesta.org.uk).



Informing citizens

Notifying citizens about and/or increasing access to upcoming debates, votes and consultations.

Examples :

Live streaming/broadcasts,
Websites and apps,
Transcripts
and voting records.



Issue framing

Enabling citizens to raise awareness of particular issues and set the agenda for public debate.

Examples :
Petitions



Citizens providing technical expertise

Platforms and tools to tap into people's distributed expertise. Typically requires a higher level of domain specific knowledge.

Examples:
Targeted calls
for evidence
and expertise.



Citizens providing ideas

Enabling citizens to provide ideas for new, improved or future solutions. Typically builds on contextual knowledge and experiential knowledge.

Examples:
Ideas banks
and competitions.
voting records.



Citizens providing information

Providing citizens with opportunities to share information about specific problems, or to understand individual needs or larger patterns and trends.

Examples :
Open meetings,
Real-time
commenting.





Deliberation

Platforms and tools which enable citizens to deliberate.

Examples :
Online forums and debating platforms.



Those in power



Citizens

Communication flows: ↗ One way ↘ Two ways



Citizens developing proposals

Enabling citizens to generate, develop and amend specific proposals individually, collectively or collaboratively; and/or with state officials.

Examples :
Collaborative documents.



Citizens monitoring and assessing public actions and services

Providing information about policy and legislation implementation, decision making processes, policy outcomes and the records of elected officials, to enable citizen monitoring and evaluation.

Examples :
Open data,
Open budgets,
Transparency



Citizens making decisions

Enabling citizens to make decisions e.g. through referendums, voting on specific proposals or participatory budgeting.

Examples :
Binding referenda
Participatory budgeting.



Citizens scrutinising proposals

Enabling citizens to scrutinise specific options.

Examples :
Open meetings,
Real-time commenting.



CAN TECHNOLOGY TRANSFORM DEMOCRACY? SOLUTIONIST TEMPTATIONS

Although digital technology may have changed the forms of political life, it has made no far-reaching modifications to the relationship between governors and governed. There is no use clinging to a determinist vision according to which technology can modify the balance of power on its own. Such balance stems from social, economic and institutional dynamics, so much so that debate and participation are still largely structured by political organisations and the traditional intermediaries. As Dominique Cardon reminds us, “the horizontality of digital exchanges is not easily compatible with the centrality of the representative government.”²⁹

Hierarchisation of information on the web is carried out a posteriori by a few gatekeepers who have a central role in the informational ecosystem. Online information remains highly polarised around a limited number of websites, most of them originating in the traditional media world. They continue to be the authoritative sources of reference for a large percentage of the population. In this respect, research carried out on “fake news” emphasises that it has limited effects on democracy if it is not taken up and legitimised by actors at the heart of the politico-mediatic space³⁰.

Likewise, online exchanges are some way away from the Habermasian ideal of collective deliberation. They are more proliferation of contradictory viewpoints than development of common positions. In addition, most initiatives that aim to bring citizens and their institutions closer together through technologies often have mixed results³¹. They are not very successful when it comes to increasing the number of participating citizens. Major inequalities remain in access to, use of and proficiency in these technologies, and only a small number of individuals are heavily involved in online political engagement. For Antoinette Rouvroy, the question is rather of knowing “how to produce forms of political engagement and not alibis, pretexts for not discussing in the public space, with a risk of social microcosm; not everybody participates on these platforms.”³²

Finally, although new technologies undoubtedly contribute to mobilisation, the political effectiveness of the collectives they help create is questionable. Findings on the accomplishments of online mobilisations are qualified. As Evgeny Morozov pointed out in 2009: “After a while, it becomes necessary to learn to convert awareness-raising among individuals into action – and it is in this that tools such as Twitter and Facebook have proved to be of no great use”³³. Awareness-raising does not mean action: reaching the masses and raising their awareness is not the same as engaging them.

**« The horizontality
of digital exchanges is
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government. »**

Dominique Cardon

The informal character of online mobilisations ends up by limiting their lifespans, preventing them from becoming more long-term political forces. Traditional political representation structures (parties and unions) are essential relays for these movements if they are to bring about robust political alternatives. From Barack Obama's campaign to local consultations, success lies in combining digital tools with physical mobilisation, consultation and representation mechanisms.

²⁹ Dominique Cardon, *Culture numérique*, Presses de Sciences Po, 2019, p.235

³⁰ Dominique Cardon, *Pourquoi avons-nous si peur des fake news?*, AOC, June 2019, <https://aoc.media/analyse/2019/06/20/pourquoi-avons-nous-si-peur-des-fake-news-1-2/>

³¹ L. Monnoyer-Smith, *Communication et délibération. Enjeux technologiques et mutations citoyennes*, Hermès/Lavoisier, 2011.

³² During a meeting of the CNIL's Foresight Committee

³³ Evgeny Morozov, *From Slacktivism to Activism*, Foreign Policy, September 2009, <https://foreignpolicy.com/2009/09/05/from-slacktivism-to-activism/>

**Civic technologies
are not neutral**



Civic technologies are not neutral



As the sociologist Dominique Boullier points out regarding voting machines, the adoption and development of civic tech is based on *"the trust that these systems may or may not inspire, insofar as voting is not simply a matter of efficiency and exactitude, but also of perception and acceptance of the measure. Voting must result in accurate determination of the winner and be persuasive enough in the loser's eyes"³⁴, so that it ensures resolution of political conflict"*³⁵. In the same way, in order to avoid any contestation of procedures and their results, civic tech must inspire trust.

Far from being neutral, the technical and economic choices made by promoters of these technologies contribute to development of a sense of trust. First of all, the data collected must be kept out of the hands of economic and political predators. It is also a matter of examining the way in which such information is collected on platforms where design is all-important, as is the use of algorithms for layout and analysis of contributions. More generally, an individual's right to participate without revealing his/her identity must be balanced with the need to collect personal data to ensure the relevance of analysis of participations.

³⁴ Bruce Schneier, *On Security*

³⁵ Dominique Boullier, *Sociologie du numérique*, Armand Collin, 2019, p. 267

The temptation of political reuse

The use for political purposes of data collected during a consultation initiative or performance of a public service constitutes the first risk of diversion of personal data. It is all too tempting for candidates and political figures in search of the limelight to reuse qualified databases on individuals whom they know to be engaged in civic life, who will go and vote, and who will probably encourage their friends to vote along with them. Reuse by political actors for election purposes is one of these technologies' pitfalls, when they are promoted and/or sponsored by these same political actors.

There have been plenty of recent examples of such diversion for political purposes. At the start of the 2018/2019 school year, a region chairperson used a database on higher secondary-school students to wish them an "excellent new school year" by SMS, sparking complaints to the CNIL and leading to him being reminded of the rules to be complied with. In September 2019, the British data protection authority ICO (Information Commissioner's Office) was concerned over Prime Minister Boris Johnson's possible use of data collected by .gov.uk websites³⁶. Earlier, he has requested the Cabinet to centralise the sites' use data so as to be able to send targeted information to its users in view of Brexit. In 2004, the Venezuelan government published the list of signatories of the petition in favour of holding a referendum to recall Hugo Chavez from office, the Tascón list (named after the Chavist MP who published it on his website). It was used to discriminate professionally and administratively against Hugo Chavez's political opponents³⁷. Although Chavez soon requested that the list no longer be used, freedom to participate was considerably restricted.

Since 2012, with a view to providing political parties and figures with the information they require for better understanding of data protection law, the CNIL has run an observatory of political and civic life in order to specify the "rules of the game". As an example, political parties can only use personal data if the data subjects concerned have freely consented. In the absence of consent, the principle of collection purposes requires that a file created in the context of a professional, commercial or community activity cannot be used for political mobilisation purposes, in the context of a consultation for example.



Getty Images - Vassilis Tsikkinis

DATA SOUGHT AFTER FOR ITS VALUE – POLITICAL AND ECONOMIC ALIKE

From identification data to political opinions, civic tech's tools collect a large quantity of data from their users. Under political, social or commercial pressure, some operators may be tempted to reuse such personal information for other purposes.

³⁶ Alex Spence, Boris Johnson asked for a massive amount of data to be tracked, BuzzFeed, Sept. 2019, <https://www.buzzfeed.com/alexspence/boris-johnson-dominic-cummings-voter-data>

³⁷ Marc Saint-Upéry, "Huit questions et huit réponses provisoires sur la 'révolution bolivarienne'", Mouvements, vol. no 47-48, no. 5, 2006, pp. 57-72.

But the CNIL also acts directly with solution providers. In 2017, for example, it asked election strategy software providers to limit certain functionalities that were incompatible with the French and European legal framework³⁸. As a result, the American company Nation Builder's software's "match" functionality, which enables use of voters' email addresses to look for information on them on social networks, was removed from the French version of the software.

Médiamétrie Survey

French internauts distrustful or poorly informed of participation platforms

The 2019 CNIL-Médiamétrie Barometer of digital practices included a civic tech component that provides a few figures on participation and membership rates as regards its platforms.

Of the 2,112 respondents in France (internauts of 15 y/o and above), **51% had already participated in this type of consultation on Internet.**

Although 71% of participants stated that they are "vigilant" regarding use of their personal data, a large majority (87%) participate under their real identities. 21% of respondents said they distrusted platforms' use of their personal data, which was one of the reasons given for not participating.

Lack of information and absence of interest also figure among the reasons for not participating: 21% said they did not know that such consultations existed, 19% did not see the point of them, and 18% were not interested in the subjects covered.

Economic models: dangerous liaisons

Economic valorisation of data collected by civic tech is another question requiring analysis, all the more so as economic models of civic tech initiatives are sometimes uncertain if not altogether unclear. In 2016, political science professor Loïc Blondiaux stressed the French landscape's diversity: *"There is a world of difference between the malicious startup that aims to position itself on the business of consultation between elected representatives and citizens, and the initiative that seeks to turn the tables and subvert representative democracy"*³⁹. The ecosystem is characterised by cohabitation of entrepreneurial and community initiatives. Economic models of the former are various and evolving: sale of software, provision of services to public bodies, civil society and companies, as is the case with Cap Collectif and Fluicity, partnerships with large companies, and the traditional model of fundraising in startups.

For example, the American platform Change.org, world leader in online petitions, has raised 72 million dollars since 2013. Such lucrative projects go side-by-side with alternative models originating in the open-source community, promoted by associations (such as Code For France, Démocratie Ouverte, Parlement et Citoyens, and Regards Citoyens) and subsidised by the public (Decidim). Their activity is based on uncertain, limited income (appeals for donations, assistance or subsidies), or public sector initiatives. As Clément Mabi emphasises⁴⁰, the borders in this community are sometimes porous. For economic reasons, certain operators may decide to adapt their platforms to the needs and demands of their sponsors. In fact, although the civic tech movement initially adopted activist positioning and advocated subversive practices, the search for a lasting economic model has led many of its stakeholders to join the democracy market and become "participation professionals", as Alice Mazeau and Magali Nonjon put it,⁴¹ "actors whose professional activity consists of organising, overseeing and assessing participation" for public institutions. In France, the most widespread model is consequently that of provision of services to local authorities and the State.

In addition, funding of civic tech may also be based on provision to third-part actors of data collected during participation initiatives. Such bifacial models inherently generate the temptation to collect large quantities of data so as to be able to turn it to profit. In this context, it is essential to ensure that individuals are informed and give their consent so as to guarantee compliance with the law. In 2016, for example, the

³⁸ <https://www.cnil.fr/frcommunication-politique-queles-sont-les-regles-pour-utilisation-des-donnees-issues-des-reseaux>

³⁹ Loïc Blondiaux, Le mouvement des civic-tech : révolution démocratique ou promesse excessive?, Libération.fr, 18 May 2016, https://www.liberation.fr/evenements-libe/2016/05/18/le-mouvement-des-civic-tech-revolution-democratique-ou-promesse-excessive_1453508

⁴⁰ Mabi Clément, "La démocratie numérique au défi de la critique sociale", Le Mouvement Social 2019/3 no.268, 2019, (forthcoming).

⁴¹ Alice Mazeaud and Magali Nonjon, Le Marché de la démocratie participative, Brignais, Le Croquant.

petition platform Change.org was accused of selling users' email addresses without their consent⁴². Although the company announced that it no longer sold such data, the example is still significant of the risks when political opinions are a particularly sensitive form of personal data and users are often hardly aware of such actors' profit motives.

Capitalising on personal data is all the more significant when it is used on generalist platforms for creation of civic tech services. Most social networks are for-profit companies whose economic model is based on advertising. Although such networks are used for political practices (information sharing, discussions, surveys, etc.) on a daily basis, individuals are not always aware enough of how such information and their profiles are made use of for advertisement targeting, as was made clear by the Cambridge Analytica scandal (see inset). The European Regulation provides a framework that should enable prevention of such abuses. By default, it does not prohibit private economic models for civic tech operators, but these latter must implement the Regulation's principles at all times (transparency, consent, proportionality and purpose in particular) and respect individual rights (information, access, modification, objection and erasure), without which trust in such systems is not possible.

In 2016, confronted with this problem, Axelle Lemaire, then Minister of State for Digital Affairs, considered creating a new legal status and foundation for such projects, which belonged neither to the social and solidarity economy nor to the startup world⁴³. A similar call had been launched the same year by 29 of the ecosystem's stakeholders, for creation of a "Fund for the Democracy of Civic Initiative"⁴⁴. Proofs that civic techs relationship with its economic models is a problem yet to be solved.

OFFPRINT

Civic tech

Une exploration critique des tensions et des usages de demain



The Vraiment Vraiment agency and researcher Clément Mabi joined forces with the CNIL to carry out a critical exploration of future uses of and tensions in civic tech.

Organised around a monitoring phase and two workshops with input by experts on the subject, the booklet we are publishing separately provides a frame of reference and explores some of the choices that civic tech operators will have to make, including tensions on simplicity of access (between representativeness and simplicity), transparency (technical and effective), information quality (between neutrality and selection of information) and freedom of expression (between profusion of ideas and clarity).

The exploration is available in paper version and on the website linc.cnil.fr

⁴² Change.org sold its users' emails to third parties

⁴³ Sylvain Rolland, Comment les civic tech réinventent la démocratie à l'ère d'internet, La tribune.fr, May 2016, <https://www.la Tribune.fr/technos-medias/civic-tech-comment-la-technologie-redonne-du-pouvoir-aux-citizens-573318.html>

⁴⁴ <https://www.voxpublic.org/Pas-sans-Nous.html>

Focus on...

Facebook, a reflection of all concerns

Social networks are frequently used for purposes of social mobilisation and political debate. They also provide platforms where individuals spend time every day swapping information, debating, questioning their elected representatives and organising events. Well aware of such practices, these companies seek to position themselves on the market by providing civic tech services and valorising their users' data.

Facebook makes no secret of its ambition to play a role in the transformation of democracy through technology. In February 2017, Mark Zuckerberg published a letter in which he asserts that the social network's role is to *"develop the social infrastructure to give people the power to build a global community that works for all of us"*⁴⁵. He goes on to say that there are two types of social infrastructures, firstly those that "encourage engagement in existing political processes" and secondly, those that *"establish a new process for citizens worldwide to participate in collective decision making"*. He adds that, as the first world community, Facebook *"can explore examples of how community governance might work at scale."*⁴⁶

The company has developed a series of tools designed to encourage political mobilisation. In 2017, it launched the Town Hall functionality, which is only available in certain countries and aims to facilitate dialogue between the network's users and their elected representatives. After locating the user, Facebook identifies local elected representatives and enables contact with them via email or telephone. The tool also has an election reminder feature aiming to encourage participation. In January 2019, the Community Actions functionality was deployed in the United States, a feature that enables users to launch petitions, organise events and fund collection, and question elected representatives and local administrations.

Although these functionalities are designed for political purposes, they also have a commercial aim. They contribute to users' engagement on the platform and its ecosystem and thereby to more detailed knowledge of its members' political activities and opinions, which may be turned to profit on the advertising market.

The platform has become an ecosystem in itself: alongside movements instigated spontaneously by users, other actors propose solutions embedded in the platform, such as Voxe.org (initially known for its political programme comparators), which has developed a chatbot on Messenger designed to "decode" the news and provide advice on "engagement". Others make use of the network for less virtuous purposes: Cambridge Analytica, for example, was publically disgraced for collecting huge amounts of data in the context of political campaigns, highlighting the vulnerability of the ecosystem as a whole by doing so. In September 2019, Facebook responded by suspending 69,000 applications that "improperly sucked up" personal data from the platform.⁴⁷

Civic-minded interactions can serve commercial goals whose compatibility with democratic purposes is highly questionable. The platform's vague democratic leanings must be put in parallel with cases of propagation of fake news, the effects of filter bubbles (see page 22) and regulation of illegal and hate content. The platform is under surveillance following a whole string of cases (a content regulation mission was launched by the French government in autumn 2018), and any choice made by an actor in political or civic life to analyse contributions and use or organise debate on this type of platform should be assessed in the light of all such risks, and of course the legal obligations arising from the GDPR.

⁴⁵ In a Facebook note: <https://www.facebook.com/notes/markzuckerberg/building-global-community/10154544292806634>

⁴⁶ Olivier Ertzscheid, Messieurs les citoyens, je vous fais une lettre, que vous lirez peut-être, si vous avez le temps, Affordance, March 2017 https://affordance.typepad.com/mon_weblog/2017/03/lettre-zuckerberg.html

⁴⁷ Kate Conger, Gabriel J.X. Dance and Mike Isaac, Facebook's Suspension of 'Tens of Thousands' of Apps Reveals Wider Privacy Issues, New-York Times, 20 September 2019, <https://www.nytimes.com/2019/09/20/technology/facebook-data-privacy-suspension.html>

TECHNOLOGICAL CHOICES ARE POLITICAL CHOICES

From ballot boxes to civic technologies, technical choices are political: they guide participants' behaviour and condition the legitimacy of political participation. The ballot box, which has long been the symbol of participation, has undergone successive modifications designed to ensure the honesty of the vote (transparent walls, counters, levers, access hatches, etc.)⁴⁸. By limiting fraud risk, such improvements have ensured its assimilation into French political life and its social legitimacy, as the controversies surrounding the voting machines set to replace them make clear, if only implicitly. They also bear witness to the importance of materiality in political practices: the least suspicion about a technical measure will lead to mistrust of the whole procedure. From submission to processing of responses, platforms' design and technical architecture influence the results of online participations. Making such choices visible and explaining them are essential democratic guarantees for any form of civic tech.

Design, a subject for mediation of civic technologies

The design of participation platforms, and in particular of the interface via which users are led to express themselves, has a direct influence on the procedure's success and the consultation's results.

First of all, a platform's interface may act as an obstacle (or encouragement) to participation. For example, the website for the Shared Initiative Referendum against privatisation of Aéroports de Paris was criticised for its poor ergonomics. Valério Motta, the Socialist Party's former Web Manager, said of it that *"The site's ergonomics as a whole seem to have been designed to complicate signature and make the registration procedure more difficult. [The homepage] seems specially created to confuse users, as is the second page with a tiny box to tick in order to show that you support the initiative. None of the basic user-experience rules is complied with"*⁴⁹. A form's complexity reduces a participation platform's accessibility, especially for citizens who are unaccustomed to using digital tools.

New ways of participating via new tools therefore raise

questions of adaptability to the maximum number of users, requiring thought to be given to the exclusion of a percentage of the population, whether due to insufficient or non-existent knowledge of how digital tools operate in general (*information illiteracy*) or to lack of accessibility with regard to *"equality of rights and opportunities, participation and citizenship of people with disabilities"*⁵⁰. Integration of adapted or alternative systems must also be taken into account during design. The very form of participation interfaces could evolve to make them more accessible. They already exist in the form of chatbots integrated into Facebook, following in Voxe's footsteps, and in the future they could be integrated into voice assistants, as we describe in our foresight scenario (page 30).

These examples highlight the importance of adapting interface design to the consultation's intended purposes. Depending on the types of people targeted, a platform's form may evolve in order to be as inclusive as possible; As the Nesta Foundation points out, *"A successful digital democracy initiative is not about simply taking an off-the-shelf tool and deploying tried and trusted communication methods. Too many innovations in this area exist simply as an app or web page, driven by what the technology can do, rather than by what the need is"*. On the contrary, for them it is a matter of creating tailor-made solutions and a participation experience that takes account of local and thematic specificities.

Algorithms' influence on opinion

In its 2017 ethical report *"Comment permettre à l'homme de garder la main"* (How do you enable human beings to maintain control) on the subject of algorithms and artificial intelligence⁵¹, the CNIL documented the risks and biases associated with use of these new methods of automation. Civic tech's specificity requires that special attention be paid to it.

⁴⁸ Olivier Ihl, "L'urne électorale. Formes et usages d'une technique de vote", *Revue française de science politique*, 43/1, 1993, pp.30-60

⁴⁹ Rémi Clément, *Le gouvernement a-t-il volontairement bâclé le site sur le référendum d'ADP?*, *Challenges.fr*, June 2019, https://www.challenges.fr/politique/comment-le-gouvernement-a-volontairement-bacle-le-site-sur-le-referendum-d-adp_658038

⁵⁰ Act no. 2005-102 of 11 February 2005 on equality of rights and opportunities, participation and citizenship of people with disabilities, <https://www.legifrance.gouv.fr/affichTexte.do?cidTexte=JORFTEXT000000809647>

⁵¹ <https://www.cnil.fr/fr-comment-permettre-lhomme-de-garder-la-main-rapport-sur-les-enjeux-ethiques-es-algorithmes-et-de>

Focus on...

Data,
design & civic techDonnées
& Design par LINC
CNIL

Questions of design in development of digital services also need to be taken into account with regard to protection of data and freedoms. In an IP Report published in January 2019, la CNIL explored the influence of design on data protection, in particular describing how certain digital actors exploit our cognitive biases with a view to influencing our choices through potentially deceptive design (dark patterns). The way in which civic tech services are designed is just as likely to be affected in this respect. First of all, it is easy enough to adapt the interface in order to make some choices more obvious than others by subtle highlighting or obfuscation; secondly, actors whose economic models are based on monetisation of data may well be tempted to use strategies that encourage users to share more data⁵².

It is therefore essential that designers of such platforms do their utmost to assist users by designing clickstreams suited to the participation process and contributing to data protection.

This being so, in June 2019 the CNIL uploaded a platform intended for designers, design.cnil.fr, enabling them to co-construct clickstreams in compliance with the GDPR and respectful of users' privacy⁵³.

First of all, classification algorithms crystallise various criticisms connected with their side-effects. In 2011, Eli Pariser defined the concept of filter bubbles, whose consequences include the fact that *"algorithms help people surround themselves with media that supports what they already believe"*. If such an algorithm is implemented during a consultation, it can confine citizens to specific subjects and strengthen their opinions. This was demonstrated for Facebook at the time of the 2016 American presidential campaign, and more recently with the Yellow Vests, in particular since the latest revision of the classification algorithm, which promotes content posted in groups at the expense of content posted by pages. Hence, individuals interacting with Yellow Vest groups saw such groups' contents increase in number in their newsfeeds⁵⁴.

Methods of increasing contributions' visibility on participation platforms determine the visibility or otherwise of opinions expressed. Always in parallel with search engines' algorithms, contribution classification criteria are based on choices that may influence the scope of participations. Should all contributions be regarded as valid? Should they be displayed randomly, thematically or chronologically? Should 10-word contributions be regarded as more or less important than 500-word ones? Does popularity mean relevance? How do you maintain consistency in a mass of heterogeneous contributions without losing information? Can algorithms weight the resources of influence and legitimacy available to competing political forces? The risk is that choices of classification modes establish a priori what is or is not a legitimate expression in the context of a debate, to the benefit of a platform's sponsors or various other stakeholders.

Online consultations are by no means exempt from diversion by political groups. Understanding how algorithms operate may lead some activists to adapt their contributions so that they are better taken into account. This is also one of the reasons that search engines do not make their algorithms public and frequently modify them: there could well be even more bypassing of rules and hacking than there is already. Guillaume Chaslot, former Google developer and founder of Algo-Transparency, has documented the side-effects of YouTube's recommendation algorithm, which tends to highlight conspiracy-theory content. In his opinion, *"AI does not create 'false information' by itself, but it encourages content creators to do so"*⁵⁵.

⁵² LINC, Cahier IP6 - La Forme des choix - Données personnelles, design et frictions désirables, January 2019, <https://linc.cnil.fr/fr/cahier-ip6-la-forme-des-choix-0>

⁵³ <https://design.cnil.fr>

⁵⁴ Vincent Glad, Dans le combat final des gilets jaunes, Jupiter va affronter des modérateurs Facebook, Libération.fr, 30 November 2018, https://www.liberation.fr/debats/2018/11/30/dans-le-combat-final-des-gilets-jaunes-jupiter-va-affronter-des-moderateurs-facebook_1695023

⁵⁵ Guillaume Chaslot, Comment des algorithmes peuvent apprendre à discréditer les médias, Medium, Dec. 2017, <https://medium.com/@guillaumechaslot/comment-des-algorithmes-incitent-%C3%A0-discr%C3%A9diter-les-m%C3%A9dias-51051d147946>

From automated analysis to delegation of political choices?

Semantic analysis tools, possibly combined with machine learning systems, can be used to generate and hierarchise citizens' requests in large databases. Such was the case with the Great Debate and the 569,020 open proposals that were posted on the platform. This type of automated processing without "human" rereading must nonetheless take account of the risks involved.

According to Clément Mabi, upstream integration of a list of key words risks concentrating the study on specific points and *"making analysis of the contribution's message a secondary concern compared with these semantic objectives"*⁵⁶. This results in isolation of the themes of the argument made in the contribution. The context in which it is articulated is crucial to making sense of it: certain words have more than one meaning or actor, and may even be used ironically. How, for example, do you distinguish the sarcastic content of such expressions as "thank you" or "bravo"?

More generally, it is difficult to analyse contributions with the help of main statistics alone. In the hypothetical case of a consultation open at national level, what might be said of the recurrent use of the word "immigration"? Analyses will differ depending on context and political bias: some people may see it as proof that the French are against immigration, while others see it as a possibility or think that a public debate is necessary.

The problems here are similar to those encountered in moderation of content. Social network platforms have implemented automated tools for identifying and blocking illegal content. One can imagine similar processes for eliminating off-subject and hate contributions, but with the risk of such algorithmic control becoming a censorship tool. As an example of inconsistent automation, Hoaxbuster's Facebook page (the website exposes hoaxes and other fake news) is regularly downgraded because it shares articles citing fake news⁵⁷.

Lastly, there is a fine line between analysis of contributions by algorithmic tools and political decision-making. These days, the former sheds light on the latter, which remains the province of elected representatives. Wide-scale generalisation of consultations and the taking into account of contributions in decision-making assumes that too much confidence in technology may lead to decisions being made without the required critical perspective or "human"

arbitration. Hypotheses worth contrasting with a number of researchers' declared determination to automate political participation itself. César Hidalgo, formerly at MIT and now a researcher at the Artificial Intelligence Research Institute in Toulouse (ANITI), is already working on a virtual agent which could participate on citizens' behalf, on the basis of their personal data and the ways they act online⁵⁸. Our society could gradually orientate itself towards automation of participation and of decisions, (see our foresight scenario on page 30), which would impose a principle of vigilance on all parties.

Making technological black boxes transparent: open source and open data

Making democracy's and its procedures' technological choices visible and comprehensible is of key importance if civic tech is to be legitimised. The slightest suspicion weakens the technical measure's honesty and participants' trust in it. In this respect, opening the platform's code and participation data is a guarantee that aims to enable auditability of algorithmic processing.

Alongside social networks' major platforms, for which opacity is the norm, the choice between open-source and proprietary technologies constitutes a real divide in the civic tech landscape. Determination to maintain control over their technological architecture, combined with an economic model of service-provision, has led a number of companies to develop proprietary solutions. In contrast, other civic tech actors have chosen open source. For them, free access to the code, which enables analysis of the functional and algorithmic mechanisms of the tool that collects or processes data, is all the more important when technologies are used for democratic purposes. In addition to the choice between open source and proprietary technology, which does not however condition respect of rights from the viewpoint of data protection, the issue here concerns participants being able to know what technological choices have been made and being in a position to monitor the system.

Trust in civic tech and the decisions arising from it is also based on publication of contributions in open data. This is a point on which a large part of the civic tech community stands firm, as the open data and civic tech movements developed alongside each other. Its promoters have always considered opening of public data to be a civic technology that promotes political transparency and citizens' participation. The Grandeannotation.fr⁵⁹ platform supported by the Code for France collective enabled all its users to categorise

⁵⁶ Mabi Clément, "La démocratie numérique au défi de la critique social" Le Mouvement Social 2019/3 no.268, 2019, (forthcoming).

⁵⁷ Tony Le Pennec, Des fact-checkeurs sanctionnés par Facebook pour... diffusion de fake news, Arrêt sur images, August 2019, <https://www.arretsimages.net/articles/des-fact-checkeurs-sanctionnes-par-facebook-pour-diffusion-de-fake-news>

⁵⁸ Florine Galéron, Toulouse attire une star américaine de l'intelligence artificielle, La Tribune.fr, September 2019, <https://toulouse.la Tribune.fr/innovation/recherche-et-developpement/2019-09-06/toulouse-attire-une-star-americaine-de-l-intelligence-artificielle-827017.html>

⁵⁹ <https://github.com/fm89/granddebat>

contributions to the Great Debate: as a result, 1,100 individuals annotated almost 250,000 contributions to the Debate's open questions.

Opening up data, when third-party actors are free to access it and reuse it for purposes not determined upstream, requires prior anonymisation of the dataset. Yet even if a contribution

is anonymous, its content may sometimes include information enabling identification of its author, when it is not the contributors themselves who give away their personal details in their contributions. Civic tech project promoters must therefore provide for data processing methods that anonymise it if they wish to open it⁶⁰.

Focus on...

Decidim: a participation and technological development laboratory

The Decidim platform ("We decide" in Catalan) is one of the civic tech ecosystems' most emblematic projects. Created in Barcelona and initially funded by the municipality, it was and still is constructed on the model of a commune. Decidim's source code is available under GNU GPL license, permitting the programme's reuse and evolution provided that modifications are shared identically. But Decidim goes yet further by attaching a social contract to the license's clauses, setting supplementary "democratic guarantees" that must be complied with when using the platform. Naturally enough, its key principles include "data confidentiality" along with "equal opportunity and qualitative indicators". The platform also promises to provide "equal starting opportunities to all participatory objects (proposals, debates, etc.) for them to be viewed, discussed, commented, evaluated or treated without discrimination of any kind". Other cities have adopted the tool in Barcelona's wake, including Helsinki, Mexico City, Angers, Nanterre, and the Lille Metropolis, as well as companies (including Open Source Politics) and collectives (such as Decidemos)⁶¹.

A tool developed for data protection

Decidim's technical infrastructure limits data collection and use. Consultation organisers cannot have access to participants' email addresses and can only contact them via the platform. This technical constraint aims to prevent any use of the list of participants' emails for other purposes and so protects consultation organisers, who themselves do not have access to such data.

Since 2017, Decidim has been one of the testing grounds for the DECODE European project⁶², which aims to "give data sovereignty back to citizens using open-source tools". Modules have been developed for the platform based on encryption solutions, in order (among other things) to enable participants to sign petitions without their names appearing, give users more control over their data, and make it possible for them to share personal attributes while guaranteeing a hermetic system as regards their real identities. DECODE has also developed tools aiming at transparency, and has worked with users to improve the platform's UX/UI design. By doing so, it has added a technological and design layer to Barcelona's field experience, so strengthening the civic participation system..

⁶⁰ The CNIL guide "Concilier ouverture des données et protection des données personnelles", intended for local authorities, presents the rules for open publication of data. <https://www.cnil.fr/fr/les-collectivites-territoriales-et-lopen-data-concilier-ouverture-des-donnees-et-protection-des>

⁶¹ <https://giletsjaunes.decidemos.com/>

⁶² <https://decodeproject.eu/publications>

CAN YOU TALK POLITICS ANONYMOUSLY?

From Athenian democracy to electronic voting, political technologies have been further developed with a view to ensuring authentication of individuals and anonymity of political expression, an essential factor in freedom of expression. In the same way, civic tech must be able to guarantee authentication of participants while enabling their identities to remain invisible when they are expressing their political views.

Authenticating is not identifying

Actors sometimes (wrongly) consider the GDPR's coming into force as a form of injunction to implement anonymous systems without collecting any data. In fact, depending on the intended purpose, it is altogether legitimate for a civic technology to collect a certain amount of information on its participants, as Clément Mabi states. *"For ideation activities, where you are above all looking for creativity and emulation among participants, systems can operate with less knowledge of participants, which is not the case with online consultations [...] or voting, or for participatory budgets, where knowledge of the status of inhabitants (infrastructure users, etc.) is essential."* In the same way in which, during any electoral operation, citizens are asked to demonstrate their identities, make sure they are registered on electoral rolls and sign up to certify their participation. The more civic tech tends towards decision-making procedures, the more legitimate it is that participation is controlled in order to avoid any possible fraud (multiple votes, participation by minors, individuals deprived of their civil rights, non-residents, etc.). As an example, the website for the Shared Initiative Referendum (SIR) on the character of the national public service of operation of Aéroports de Paris (ADP) asks citizens to "provide themselves with an identity document (National ID card or passport)"⁶³. There are many ways of identifying individuals, to be selected depending on the intended purpose of the civic tech concerned. Identification management may be carried out by the platform itself, by third-party certification bodies or by other methods (see recommendation on page 34).

Information on participants is also essential in order to carry out detailed analysis of participants in a debate or measure the representativeness of a consultation. In the case of online consultations, it is sometimes necessary to have at least some knowledge of participants' status: it is impossible to analyse contents' representativeness without a frame of reference, and so have a connection between what is said

and who is saying it. Taking as an example the Great Debate consultation, for which it had been decided to limit information to participants' postcodes alone, Clément Mabi deems that the decision *"opens the possibility of significant manipulation of the consultation by already constituted interest groups, lobbies of all kinds [...] without it being possible to expose them. Such major biases [...] de facto limit contributions' political impact."* Hence, not collecting the information required to characterise the mass of contributions creates conditions leading to a measure of ineffectiveness in the procedure when its purpose is to act as an aid to decision-making for political representatives. The issue here is still to be able to bring information, such as metadata, to the sum of participations without compromising data protection and participants' freedoms, by making use of pseudonymity.

Pseudonymity as a balance measure

The repeated calls for it to be compulsory for users to participate under their real identities constitute one of the major traps to be avoided at all costs. An apparently obvious obligation that harbours a great many more pitfalls than it does advantages. It is altogether possible to authenticate an individual while allowing him/her to participate under a pseudonym.

Over and above providing possible protection for individuals with reprehensible views, pseudonymity provides essential protection to network users. First of all, use of pseudonyms reduces risks of harassment and offline disturbances. Integration of the obligation for users to declare their actual identities would be an obstacle to participation on the part of all minority groups; who would be de facto excluded from the use of certain platforms and services, social networks and civic participation, as they would risk revealing sensitive data within the meaning of the GDPR (racial or ethnic origin, political opinions, religion, sexual orientation, etc.), and sometimes their gender (which in some contexts is enough to lead to harassment).

⁶³ <https://www.referendum.interieur.gouv.fr/soutien/etape-1>

Speaking of social networks in 2011⁶⁴, the sociologist danah boyd explained that *“the people who most heavily rely on pseudonyms in online spaces are those who are most marginalised by systems of power, adding that the “real name” policy constitutes “an authoritarian assertion of power over vulnerable people.”* In some cases, promotion of online civic participation requires giving people the opportunity to participate without having to reveal their identities to the public at large. Pseudonymity also enables protection of individual rights over the long term, in particular as regards search engines' indexing of their contributions and exercise of the right of oblivion⁶⁵. Furthermore, classic forms of participation in offline spaces do not necessarily result in creation of digital traces, any more than declaration of one's identity.

The CNIL and its counterparts recommend that individuals use pseudonyms, as a measure for securing their data and identities so as to maintain their online privacy. It is a way for online service users to protect themselves if they so wish. Citizen consultation platforms must provide solutions that enable individuals to feel free to participate without having to submit to social pressure or risks of various forms of “reprisals” due to who they are. Consultation platforms, like petition services or services putting users in contact with their elected representatives, can ensure this by creating safe pseudonymity conditions for individuals, combined with authentication mechanisms, in order, for example, to avoid representatives of lobby groups posting multiple contributions.

Anonymity and freedom of political expression

Authentication of participants must not be achieved at the expense of anonymity of political expression when such is required. Between polling booth and envelope, the voting procedure enables the freedom to *“say who you voted for or keep quiet” in the absence of coercion and responding to a “democratic ideal of civic responsibility”*⁶⁶. Introduction of the polling booth in France in 1913, following lengthy parliamentary debates, enabled citizens to vote without any social pressure being put on them. For Yves Déloye and Olivier Ihl⁶⁷, *“when they go through the polling booth's curtain, voters cease to be lambda individuals immersed in their everyday lives and become free, autonomous citizens, provided with a share of sovereignty”*. The interest of the polling booth in a village setting was that it enabled inhabitants to vote completely independently. In the same way, civic tech must enable individuals to express themselves freely without

having to put up with social pressure or fear repercussions in their everyday lives.

However, between the secrecy of the ballot and the publicness of the voice from the podium, where the speaker's identity is known to all, there is a whole series of degrees of visibility of individuals and their identities which must enable them to express their opinions, whether professional expert assessments or otherwise, and personal experiences. While the anonymity of the ballot highlights the notion of equal citizens of abstract generic identity, diversity of participants, opinions and proposals enriches citizens' debates. Depending on the intended purposes, the democratic ideal may be based on the number of proposals considered on a strictly equal footing or be weighted in accordance with social characteristics in order to limit inequalities and imbalances of resources between participants. Therefore, rather than a priori moderation of any message providing identifying information, such information may help support a participant's argument by clarifying “where he/she's coming from”.

⁶⁴ danah boyd, “Real Names” Policies Are an Abuse of Power, Apophenia (blog), August 2011, <http://www.zephoria.org/thoughts/archives/2011/08/04/real-names.html>

⁶⁵ <https://www.cnil.fr/fr/droit-au-dereferencement>

⁶⁶ A. Giddens, *The Transformation of Intimacy. Sexuality, Love and Eroticism in Modern Societies*, Cambridge, Polity Press, 1992.

⁶⁷ Déloye, Yves, and Olivier Ihl. “Chapitre 10. L'élection au village”, *L'acte de vote*, edited by Déloye Yves, Ihl Olivier. Presses de Sciences Po, 2008, pp.417-458.

Focus on...

The political ambivalence of technologies: the case of Hong Kong

Technologies are ambivalent: they can share power or concentrate it, promote citizen participation or surveillance. The 2019 Hong Kong revolt is a good illustration of the fact. Social networks play a key role in mobilisation, for exchanging information, communicating at international level, deciding on the movement's strategic orientations and coordinating actions. The two tools most used in Hong Kong are the LIHKG Forum and Telegram Messenger. Demonstrators used the "public channel" function to disseminate information without algorithmic filter and the "poll" function to vote on strategic choices. However, although the application is encrypted, the Chinese authorities are suspected of having used a security breach to obtain protesters' identities⁶⁸. In response, Telegram states that Hong-Kong users will now be able to mask their telephone numbers in order to protect their identities⁶⁹. Hong Kong's activists have also developed a series of digital tools to assist in their fight. Dynamic mapping, updated by volunteers on the ground, indicates the locations of demonstrators, the police, medical assistance teams, and supplies of water, helmets and gasmasks⁷⁰. Demonstrators also divert such applications as Uber, Pokémon Go and Tinder in order to communicate information on mobilisations⁷¹. Such strategies enable them to organise while staying anonymous. Therefore, unlike the pro-democracy demonstrations in 2014, whose leaders were rapidly imprisoned, the movement has not been impacted by the police arresting over a thousand of its number.

The Chinese authorities have also made use of digital technologies to contain and curb the protest movement. The Chinese government created accounts on Twitter with the aim of influencing public debate and raising international awareness by disseminating information favourable to the regime. *"These accounts deliberately and specifically sought to sow political discord in Hong Kong and in particular to undermine the legitimacy and political positions of the protest movement on the ground"*⁷² according to Twitter (which is banned in China), which deleted 1,000 such active accounts and 200,000 others not yet active. Back in 2013, the head of China's propaganda department had already stated that over two million people worked to reinforce orientation of opinion online⁷³.

The Hong Kong protest also bears witness to demonstrators' ingenuity and use of low-tech solutions to resist technological surveillance systems: mass use of umbrellas, lasers and paint bombs to interfere with video surveillance and prevent facial recognition; deactivation of their telephones' face-unlock systems in case biometric templates were centralised; use of cash to purchase single tickets (and avoid use of easily traceable transport cards); making variously coloured t-shirts available in underground stations in order to blend in with the crowd. These events demonstrate the risk that using certain technologies poses to rights and freedoms, as well as providing food for thought on the David and Goliath combat that plays out when the powers-that-be seek to silence discordant voices.

⁶⁸ Catalin Cimpanu, Hong Kong protesters warn of Telegram feature that can disclose their identities, ZDNet, August 2019, <https://www.zdnet.com/article/hong-kong-protesters-warn-of-telegram-feature-that-can-disclose-their-identities/>

⁶⁹ Joel Schectman, Exclusive: Messaging app Telegram moves to protect identity of Hong Kong protesters, 31 August 2019, Reuters, <https://www.reuters.com/article/us-hongkong-telegram-exclusive-idUSKCN1VK2NI>

⁷⁰ <https://hkmap.live/#>

⁷¹ Danny Vincent, Hong Kong protesters turn to Uber and Pokémon, BBC News, Hong Kong, 9 August 2019, <https://www.bbc.com/news/technology-49280726>

⁷² Pékin a utilisé Twitter et Facebook contre les manifestants de Hongkong, AFP, 19 August 2019 73 Raymond Zhong, Steven Lee Myers and Jin Wu, How China Unleashed Twitter Trolls to Discredit Hong Kong's Protesters, Sept. 2019, New York Times, <https://www.nytimes.com/interactive/2019/09/18/world/asia/hk-twitter.html>



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Tomorrow is now

CITIZENS O CITIZENS

Interview:

When our voice is heard

The sensor gives you the floor:

A look back at a neighbourhood
association's letter

Confidential:

Extract from a memo
on the Algora experiment

WHEN OUR VOICE IS "HEARD"

The Dial'og startup raised 100 million dollars for its opinion sensor, "the absolute weapon of elected representatives who listen in to voters". A voice recognition system set to revolutionise citizens' participation. Clara Von Poppel, its CEO, answers our questions.

N2P: How, in 2027, did you come up with the idea of getting into citizen consultation? A market that seems to us to be completely outdated.

CvP: It's true that the market for what they used to call civic tech collapsed around 2020, a victim of its own success, so to speak. Politics leaned too heavily on the solutions of the day, to the point of manipulating them and losing any trust that citizens had in them. The movement had started with the Yellow Vests, a spontaneous uprising that spread across France and weakened the authorities in power. In response, as if it were a magical solution, they'd suggested organising a great national consultation, on an online platform where people registered with an email and then answered more or less open questions, a lengthy, tedious system typical of those "finger digital" days. The mistake had been to imagine that your average French citizen had the will to participate and debate, make any long term commitment. The results of the consultation itself hadn't had the effect they were all hoping for; futile attempts to try such procedures again had ended up by boring citizens, and worst of all, increasing their general distrust.

None of them took advantage of the new opportunities offered by "oral digital", which in our opinion will enable re-establishment of the connection and rebuilding of trust. That's why we took the plunge in 2023.

N2P: Then what exactly is this magic solution you're proposing with Dial'Og?

CvP: Our forerunners' first mistake had been to think that people were going to take the time to participate actively. The second had been to sever ties with spontaneous discussion, as if we could really discuss with a screen. We were all used to discussing at the bistro, watching political debates or at family mealtimes. Whence our solution: capitalise on voice assistant technologies, which you can now find in any household and public places like bars and restaurants. Rather than believing in a "human/machine" dialectic, we've created a machine that analyses the "human/human" dialectic. Via the keywords "I think that...", and with the agreement of the people present of course, Dial'Og can listen to and capture exchanges and debates on political questions, in your own home or outside it. There are two possible modes, simple listening, where we analyse all conversations in order to extract any political matter, and advanced mode, where we recreate the conditions of a

debate, with questions and stimulations provided by Dial'Og. Coming back to a natural interface, that's the reason for our success.

N2P: How is this data better than what we found out using traditional means?

CvP: Our great strengths are spontaneity and our capacity to analyse voices in detail. As well as traditional textual analysis, via text mining and semantic analysis, we've added social and emotional analysis of participants. We're in a position to know what people are saying and how they say it. Our emotional sensors analyse vocal timbres, so adding to the data, as regards levels of annoyance or engagement for example. You should also remember that early voice assistants had problems understanding people's accents. What was once a difficulty is now an opportunity: we can now detect participants' geographical or ethnic origins. We also identify their social class by cross-referencing the semantic richness of their discourse. Our database gets bigger with every exchange. The analyses we provide our sponsors with are more relevant than anything that came before us.

N2P: But is all this actually legal?

CvP: For the time being, we only activate the "emotion" and "origin" functions for our American clients, but we're in advanced talks with French and European parliamentarians to provide a legal framework for these sorts of collections, which we firmly believe are the remedies for all democracy's ills. Nonetheless, the new framework must provide for prohibition of autotune [ed.: voice correction software enabling users to sing in tune or giving their voices an artificial "metallic" character]; we've already seen attempts to circumvent solutions on the part of individuals who mask their vocal timbre behind an autotune in order to falsify results. Such technologies will have to be banned as they are a danger to democracy. But I still have full confidence in our tech and in parliamentarians' ability to make good use of it.

THE SENSOR GIVES YOU THE FLOOR

Nex2Pac has managed to get hold of the Breil district's letter to the Mayor of Nantes, where it seems that "The sensor gives you the floor" is not universally popular.

Breil District Council

Nantes, 5 March 2027

Dear Madam Mayor,

We are writing to you to protest the abuses of the municipal system "The sensor gives you the floor", which have become unacceptable to the Breil district's inhabitants and unworthy of our city's participatory tradition.

The introduction three years ago of the "The sensor gives you the floor" system was welcomed as a significant democratic advance. It marked the enshrinement of a renewed relationship with politics via data, starting with citizens' production of data. The organisation of participatory mapping enabled inhabitants to take back possession of their neighbourhood after the riots of July 2018. Data production made the invisible visible and opened up new political possibilities. This showed itself to be of major importance when a few months later, with the Civic Sensors association, inhabitants measured the atmospheric pollution rate and criticised the previous authority's inaction, forcing it to adopt more binding measures to preserve its citizens' health. Apart from this noteworthy victory, production of alternative environmental data was an innovative form of engagement, communities grew up in order to make use of such knowledge in the public debate and force the government's hand.

Some time later, the municipality made use of the phenomenon in order to obtain fresh knowledge. It encouraged citizens to exercise their right of portability vis-à-vis service providers in order to share their data with the local authority in the general interest. "Be a citizen, share your data" practical guides were posted through every letterbox, telling inhabitants how to communicate their travel histories as recorded by Google Maps and their sporting careers as recorded in Strava, in order to improve design of public spaces, have access to new bike paths and optimise bus timetables to best meet their needs. Your teams gradually began to realise that this data was more representative than the local debates and consultations that only attracted grizzled old citizens who insisted on having their say. Using our behavioural traces had become a way of fluidising civic engagement.

Such encouragement to share data has become a pernicious injunction. Sharing your data is now the only way to be heard and represented. Refusing to make your data available to the local authority inevitably results in your being seen as a bad citizen. As one of your employees berated me, "Without data, you're just someone with an opinion". Subjective individual expressions mean nothing in the face of the power of figures.

And, as so often happens in political debate, the balance of power has come back into play. Are we all equal in the face of our data? Absolutely not. Associations active in the most prosperous neighbourhoods of Nantes Golden Triangle have organised to supply their inhabitants with top-quality sensors providing them with more comprehensive political representation. Being better represented, they have been able to impose their ideas and benefit from better quality urban development. We also suspect that certain inhabitants have rigged their data in order to skew political representation in their favour. Without calling the legitimacy of the "The sensor gives you the floor" system into question, we therefore ask you, Madame Mayor, not to forget the Breil district's inhabitants and to weight representation of citizens' data in order to take account of structural inequalities among Nantes' inhabitants.

We remain at your disposal for a meeting should you require further information.

Yours faithfully,

CONFIDENTIAL FILE

In an internal memo, the Ministry of Education studies the nonetheless controversial introduction of Algora "democratic intelligence" into civic education programmes.

Internal memo

Proposed presentation of inclusion of Algora in civic education, in manuals set to appear in 2028.

The 6th Republic's context is one of the most chaotic in (modern) democracy in France. In the face of ever more numerous and violent insurrectionist episodes, entrepreneurial collectives appeared on the scene determined to take matters back in hand and ensure the country's cohesion. The key to social stability lay in a new unrestricted, almost invisible form of citizen participation: Algora.

While some people stuck to traditional forms of protest to challenge the powers-that-be, other civic groupings sought a more constructive and innovative solution to the democratic crisis underway. Use of social networks and the development of digital solutions connected with civic participation, the famous civic tech that marked the century's early years, emerged as the entry point to an innovative solution. By hoarding the political data collected from this source, the WePolitik group developed a solution to better identify needs and grievances. Gradually adopted by cities in the west of France, Algora established itself as the solution to saving democracy. In the face of growing public pressure, the President, M. Chacobi, was forced to make a civic democracy tool mandatory in all political procedures, local and national alike. After study of a series of cases and a number of stormy debates in the Assembly, Algora was finally enshrined in the Constitution as the foundation of a functional democratic society.

Members of Parliament and the Government recognised the solution's technological power. Algora, artificial intelligence specialising in the understanding and analysis of natural language, collects all political expressions accessible on the web and then analyses them in order to determine the country's public policies. The intrinsic objectivity of the calculations carried out by the machine has speeded up decision-making procedures by rationalising them and "by design" providing the best possible solution.

Modifications were added at the Government's request: a "human- in-the-loop" functionality provided each citizen with the possibility of manually refining their political profile as generated by the machine, for active participation in the shaping of policies. Then its decision-making mechanism was improved. As well as making decisions at national level, it was thenceforth able to make them at micro-local and even individual levels in order to facilitate peaceful coexistence: medical cartography, location of factories and companies in such-and-such a sector, relocation of workers who have been unemployed for over 6 months to labour pools, bringing together populations with similar profiles, etc.

Its decisions' radicalness put some people off, including the "Algo-Smashers" anarchist group, which emphasised the machine's "authoritarian, cold, egalitarian and inhuman character". Algora's results easily overrode such protests: the fairness of its decisions brings the democratic balance that our society requires. Algora required a good deal of adjustment in order to find the right mix of semantic analysis of discourse and sociological and emotional profile in order to come up with perfect democratic responses. It is the living proof that the alliance of Reason and Progress, inherited from the Lumières, is the solution for a better life in society.

Avenues for ensuring long-term trust

Avenues for ensuring long-term trust



Adoption of any political technology is a lengthy and turbulent procedure before it is stabilised and integrated dispassionately into the democratic process. The connections between Internet and democratic usages are as old as the network itself; and they have undergone dramatic changes in less than thirty years, from the first mobilisations to creation of a real civic tech market, from IRC channels to social networks.

Uses of technologies are intrinsic to civic participation practices just as they are in all aspects of life in society. Nonetheless, civic tech is neither the magic pill for democracy's ills, nor is it the only means by which citizens should express themselves. Undemanding new forms of long-term participation are already being explored, such as the Citizens'

Convention for Climate, but the temptation of technological solutionism still needs to be kept at bay. Civic tech is still an invaluable tool for democracy but is not a substitute for more traditional forms of discussions.

If civic tech is to be of lasting value to the democratic process, elected representatives and sponsors, along with the ecosystem's actors and entrepreneurs, must commit themselves. The challenge is still that of guaranteeing an environment of trust enabling everyone to exercise their citizenship in full respect of their rights and freedoms. The following recommendations aim to improve institutions' and citizens' trust in civic tech.

Protection Regulation's enactment highlighted the issue of data protection in digital democracy in questions raised by project promoters.

Civic tech actors would benefit from compliance with each of the GDPR's principles and obligations, as levers for generating trust in and adherence to the participation procedures they implement.

Project promoters and participation platform designers (data controllers) should construct relevant models, minimising data collection while ensuring that enough information is gathered. The GDPR's underlying principles (purpose, accuracy, proportionality and relevance, limitation of retention period, security and confidentiality, and individual rights) are all levers that help create citizens' trust in civic tech and the lessons to be learned from it. The five points set out below correspond specifically to the issues involved in civic tech, and should be taken into account by solution promoters and sponsors alike.

Pay special attention to transparency and users' rights

Information on and transparency of personal data collection and processing are essential to generation of trust in civic tech. Designers must make absolutely sure that users are kept fully informed throughout the participation process. Individual rights must be clearly displayed and easily exercised. In order to ensure that such information is comprehensible to everyone, particular care must be taken over the user interface, which is the initial mediator between law, rights and individuals⁷⁴. The CNIL has been providing designers with help in coming up with virtuous solutions via the design.cnil.fr platform since June 2019.

Information, consent, the way in which contributions will be displayed on the site and how public they will be made must all be absolutely explicit for individuals.

DEFINING PRACTICES TO BEST CALIBRATE DATA COLLECTION AND CYCLES

Article 1 of France's Data Protection Act states that first and foremost *"Information technology should be at the service of every citizen [...] It shall not violate human identity, human rights, privacy, or individual or public liberties."* Although this framework has existed for over forty years, the General Data

Getty Images - Westend61

⁷⁴ <https://linc.cnil.fr/fr/cahier-ip6-la-forme-des-choix-0>

Focus on...

In spring 2019, the CNIL updated its recommendation on electronic voting. Although the subject is still very much connected with civic tech, these recommendations open up avenues and illustrate the various degrees of security required in order to hold an online vote, depending on goals and target audience⁷⁵.

Coordinate user identification and pseudonymity

Although “suggestion box” contribution systems do not always require identification of participants, some platforms need to make sure that it is not skewed. In certain cases, it may even be useful to know participants’ real identities, if, for example, they represent a lobby group. All gradations are possible. In cases where identification is necessary, and even when good management and compliance with the GDPR should protect participants from misuse of their data, a sponsor’s centralisation of real identities may undermine potential participants’ trust in the system.

In the context of a democratic process, although more virtuous solutions are possible, it is preferable not to use solutions that may put the system’s sovereignty at risk and involve risks of user tracking. For example, buttons enabling participants to use social networks to authenticate themselves on a civic tech platform⁷⁶ may create traffic and send data to third parties that are not under civic-tech project promoters’ direct control.

Use of more advanced identity management methods is recommended with trusted third-party certification bodies such as France Connect. There are also other initiatives worth looking into, such as the technology developed in the context of the DECODE European project (see inset on page 24), which provides a decentralised identity management tool, Attribute-Based Cryptography, enabling participants to share personal attributes in accordance with the platform’s requirements; such data is stored in aggregated form, without ever being linked to individual identities at platform level. There are several technological solutions ensuring that a contribution platform operates as it should and that results are relevant, without compromising individual freedoms.

Assess content indexing by search engines in relation to freedoms

The way in which search engines index content must also be taken into account. Project promoters must give thought to what on the platform should be indexed by search engines. Visibility of participations on search engines does not seem necessary when it makes it easy to link an individual with a political expression. It may actually restrict his/her individual freedoms. Although the right to be forgotten and to be de-listed enables individuals to no longer appear on search engines, non-indexing and/or display by pseudonyms alone is to be prioritised unless necessity dictates otherwise.

Prevent risks connected with publication

The GDPR sets the principle of limitation of retention periods: an appropriate period must be provided for, following which personal data is erased or anonymised. Data must be archived (in the public interest, for historical or scientific research purposes, or for statistical purposes) or erased once it has been processed and exploited. Consultations (votes, deliberations, etc.) have fixed durations, and the same goes for retention, which must have a set timeframe.

Publication in open data is an important topic that comes under frequent discussion as it affects processes’ transparency. If such choice is made, the database must be anonymised so as to make it impossible to identify concerned individuals. In October 2019, in Partnership with the Commission for Access to Administrative Documents (CADA), the CNIL published a practical guide to publication and reuse of data⁷⁷.

⁷⁵ <https://www.cnil.fr/fr/securite-des-systemes-de-vote-par-internet-la-cnil-actualise-sa-recommandation-de-2010>

⁷⁶ For example, the Open Democracy Association’s Open Democracy Manifesto; the Make.org startup’s Initiative for a Sustainable Democracy; or the “social contract” integrated into the Decidim platform.

⁷⁷ <https://www.cnil.fr/sites/default/files/atoms/files/guide-open-data.pdf>

Secure the system over the short and long term

Data collected by civic tech may be sensitive data (political or trade-union opinions, etc.), for which the GDPR requires reinforced protection. Data integrity, which is a *sine qua non* of compliance with the GDPR, is essential in the context of participation in a democratic process that engages citizens.

The security guide published by the CNIL⁷⁸ provides project promoters with assistance and goes alongside a developer's guide listing best practices and mistakes to avoid during development of an application or website⁷⁹.

Construct a respectful model right from the start

Article 25 of the GDPR defines "privacy by design", which obliges project promoters to implement "*appropriate technical and organisational measures [...] designed to implement data-protection principles [...] in an effective manner*" from the design stage onwards. In this respect, it is recommended that civic tech project promoters carry out risk analyses using the PIA tool⁸⁰. Made available by the CNIL in the form of open-source software, PIA is compulsory in certain cases, in particular when there is large-scale collection of sensitive or highly personal data. Civic tech falls into this context by its very nature, and requires that such analysis be carried out prior to processing and be regularly updated as long as processing lasts.

TOWARDS A CODE OF CONDUCT HARMONISING CIVIC TECH PRACTICES?

Actors in the civic tech community have made several attempts to band together around charters and manifestos⁸¹. Although the sector remains composite and does not yet seem mature enough for such initiatives, the French (or European) civic tech ecosystem should eventually be able to organise itself and draw up a code of conduct as defined in Articles 40 and 41 of the GDPR.

Civic actors should be able to band together to harmonise their practices and seek to co-construct a code of conduct.

A code of conduct is a tool that makes a sector's actors accountable and helps demonstrate compliance with regulations. The code of conduct provides an operational expression of the GDPR's provisions, adapted to respond to sector professionals' needs and problems. It enables definition of best practices (retention periods, information statements, operational modes, choices to do with authentication, security, etc.). The code of conduct is the result of a voluntary initiative on the sector's part, promoted by an association, federation or representative body, which will act as the CNIL's preferred interlocutor. Professionals' adherence to the code is voluntary but legally constraining. The code of conduct's effectiveness is ensured by a supervisory body explicitly designated in it and approved by the CNIL.

Meanwhile, it would be worth drafting a practical guide with a view to standardize professionals' levels of compliance; then, once the required level of maturity has been achieved, work could be started on drawing up a code of conduct.

Co-construction and subsequent approval of such a code would also enable differentiation of actors not wishing to comply with it and thus send a positive signal to citizens and sponsors alike.

⁷⁸ <https://www.cnil.fr/fr/un-nouveau-guide-de-la-securite-des-donnees-personnelles>

⁷⁹ <https://www.cnil.fr/fr/kit-developpeur>

⁸⁰ <https://www.cnil.fr/fr/ce-quel-faut-savoir-sur-lanalyse-dimpact-relative-la-protection-des-donnees-aide>

⁸¹ <https://about.make.org/post/initiative-pour-une-democratie-durable-charte-dalliance-entre-les-etats-les-pouvoirs-locaux-et-les-civictech>

SOCIAL NETWORKS MUST NOT BECOME OFFICIAL BODIES FOR POLITICAL PARTICIPATION

Public institutions should diversify channels for political expression and mobilisation, preserving a measure of sovereignty by avoiding any dependence on companies whose models they are not masters of in order to address citizens.

Social networks have an ambivalent relationship with civic participation. Users that can be far removed from traditional participation bodies appropriate them. Citizens use them to question their local elected representatives. Information is exchanged and politics discussed on them on a daily basis. In this respect, these platforms are tools for connecting elected representatives with the population. They are also tools for monitoring citizens' concerns, scrutinised by administrations and politicians.

Some institutions even hold consultations on their platforms. According to the observatory on civic tech and digital democracy, 71% of respondent local authorities use Facebook for civic participation⁸². There might be cause for concern over this gradual shift to social networks which public actors have no contractual ties with, although, in certain cases, there may be joint responsibility for data processing⁸³. Once a local authority makes use of such platforms, it commits all of its constituents wishing to participate to consenting to an economic model and subsequent collection of their data.

Moreover, public actors have no control over the way platforms operate, in particular with regard to content moderation, classification algorithms and filter bubble effects. Unilateral modification of a platform's choices may result in loss of visibility on the part of a public institution's messages, as was the case recently for union organisations and radical leftist collectives, whose posts no longer appeared in their subscribers' newsfeeds⁸⁴.

Although public actors involved in civic participation use such platforms to disseminate information and spark debate, and keep a close eye on their discussion spaces, they must in no circumstances become their dependents as long as they

have no control on the rules of the game. In order to avoid such dependence, mediums must be diversified, retaining various information and participation systems that do not rely on these actors.

MINIMISING DIGITAL EXCLUSION BY COMBINING CIVIC TECH WITH PHYSICAL PARTICIPATION

Numerous civic tech actors and practitioners agree on the fact that technology alone is not enough to promote participation and civic debate. Digital tools are often presented as solutions that limit biases in representativeness by facilitating participation by individuals who are unable to take part in physical systems due to distance or lack of time. Although the aim of making participation simpler and more accessible is praiseworthy enough, platforms, however well designed and developed they may be, are based on the notion of digitally autonomous citizens, so excluding people with no experience of digital tools (or who do not wish to use them) from participating. Yet there are significant inequalities in access to and use of digital technology: according to various studies, between 12 and 40% of French citizens have problems using digital technology⁸⁵.

Accessing a tool, finding your way around a platform, creating an account and composing a contribution are all complicated operations for a sizeable percentage of the population. Complexity of procedures prevents some citizens from exercising their civic rights.

Any political participation procedure would gain from combining online and physical systems and/or inventing hybrid forms making the most of the advantages of both types of system.

So as not to exclude entire sections of the population from political processes and avoid any breach of equality between citizens, it is essential not to rely on digital solutions alone: there must be alternatives on offer. Development of digital tools must not be at the expense of organisation of face-to-face democratic processes, using traditional participation

⁸² Pierre Mazet, Vers l'État plateforme - La dématérialisation de la relation administrative, LaViedesIdées.fr, <https://lavedesidees.fr/Vers-l-Etat-plateforme.html>

⁸³ The administrator of a fan page on Facebook is jointly responsible with Facebook for processing page visitors' data, <https://curia.europa.eu/jcms/upload/docs/application/pdf/2018-06/cp180081fr.pdf>

⁸⁴ Vincent Vériér, SNCF: Facebook restreint les comptes des syndicats SUD Rail et CGT cheminots, Le Parisien, October 2019, <http://www.leparisien.fr/economie/sncf-facebook-restreint-les-comptes-des-syndicats-sud-rail-et-cgt-cheminots-22-10-2019-8178201.php>

⁸⁵ Pierre Mazet, Vers l'État plateforme - La dématérialisation de la relation administrative, LaViedesIdées.fr, <https://lavedesidees.fr/Vers-l-Etat-plateforme.html>

tools or more innovative forms like the Citizens' Convention for Climate held in October 2019: 150 participants picked at random and representative of social diversity met over six three-day weekends⁸⁶. Hybrid forms combining high tech and low tech might also be employed to enrich public debate. Such combinations have been tried out during deployment of voting machines, which print out paper ballots so that citizens can be sure that their votes have been taken into account⁸⁷.

Production of online participatory cartographies, which are then discussed during consultation meetings prior to neighbourhood redevelopment, is another example of combined participation systems.

CIVIC EDUCATION MUST ALSO BE TECHNOLOGICAL

In terms of the long history of democracy, digital citizenship is still in its infancy, and society as a whole, promoters of such technologies included, is in a learning phase which is repetitive by nature: this being so, it is necessary to capitalise on the knowledge acquired through the various online participation systems in order to identify their limitations, ascertain risks and make best use of the opportunities for participation that they provide.

A culture of online political participation must develop in order to apprehend the issues involved in digital technologies. Inclusion of digital literacy in school programmes should go side-by-side with a civic component so that individuals are fully aware of the risks connected with online expression of political opinion, know their rights and are in a position to ensure they are respected.

More generally, new citizenship skills need to be developed so that civic tech becomes a medium for political integration. It must not make democracy the province of experts on whom control and understanding of the technologies deployed would depend. Citizens must be involved in risk management: politics is just as much an experience as it is participation. This is particularly visible during social mobilisations, through changes in the way in which participants consider public affairs. Finally, it is important to remain open to other political process modes. Political values, systems and procedures evolve along with participation techniques.

New participation methods may be explored, such as radical horizontalism of online mobilisations, reversible voting (tried out in Estonia⁸⁸) or liquid systems (with vote delegation procedures, as implemented by the Pirate Party). It is likely that the digital democracies of tomorrow's world will bear little resemblance to our present institutions, in the same way that industrial revolutions brought about far-reaching changes in political systems.

Civic education programmes and actors in digital education should incorporate the issues involved in online political participation.

The CNIL develops and oversees the EducNum network, a collective that first saw the light of day in 2013 and which brings together a wide range of actors, from the worlds of education, research, digital economy, civil society, and companies' and institutions' foundations, to manage and support actions designed to promote a genuine digital citizenship culture. In this respect, civic technologies are digital citizenship laboratories and are best placed to tackle such subjects, along with all actors in civil society.

⁸⁶ Convention citoyenne pour le climat: 150 participants tirés au sort, August 2019, Gouvernement.fr, <https://www.gouvernement.fr/convention-citoyenne-pour-le-climat-150-participants-tires-au-sort>

⁸⁷ Rebecca Mercuri, A Better Ballot Box? New electronic voting systems pose risks as well as solutions, IEEE Spectrum, octobre 2002, A Better Ballot Box? New electronic voting systems pose risks as well as solutions, <https://spectrum.ieee.org/computing/software/a-better-ballot-box>

⁸⁸ Internet voting in the March 2007 Parliamentary Elections in Estonia, https://www.valimised.ee/sites/default/files/uploads/eh/Coe_and_NEC_Report_E-voting_2007.pdf

A pathway to trust

Levers to activate throughout the civic participation process



Registration participation

What information collected?

- > Identification – authentication
- > Minimisation
- > Third-party identity certifier

What representativeness?

- > Characterisation of contributors
- > Pseudonymity

Can contributions be anonymous?

- > Freedom of expression
- > Pseudonymity

What visibility of contents?

- > Classification algorithms



Discussions debates

What inclusion factors

- > Interface design
- > Physical/digital hybridisation
- > Digital literacy



Analyse décision

What methods and criteria for analysing contributions?

- > Transparency of algorithms

Is data published in open data?

- > Anonymisation

How do you prevent political/economic misuse?

- > Access to third parties
- > Information / consent

What indexing policy?

- > Right to be forgotten
- > Freedom of expression

What temporal limits?

- > Archiving
- > Retention period



Sharing openness

The Foresight Committee

The CNIL facilitates a committee of twenty-one experts with varied profiles and backgrounds, in order to nurture forward thinking and contribute to debate on the ethics of digital technology. Being more responsive and open to the outside world and working in partnership with the world of research and innovation: such are the goals the CNIL has set itself in this context.

Chaired by the President of the CNIL, **Marie-Laure Denis**, the Committee is composed of the following individuals:

EXTERNAL EXPERTS

Pierre Bellanger,

free radio pioneer, entrepreneur and Internet expert

Pierre-Jean Benghozi,

research director Ecole polytechnique - CNRS, Professor at the University of Geneva.

Stefana Broadbent,

psychologist, Honorary Professor of Anthropology at University College London, where she teaches digital anthropology.

Isabelle Bordry,

entrepreneur, French digital media industry pioneer.

Dominique Cardon,

sociologist, Associate Professor at Sciences Po Paris' Médialab, member of the Réseaux magazine's Editorial Committee and Wikimedia France's Scientific Council.

Milad Doueïhi,

philosopher, historian of religions and holder of the Chair of Digital Humanism at the University of Paris-Sorbonne (Paris IV), co-holder of the Collège des Bernardins Chair on Human Challenges of Digital Culture.

Célia Hodent,

psychologist specialising in application of the user experience in video game design.

Claude Kirchner,

Director of Research at INRIA, Chair of INRIA's Operational Committee for the Assessment of Legal and Ethical Risks (COERLE), advisor to the President of INRIA.

David Le Breton,

Professor of Sociology and Anthropology at the University of Strasbourg.

Titou Lecoq,

freelance journalist, blogger and novelist, specialist in web culture.

Philippe Lemoine,

entrepreneur and essayist, President of the Action-Modernités Forum, President of FING.

Lionel Maurel,

lawyer, librarian and author of the S.I.Lex blog, where he decodes and analyses changes in the law in the era of digital technology.

Cécile Méadel,

sociologist, Professor at University Panthéon-Assas, Director of the Master's in Communication and Multimedia. Researcher at CARISM, Associate Researcher at the Centre for the Sociology of Innovation (Mines-CNRS).

Tristan Nitot,

entrepreneur, author and lecturer on digital freedoms; founded and chaired Mozilla Europe. He is VP Advocacy at Qwant.

Bruno Patino,

journalist and specialist in digital media. Director of Science-Po's School of Journalism

Antoinette Rouvroy,

lawyer, FNRS researcher at the Research Centre in Information, Law and Society (CRIDS) at the University of Namur.

Henri Verdier,

Ambassador for Digital Affairs, Ministry for Europe and Foreign Affairs.

Nicolas Vanbremeersch,

entrepreneur, President and founder of the Spintank agency and Le Tank coworking space.

Célia Zolynski,

Associate Professor of Private Law at the Sorbonne - University Paris 1 Panthéon-Sorbonne's Law School. Member of CERNA and qualified member of the Higher Council for Literary and Artistic Property (CSPLA).

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Valérie Peugeot,

researcher at Orange Labs' Social and Human Sciences Laboratory.

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The Innovation, Studies and Foresight team at the CNIL's Directorate of Technology and Innovation oversees projects for studies and explorations of emerging issues connected with data and privacy. Its work is at the crossroads between innovation, technologies, usages, society, regulation and ethics.

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