Concluding remarks

This book explores AI-mediated citizen–government relations. It aims to answer the question: where and how is artificial intelligence (AI) used in this relation, which is essential for “the quality of democracy and strengthening civic capacity” (OECD, 2001, p.1).

Governments have progressively adopted a number of technology innovations to respond to a growing demand to (1) digitalize public action and optimize its operations and services (de Feraudy, 2019), and (2) increase citizen engagement in the development, implementation, and evaluation of public policies (de Feraudy & Saujot, 2017). The e-government efforts were mainly to take advantage of technological advances to (a) optimize the effectiveness and efficiency of government services, (b) put the citizen back at the center of the design of services rendered by organizations, and (c) increase trust in government (OECD, 2020). AI is increasingly used in the fields of healthcare, education, social and cultural services since it can be considered useful for six types of government challenges: allocating resources, analyzing large datasets, overcoming the shortage of experts, predicting scenarios, managing procedural and repetitive tasks, and diverse data aggregation and summarization (Mehr, Ash, & Fellow, 2017). The taxonomy developed by Misuraca and Van Noordt (2020) provides numerous examples of how AI is used by governments in Europe (European Union and United Kingdom, Norway and Switzerland) to improve knowledge management capacity (e.g. assist in the browsing and finding of relevant data in Slovakia), map and predict risks (e.g. predicts burglaries in Switzerland), and automatize data collection and analysis (e.g. process satellite imagery in Estonia), public services (e.g. self-driving snowploughs in Norway), decision-making processes (e.g. nursery child recruitment system used in Warsaw), and the communication with citizens (e.g. chatbot to answer frequently asked questions in Latvia).

But the citizen–government relation is more than the delivery of governmental services. It is also about including civil society in the policy-making cycle (OECD, 2001). The Multiple Streams Framework (MSF) is a powerful conceptualization of the policy process, and specifically agenda setting (Kingdon, [1984] 2011). It argues that policy entrepreneurs (e.g. civil society) need resources (e.g. technology) and specific skills (e.g. engaging multiple audience) to develop and implement tactics (e.g. narrative reframing) through problem, policy and politics streams, to identify and exploit successfully open
policy windows. Touraine (1992) contends that there cannot be any form of democracy without freedom of political choice. As Parry, Moyser, and Day (1992) contend, citizen participation corresponds to all these “action[s] by citizens which [are] aimed at influencing decisions which are, in most cases, ultimately taken by public representatives and officials” (p.16). If conventional forms of participation are in decline in some liberal democracies (Parvin, 2015, 2018), other forms of participation have developed including street protests and boycotts, leading some scholars to argue in favor of a transformation of citizen participation rather than a decline.

To strengthen citizen–government relations and citizen participation in policy making, the OECD (2001) recommends governments use digital technology for three types of actions: (1) enhancing access to information so that citizens are well informed, (2) enabling citizens to express their views on projects and societal issues that affect them in consultations, and (3) engaging citizens in decision-making processes. Information plays a crucial role throughout the policy-making process. Said differently, who provides and gains access to information, as well as who influences its distribution, gains a competitive advantage in the problem, policy and politics streams. Previous researchers have identified a number of key skills (Mintrom, 2019) and tactics (Goyal, Howlett, & Chindarkar, 2020) for policy entrepreneurs, many of which depend on access to information and information distribution capacity:

- collecting evidence to share (new and reliable) knowledge about alternatives, control information flows, and construct models of best practice;
- making arguments to alter problem perception, reframe a narrative or discourse, delegitimize institutional status quo, negotiate, and bargain;
- strategic thinking to exploit decision-making procedures;
- engaging multiple audiences to create awareness about a policy problem, politicize an issue, and mobilize public opinion.

Among the five policy spaces identified by Prateek, Kumar, Kar, and Krishnan (2021), online platforms constitute an unprecedented avenue to develop some of the tactics presented above and influence informally policy-making. These platforms offer civil society organizations and social movements an opportunity to develop creative advocacy campaigns to raise awareness, as well as to coordinate their actions (e.g. street protests). AI plays a key role on social media platforms in the form of their machine learning algorithms (MLAs), which controls information distribution with two primary objectives: keeping users online as long as possible, and overcoming the information overload. Although there is a large variety of platforms and MLAs, these two objectives are common to all. Based on the data collected from users, MLAs can predict with some degree of precision the information users will like the most.
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(Konstan & Riedl, 2012), and then rank, filter, and diffuse information accordingly. It leads to well-known phenomena such as filter bubble (Pariser, 2011) and echo chambers (Sunstein, 2001). In the case of Facebook, their MLA tends to favor juicy, sensationalist and extremist content, leading Schwartz (2015) to argue that this platform is not successful in creating a space for serious and critical interaction but rather echo chambers. AI enables online platforms to profile each user by processing big data collected from their online activity. Political communication has benefited from this opportunity to assess a potential voter’s psychological characteristics (i.e. psychometric profiling) and micro-target them with individualized online ads. Beyond profiling and micro-targeting, this new generation of AI-powered tactics and tools includes programmatic advertising (AI placing ads online), political apps for smartphones, geotargeting services, automated profiles and social bots. Since AI also controls information diffusion, it also plays a key role in the diffusion of false news and in the mitigation of disinformation operations. The AI-powered tactics and tools used in the context of recent political elections in Europe, and examined in this book, are developed by a relatively small number of private sector companies, which benefit from the data and attention of large captive audiences. Their cost leads us to think that only stakeholders with substantial financial means can afford these tools, and the influence they offer. The limited transparency and accountability of these actors, and the tools they sell to some political actors, increase the asymmetry of power in the policy-making process, as well as raising questions about the legitimacy of the process itself. As Bradshaw and Howard (2019) argue, “Although there is nothing necessarily new about propaganda, the affordances of social networking technologies – algorithms, automation, and big data – change the scale, scope, and precision of how information is transmitted in the digital age” (p.11). AI and data are the two main components of this transformation.

These new tactics and tools are also used in the context of an “information warfare” (Thornton, 2015), and hybrid threat where information is the weapon and the minds of citizens the new “battlefield” (Cavelty & Mauer, 2016). Governments deploy cyber-capacity to weaken other states and intervene in their internal affairs through aggressive external cyber operations (Deibert & Pauly, 2019) in times of peace and conflict. Through disinformation campaigns abroad, some governments aim to influence sympathetic changes in citizen behavior and perception, erode trust and participation of some parts of the population in the decision-making process, decrease the quality of their communications environment, and diminish the quality of information availa-
ble to citizens (Krasodomski-Jones, Smith, Jones, Judson, & Miller, 2019). As Spruds et al. (2016) argue:

[the factors that make this strategy so powerful are that this type of “warfare” is continuously ongoing and hard to detect. It is complicated to identify its source, particularly as more often than not it is waged from several sources simultaneously. And finally, such a warfare strategy penetrates all levels of society at a very low cost. Even if the audience does not necessarily believe in the planted information, the abundance of unvetted information of itself leads to a persistent distrust of public information and the media. (p.8)

AI is at the center of this battlefield both as an enabler of disinformation diffusion by controlling content distribution (i.e. MLA of online platforms favoring juicy content), and as a potential opportunity to mitigate their diffusion (i.e. automated fact-checking).

Disinformation operations are not the only threats to the trust between governments and citizens. Surveillance is an integral feature of online platforms (Trottier, 2016), where users watch over one another, states and intelligence agencies watch over a target population, and companies watch over their audience (Trottier, 2020). Surveillance and its impact on privacy and freedom of opinion and expression is well known. As mentioned previously, online platforms collect data from users’ online activity, including demographics, psychographics, behavioral data, and metadata (i.e. data about data). Surveillance from governments can have two main purposes. On the one hand, intelligence agencies collect bulk data and use AI to identify potential threats to public safety and national security. On the other hand, governments and political parties use AI to analyze citizen conversations online (i.e. sentiment analysis and opinion mining) to understand what are the most pressing needs of their populations, as well as their opinions and arguments about specific topics (Milano, O’Sullivan, & Gavanelli, 2014). Lastly, surveillance is also conducted by private actors: as Zuboff (2015) argues, “[t]his new form of information capitalism aims to predict and modify human behavior as a means to produce revenue and market control” (p.75). The limited transparency and accountability of these forms of surveillance challenge the citizen–government relation. As Andrejevic (2007) argues, citizens have “limited knowledge about how their personal information is controlled, who controls it, and how it is used” (Andrejevic, 2007, p.27). This limited information and oversight contributes to an asymmetry of power in favor of those with surveillance means and to the erosion of trust between governments and citizens.

As mentioned previously, the OECD (2001) recommends using digital technology to offer civil society accessible and relevant consultation and decision opportunities. This new approach to the institution–citizen relations differs fundamentally from more traditional approaches to engaging citizens
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in policy-making processes, which too often limit their participation to the adoption stage. This co-creative approach therefore opens up the problem and policy streams for civil society to play its role as policy entrepreneur. Civic tech refers to the technology that aims “to increase and deepen democratic participation” (Gilman, 2017, p.745). Top-down initiatives correspond to those participatory platforms either developed internally (e.g. by an IT department of a government) or externally (by companies and universities most often). But civic tech also comprises of bottom-up initiatives that are based on platforms developed outside the control of the state. As Badger (2012) and Suri (2013) point out, they are primarily intended to complement conventional citizen participation and channels of communication previously monopolized by governmental and intergovernmental institutions, as well as address challenges that may be invisible to or neglected by governments in a collaborative, problem-centered way (David, McNutt, & Justice, 2018). AI is used in this context for efficiency purposes: to process a vast number of comments and text published by citizens on some of these platforms. However, civic tech also presents challenges. First, many citizens still lack access to the internet and have limited digital skills, which means that “civic tools may increase the divide and further marginalize those already limited in exerting power” (Skaržauskienė and Mačiulienė, 2020, p.11). Moreover, many citizens may lack the critical awareness regarding the type of technology used, the tech actors developing and managing the platform, the political actors supporting the initiative, the transparency and accountability of data processing, and questions of cybersecurity and data privacy. Civic tech’s digital infrastructures may indeed be opaque to the users. When using AI, and because of its black box characteristics, it may be difficult to explain how AI makes its decisions. In other words, it could make the outcome document suspicious, that is, reducing trust in the process and its perceived legitimacy, as well as hinder citizen participation motivation. Data processing may also be biased either due to the algorithm itself or the data sample. Additionally, the nature of data collected requires high security and privacy levels, which may be hampered by legacy infrastructure and cybersecurity vulnerabilities.

As discussed previously, AI is increasingly present in the citizen–government relation today. It mediates many interactions between civil society and those in power. The design justice perspective (Costanza-Chock, 2020) offers useful lenses to look at technology and the domination patterns it perpetuates. AI offers indeed a competitive advantage to those who have the financial means and/or the technological capacity to harness its power. In the politics stream, AI is mainly in the hands of governments, political leaders and parties, and interest groups with substantial financial means. Hence it reduces the spectrum of who can substantially influence policy making to these who can benefit from AI and big data competitive advantage. Mayer-Schönberger and Ramge
Artificial intelligence and democracy (2018) contend that power will increasingly be concentrated in the hands of those who have developed the capacity to collect and control valuable data. Tim Wu (2010) predicts the growth of cartels and monopolies. Harari (2018) argues that regulating data ownership is crucial to avoiding power concentration, cartels, and monopolies. Without control over data accumulation, users are deprived of their agency over personal information, which can then become an open door to unfair data management practices, such as discrimination (Cinnamon, 2017; Lyon, 2007, 2003). This book concurs with these studies by arguing that in an AI-mediated citizen–government context, power lies with those who hold the AI and big data capacity, that is, not marginalized populations and individual citizens.

The introduction of AI in the citizen–government relations presents many opportunities but also many risks. AI remains indeed this (1) blurry (i.e. conceptual challenges, ongoing developments and multiple applications), (2) sometimes unreliable (i.e. AI technical or adversarial vulnerabilities, data and algorithm bias), (3) and often opaque (i.e. black box phenomenon) technological agent (4) with various degrees of agency (i.e. capacity to observe its environment, learn from it, and take smart action or propose decisions). When introducing (or allowing the use of) this technology in democratic processes, governments also introduce a degree of uncertainty and vulnerability. In other words, using AI in democratic processes is not neutral and may have long-lasting negative effects on the trust that citizens place in their governments, the transparency and accountability of policy making, as well as in their capacity to have a meaningful input in this process.

Civil society, and particularly individual citizens, take a risk when their interaction with government or their participation in policy making is mediated by AI. Tulloch and Lupton (2003) argue that voluntary risk-taking is this “activity in which individuals engage, and which is perceived by them to be in some sense risky, but is undertaken deliberately and from choice” (pp.10–11). This definition highlights three important elements: reflexivity (or consciousness) that one is taking a risk, capacity (or agency) to make the decision to take the risk, and voluntary aspect of the decision, which is shaped by social conditions to some extent (Zinn, 2015). In a context of constant technological, environmental and social transformations, it is crucial for citizens to develop their capacity to perceive and to respond to risk (Beck, 2009). However, as this book highlighted, the AI-mediation of citizen–government relations remains often blurry if not opaque to the citizen. This leads us to question the “voluntary” aspect of the risk-taking role of civil society. Hence, there is a dire need for capacity building (i.e. digital skills and literacy) to empower civil society and in particular individual citizens, so that they can adapt and benefit from this new AI-mediated citizen–government relations.
What is more, this book argues that governments may become risk-makers when introducing AI in their interactions with citizens, if this introduction is not done according to principles of equality, freedom, and human rights. The risk-taker role differs indeed from the risk-maker in the sense that the decision-maker is the one affected by the consequences of its decision (vs. affecting others). When adopting new technologies, and especially when the new technology is not mature in its development, early adopters may face mistakes, which then may jeopardize the confidence of later adopters in the technology (Dzindolet, Peterson, Pomranky, Pierce, & Beck, 2003). To avoid placing itself in the role of risk-maker (and consequently challenging the legitimacy of its role and decisions), governments must by all means ensure that (i) AI developers and managers apply principles of equality, freedom, and human rights, that (ii) citizen participation is not harmed by AI (i.e. discrimination against parts of the population, asymmetry of power in access to information and information distribution), and that (iii) the use of this technology also empowers civil society and greater inclusiveness in policy making and governmental services (i.e. not only efficiency). Otherwise, the introduction of AI may change how citizens perceive their agency and their role in the citizen–government relation.

As discussed previously, scholars have attempted to explore how and when a society becomes another (Koselleck, 1979; Castoriadis, 1997). Lefort (1988a) examined the transformational role of imaginary in politics and argued that a new political system emerges with the “mutation of the symbolic order” (Lefort, 1986, p.284).

Popular sovereignty structures the political imaginary of democracy (Diehl, 2019) and forms a “symbolic matrix of democracy” (Lefort, 1986). The principles of equality, freedom, and human rights are the criteria that legitimize political power, and become the normative horizon of democracy (Diehl, 2019).

In the case of AI, this technology presents many opportunities but also many risks. This is the paradox facing the governments of liberal democracies: supporting the development of a technology that will play a key role in the coming years (for society and economy to benefit from its promises), while ensuring that this technology does not contradict core values of liberal democracies. But the balance is fragile. And in dealing with a technology that presents so many risks for citizen participation, governments must avoid “manifesting a backlash concerning democratic values, [which] can indeed be the beginning of an erosion process and contribute to a mutation of the political imaginary” (Diehl, 2019, p.412).
The EU’s approach to trustworthy AI goes in this direction:

The Commission has developed key principles to guide the European approach to AI that take into account the social and environmental impact of AI technologies. They include a human-centric way of developing and using AI, the protection of EU values and fundamental rights such as non-discrimination, privacy and data protection, and the sustainable and efficient use of resources. (European Union, 2021)

This human-centric way of developing and using AI is indeed an imperative. But this book goes further. In light of the risks and challenges presented, a dedicated approach to AI for the citizen–government relation is needed, and in particular for citizen participation. In this context, each use of AI should not only adopt a human-centric approach, but also undergo a specific risk assessment to ensure the defense of equality, freedom, human rights, and the notion of popular sovereignty. Otherwise, it may lead citizens to conceive politics and governments differently, testifying of “a new system of representations” (Lefort, 1986, p.284). The risk is real. Without a distinct approach to AI for citizen participation, we might soon be mutating toward a different type of political system. But which one?

REFERENCES


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