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APPS AND
SUBMARINE
CABLES:

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RECONFIGURING
CONFIGURING

TECHNOLOGY

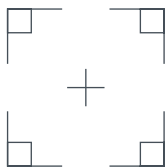
IN A STATE OF URGENCY

Francesca Musiani

This piece provides an overview of the main issues that are currently being discussed in France, and highlights some of their implications for the (re-)distribution of authority mediated by digital technology. A first, perhaps central,

theme of debate is the use of big data, in particular personal data, to counter the pandemic. Since the beginning of the epidemic worldwide, initiatives related to this aspect were either envisaged or implemented in a number of countries, with a shared rationale:¹ COVID-19 propagates with people moving

around, thus, using the massive digital data generated by our smartphones can both help in understanding the ways in which the virus progresses and guide political decision-making on social distancing and confinement.



In France, this rationale gradually took shape as the StopCovid project, a smartphone application meant to 'limit the spread of the virus by identifying transmission chains', monitoring social relations of users to warn at-risk individuals—as Olivier Véran and Cédric O, the Ministers of Health and Digital Affairs, explained in early April to France's foremost newspaper, *Le Monde*.² While the two officials mentioned that they were in an 'exploratory phase, while exploring all possibilities', they could initially count on widespread support from the French population: a late-March survey conducted in France on behalf of University of Oxford researchers showed that eight individuals out of 10 would be in favour of installing such an application, with two thirds mentioning that they would even be in favour of an automatic installation by phone operators (an option which, in any case, was technically infeasible).³ This popular support would subsequently falter, as more debates took place on the app project and its potential weaknesses were uncovered.⁴

Perhaps unsurprisingly, StopCovid—and more generally the possibility to use big data, surveillance, and geolocation to fight COVID-19—was from the start the subject of much controversy. Threats to privacy were an important concern, with CNIL (the French Privacy and Data Protection Commission) emphasising in a March 25 recommendation⁵ that such a project should 'privilege the treatment of anonymised data rather than individual data' (with the well-known difficulty of truly and fully anonymising data),⁶ and in the cases when an individual follow-up would be necessary, it should be based on a 'voluntary action of the concerned person'. Discussions of the more or less problematic character of the app for civil liberties were mostly linked to discussions about its technical features, in particular data storage modalities:⁷ How would data be protected? Would there be a centralised file and, if yes, who would maintain it? Preliminary reports indicated that the French government, advised by a task force led by Inria, the French national research institute for the digital sciences, was privileging solutions centred on Bluetooth rather than on GPS,⁸ thereby prioritising technological solutions considered as less intrusive, the most cited example of which was Singapore's TraceTogether.

Another concern linked to this application was its effectiveness, with tech journalist Hubert Guillaud interestingly pointing out that the app was bound to suffer from two problems:⁹ transforming a 'sign' into a 'signal' (i.e. reading proximity with an ill individual as an anticipation of infection so as to trigger an alert and a treatment), and, in a likely-prolonged state of urgency, turning what should only be a brick in a wall of preventive measures into the only recourse of France's COVID-19 health policy. Finally, a more meta-concern, vehemently voiced by digital liberties associations such as La Quadrature Du Net,¹⁰ was the temporal dimension: if specific surveillance and data processing initiatives are authorised in a state of urgency, and under particular conditions—will we be able to go back, how, and to what extent?

Initially envisaged as a companion to the set of deconfinement measures implemented from May 11, the StopCovid application was officially released on June 2, and made available in Apple's and Google's online stores.¹¹ A week later, on June 9, the Ministry of Digital Affairs announced that the app had been downloaded *and* activated by 1.4 million French citizens, about two percent of the total population—an adoption rate considered disappointing by the government, which was hoping to be able to count on numbers similar to Australia's (8%) and Norway's (25%) to improve the effectiveness of StopCovid (a critical mass of users must be reached for the results to be meaningful).¹² Given that effectiveness is one of the primary conditions for the CNIL to maintain its support for the app project even in light of its potential privacy risks,¹³ StopCovid's promoters are concerned, but do not yet wish to draw conclusions about its success; more information will be needed about the number of actually *active* users (a first estimate indicates around 350,000), the geographical disparities of use (urban vs rural especially), and the number of alerts sent as well as their correlation with the carrying out of tests.¹⁴ Nonetheless, the limited number of downloads and notifications so far has led several voices to speak of a predictable fiasco,¹⁵ and to express concern about the seemingly disproportionate hosting and maintenance costs for the app, which, after a phase of development driven by 'national solidarity', would now burden the state.¹⁶

While this debate continues to be the liveliest one concerning issues of technology and authority in France, several others that touch more broadly on tech justice can be identified. One concerns the sustainability of Internet infrastructures due to the massive shifts in both work habits (a steady increase of remote working practices) and the perusal of digital content for leisure. Orange, France's historical operator and Internet service provider (previously France Télécom) quickly announced it would be doubling the capacity of submarine cables that connect it to the United States (thus, connecting French users to Silicon Valley services, representing 80% of the nation's traffic).¹⁷ However, French data centre operators warned that the capacity to receive such traffic depends on the quantity of servers set up by companies,¹⁸ with several reporting to have underestimated the burden and others announcing that they would impose access restrictions.¹⁹ Linked to this issue was the debate on the digital responsibility of individual citizens / Internet users, who were called upon to avoid imposing excessive loads on mobile networks (e.g. Fédération des Télécoms's secretary general launching a Twitter hashtag #TousEnWifi on March 19, asking for the public to favour WiFi connections over 4G).²⁰

A final issue connected to tech justice concerns the infrastructure and practices of remote working, as catalysts of (more or less digital) inequalities. In particular, the French press has published a number of articles exploring the inability of several socio-professional sectors of the French population to work or learn from home,²¹ either due to infrastructural / material constraints or to the fact that their professions cannot be exercised remotely, thereby putting them at greater risk of illness. The Covid-19 pandemic, and the 'going all-digital' shift it entails, are understood as accelerators of social exclusion—historically referred to as the digital divide—for primarily three groups of people: 'the young, for financial reasons; the elderly, for lack of interest, they say; and the rural world, which is partly explained by questions of quality of the network and equipment'²²—a dynamic that has reminded the nation that half of those living outside the largest cities in France consider the quality of their Internet connection to be unsatisfactory.

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Like in most countries worldwide, the COVID-19 pandemic in France is posing a number of challenges that are in some respects unprecedented, at least since our world has become a pervasively digital and networked one. But the tools to study surveillance, risk, inequality, and justice that we have been building as scholars and citizens for a long time can be of use to start trying to make sense of all that is happening.

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