

“The use of the Digital Fence system is a crucial part of Taiwan’s current epidemic prevention measures.”

A conversation with Audrey Tang, April 2020

On April 11, the Central Epidemic Command Center reported a total of only 385 confirmed cases of Covid-19 and 6 related deaths in Taiwan. The island is one of the most-prepared and best-equipped, and owes its success largely to the use of technologies, from case tracing mechanisms to masks availability apps. Antoine Bondaz, Research fellow at the Foundation for Strategic Research, interviewed Audrey Tang, Minister without Portfolio since 2016, to share her insights and Taiwan’s best practices. Much of her work focuses on creating digital tools that make democracy more accessible and fighting the epidemic easier, and new ways to combat disinformation, especially during the Covid-19 outbreak.



Audrey Tang (唐鳳) is Taiwan’s Digital Minister. Born in 1981, she is known for revitalizing the computer languages Perl and Haskell. A former consultant with Apple on computational linguistics, she served on Taiwan national development council’s open data committee and led the country’s first e-Rulemaking project. A global advisory council member of The Governance Lab, she still actively contributes to g0v (“gov zero”), a vibrant community focusing on creating tools for the civil society.

Q1: Even before being appointed as Minister, you have been a prominent advocate of a transparent digital democracy in Taiwan. How would you define it and how do you link it to open government?

A digital democracy is a democracy with the use of the digital spaces, so that people can not only be talked to but also be listened to. When we talk about transparency here, we always mean that the state makes itself transparent to the people to show trust. It’s about listening, and it’s about trust. It’s about the government trusting the people without requiring the people trusting back. All the digital technologies are here just to amplify the trust that people can get in a face-to-face setting¹.

Q2: You often mention that we should “immunize democracies against disinformation from below”. What does it mean, is there a vaccine? I have heard that each ministry can provide clarification to disinformation in 60 minutes, could you elaborate?

The Taiwan model of responding to disinformation, primarily, does not rely on legal control but rather collaborates with major social media platforms such as Facebook, LINE, and Google to simultaneously sign standards of co-governance practice. In addition to establishing protections on the technical front, increasing oversight and transparency on political advertisement, and strengthening media competency across all age

groups, it is important to cooperate with third parties to build an independent, transparent, and fair supervision mechanism.

Because the government’s organizations and resources are vast, it is incumbent on them to provide timely, accurate, and easy-to-understand information to the public and to allow third parties to fact-check. The Executive Yuan adopts the “2-2-2 principle” in expecting prompt clarifications from each ministry within 20 minutes and 200 words, with the inclusion of 2 images (a majority of which should be completed within 1 hour after the disinformation is disclosed)².

Of course, meme engineering — that is, the “package the message in such a funny way that you simply have to share it” — can crucially allow accurate information to be disseminated more quickly. If it is possible for the accurate information to immediately follow disinformation, it can similarly gain just as much traction, a strategy that we call “humor over rumor”.

Q3: For several years, the focus in Europe has been mostly on election interference from Russia. Today, Taiwan is not only facing Chinese disinformation

¹ “Democracy improves as more people participate. And digital technology remains one of the best ways to improve participation — as long as the focus is on finding common ground and creating consensus, not division. (...) Today, Taiwan is crowdsourcing democracy to create a more responsive government”. TANG

Audrey, “[A Strong Democracy Is a Digital Democracy](#)”, *New York Times*, October 15, 2019.

² “[Audrey Tang: Finding Facts in a World of Disinformation](#)”, Public Digital Innovation Space, *Youtube*, October 22, 2019.

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during elections but also during the Covid-19 outbreak³. Could you explain us in which way?

In December 2019, everybody was focused on the presidential election, which was January 11. My work is mostly ensuring that a civic sector could respond to disinformation very quickly and get the fact checkers, the first line of response, from the government.

As I was already using what we call "memetic engineering" and "epidemic metaphors" at the time as a metaphor of counter-disinformation, one of my first interventions at that time was to ensure that the Centers for Disease Control (CDC) joined the group that rose out of the very rapid response of what we called "humor over rumor" response teams, making sure that whenever there is any disinformation — we expected it to be an epidemic, but didn't know it would be a pandemic at the time — about the novel coronavirus, people could get a timely response from the Ministry of Health and Welfare's social media team⁴.

Q4: Taiwan is praised as a model for maintaining one of the lowest infection and mortality rates. Vice-President Chen Chien-jen called you “a key figure in Taiwan's national epidemic prevention team”. How do you contribute through digital tools?

I have worked with the Taiwanese government and social sector « civic hackers » such as the g0v movement, through the National Health Insurance Agency's mask stock level data, collected from pharmacies and released as open data by the government to develop an online [“mask supply and demand information platform”](#).

The platform contains over a hundred Apps and other digital tools from civil society, providing real-time information to help citizens search for face mask inventory levels and then purchase masks at drugstores through the name-based rationing system across Taiwan⁵.

In addition to that, we partnered with major convenience stores to implement an online ordering mechanism at the [“eMask Ordering System”](#) for all residents, with delivery and pick-up at convenience stores. The mechanism

allows people to order at the website using their NHI cards or Citizen Digital Certificates or through the NHI app. It is to better ensure even distribution and make it more convenient to obtain face masks for who lacks time for going to pharmacies under the current name-based rationing system.

Q5: There is growing debate in Europe on the necessity to track potentially infected people. Yet, many are afraid of an abusive use of technologies to monitor people. How has Taiwan succeeded in reconciling health requirements, use of technology and privacy concerns?

Governments around the world are combining technology and human efforts to enforce quarantines that require people who have been exposed to the virus to stay in their homes, but Taiwan's system, the *Digital Fence*, is believed to be the first to use mobile phone tracking for that purpose. The system monitors phone signals to alert police and local officials if those in home-quarantine move away from their address or turn off their phones.

Privacy protection is one of the major concerns on the use of location data for anti-coronavirus. Hence, the use of the electronic epidemic prevention system should be cautious and minimized in necessary extent, so that it preserves the protection of personal information and privacy.

The use of the *Digital Fence* system is a crucial part of the current epidemic prevention measures⁶. A government agency use of personal data is restricted to only specific cases such as for ensuring national security or furthering public interest. Hence, under the provisions of the Communicable Disease Control Act and the Personal Data Protection Act, the use of this electronic system for the anti-coronavirus efforts should certainly not undermine the protection of personal information and privacy.

**Interview conducted in April 2020
by Antoine Bondaz**

³ “Virus Outbreak: Most Virus Disinformation Originating from China”, *Taipei Times*, April 9, 2020.

⁴ “[Audrey Tang on Taiwan's Digital Democracy, COVID-19, and Combating Disinformation](#)”, Stimson Center, *Youtube*, March 17, 2020.

⁵ LANIER Jaron and WEYL Glen, “[How Civic Technology Can Help Stop a Pandemic: Taiwan's Initial Success Is a Model for the Rest of the World](#)”, *Foreign Affairs*, March 20, 2020.

⁶ “[The Digital Fence: Taiwan's Response to COVID-19](#)”, Simons Institute, *Youtube*, April 7, 2020.