*Open Minds … from Creative Commons*

**Episode 5: Audrey Tang, Digital Minister of Taiwan**

URL:
https://creativecommons.org/2021/07/13/open-minds-podcast-audrey-tang-digital-minister-of-Taiwan/

[Music: "Day Bird" by Broke for Free]

Eric Steuer: Welcome to *Open Minds … from Creative Commons*. I'm Eric Steuer. 2021 marks the 20th anniversary of Creative Commons, and one of the ways we're celebrating is with this podcast, which is a series of conversations with people working on the issues we're involved with in subjects we're excited about. On today's episode of the podcast, I talk to Audrey Tang. Tang is an influential free software programmer, a hacker, and the Digital Minister of Taiwan. Tang became involved in politics during the Sunflower Student Movement of 2014, which was a series of protests against a trade agreement with China. Tang was instrumental in using open technology to help amplify the voices of demonstrators so that they could better communicate their message. Since then, Tang has worked to manifest a vision for how open technology, open data, and radical transparency can result in positive, productive collaboration between government and the people. Last year, Taiwan was frequently credited with having one of the world's best responses to COVID-19. There were a lot of reasons for their success, but a significant one was due to a digital strategy that included information crowdsourcing and open data projects that kept people informed. There's a great WIRED article on Tang from last year that goes deep on all of this. It's called "How Taiwan's Unlikely Digital Minister Hacked the Pandemic." I'll link to it in the show notes because it's definitely worth a read. Before we get into our interview, I want to mention that Tang will be one of the keynote speakers at this year's CC Global Summit, which is Creative Commons' annual event that brings together hundreds of leading activists, technologists, educators, lawyers, librarians, and other people for discussion, panels, workshops, and community building. You can find out more about the event and register for it online at summit.creativecommons.org. For now, I hope you enjoy my conversation with Audrey Tang.

I wanted to start by asking you if you could tell me just a bit about how you got to where you are, so maybe your path from being a hacker to where you are now.

Audrey Tang: Well, I'm still a hacker. I'm working *with* the government, not *for* the government. Back in 2014, I helped occupy the parliament in Taiwan. That was in March 2014, and it was called the Sunflower Movement, and it was half a million people on the street and many more online. We demonstrated (as in "demo," not as in "protest") demonstrated that listening at scale is possible and people can actually talk about the trade service deal with Beijing in a way that is very well informed, that has people online as well as internationally joining, and that produces actionable rough consensus. Of course, for people who was already in internet standard-making communities, this shouldn't be a surprise. We already know how to listen at scale, but it is a surprise to many people working in the public service. So I was then recruited as a reverse mentor at the end of 2014, advising the Cabinet on how to listen to scale.

Eric Steuer: And what's kept you interested in working in public service versus in the private sector?

Audrey Tang: So my work is firmly in the social sector, meaning that anyone's contribution is valued, is everyone's business, with everyone's help, so I see myself primarily connecting to the social sector organizations. And in the public sector, of course, there are many public servants who are also active participants in the social sector after work. Right? So in the early days of the Sunflower Movement, we found that many people who joined the g0v [gov zero] or g0v [G zero V] movement (that looks at all the digital services that ends in .gov.tw and to make forks, that's to say alternate versions of such digital services ending in g0v.tw so people can just change a O to a 0 in the browser bar and get into the shadow governments, but always forking with the intention to be merged back) — and we found that many contributors to g0v are actually public servants, so they're also very interested in horizontal connecting together rather than being trapped in their silos, their hierarchical relationships, in their day job. And so I see my work as mostly horizontal, making sure that the 12 or some ministries who sends the [unclear 4:22] to my office as well as the Participatory Officer network, the PO network, in all the ministries can connect together and listen better to the citizens. So that's my role. I call it a public servant to public service.

Eric Steuer: You know, I'm interested to know when you became involved with the open-source software community and how that influenced your life.

Audrey Tang: I was involved even before the term "open source" [did 4:48]. I was quite active in CPAN (that's the Comprehensive Perl Archive Network) around '95, I think, '96, when I first joined as a co-founder. My first start-up is all written in Perl. I'm also interested in web standards, so later on I would participate, say, in the Atom working group to develop a

viable alternative to the RSS. I'm also involved in the Creative Commons popularization in Taiwan, doing translation work as well as maintaining the GitHub-like infrastructure called Open Foundry maintained by our national academy around the turn of century, I think 2003, 2004, and so on. So yeah, I think the free, libre, open-source movement really defined the way that my work is possible. Right? Because previously, as a junior high school dropout, I would not have access to the latest research if not for the open access movement, for example arXiv (A-R-X-I-V) preprint, and I wouldn't have access also to the community that builds a cutting-edge computer language together, for example the Haskell community that I would later join in helping shaping the Haskell standard. And so, yeah, I would not imagine a career outside of the engagement to the free, libre and open source communities.

Eric Steuer: Something I've definitely seen, and I'm sure you have also, over the last several years is that things like openness and even the phrase "open source," but transparency, these have also become almost buzzwords that have lost their meaning to some degree because of the very loose ways that different entities apply them, and this is especially true of companies that want to use them almost for sort of marketing purposes and different governments that want to seem like they're doing the right thing but just really are kind of pandering. You know, what are some thoughts that you can share about the requirements that must be in place for something to be truly open or transparent?

Audrey Tang: First of all, I think the buzzword situation is actually not that bad if you compare it to, say, big data or blockchain, so it's still manageable. That's what I would say. And I would say that transparency and participation are, of course, both important, but to me, the most important part is whether it's inclusive, meaning that people who are affected by the software, whether they have a real say in either remixing, customizing, or just changing the course of how the software is developed and how it is interfaced with the society. So I would say that any open-source project that focus on governance, on getting the most inclusive culture possible, is more sustainable, and the open-source projects that are, as you mentioned, started by companies who are not that interested in the co-governance model with the stakeholders almost by definition do not get to be remixed or reused and therefore less sustainable. And so I think this is a natural evolution-like process that rewards the projects that take care about the stakeholder communications and inclusive accountability. So I think it is a natural progression toward only leaving the project that take care of the non-open-washing, the actual inclusive part, to remain. So I'm cautiously optimistic about this dynamic.

Eric Steuer: I've heard you talk about different social media efforts as either being pro-social or anti-social…

Audrey Tang: That's right.

Eric Steuer: … in their nature. I still get excited about the idea of what social media could be for us, you know, how it could foster dialogue. I mean, it does this in some ways, and it elevates voices in some ways, and it even brings us together in some ways, but in so many other ways, in practice, it feels like it has the opposite effect of what I thought that social media would feel like. You know, because you've done so much thinking about this, I'm interested to know if you could talk about why you think that this has become the sort of way that social media feels for so many people and whether it's what we're going to be stuck with perpetually or whether there's another way that is possible going forward.

Audrey Tang: Well, to me, Wikipedia or GitHub are also social media. The difference is that the creativity in such pro-social places are directed to the commons, whereas in the more anti-social corners of social media, there's no sense of social production or social creation by default. Right? By default, it's people standing their ground, sharing their positions, but also attacking at one another, not just, you know, contributing alternate positions, but actually making ad hominem attacks and conspiracy theories and things like that because the experience design by default privileges the kind of outrage, the kind of emotion, that helps, for example, selling advertisements and so on. So on the Taiwanese equivalent of Reddit, for example, the PTT, it doesn't even have any shareholders. It doesn't have any advertisers. It's entirely subsidized by the National Taiwan University, but because of academic freedom, this student's pet project, which has been running for 25 years, is essentially social-sector-run digital public infrastructure. So people joining with the norm of contributing to the commons instead of attacking one another, and the interface does not privilege any of those people who, for example, place targeted sponsored advertisements to incite emotions and things like that. So I think the platform's incentive is really at play here, and we need to make the digital equivalent of town halls, of libraries, parks, national parks, and so on, in order to have a careful deliberation about public issues. Of course, there's still a place for like the nightlife district, right, for the more distraction-oriented serving addictive drinks, private bouncers, very loud, one has to shout to get heard, places. It's just, we should not purpose those places to work on public deliberation.

Eric Steuer: You know, I think of Wikipedia, I think of GitHub especially, Creative Commons especially, these are somewhat rarefied spaces, so while they are social media, while they are open in theory to anyone to get involved with, they require in practice a certain kind of vocabulary. Do you have any thoughts about how to open up those spaces to people that

maybe don't have as much sophistication around some of those communities or the thinking that goes into being a part of them?

Audrey Tang: Yeah, I worked briefly in the visual editor team in Wikipedia because many people who contribute to Wikipedia report that the wiki syntax is actually the thing that prevents them from contributing — not because they can't learn the syntax, but because syntax is quite unforgiving in a sense that if you make a typo, then the page looks really bad, and then, of course, people will fix it afterwards, but the initial contributors' experience isn't that great. So I think we need to focus, just like the visual editor on the initial experience. And GitHub has been doing a lot of this to simplify the admittedly quite complex algorithm of the git algorithm and share it in such a way that anyone with a phone, anyone with a touchscreen, can just treat it as a wiki. Right? To click to edit, to preview, to save and things like that. So I think a collaborative environment in, for example, Taiwan's administration, we run our own collaboration platform and it's called Sandstorm. It's also open source, and we make sure that people's initial experience is, for example, [ordering 13:04] Lunch Box together, which is also co-creation. It's like a Google Form, right? Google Form is actually the most accessible part of the entire Google Apps collection, but we, of course, have free software alternatives, and from forms, then it's spreadsheets, which is also quite forgiving. If you type a formula wrong, it only affects that cell and maybe some other individual cells, but certainly it doesn't crash and so on. So gradually people from forms, to collaborative edits, simultaneous, co-editing documents to spreadsheets and so on, and eventually they learn that it's actually very easy to start a co-creation project. And all the, meanwhile there's a Slack-like Rocket.Chat channel in the background that helps to handhold the initial onboarding process for the public service.

Eric Steuer: Why do you think tools like Rocket.Chat instead of Slack are important? So why is open source, why is it an important part of these systems?

Audrey Tang: In a very practical sense, we prefer open source on-premise deployment because of the cybersecurity concerns. We want to make sure that we can deploy defense at depth and also work with penetration testers, the Taiwan pen test team such as DEVCORE, of course, is internationally quite well known now, they also help us to file CVEs against the free software projects that's hosted on our, for example, National Center for High Speed Computation, and that makes all the cybersecurity defenses much more effective because we can get the entire data flow, the entire routing and so on, in a place that has pretty good advanced warning systems, that has pretty good honeypots and things like that. So, because Taiwan is quite literally at the frontline of cybersecurity engagements, we really prefer open source rather than the on-the-cloud software that we don't have a good data flow control.

Eric Steuer: You mentioned conspiracy theories, and I'm curious because I know that you've done a lot of thinking around this, I've specifically heard about you using humor. I think that the line is that you use humor to…

Audrey Tang: [unclear 15:32]

Eric Steuer: … squash the rumor. Humor over rumor.

Audrey Tang: That's right. That's right.

Eric Steuer: So how does that work? Because that's something I think a lot of people need some insight into.

Audrey Tang: So the basic idea, as I mentioned, many messages that [channel 15:42] outrage eventually get channeled to conspiracy theory, or vengeful thinking, or discriminatory thinking and so on because people who are in a mood of outrage do not by definition have the full emotional capacity to take all the sides or to fact check. Right? So it's important to offer something like a catnip (right?) that makes laughter vent some tension and so on so that people can step a little bit back and think about, "Okay, so this is a situation that's unfortunate, but how do we co-create something that prevents this unfortunate situation from happening again?" Which is the mood for co-creation. So we discovered that really the only more viral emotion than outrage on social network is humor, and that includes cuteness, like cute cats and so on. And so we merge humor and cuteness together, so that, for example, there was a conspiracy theory last April at the height of the pandemic about how tissue paper will run out because Taiwan government, the rumor says, has been confiscating tissue paper materials to make medical-grade masks. Now, of course, these are different materials, but people who get caught into this outrage mood could not fact-check, so our Premier posted in just a couple hours a very funny picture of himself wiggling his bottom and saying in very large font that each of us only have a pair of bottoms. It's a wordplay because in Mandarin "bottom" (*tún*) sounds the same as "stockpiling" (*tún*), so basically he is saying that it doesn't really pay to stockpile. And then there's a very clear table that says the tissue papers are made from South American materials, while the medical-grade masks are made from domestic, it's plastic materials, so there's no way that producing musk will hurt tissue paper production. Within just a couple days, the conspiracy theory died down because people find this meme to

be hilarious. It has a very high R value. It's reached pretty much everyone in the Taiwanese society, and people who have laughed about it found themself impossible to entertain the conspiracy theory anymore, and then they actually checked the tissue paper material and found out it's correct. But if we just published a rebuttal without, you know, making the Premier literally butt of the joke, it will not spread to the same amount of people that the conspiracy theory could, and so getting the R value of the vaccine of the mind higher than the conspiracy theory, that's very important, and we have dedicated team in each ministry to work on this.

Eric Steuer: So much of what makes memes viral is sort of the abstracted meaning that can be derived from them, but in this case, it seems actually like what you're doing, or what you're an advocate for, is bringing humanity into the humor. It's like saying that there's an actual person here. Do you have any thoughts about that?

Audrey Tang: That's correct, but using Creative Commons, for example, I also license publicly, usually under ShareAlike, sometimes just Attribution, all the photos of me in those humor-over-rumor appearances, and so people do remix it and then add new layers of meaning on it. Even other public servants in other ministries remix my likeness without asking me, as permitted by the Creative Commons. And so I would say it serves dual purpose. First, that it shows that we're all like real people, are real humans, and we care about getting the messages out, but we do so in a way that makes fun of ourselves and not attacking other people. So that's the first thing. And the second is that the creativity of the internet meme culture then enters play because they understand they won't be sued if they remix Creative Commons photos, and then you see some truly bizarre remixes.

Eric Steuer: Much of Taiwan's early success in dealing with COVID has been attributed to open data efforts, which I know you're also a big proponent of open data. Can you talk about how open data was used to help Taiwan deal with COVID?

Audrey Tang: Certainly. From the very beginning, like 2020, January 31st, we understood that we need to get three quarters of population [in any district 20:26] to wear masks and wash their hands. That's the only way to reduce the R value to be under one for the novel coronavirus. Now, how would we do that? It turns out that we cannot produce so much masks as required back then. Our production facility maxes out at around 2 million masks a day, but Taiwan has 23 million people, which means that rationing is inevitable, so we did implement rationing for, I think, three days of development. We repurposed the existing mechanism for getting the recurring prescriptions in all the 6,000 pharmacies in the community so that people can also get the rationed mask, at first two per week, and then three per week and then

nowadays is 10 per two weeks, and so on. Of course, nowadays we produce more than 20 million masks a day, so it's not a problem anymore, but back then, how to ensure the rationing is fair, how to ensure that it gets evenly distributed according to demand to all corners of Taiwan, that's a really big challenge, and so what we did is that we publish every 30 seconds, starting February 2020, all the real-time mask availability in all the pharmacies and essentially crowdsource solutions from the society saying that this is exactly how the rationing goes. When people queue in line, they can use one of the 100 or so maps, or chatbots, or voice assistants to check that people queueing before them actually purchased this in a fair way. It's reflected in real time, but also as importantly, people who specialize in data science can also suggest better way to distribute the mask, to pre-order the mask, and so on, so we reach the three-quarter goal by April, and right afterwards, we move to the sort of post-pandemic phase.

Eric Steuer: So I'm going to make quite a departure here, not a good segue, but I have to ask, because I've heard you mention Leonard Cohen a few times in presentations, and specifically the song "Anthem," and the line "There is a crack, a crack in everything / That's how the light gets in." That's one of my favorite albums and my favorite songs, so I want to know why this song and this lyric are so important to you.

Audrey Tang: Yeah, before encountering this stanza and translating it into Mandarin, I'm sort of a perfectionist. I don't usually publish unfinished projects, and I like to contribute to, say, GitHub, but always in batches, like in the contributions that are kind of standalone, that explains itself and so on. But that sentence, that stanza, cured my perfectionism. It let me see that if my contributions are perfect or near perfect, it actually creates a very high barrier for my collaborators to work with me. On the other hand, if I publish the very early drafts full of typos and all, it actually lowers the requirements, the barrier, for everyone to participate as colleagues. And so I think that sentiment, like "Ring the bells that still can ring" and "Forget your perfect offering" captures perfectly the idea of contributing to the commons with what we've got for the day and not like overprotecting ourselves from criticisms and so on, because in fact those criticisms are the beginning of friendships.

Eric Steuer: Is it hard for you to be vulnerable in that way and to put yourself out there in an imperfect way?

Audrey Tang: I think after translating that song, then whenever I get criticized for not being perfect and so on, I would simply say, "Well, it's everyone's business with everyone's help. Of course, it sounds like you have a better idea. What would you do if you were the Digital Minister?" And so on. And this is all thanks to the poetry of Leonard Cohen.

Eric Steuer: And I know that you are interested in art and you are an artist yourself. Are there other artists that you would point to that have been influential on your thinking about the internet, about participatory culture, about technology, about the, just about anything?

Audrey Tang: So I call myself a poetician, and so I would encourage people listening to this podcast to search for "poetician," and you'll find that the idea of poetician is not just in Taiwan, but also, for example, in Iceland as well. So just follow the hashtag, and I welcome all the people working in arts and culture to also consider becoming poeticians.

Eric Steuer: Audrey Tang, I appreciate your time so much, your insight and your thinking, and it's just been a great pleasure to talk to you. Thank you so much.

Audrey Tang: Thank you. Live long and prosper.

Eric Steuer: [laughs] Same to you. I love it.

[Music: "Day Bird" by Broke for Free]

Eric Steuer: Thanks for listening to *Open Minds … from Creative Commons*. Special thanks to the musician Broke For Free, whose track "Day Bird" you heard at the beginning of this episode and you're listening to right now. It's available under the Creative Commons Attribution license, meaning it's free for anyone to use. You can find it at the Free Music Archive, freemusicarchive.org. Please subscribe to our show so you don't miss any of our conversations with people working to make the internet and our global culture more open and collaborative. We'll be back soon with another episode. Talk to you then.

[Music: "Day Bird" by Broke for Free]