vTaiwan: public participation methods on the cyberpunk frontier of democracy

[Kicker] In the midst of the signal failure known as the US electoral season, here's something to be inspired about: a true story about rational deliberation on a national scale.

[Short editorial intro to come: "This is awesome work. I have been wondering when someone somewhere would crack this problem of large-scale public deliberation, with government participation, and holy shit, here it is."]

In April 2014, I walked through Taiwan's massive Sunflower Demonstration, a student-led movement in opposition to the government's attempt to ram through a new trade deal with Beijing that erupted into a weeks-long occupation of the country's parliament. I watched as groups of strangers armed with post-it notes intensely deliberated policy points and DIY antenna-wielding tech crews broadcast those street deliberations to millions. Amidst the hand-painted banners, giant puppets, and stacked bedrolls were weather-proofed racks of servers, broadcast equipment, and dishes powered by thick electrical cables running out of the open windows of the occupied legislative building.




Above: Photos by Even Wu https://musou.tw/focuses/31
Left: equipment racks. Right: building base stations antennas to reach into the Yuan

I came to a stop amid a quietly buzzing expanse of self-organized civil society tents: every non-roadway open space for three city blocks was neatly yet completely packed. People explained to me that, at the beginning, environmentalists, unionists, reformists, separatists did not really have a consensus, so they each picked their own place in the occupied area, but because it was peaceful, people started to cross-pollinate, and by the end of the movement, a stronger consensus emerged. Formally, on the last day, the students explicitly declared that bringing deliberation in the street to home/school/community was the movement's aim — so it was a large part of the agenda *if not the only one*.

Overall, the occupation was operating as a new model of democracy at scale by 1) demonstrating (*double entendre intended*) scalable listening, empathy-building, and consensus-making on the Cross-Strait Service & Trade Agreement among thousands of people in the street, and 2) broadcasting the events to a nation of remotely participating citizens. (For more on the Sunflower Movement in English, see @jmichaelcole1's "Black Island.")



Above: photos of facilitating inclusive deliberation in the street during 2014 Sunflower Movement
https://sites.google.com/site/twdstreet/

In late April 2014, after the Sunflower Movement had ended, the same "deliberation in the street" (dstreet) team held another round of public deliberations on nuclear energy, and yet another set on constitutional reform: https://www.facebook.com/twdstreet/.

By May 2016, when I was back in Taiwan to speak at Summit.g0v.tw, I discovered that ever since the Sunflower Movement, members of the open source community and Taiwan's government had been collaboratively developing a novel, effective conglomeration of civic technologies, government commitments, and mass media dedicated to the public conversation needs of a nation's democratic process. They call it vTaiwan. If the rule, born of hard experience, is that all the code written for deliberative democracy will never find traction in formal government, here finally is an example that disproves that rule.

[Pull quote: members of the open source community and Taiwan's government had been collaboratively developing a novel, effective conglomeration of civic technologies, government commitments, and mass media dedicated to the public conversation needs of a nation's democratic process.]

The vTaiwan process now routinely leads to passage of laws by Taiwan's national legislature. And it's gaining momentum: on July 26, Taiwan's new premier declared in a cross-ministry meeting that "all substantial national issues should go through a vTaiwan-like process." There

are many reasons why Parliament has been willing to embrace this process, but the primary one is that it had been occupied for 22 days in 2014, and the government had lost its credibility as a governing body to an occupation who had outperformed it at demonstrating democracy. Legislators wanted to show goodwill.

Other democracies, prick up your ears.

What is vTaiwan and how it works

Originally vTaiwan -- v is for “virtual” -- was used only for developing cyberpolicy (*e.g.* sharing economy apps, telework, crowdfunding, etc) but it is now being expanded into other domains. Over its two years of development, vTaiwan has matured into a four phase process with a set of methods that integrate technology, media, and facilitation:

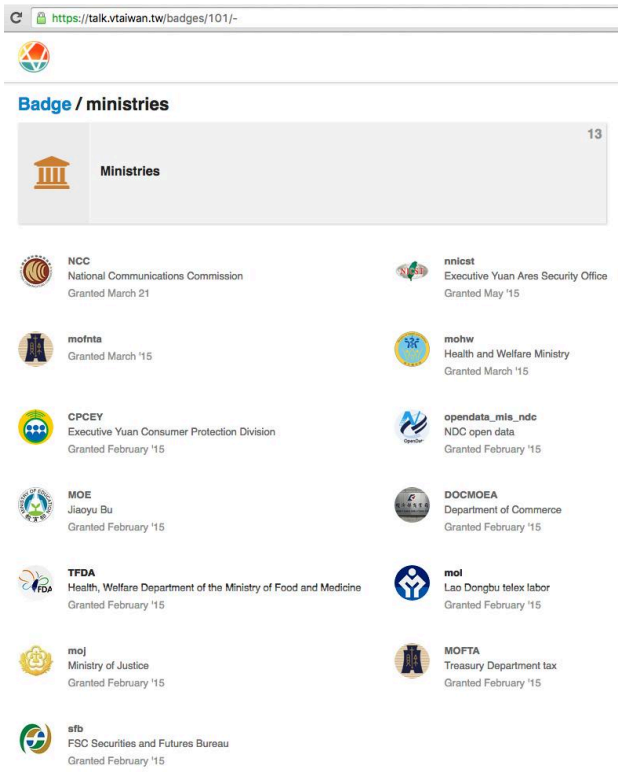
1. First, an artificial-intelligence facilitated conversation tool called pol.is is distributed through Facebook ads and stakeholder networks;
2. Then a public meeting is broadcast where scholars and officials respond to issues that emerged in the conversation;
3. This is followed by an in-person stakeholder meeting co-facilitated by civil society and the government, and broadcast to remote participants;
4. Finally, the Government agrees to bind its action to points that reached consensus, or provides a point-by-point explanation of why those consensus points are not (yet) feasible.

The first issue tackled by vTaiwan, how to regulate “closed companies” (similar to Delaware LLCs), took three months and involved about 2000 viewers on livestream, about 200 suggestions, and about 20 face-to-face contributors. Public consultation began February 1, 2015 and on May 1, 2015, the consensus position was signed into law by parliament.

vTaiwan’s first stakeholder meeting was facilitated according to Cornell’s RegulationRoom methodology. RegulationRoom offered important insights even to a group already well-versed in facilitation: a process for stakeholder discovery, lexicons to avoid pointless wars over definitions, and a dedicated moderation team. To this, the Taiwanese cyber democracy activists added working groups composed of stakeholders, and made sure that the participants themselves wrote the final synthesis document. They even experimented with IETF-style "humming” for non-verbal signalling. A multimodal livestream+transcription+chat format was used to bring in-person and remote participants into the same conversation; mixed-reality is currently the most active development area for the vTaiwan team.

This first version of vTaiwan used Discourse, a forum-based technology that emerged in 2011. Each ministry had its own @username and agreed to reply within seven days when cued by moderators. Ministries could cue other ministries, enabling direct cross-ministry conversation. To

operate Discourse's discussion board on the scale of Taiwan (23 million people), three volunteers worked fulltime to moderate new posts and responses. Despite that investment, results were mixed: the number of people being consulted averaged in the tens (10s) and the complexity of topics about which public opinion could be gathered was limited.



Above: the Discourse accounts of Taiwan's various ministries
https://talk.vtaiwan.tw/badges/101/-

While vTaiwan was finding its legs, open-source conference organizers in Taiwan were dealing with a divisive issue within their own community. Chia-Liang Kao, a co-founder of the g0v.tw community, introduced pol.is and found that it visually defined and gave space to divergent opinion groups and broke the community's deadlock by identifying the points of consensus.

Based on that success, the second and current version of vTaiwan now uses pol.is. Pol.is is a survey technology where the user clicks "agree," "disagree," or "pass" in response to statements others have contributed. The user can also enter their own statement for others to take positions on. Pol.is clusters users who voted similarly into opinion groups using realtime machine learning (artificial intelligence), and visualizes those groups in real time. Once vTaiwan deployed pol.is, participation scaled a hundredfold, the complexity of issues grappled with increased, and the volunteer moderators were no longer needed during the "crowd-sourced agenda setting" phase. After years of closely iterating with the vTaiwan team, pol.is was recently open sourced, greenlighting its longterm integration into governing processes.

The Fourth Estate has also gotten involved in the cause. **Talk to Taiwan** http://talkto.tw/ is a sibling project of vTaiwan, a broadcast talk show where government ministers, mayors and scholars show up to respond to citizen ideas and concerns expressed via pol.is. It's another project born out of a g0v hackathon, with its own governance structure but many principles and project contributors that overlap with vTaiwan. Media continues to be a site of experimentation; so far six shows have been broadcast in virtual reality. For instance, here's an episode with Mayor Ko Wen-Je that the viewer can rotate with a phone: https://www.youtube.com/watch?v=H0MpIVqPsjw.



Above: Monocle's coverage of the show in April https://monocle.com/minute/2016/04/27/#3

Combined, vTaiwan and Talk to Taiwan are hearing from an average of 1,000 people per issue as a result of distributing Pol.is surveys to a couple thousand people through Facebook ads on the Talk to Taiwan page https://www.facebook.com/talkto.tw/ (20,000+ members) and through other groups. The survey outcomes are then deliberated through live video broadcasts, attended by around 20,000 participants per issue. There's a cohort from g0v who participates in most polls, continuously evaluating the system.

Post-Sunflower partnerships

vTaiwan couldn't have emerged without the prior development of the g0v community, which describes itself as a "civic movement by informed netizens toward participatory self-government, borne out of frustration at the government's blithe lack of transparency at the end of 2012." (http://g0v.asia/tw/).

Attendees of the biennial Summit.g0v.tw include a wide age range of mid-career technology and creative professionals with a high level of technical proficiency. This excerpt from a 2013 report (http://g0v.asia/tw/#Q3.1) reveals that Taiwanese civic hacking has long taken an all-terrain approach toward supporting rational public discourse, including crowdsourced browser plugins for identifying erroneous news, gorgeous (and revealing) interactive visualizations of

government economic data, and iterations on leaderless public deliberation processes (loomio, airesis, occupy.here, and other liquid democracy platforms). As of August 2016, there are almost 2,000 members in g0v.tw's Slack channel.

In the immediate aftermath of the Sunflower Movement, this civic technology community had higher public credibility than the government itself due to its having successfully demonstrating how to conduct transparent democratic process at scale. (Public opinion polls showed that confidence in Taiwan's president was barely above single digits, by contrast.)

Taiwanese g0v activists such as Audrey Tang, who grew up among Tiananmen exiles in Germany, view governance failures as a "noisy signal" problem. She has been working with active listening and leaderless groups since 1989, e-facilitation since 2008, and psychoanalysis since 2011. A key collaborator, Chia-Hua Lü, has been working as a f2f facilitator since Taiwan's 2002 national healthcare deliberation. In Tang's recent manifesto published in France's national paper *Le Monde* "Une expérience pionnière de démocratie numérique » à Taïwan" (and in English on Medium), she expresses how in Taiwan, "internet and democracy evolved together, spread together, and integrated with each other." She continues:

> The year 1988 brought freedom of the press *and* personal computers.
> The year 1996 brought the first presidential election *and* dot-com websites.
> There are so many civic hackers in Taiwan volunteering to work on democracy [...] because our generation is the first to speak out freely—free speech was banned for 40 years during Martial Law under the Chiang dictatorship.

Tang worked with the community to welcome government officials to participate in these improved modes. But she and her g0v colleagues wouldn't be succeeding as much as they are without enlightened partners inside government like Minister Jaclyn Tsai, who has led the government's ongoing participation with the community. Previously Minister Tsai was a lawyer — General Counsel of IBM Greater China Group (China, Hong Kong, Taiwan) — and had joined the Taiwanese government as "Minister without Portfolio of the Executive Yuan" to manage national government policy around tech. Crucially, she also was charged with coordinating cross-ministry issues, meaning she saw that even for the government to successfully talk to itself there was a need to organize processes for rational deliberation.

At a December 2014 g0v.tw hackathon, Minister Tsai upped the ante with a big ask: "Could g0v.tw create a platform for rational discussion and deliberation of policy issues that the entire nation could participate in?" In return, she offered binding consultation — that government decisions on issues discussed on the platform would be bound by the popular will expressed there. Dozens of volunteers at the hackathon accepted the challenge, and vTaiwan https://vtaiwan.tw/ was born.



"We should say, vTaiwan is something of an experiment." - Minister Jaclyn Tsai on Talk To Taiwan

Minister Tsai reflects on vTaiwan on this interview on Talk to Taiwan: http://talkto.tw/talk/s2-02 https://www.youtube.com/watch?v=dig0WjnD3pQ&t=10m (translation by Audrey Tang):

> We should say, vTaiwan is something of an experiment. Because at the time — if you remember the post-Sunflower days — the entire society was very chaotic.
>
> When I worked on cyberspace regulations, often I heard people saying "Minister, this is impossible, you need at least 3 years or 5 years to make progress." But in the business world, because I've been in the technology industry, technology moves much faster. We are in a world of rapid change. How is it possible that each policy always takes 3 to 5 years? That's just not workable. When we think about today's Taiwan, we are a pluralistic society; it's almost certain that there will be different voices for any policy issue. So when there are so many different voices, how can we efficiently reach all the stakeholders, so that we can quickly draw a consensus? We need to have a mechanism.
>
> So I went to the g0v hackathon and proposed this project. I said I'm working on these bills and I think we need to have a platform to allow the entire society to engage in rational discussion. Luckily, Audrey Tang and many volunteers felt this idea was worthwhile, so the platform was set up in just a few weeks.

Minister Tsai continues with details on the government process:

> So how do we make a platform for rational discussions? Our consensus is that all discussion procedures are to be determined and maintained by g0v volunteers; they have their own rules of the game, all of this is developed in g0v.
>
> On behalf of the government side, I make sure that whenever anyone raises a question, the relevant ministries must respond within 7 days.
>
> If a consensus forms online, then the issue is settled. If there is no consensus, we hold livestreamed consultation meetings. The consultation meeting invites various related ministries and commissions, government representatives, academics, all stakeholder representatives from industries, and participants from the online community. The entire meeting is live online. Everyone voices their opinions, but they are all recorded, open and transparent. Friends in g0v set up a transcription infrastructure, so 2–3 hours later, a stenographic transcript is available to everyone online.

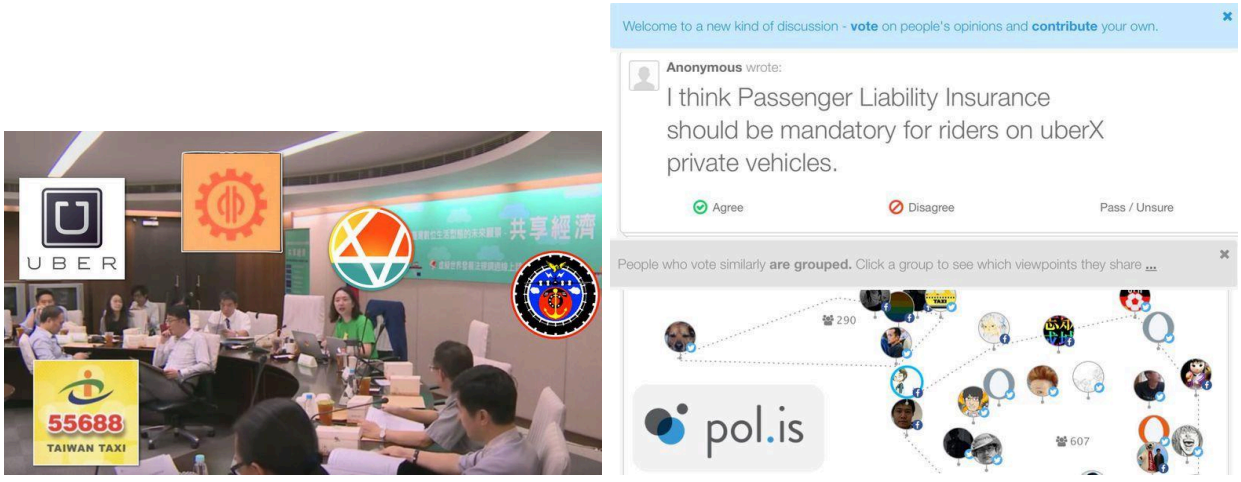
> We worked with this platform on closely-held company law, equity-based crowdfunding, selling medical material over internet . . . . All these things were deliberated on the platform, with different views recorded at the same time.
>
> To us policymakers, what are the benefits? For each policy, I post all background material I have online. So if you want to delve into this issue, you can see the same data as I do. When everyone is on the same page, we can have a real discussion. Otherwise, the dialogue would be out of focus.
>
> So if we can all take the time to understand the problem, read the data, while also listening to the views of the people — and enter a discussion, we are much more likely to reach a consensus.

vTaiwan's recent successes

A year ago, vTaiwan started tackling its 12th topic: how to regulate the entry of Uber into Taiwan. The process played out -- people offered statements for others to agree or disagree on, government ministers addressed the points of consensus on television, co-facilitators from the government and g0v held mixed-reality stakeholder meetings, and the government pledged to ratify the consensus points:

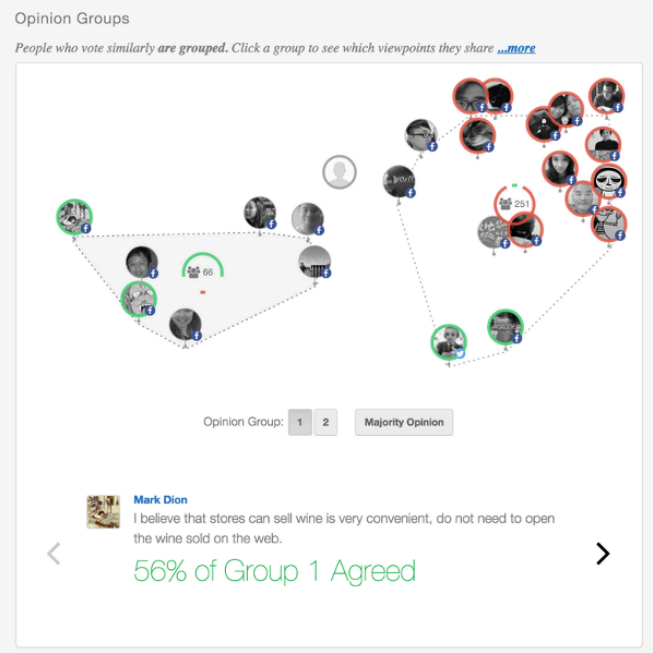
- Taxis no longer need to be painted yellow.
- High-end app-based Taxis are free to operate, as long as they don't undercut existing meters.
- App-based dispatch systems must display car and driver identification, estimated fare, and customer rating.
- Per-ride taxation is required to report to the Ministry of Finance.

With city-level pilots expected in August 2016, the new regulation would allow other Uber-like apps as well as some created by the civil society to enter the market. [Full story here](#).



Above left: gov and g0v co-facilitated stakeholder meetings
Above right: an opinion submitted to pol.is, and the interactive graphic of others' responses to it

This success in regulating Uber was followed by another success in March 2016, when vTaiwan's consensus building methods overcame a six-year deadlock on online alcohol sales. The constituents had been yelling at each other across the divide; using pol.is, the vTaiwan was able to break the deadlock in 3 to 5 months.



Above: vTaiwan's pol.is conversation on online sale of alcohol

How Occupy Wall Street led to Pol.is

In 2011, I spent some time in Zuccotti Park. Back then, public conversation tech in OccupyWallStreet utilized classic forums with topics and replies (see http://www.nycga.net/ and http://occupywallst.org/forum/). There was some prototype location-specific anonymous messaging, a preface to what FireChat would become in Hong Kong's Umbrella Movement. Briefly, an anonymous txt2projection installation "Our Wall," sought to "amplify thoughts and ideas in and around the park [...] without actually being loud."

The iconic technology of Occupy was the People's Mic, by which the crowd turns themselves into a speaker system to have a conversation at scale: *Mic Check!* + twinkling fingers to indicate agreement. The modes of interaction in Occupy amplified individual voices into a cacophony, and out of that noise, the loudest discernable voices were the ones jockeying to speak on behalf of everyone else. Not a big difference from US speech-making personalities. Fewer provisions were made to pick up signals from a broader base of quieter folks, or to identify points of consensus within complex, divisive issues.

Colin Megill, founder of Pol.is, has said that watching the People's Mic in action, as well as the communication challenges faced by Arab Spring organizers in Egypt and Iran, inspired the creation of Pol.is (see http://www.geekwire.com/2014/startup-spotlight-pol.is/). As he says,

<blockquote>"We wanted a comment system to be able to handle large populations and stay coherent, while preserving minority opinions and producing insights automatically. AI made that possible. We wanted people to feel safe, listened to and be able to jump in and out as they please. Overall, we wanted to make it easier to successfully decentralize power in organizations of all kinds."</blockquote>

Public participation methods that scale

Pol.is is a way to gather open-ended feedback from large groups of people. The polls can be anonymous or linked with social media accounts. A graphic interface shows how opinion clusters emerge, cluster, respond, divide, and recombine; this is possible because pol.is creates and analyzes a matrix comprising what each person thinks about every comment. Minority opinions are as well-defined as the majority opinions are, "dissent is data." Check this illustrated blog post about the evolution of their user interface: https://blog.pol.is/the-evolution-of-the-pol-is-user-interface-9b7dccf54b2f#.lw6u3tt4a.

This technology only became possible in the past 5 years or so with the advent of near ubiquitous mobile connectivity, the real-time web, web-based data visualization, and neural networks (where the computer learns the rules itself instead of being hand-coded by software engineers; recommender engines like Netflix/Spotify and machine vision both use these kinds of algorithms).

Because anyone can enter a new statement, the agenda-setting power is held by the people, a critical advance on a very sticky sticking point for mass decision making. I think of this interface as the online counterpart of paper-tech methods of "open space technology" — you may have experienced a more popular but watered-down version called "unconference," which maximizes the number of presenter-audience relationships, but does not attempt to support group decision-making.



Above: open space technology's "marketplace" of people generating and clustering topics
See https://publiclab.org/barnraising

In the 40-odd-year tradition of open space technology, individuals write the topics they want to address on pieces of paper, then the group works together to cluster the topics and place them into a schedule for dedicated discussion time. This analog method is in wide use today by groups self-organizing meetings, and should be given credit for being able to scale to many hundreds of people with a single ream of printer paper, some markers, and a bit of tape. Pol.is, however, is made for the masses.

Implications for democratic process

Here's a mic drop quote from Audrey Tang: "vTaiwan and pol.is mean a rethink of the political system at the constitutional level."

Sadly, that road is littered with failures. Most efforts at collaborative legislation drafting have failed either because the power-holding body wasn't involved, or because it decided to reject the recommendations of the people — *see for example* Iceland's experience with its crowdsourced Constitution. Only occasionally have legislators embraced crowdsourcing of legislative commenting (see Utah's experiment in Politicopia http://techpresident.com/content/your-wiki-showing or US Senator Durbin's Legislation 2.0 http://techpresident.com/blog-entry/legislation-202-starting-gain-momentum).

The fact that these methods are working at a national scale in Taiwan suggests that, in an age of mass digital participation, we can reclaim the democratic process for including the people's voice in creating laws. Any permanent change in the way that laws get made — who has responsibility and the power for making decisions — would refer to the constitution. The ambiguous space that opens when consultation begins to function more efficiently and politicians voluntarily agree to abide by the will of the public is where new patterns can emerge.

In early May, an interviewer on Talk to Taiwan asked Minister Tsai if vTaiwan could continue into the new administration:

> Tsai: This is my hope, of course. I think this is a solid platform for civil collaboration with the government. The platform has operated for a period of time. People generally trust this process of policy formulation — early-stage communication and transparency really helps. I think it should continue. I really hope g0v friends can work with the new administration after May 20 [2016].

Three days later, the very first political move made by Taiwan's new administration was to withdraw criminal charges filed by the previous Cabinet against the 2014 Sunflower organizers (http://focustaiwan.tw/news/aipl/201605230010.aspx).

On June 19, 2016, Audrey Tang sent this update: "The use of pol.is at the national level is sufficiently convincing that an MP just asked the current premier and minister of economy whether substantial rulemaking — like the reworking of the joint-stock company law — should be deliberated on vTaiwan."



Above: @twccly is a bot posting all video feeds from the parliament, made by the http://www.whomakelaws.org/ project

On July 26, as mentioned at the top of this piece, Taiwan's new premier declared in a cross-ministry internal meeting that "all substantial national issues should go through a vTaiwan-like process."

Now with plans to include non-net-enabled citizens, the process is spreading to other levels of the Taiwanese political system, including the city of Taipei, and multiple countries outside of Asia. Audrey Tang says she has been “non-stop running training camps for public servants. We — the 3 civil society advisors to the National Development Council’s civic participation team ... — trained 37 ‘seed’ trainers as a joint effort between the academic Taiwan E-Governance Research Center (TEG) and the NDC operation team. Then we work with the seeds on another wave of 6 training classes, after which they can hold their own training camps.” Public servants describe this experience as “eye-opening” and/or “revolutionary,” with a 97.2% satisfaction rating in post-class surveys. Here’s the whole curriculum: http://beta.hackfoldr.org/13xSll98u4U6YveKFv6H8fSsLOaN5exFMj9KR7Gq8s4M/.

The vTaiwan project is focused on scaling human facilitation skills as a critical component of this massive democratic participation. In the early days, they went through several generations of electronic whiteboards — first with eBeam, eventually re-training folks who facilitated with whiteboard-and-paper to use iPad Pro + Apple Pencil + GoodNotes (taking photos; splicing them on a virtual wall for remote participants to more clearly see). Now they are onto VR and wearables. They are experimenting with 360° recording to possibly replace the labor-intensive livestreaming of stakeholder meetings that currently requires a crew of volunteers. Here’s TonyQ in April testing https://hugvr.com/ (WebRTC) before YouTube 360° was available: https://www.facebook.com/tonylovejava/posts/10209493202432652. In the past couple stakeholder meetings, Audrey has tested a POV shoulder-mounted Theta S and also a PixPro 4K to stream her facilitation to YouTube VR-360 “all in the name of science, to some day train a robotic in-person facilitator guidance system — not to replace facilitators, to augment them.”



Above: Audrey Tang wearing the facilitator’s kit.

Meanwhile, the team behind the consensus-building technology inside vTaiwan — Pol.is — has been approached by academics working with the municipal government of Rome and multiple

US agencies at the state and federal level have demonstrated interest. Colin Megill, the founder of Pol.is, says:

> We're working to change the relationship between citizens and governments in all levels in all places by making feedback something that happens automatically, not something governments have to “go get.” We’ve worked to make it so simple to deploy on a daily or weekly basis that there’s no excuse to not find out what a given population thinks. That’s been really time consuming and labor intensive until now, but leveraging AI will dramatically change the calculation for robust social research.
>
> Getting high dimensional, organic feedback from the population during a problem identification phase — as early as possible in the formation of rules — is categorically different from voting. In voting the cake is baked, and there are literally hundreds of issues at stake. The goal is to engage citizens far earlier, when everyone is arguing over the ingredients. At that point, it’s not legalese yet. It gives citizens much more leverage in shaping policy, and involves them at the phase the process is most accessible, and their input is most valuable as well.
>
> As the complexity of our economy increases, it’s critical to increase the speed with which governments are able to respond to regulatory demands in a collaborative, transparent, and sophisticated way. We’re working to help governments move faster and with more confidence to meet complex challenges posed by new technologies, while embracing diversity of thought and balancing interest groups.

Watch Colin’s presentation at Summit.g0v.tw or read the transcript here.

Reflections

Thanks to the rise of the Internet, many people around the world are today sending many signals to many other people and/or governments with many tools, most of which were never designed for diverse constituencies to democratically govern themselves at scale. The tools we’re using at scale generally accentuate polarization and conflict (see work by Stanford’s Emma Pierson, 1 & 2). Taken as a whole, the process vTaiwan has created amounts to a rethinking of how citizens send signals on complex issues, and how government listens and decisions result. Consensus-building combined with facilitation to derive “coherent, blended volition,” (as worded by Audrey Tang) can renew the value of public discourse, and leverage the true strengths of diversity in a civil society.

The bit about bringing agenda setting to the public brought back some fond memories for me personally. Flashback to 2002 when I sat next to a sign that said Talk to Me, and once a year my friend and I would hold “Talk to Me” parties so that all of the strangers we met could meet everyone else. Our method was to fill Bryant Park *(if you’re reading this, Bryant Park BID, thank you again!)* with an assortment of questions and invite thousands of strangers to self-organize into talking about whatever they wanted. We had some light-hearted DIY moderation in the style

of Antanus Mockus, and one key rule: *no one on mic*. Our goals were multiple, but chief among them was a sincere desire to use the potential offered by this incredibly diverse, international city to rekindle the “talk of the town” without status or pre-determined agenda.

The internet is everywhere-ish, yes, but it’s geographically-organized public conversation that generate political impact. Our sense of place is inextricable from politics. I admit I am guilty of musing about what is possible in democracies at the scale of island or “island-like” internet-enabled city-states like Taiwan, Hong Kong, ancient Greece, Iceland, even the tri-state area.

This vision, however, only makes what’s currently happening in Hong Kong all the more painful. In a region where the stakes for these young democracies are so high, freedoms are being revoked: this month, in contrast to the pardons received by Taiwan’s pro-democracy Sunflower organizers, Hong Kong’s pro-democracy Umbrella organizers — who were advocating for their right to nominate their own candidates and vote them into the top position — were found guilty on illegal assembly charges stemming from the 2014 occupation. It is no coincidence that new innovations for democracy are coming from Hong Kong and Taiwan, polities feeling the real possibility of losing theirs.

I say this as someone committed to face-to-face organizing and the offline (you might say, vernacular) technologies that make it possible: while I don’t think any one piece of technology could save democracy, I do think this one solves a big problem with it — which is to say, what happens when we disagree? How do we live with — or live as — the losers? Consensus building reduces the losing-ness of democracy by finding the points we all agree on without erasing the camps we stand in. Consensus building technology that works at large scale could be the Internet's missing link — the app we need to help us past just yelling 'stop' and figure out how we get to 'go.’ Arguably, Taiwan's more homogenous population makes the vTaiwan process more viable. Could it work in a setting like the United States, where people seem to have completely different versions of reality?

I am looking forward to voting in the US presidential election this fall, but I just can’t call that single opportunity to signal — especially when it’s merely to choose a representative, not to make any particular decision — democratic. Especially not since encountering a functioning set of tools that we could be using instead of listening to speeches. So, as surprised as I am to hear myself utter this rather unlikely phrase, if *massive mixed-reality facilitated deliberations built on top of a consensus-building neural network* can help us all talk to each other — I’m in.

The author wishes to thank Audrey Tang, Colin Megill, Christine Cupaiuolo, and Greg Bloom for their assistance on this article. To join the g0v community on Slack, go to join.g0v.today. To learn more about Pol.is for governments, sign up here: pol.is/gov. And for informal vTaiwan updates, follow Audrey Tang’s (mostly English) Twitter handle twitter.com/audreyt.