

Holopolis - demo the next democracy, in shared reality.

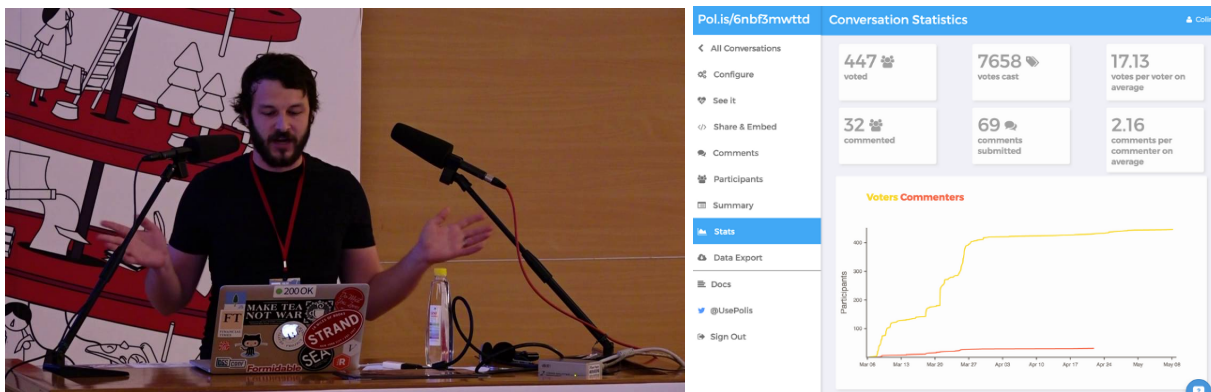
Open project launched by [PDIS](#) and [Pol.is](#) with the help of [Microsoft Hololens Team](#) and [Re:public Inc](#)

We are enhancing deliberation process for all participants to form collective consensus with the help of shared reality technology, to bringing people who are physically absent to the scene, facilitate deep and fair conversation, form consensus with the help of artificial-intelligence and deliver solution we can all live with.

Holopolis 用虛擬實境技術促成一群在討論事情的人形成共識，打破時間空間的控制，建造公平的環境，促成深度的對話，達成有效的共識形成與決策過程。

Background

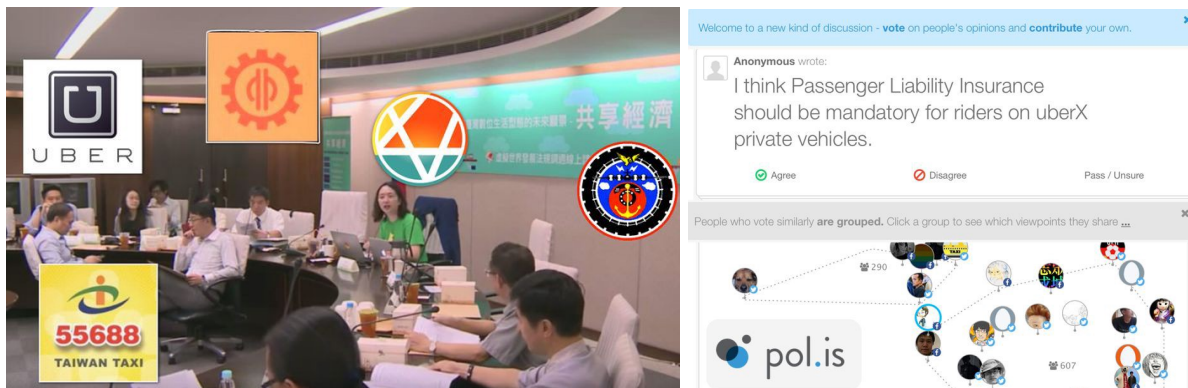
DELIBERATION IN TAIWAN AFTER SUNFLOWER MOVEMENT UBER CASE



Pol.is is a startup based in Seattle, focusing on creating a tool that leverages machine learning to scale up online discussion. Around the same period of time across the Pacific Ocean, Taiwanese were experiencing the Sunflower Student Movement and the after-effect. The students demonstrated deep deliberation with the help of information technology, in the parliament and on the streets, as the government refused to deliberate about Trade Service Agreement with China.

vTaiwan launched soon afterwards. As Liz Barry, the founding member of Public Laboratory wrote: "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."



The first use of Pol.is for social issues was the 12th topic that vTaiwan tackled: 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.

At this moment, Pol.is has been used daily as part of the administration work to facilitate discussion that involves us all stakeholders, bringing together government ministries, elected officials, scholars, business leaders and the general public. We believe that deliberation - thinking deeply about something together - is core to the future democracy.

Why Holopolis

DELIBERATION NOW LIVES BOTH ONLINE AND OFFLINE, IT DESERVES A BETTER INFORMATION ECOSYSTEM

All vTaiwan topics start from a proposal followed with the commitment of the government and the civic society. Then the journey begins: stakeholder discovery with rolling questionnaire, artificial-intelligence facilitated conversation tool (i.e Pol.is), livestreamed consultation meetings bring key stakeholders together physically while livestreaming the entire process where

watchers contribute ideas over the internet, finally, law specialists make draft bills as the deliverables made from all stakeholders to the system we live in.



Visual representation of the vTaiwan consultation process, courtesy of Colin Megill.

Holopolis (*meaning hololens supported polis*) is an experiment to bring deliberation in shared reality. We chose to do this in shared reality not for replacing human contact, but rather to provide us (thinker, developers, designers, civic hackers, sociologists, anthropologists, governmental officials) a completely free environment to invent new way to interact.

It's an experiment to bring democracy a step further to the future democracy. To bring people closer together while deliberation, to bring different point of views on the same topics, to have deep conversation and relate to the others, and finally come up with solutions that all stakeholders can go with.

Invasion

INVITATION

Holopolis is an open project launched by [PDIS](#) and [Pol.is](#) with the help of [Microsoft Hololens Team](#) and [Re:public Inc](#) as an extension project of [vTaiwan](#), incubated by [g0v](#).

We invite people or organizations interested, to think, create, make & experiment.

For people seeking for collaboration, please contact us in [join.g0v.today](#) and subscribe to channel #general-en

In this project we invite you to rethink:

What does the future democracy look like? If we could simply see democracy as “many people making decisions all together”, how would you imagine a group decision making process? Start from this generation, people are born as digital natives. How would that affect the decision making process or democracy?

Who are we making decision for? Who owns the democratic political body? What rights do participants have? How will it be maintained?

Decision making process will change rapidly and and become extremely rapid. At this moment of today, technologies are ready to form consensus for participants among the same shared reality. But, the question is: what do we want?

We imagine a virtually connected network of physical and virtual spaces where people appear and form consensus together. It transcends the dimensions of time and space; it provides equal room for listening, and introduce new model for global interaction. And how exactly it could work?

Here are some hashtags we found related, welcome to help add a few for us!

#digital native #collective decision making process
#reflective space #recursive public #public ownership and common ownership
#collecting knowledge #wisdom of crowds #pol.is
#shared reality #decision theater #mgov
#scalable listening
#ict geared deliberation

APPENDIX

TIMELINE

Jul, 2017	Aug	Sep	Oct	Nov	Dec	Jan, 2018
Never ending research and connecting with people internationally						
	Meet Inami@Taip ei					
		Very concentrate on prototyping				
		civictechfest.org	press :tea: decidim		Demo & review	

REFERENCES

[Reinventing Democracy](#)

[Pol.is in Taiwan](#)

[Digital Tools Open Up Taiwan's Democratic Imaginations](#)

[Audrey Tang | Stories From the Future of Democracy: Taiwan \(transcript\)](#)

[Uber responds to vTaiwan's coherent blended volition](#)

[public online survey](#) on Uber case with polis

[Virtual Reality for Civic Deliberation](#)

[Towards Plurality](#)

[VTAIWAN: PUBLIC PARTICIPATION METHODS ON THE CYBERPUNK FRONTIER OF DEMOCRACY](#)

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https://www.parc.com/content/events/attachments/Garcia-Vivacqua-CI_MESA.pdf

<https://culanth.org/articles/157-geeks-social-imaginaries-and-recursive-publics>

<https://scholar.harvard.edu/glichand/mgov>

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Regulation Room

Decision Theater

FIELDS HIGHLIGHT

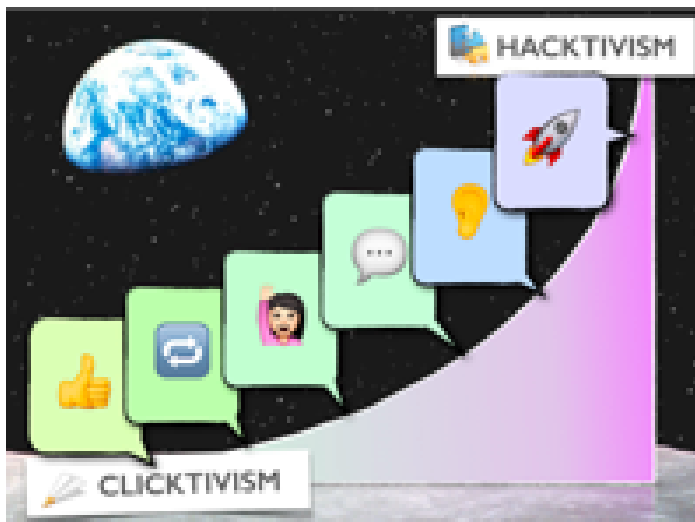
Virtual Reality, Shared Reality and Reality



VR: Virtual Reality. It is not meant to replace human contact, but rather to provide a completely new way to interact. In the past, pencil and paper, telephone and audiovisual media have all played this role.

What is so special about VR is that it can transcend the dimensions of time and space, bringing a stronger sense of coexistence to participants, which helps foster common understanding and eventually leads to spontaneity, interaction and pursuit of the common good.

Democracy, Deliberation, Polis



Actually, I'd like to invite you to think of Democracy itself as a game with a purpose, with voting as its entry level, equivalent to clicking "Like" on social media.

Open data takes it a level further — when all budgets, laws and statistics have their place on the web, we can share their links together to get a bigger picture.

Forums are useful too — when questions are answered in a timely fashion, it bridges the gap between public servants and the civil society.

Then we can have meaningful discussions — where people talk about issues openly, discovering new facts and sharing each other's feelings.

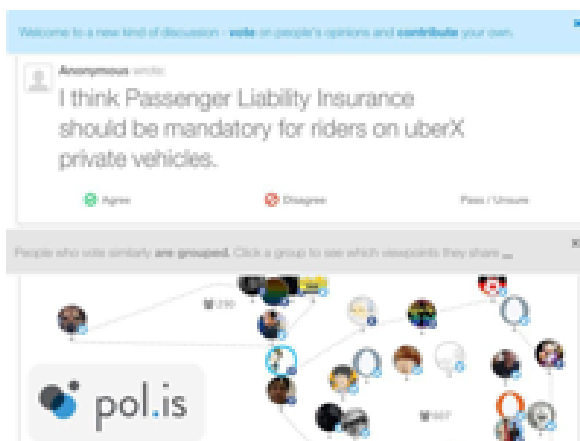
Deliberation takes it to a whole new level — when elected officials and private-sectors companies listen to the civil society and pledge their commitments in the open, the civil society can listen back, too.

The final level, true agenda-setting power, can never come from above, because it changes the rule of the game. It only emerges naturally, when we are ready to share the purposes of our lives, through authentic facts, feelings and ideas — not ideologies.

A proper deliberation involves four stages:

- Facts: "What do we know?"
- Feelings: "How do we react?"
- Ideas: "What are the possibilities?"
- Decisions: "What can we all agree on?"

However, if the decision-making process is not transparent, we don't get access to same facts as the policy-makers.



Future Democracy, Digital Democracy

In today's democracy, fostering empathy through communication has become more and more important due to the diverse backgrounds and value systems of citizens. This is especially true for government officials and agencies. In the previous century, judgment and professional abilities were the most important attributes in a country's leader or a government official. But nowadays, the ability to build consensus may be equally important.

Before, democracy was a showdown between two opposing values.

Now, democracy is a conversation between many diverse values.

To build a united democracy that is not hijacked by ideology;

To build an efficient democracy that responds to society and economy;

To build a pragmatic democracy that takes care of the people;

— — this is our experiment in reinventing democracy.

Re:public Inc., Speculative Design, Futuristic Design

[Civic Futures for Re:public](#)

Ideas from Colin, Pol.is

1. MORE SPACE

There are many places in pol.is, in the visualization, that we wanted to show things and didn't have enough room. This is a fertile area for exploration. For instance, the 'opinion space' of the graph, in other words, the x & y coordinate plane, is 'defined' by comments. Comments have a 'position' in the x & y space, and then people are positioned closest to the comments they agreed with and further from the ones they disagreed with. Because of space, we don't show the comment text, but this is the whole reason pol.is is confusing! If we could show the text of all the comments, it would be very clear that people who are 'over in this area' tended to agree with 'this set of comments.' Showing this visually will make the entire experience _much_ less abstract. We don't even show all of the people who have logged in with social media! We have in some conversations 200 people who have logged in, we show maybe 20. Showing everyone, and everyone who is in the conversation but anonymous (maybe as a little orb), would be neat.

2. REPRESENTING TERRITORY

How we represent 'territory'. In VR, maybe this is actual territory. The idea of 'common ground' is real in pol.is, there are things which only some groups agree with and there are things which unify and are 'under everyone's feet'. This could be a visual metaphor in a better and more tactile way than we were able to do with the web medium.

3. TRANSPARENCY

Another fertile area are things that we don't show because they would be distracting. For instance, we don't show comments which have been moderated out. But we should! There should be an area that is 'fenced in', maybe, or a 'garbage dump', where statements that have not made it into the conversation can be argued over. If these comments are in an 'area' with a 'sign' indicating what they are, it is obvious.

4. INSTRUCTIONS & TUTORIALS

Instructions and tutorials. In VR, it's easier to imagine having a robot 'go through and perform' the actions that we are expecting the users to perform. This is typically not intuitive and quite difficult in web. Lots of room for innovation and invention here.

5. MULTI-CONVERSATION

How conversations relate and connect to one another. One way to do this might be to have one building or 'area' or even floating island per pol.is conversation, and walkways or bridges between them. Having one conversation implies having many more other conversations, usually, and this will branch out like a tree. Showing the structure of the path of inquiry would be helpful to orient users, to say 'one week ago we were over there. The conversation has concluded, but you can go explore and see what happened. Now we are over here having these four conversations.'

6. TASKS

Extra tasks. People could label comments as emotion or fact, or moderate new statements, or tag/label/categorize comments...

7. MIXING GROUP REPRESENTATIVES

Social connections. In each group there are people who are extreme, and people who are not so extreme. What about taking a few people from each group who are not that extreme (pol.is has an API that will give you people like this, a Brazilian team asked us to build it), and put them in the same space to have a more in depth conversation.

8. DELIBERATION STRUCTURE AND PROCESS

Another area to look at is the structure and process around the deliberation itself. What if the phases of vTaiwan were reflected in physical (virtual) architecture? This is common in games, where certain tasks are performed in certain buildings. vTaiwan the process gets a 'campus'. This could also be reflective of the stages that have been

developed in platforms like Consul and Digidem. Having a campus for deliberative democracy that implies process and instructs the various actors of their roles would be a very interesting way to replicate the process. If everyone joins a 'branded' campus for their city or country, the best practices could be more and more baked into the fabric of the virtual world.

PARTNERS

Organization Name	Description	Link	Note
Polis	pol.is. focused on creating a tool that leverages machine learning to scale up online discussion.	http://pol.is	Colin Megill
PDIS	Incubate and facilitate digital innovation and service. Working to implement the open government principles: Transparency, Participation and Accountability. How might we refashion democracy to share agenda-setting power with the people?	http://pdis.tw	Audrey Tang Shu Yang Lin Mark Dai Fang-jui Chang Shirley Li-Ting Huang
Microsoft Hololens Team	MR+VR device and experience maker	https://www.microsoft.com/en-us/hololens	Matt Stempeck Ching Chen Herman Wu
Re:public	Think & do tank that makes Japan a more creative place, with a group of people who pursue architecture in	http://re-public.jp/	Tamura Hiroshi, Yuki Uchida, Fumiko Ichikawa, Ryo Shirai

	innovation.		
*xlab (Keio Uni)	Activating the physical. Bring virtual world to physical space. By illumination through digital pixels, physical objects can virtually change it's appearances. Hack into shape, movement, color and other material behaviors.	http://www.xlab.sfc.keio.ac.jp/	Prof. Kakehi Yasuaki
*Daijiro Mizuno	fashion design and design research, inclusive design and digital fabrication	http://www.daijirom.com/	Dr. Daijiro Mizuno
...			

SATELLITE SPACES (INVITING)

- Taipei, Taiwan
- *Tokyo, Japan
- *Yokohama, japan
- Barcelona, Spain
- ...

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The entire process will be tracked/recorded/logged and made available online

SOME QUOTES WE LIKE :)

“We need to build a unified democracy, not hijacked by ideologies; an efficient democracy that responds to the demands of the environment; and a pragmatic democracy that will let people take care of each other’s feelings.” - Dr. Tsai Ing-Wen

“We do this just by listening, and building technologies that help us listen to each other.” - Audrey tang

ACTION LOGS & NEXT STEPS

Action	Participants	Link	Date
Pol.is vr ideation	Polis, PDIS		27 Jan 2017
Pol.is with AR/VR setting	PDIS, Polis		9 Feb 2017
Audrey, Colin talk in PDF'17	Audrey, Microsoft	Stories From the Future of Democracy: Taiwan Stories From the Future of Democracy: The Promise of AI	9 June 2017
Brainstorming	g0v, PDIS, Microsoft	https://realtimeboard.com/app/board/o9J_k03x7MA=	28 June 2017
Holopolis project	PDIS, Polis		10 Jul 2017
Invite International Partners	Re:public, Shuyang		
Idea sketch & poc preparation			
Rapid prototyping and proof of concept	PDIS, Microsoft		Mid Sep - mid Nov

DEVELOPER REFERENCE

<https://docs.unrealengine.com/latest/INT/Platforms/SteamVR/QuickStart/2/index.html>