Reinventing Democracy through Civic Deliberation

"Deliberation — listening to each other deeply, thinking together and working out something that we can all live with — is magical." — Audrey Tang, Digital Minister without Portfolio of Taiwan

Taiwan has been experimenting with bringing citizens and public servants together in a civic deliberation process utilizing state of the art technologies for crafting digital legislation. The adoption of these technologies brings a more transparent, responsive, and participatory deliberation process, which is the core of public participation and the open government movement. By openly aggregating shared wisdom from the society on a regular basis, the experiments created a recursive public, an open and interactive community environment that keeps track of updated rough consensus for crafting legislation and regulation for the society. We call this process vTaiwan – v for virtual, vote and voice. vTaiwan brings people directly into governance and helps lawmakers implement decisions with a greater degree of legitimacy. We see our project as an adaptable and reproducible prototype for future democracy.

It is our priority to support all people in participating fully and freely. We utilize the power of web and AI to provide full remote participation for large groups of participants. Now, we are taking the platform to the next level by bringing participants into a shared virtual reality environment. We call this project Holopolis. This virtual environment that Holopolis creates will welcome people with different learning inclinations to participate and contribute freely in the ways they are most comfortable.

We believe that by using technology creatively humanity can facilitate deep and fair conversations, form collective consensus, and deliver solutions we can all live with.

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Holopolis: Commons for All

Holopolis, the project's name, is derived from two Greek words, $\delta\lambda o$ (holo) and $\pi\delta\lambda\iota\varsigma$ (polis). Holo means "whole, entire, complete". The word "holography" also suggests a three-dimensional projection of a subject that creates a shared experience with all surrounding viewers. "Polis" means "affairs of the cities" or "city-state". In combination, the project Holopolis hopes to prototype a space that is shared by all participants, an interactive environment that is crafted by the senses of the group, a commons for all.

What is politics?

"Politics is the matter of managing the populace. (政治是管理眾人之事)", said Dr. Sun Yet-sen, founder of the Republic of China. It is a widespread quote, but, why does the populace have to be managed? What are other definition of politics?

There are several ways to interpret politics, and one of the most accepted definition by far is: the process of making decisions that apply to members of a group. This sounds like a series of action that conducts decision making process, but if we go back to its very root of the definition, 'politics' is derived from a Greek word 'polis', which means "affairs of the cities" or "city-state". Then, the definition of politics here becomes a status that describes the mechanism how a group functions.

Hiroki Azuma, a Japanese philosopher, made a comment in his book << General Will 2.0>>: "I think the essence of politics is to craft definitions, it is the act of demarcating boundaries." This might just artistically give politics a new look: the definition of politics is the act of crafting definitions.

Then this leads to a series of questions: who are the people that conduct the act of making definitions? In a democratic system, and according to the Greek root of democracy, democracy literally means "rule of the people", but what does democracy offering the citizens living within? Or rather, what could have democracy offered us if the technology were ready? Are we asking ourselves "where shall we go as a society?" and "What do we want from technology?"

Origin of the Internet

J. C. R. Licklider, known as father of the Internet, wrote that it is important to not only seek to consider the public interest, but also to make it possible for the public to be involved in the decision making process. In his memos when he worked for ARPA (Advanced Research Project Agent), when facilitating the birth of the Internet, he and his colleagues knew if the computers could talk to each others, if computers could be connected and tackle collective problems, this technical origin will also stimulate other origins as well.

[Decisions] in the 'public interest' but also in the interest of giving the public itself the means to enter into the decision-making process that will shape their future.

In other words, the origin of Internet also gave birth to the origin of digital democracy. And that, led to the start of the project holopolis, aiming at prototyping a future democracy with emerging or existing technologies.

vTaiwan – a beautiful hybrid born of years of evolution in democracy and technology

Public participation in Taiwan has been developed in several formats, from face to face, radio broadcast and telephone call-ins, to deliberation over the internet. This trajectory coincides with the advancement of technology we sensed. New technology arrived — democracy evolved. In 2014, riding on the era of self-media, when digital natives wouldn't hesitate to become YouTubers, to share selfies and Vine videos on social media in regular basis or in live, the Sunflower movement took place. Students in Taiwan wouldn't bare with the MP's unwillingness to deliberate about a service trade deal with Beijing Office so that, the students occupied the parliament for 22 days and conducted a real deliberation, with the entire process live-streamed.

That led to the launch of vTaiwan, an experiment that prototypes an open consultation process for the civil society. After sunflower movement, the government didn't go back and sit in their silos. The former minister of cyberspace affairs, Jaclyn Tsai, went to one of the hackathons organized by the largest civic tech community, and proposed to have a platform that allowed the entire society to engage in rational discussion. People in hackathon took the challenges, and that was the start of vTaiwan.

vTaiwan takes shape into a platform and consultation process for the civil society, including governmental officials and civil servants to come together and deliberate on public policies. It has various touch points such as a website, a combination of meetings and hackathons along with a consultation process. vTaiwan is a platform of the society, including government, to conduct deliberation on public issues related to cyberspace regulation reform. It brings people directly into governance and helps lawmakers implement decisions with a greater degree of legitimacy.

vTaiwan creates and open space with open format. It invites all actors to participate in discussion and to decide the agenda. vTaiwan process has also been formed by the community participants iteratively. Therefore, its space, environment, process, experience and the environment has been developed in several varieties through the past three years. The result is an extremely flexible space formation that connects physical room with digital interfaces according to group size for each discussion; an interactive environment crafted by vTaiwan contributors, which could mean anyone.

Holopolis – bringing vTaiwan's online-offline spaces to a mixed reality, an immersive shared experience

As the experiment of vTaiwan is still on, with a recent focus on providing people to participate fully and freely through modern and cutting edge technologies. We have utilized the power of web and AI to provide full remote participation for large groups of participants, and we are now taking the platform to the next level by bringing participants into a shared reality environment.

This virtual environment will welcome people with different learning inclinations to participate and contribute freely in the ways they are most comfortable. We believe that by using technology creatively humanity can facilitate deep and fair conversations, form collective consensus, and deliver solution we can all live with. We named this project *Holopolis* as in envisioning a virtual projection of real world cities, where citizens come together, commit and conduct deep deliberation.

Kick-start phase: open project, brainstorming with prototyping

Holopolis is an open project that welcomes all people interested to participate. We see Holopolis as a collective of many small projects instead of a single giant one. We post the background of Holopolis, our realtimeboard brainstorming canvas, insights from research/interview/fieldwork and design challenges. Anyone can contribute with projects that relate to the theme. New ideas and prototypes are especially welcome.

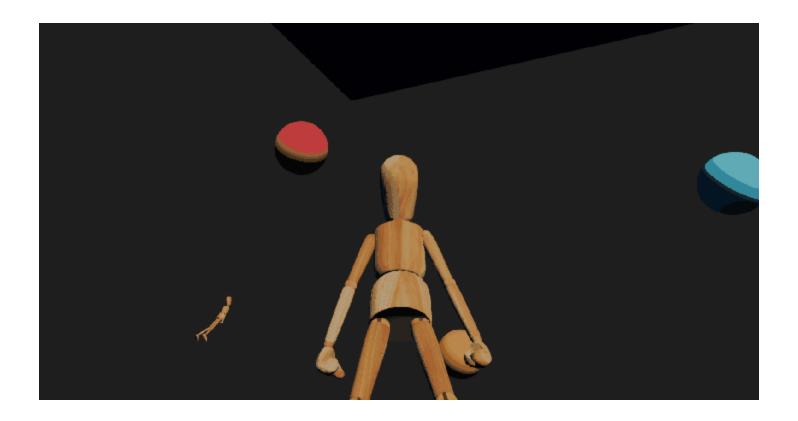
At the moment, we have attracted contributors from more than five countries in the world, with various backgrounds including developers, designers and researchers who work together and share ideas and prototypes for reinventing democracy.

Here are three prototypes contributors in Holopolis project published:

Prototype 1: Holopolis HiFi

Holopolis HiFi uses the <u>High Fidelity VR platform</u> to create a virtual commons. It imagines a far future in which we can all connect to and immerse in public policy deliberation anytime we choose.

This may be helpful for challenges like climate change that span country borders, and for larger questions of directions for our society.



"A recursive public is a public that is vitally concerned with the material and practical maintenance and modification of the technical, legal, practical, and conceptual means of its own existence as a public; it is a collective independent of other forms of constituted power and is capable of speaking to existing forms of power through the production of actually existing alternatives. Free Software is one instance of this concept, both as it has emerged in the recent past and as it undergoes transformation and differentiation in the near future. There are other instances, including those that emerge from the practices of Free Software, such as Creative Commons, the Connexions project, and the Open Access movement in science." – From Two Bits by Christopher Kelty

One of the ultimate outcomes from open government initiatives might be a virtual commons where all citizens can log in for public participation. Imagine a virtual world connects the society, information, always updatable and most updated regulations and rules that

define how the entire society prefers to interact within, we set up a virtual environment on a server that runs High Fidelity, and simply started jamming and scripting within.

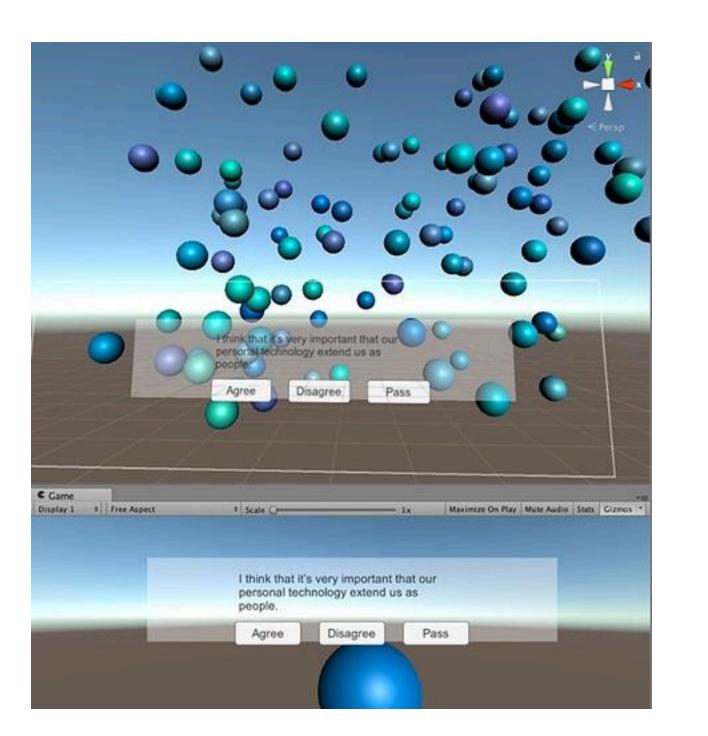
Prototype 2: Holopolis Mixed Reality (MR)

Holopolis MR consists of several public virtual forums for discussing public issues, and the forums would be distributed among the city's public space where those issues could tie to, such as a pop-up virtual forum about the lack of parking spaces situated in a real parking lot, another discussion about design of priority seats at real priority seatings at metro or subways in public transportation.

Holopolis MR imagines the uses case in the near future, when MR headsets are more popularized. It turns on the GPS with computer vision feature so that the users can bump into virtual public forums such as a forum setup next to the priority seats.

Despite the naming war of AR/VR/MR/XR, the substance of connecting information, overlaying visualization and designing interaction between real and virtual world brought us to a journey that explores possibility to immerse in public participation in real field, to conduct civic engagement in the city. Shipment of Microsoft's Hololens in 2016 enables this idea. Hololens is a self-contained holographic computing headset. It transmits the world around users from another point of view, and we curated this point of view to a world for civic engagement.





Holopolis MR enables users to engage in a world of digital content overlaying the real world surrounding them, and interact with holograms within. We could present crowdsourced questions and comments from the citizens in Holopolis MR to another citizen and ask for further feedback or comment.



Prototype 3: Holopolis bot

Holopolis bot allows always available participation. It packages vTaiwan as a contact you can add friend with and share your opinions on cases under discussion.

