

Intervista a Tamiko Thiel

a cura di Sofia Pirandello

Tamiko Thiel (Oakland, California, USA, 1957) è considerata una pioniera della Digital Art. Nel suo lavoro ha utilizzato spesso tecnologie di AR, VR e MR, realizzando numerose opere che esplorano la relazione fra spazio fisico e digitale, indagandone le potenzialità politiche e narrative.

SP You graduated at Stanford University and at the MIT in Mechanical Engineering: could you tell me something about your career? How did you become an artist starting from such an education?

TT My degree from Stanford was in Product Design, which at that time, in the late 1970s, was one of the very few programs in the USA where you could take classes in art, design and engineering. It was that specific mixture, plus the focus on human factors (how the product related to the human body and the user's sensory perception), that attracted me. I worked for two years at Hewlett-Packard, in those days a leading manufacturer of technical equipment and computers, and brought two products to market. It was an incredibly supportive environment for a young female engineer, but I somehow wanted more. My social circle included researchers from Xerox PARC, where the windows and mouse system we all use now was invented, and at Apple, where (I found out later) my best girlfriend Joanna Hoffman was on the secret team that was developing the first Macintosh. Everyone else seemed to be doing very exciting things, but they weren't right for me. All I could think of doing was either to continue being an engineer, or to become a manager of engineers, and I couldn't believe that was all there was to life. So, I went to MIT for my graduate studies in the hope that a complete change of



Fig. 1 – Tamiko Thiel, *Reign of Gold*, augmented reality installation, 2011. Seen in front of the New York Stock Exchange, Broad Street façade.
Courtesy of the artist

scenery would reshape my life. And it did: after I fulfilled my required courses for my Mechanical Engineering major, I discovered the predecessor to the MIT Media Lab and took the second half of my studies in those departments: The Architecture Machine Group and Visual Language Workshop. I decided then and there I would become a media artist and learned computer graphics programming (which at that point in the early 1980s mostly meant creating spinning boxes!) and how to use computers to address art and design problems.

SP Why did you decide to employ AR in your works? What brought you to experiment with this technology?

TT I had been creating site-specific VR artworks for the last fifteen years when, in 2010, Mark Skwarek and Sander Veenhof introduced me to mobile AR by inviting me to participate in *We AR in MoMA*, their AR intervention into the Museum of Modern Art in New York. I realized that AR allows me to select the site as a given, and only have to create the artworks to enhance it, rather than first having to create a virtual reconstruction of the site. My early VR projects (1995 – 2010) were all five-years projects because it took me several years to first simulate enough of the site to provide the “stage set” for my artwork. With AR, the site was already there; I just had to enhance it with my artworks.

SP This is so interesting. I think this is the case with *Unexpected Growth*: how did you conceive that piece in relation to its specific environment?



Fig. 2 – Tamiko Thiel and /p, *Lend Me Your Face!*, participatory deepfake artificial intelligence installation, 2020. Installation view in “Götzendämmerung,” group exhibit of the Artists Association in Haus der Kunst, Munich. Courtesy of the artist

TT I had been working with climate change issues in earlier pieces, *Biomer Skelters* (2013, with my Manifest.AR co-founder Will Pappenheimer) and my solo piece *Gardens of the Anthropocene* (2016). *Unexpected Growth* was commissioned for the show “Programmed: Rules, Codes, and Choreographies in Art, 1965–2018”, and required an algorithmic element in the artwork. My co-artist /p and I wanted to use Lindenmayer Systems, growth algorithms that described the growth of plants and chorals, and are used often in computer graphics. It seems boring however to use just simple geometric forms as the base elements that are repeated in the growing forms, so I hit on the idea of using plastic garbage. We had seen ourselves how plastic garbage covered uninhabited tropical islands in Southeast Asia – and found out that a lot of that garbage was actually from the West. We think we are so clean, so environmentally conscious, our beaches are garbage free because we “recycle” it – and don’t realize that it is actually just sent overseas to poorer countries with less enforcement of environmental standards. So I wanted to bring this garbage “back” to the people who created it. The Whitney stands right by the Hudson River, and I imagined the waters rising, putting the 6th floor terrace underwater, where our plastic waste coral reef would grow to cover the entire terrace.

SP **Since you and the other artists of Manifest.AR are considered to be the pioneers of AR political art I would like to ask your opinion of possible pros and cons of using this particular tool for the activist sake.**

TT The pros are that you can place whatever you want wherever you want, without having to receive permission and permits from the authorities. The cons are that no one will know about it unless you manage to reach them by social media or other forms of PR – no one will just stumble across it.

SP **For example, how did you communicate to the public that *Reign of Gold* had been released? Considering what you just said, do you think it is possible to consider this kind of artworks a successful political demonstration?**

TT This was a real problem in the early days of our work, and was part of the reason that we formed the Manifest.AR group: to bundle our social networks

and press contacts. We announced flash mobs at our chosen site, invited journalists to come, took a lot of photo and video documentation and shared them as widely as possible on our websites and blogs. As social media became more and more popular we realized that this was the natural channel to spread word of our artworks: social media postings to let people know where and when we were exhibiting what, so they could be shared by our networks. I think of AR apps, especially projects like *Reign of Gold* that can be accessed anywhere in the world, as the chance to set “AR visual memes” into the world: viewer/participants can take their own screenshots with the app and share the images through their networks as well.

SP **I think one of the most important elements in your work is storytelling. How is to conceive a narrative for a tool such as Augmented or Mixed Reality? To what extent you take into consideration the audience possible choices and interaction? Do you want the public to manipulate the story and your piece?**

TT The narrative is constructed by referring to the site and multiple layers of meaning that the site can evoke in concert with the virtual artwork. Possibilities for interaction will vary depending on the work, the site and the circumstances. The public finds their own juxtapositions of background site and foreground AR artwork and composes their own images within that juxtaposition.

SP **In your opinion, which is the most interactive and manipulable among your pieces? Why?**

TT In *Evolution of Fish* (2019, with /p) you can guide fish swarms around in your space, and also control the proportions of fish versus plastic garbage by thinking about your own movements: the more still you are the more fish you have; the more agitated, the more garbage. I really can’t stand giving users a click interface where they have absolute control, but rather prefer to create a give and take between the actions of the app and the actions of the user.

SP **Can you tell me about your piece *Lend Me Your Face!* that you created last year for the Synthetic Corpo-Reality collective exhibition at the MEET Center**



Fig. 3 – Tamiko Thiel, *Sponge Space Trash Takeover*, virtual plastic garbage intervention into the "Sponge Space" Mozilla Hubs VR space created by Cyan Planet for xR HUB Bavaria, 2020. Courtesy of the artist.

in Milan?

TT *Lend Me Your Face!* is a participatory AI deepfake installation. It was created for the exhibition *Götzendämmerung*, put on in 2020 by the Artists Association in Haus der Kunst Munich. We took one photo of each participant as they waited for entry, and by the time they reached our hall, we had rendered deepfake videos that animated their face to mimic those of various public figures (Obama, Merkel, Trump, Greta) in their famous speeches. Both the driving videos of the public figures and the deepfakes were projected on 6 large 2.5 m square screens surrounding the visitors. The participant saw their own face "hijacked" by the public figures, whether the participant supported the speech or not.

SP **And what about *Sponge Space Trash Takeover*? What was your aim with that specific artwork?**

TT *Sponge Space* is a very soothing underwater Mozilla Hubs online virtual environment created by Cyan Planet as an online virtual meeting space for xR Hub Bavaria. It is a giant underwater sponge, built with multiple rooms and screens so users could hold meetings and conferences in it. The space is surrounded by an underwater riff scene with many fish, and is very peaceful. They asked me to do an intervention in it – so what did I do? I filled it with plastic garbage! Real sponges actually do filter microplastics out of the water, so this giant sponge is filled with plastic bottles and other garbage, including slowly drifting clouds of blue



Fig. 4 – Tamiko Thiel and /p, *Unexpected Growth*, augmented reality installation, 2018. Screenshot as seen on the Whitney 6th floor terrace. Commissioned by the Whitney Museum of American Art NY, the first edition is in the collection. Courtesy of the artist

surgical face masks. My strategy here, as in pretty much all my works, is to try to seduce the viewer into engaging with the piece by offering luscious imagery, which however on closer inspection reveals a very different layer of meaning.

SP What about conservation of AR artworks in museum collections?

TT I have seen many VR and AR platforms disappear – along with all the works made on those platforms. I try to use open source software and commonly available hardware if at all possible, so that my works have a higher chance of survival in the future. I was lucky to get an early virtual reality work, *Beyond Manzanar* (2000, with Zara Houshmand), into the permanent collection of the San Jose Museum of Art in San Jose, California, USA in 2002 – as perhaps the first VR artwork collected by a US art museum. They archived the piece back then, together with the Windows 98 PC that the piece ran on at that time. In 2017 I helped them migrate the work to a Windows 10 PC, and improved the quality of many of the images used in the piece. I am delighted that *Unexpected Growth*, which entered the collection of the Whitney Museum of American Art in 2019, is similarly being archived by them. This means that both my VR platform and AR platform are being preserved, thus helping indirectly to preserve the other works I made using the same platforms.

SP Do you think you are going to use AR, MR or VR again in your next projects?

TT I am working on several AR, VR and MR projects for the future, as these are normal parts of my art practice. At the same time, I am hoping to do more work in other art forms like 2D and 3D prints and art videos, so that I can choose the medium that is right for the project, rather than being constrained by expectations of specific media.

SP So, you believe they are very promising technology. Do you think that problems like digital divide and technology accessibility, that characterize virtual technologies in particular, could compromise their actual impact?

TT In my time as a professional artist, I have seen digital art go from a very niche

medium to being a natural and normal part of everybody's daily activities: every kid and teen, and now more and more adults, are taking and editing and sharing photos and videos as part of their daily lives. Does the fact that these are digital files rather than tangible media compromise the actual impact of the media in our lives?