

Interactive Art I

The role of Artificial artworks become active

Simulate Human behaviors

1940s- Grey Walter: Tortoises

Golan Levin, Jaap Blonk: *Messa di Voce*

The animation interacted to the performers

Performance with video mapping artwork together

Raphael Lozano Hemmer: *Under scan*

Representative video mappings in the shadows

The viewers and the installations build the artwork together through their interactions

Making Artworks together with Human.

Simulate Human intelligence/ emotions

Valentino Braitenberg: *Vehicles*

Responsive

Fear/laugh/ happy

Intelligence

Ulrike Gabriel: *Tortoises Project- Terrain01*

Collective robotic

Minimal function

Behaviors controlled by viewers

lower intelligence

2000 Expo 2000 robots

72 collective rooting

Video mapping from inside

2017 mobile robotic fabrication eco-system

Cooperative variety of task-specific robots

2015 building a rope bridge with flying drones

Doing functional installations/ constructions

2015 Gramazio Kohler Architects:

Rock print

Installation creates results randomly

Architectural installation

2012 Robot readable world

Show us life through the eyes of the machines

2012 Luis Philipp Demers: *The blind Robot*

Robot explore us by touching

Create Individual characteristics and behaviors

Norman White: *The Helpless Robot*

Arrogant, interfering

Self-willed robot/

"The more cooperative you prove to be, the more dictatorial the robot becomes"

Simon Penny: *Petit Mal*

Truly autonomous robotic artwork

Anti-robot

Zoomorphic

Anthropomorphic

It's behavior arises from the dynamics of its body

Interactive Artworks impressed me

Absence and presence of Time

Modern light installation with traditional ways fo telling time by shadowing

<https://www.youtube.com/watch?v=SbyjKXHbjuM>

Wayne McGregor - A study of Time

Studio Nick- Aura

<https://www.youtube.com/watch?v=8FkBA3xTne0>

Light Installations

Explore in the installation

Audiovisual Installtion

Daniel Stryjecki

<https://www.youtube.com/watch?v=EL6mPhMCeRw>

Interactive Video Mapping

Multimedia show

(2014) The Inheritance

https://www.youtube.com/watch?v=AlchsaH_rYk&feature=emb_logo

Concepts behind: History, past, identity, freedom

Interactive Performances

Let the viewers be immersed in the environments and explore the place actively

- viewers are/ belong to part of the installations or artworks
- Invisible "interactions"— emotions are be created and transferred

VR/ AR Artworks:

- combine various elements
- Break the physical limitations
- Change perspectives and dimensions
- More possibilities

VR/AR environments

Laurie Anderson HsinChien Huang - To the Moon

<https://www.youtube.com/watch?v=VWX1hWcuZ-8>

Interactive Installations

Chris Milk - The Treachery of Sanctuary

https://www.youtube.com/watch?v=Mjdvk3dO_xLI

How Thoughts are being proceeded, struggled and changed

Interactive Video Mapping

Barbican's Rain Room

<https://www.youtube.com/watch?v=EkvazjZx->

Interactive to the position where visitors stand

Let the visitors explore the environment

Diagram 1: Artworks of the presentation

Presentation- Interactive Art I early interactive artifacts and their reception in art

I can see a pretty clear process of how Interactive Art was being developed in the presentation. By separating the steps of its developments I try to analyzing and understanding more about the idea, the needs and the concepts behind those changes. Why human want more from the artificial creatures.

Artificial robots simulated Human behaviors/ intelligences and emotions

Start from the very beginning of the development of mechanical creatures people focused more on achieving an anatomically correct behaviors, eg. The first mechanical creature “Tortoises” (created by Grey Walter).

The machines, vehicles or robots started imitating the basic movements of human.

Then we started adding not only physically behaviors on robots but more deeper like emotions and characteristics from robots. As a viewers we also change our perspective from only observing the robots, but have more emotionally interactions with robots. What I saw in the videos is, when a robot can laugh, can cry and showing their feelings even something negative, the distance between we and the robots are reduced. It seems like we are not only standing out side and observe the robots, but a real communication appear. That is the thing I think human beings are seeking for. Not only from other people but started from artificial creatures.

Artificial robots can have their own individual characteristics and behaviors

So based on the humanity we need more them physical reactions from artificial creatures. Emotions, individual characteristics from artificial creatures. This became the next important demands, which people focused more on, in the history of interactive Art.

The more emotional reactions make human build connections with a robotic installation more easily. From the Videos of these interactive art works in the presentation we can see Viewers show a great curiosity toward the unpredictable behaviors of robots. The communication and interactions works perfectly and so similar like how human interact with each other. We explore the artificial creature, its thoughts and its feelings and we test and read each other and even learn from each other by observing and testing them. Very interesting is, the robots are doing exactly these things at the same time. This kind of interaction seems to be created by complicated programing and complex process of calculations, but interactions are real and happen naturally. It make me have a rethink on how a communication work between our human beings. Seems like we all have these kind of calculations in mind, and these is how a decision be made.

The role of Artificial artworks/ installations become more active

So after human can have a real interaction with robotic creatures, we start make them stronger, more powerful and have chances to play a relative dominant role in tasks. eg. in the art works, Luis Philipp Demers *The Blind Robot* (2012) and *Robot readable world* (2012). Robots started being more actively than Human in the environment. This is a very interesting and important thing in the whole precess, cause it proves that the trust between human and artificial creatures has been created. For me I would say Trust a pretty significant step in the development of interactive Art. Once the trust has been built, we let artificial creatures, robots or installations have more freedom and possibilities to do random art works. Again, our human take the perspective as a viewer, observing what and how a artificial thing doing art. Though we are observer in this situation, but the meaning of the “observer” here is totally different than how we observe the mechanical creatures like *Tortoises* in the 1940s. Cause now what we are observing is not only the behaviors or reactions, but the art works that created from them.

Artists/ Performers doing artworks with artificial installations together

This step gives human a possibility as well to work with artificial intelligence, creating or performance artworks “together”, eg. Golan Levin *Messa di Voce* (2003), or even create a environment where all the audiences can have interaction with the artwork, Raphael Lozano Hemmer: *Underscan*. More and more this kind of artworks are created through methods like video mapping or VR, AR environments.

Diagram 2: Artworks that impressed me

When I think about the interactive artworks that impressed me, I actually started listing all the artworks by rethinking about the question: what is the definitions of a “interactive” artwork?

After seeing around different kind of interactive artworks, its history and its development. I would say an interaction between human and artificial creatures can be visible or invisible. Even there's no physical interaction in some works but the viewer still can have communication with artworks through feelings and emotions. Many VR, AR projects show this possibilities and a great potentiality in this kind of art works, which is really fascinating to me.

I spent more time on looking for temporary interactive art works, and most of them are related to responsive video mapping, VR environments and lights performances. In the diagram I listed several interactive artworks that I am impressed by, through doing this, I try to analyze the directions where I want to explore and develop more.

One thing I found out from my diagram is, I really interesting in works, which lead views to another perspectives by changing dimensions from the reality world to an immersive digital environment. In this created world the interactions work perfectly and realistically. But by changing dimension every irrelevant things or things hard to be seen in the reality around us will get more attention and become more meaningful. I feel all the limitations can be broke in these kind of artworks, things can be totally out of all physically rules in the reality. And strong feelings can be created easily through this kind of artworks.

Also from these two diagrams one interesting I found is the concepts behind the artworks. Seems like human we are always seeking similar things or discussing similar topics through various techniques, methods of performances and interactions. History, memories, meanings of time, freedom, political topics and self identities and so on. We are seeking for ways to interpret our thoughts and the meaning of the world. And the intensity of expressing ideas, transferring feelings become higher through a long development of interactive artworks.

This is just my opinion and perspective after making these two diagrams, and I think I will also focus more on the concepts what I want to deliver, and through which kind of representation of interactive work to let viewers feel more and much intensively.