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Question III: Choose a historic or contemporary media artist not discussed in class to carry out independent research that draws from our study of interactive media history, theory and its concepts and forms. The artist and their work should be relevant to our study of multimedia concepts and paradigms (i.e. Interactivity, Hypermedia, Immersion).

Introduction

Design I/O is a creative studio that specialises in the design and development of cutting-edge, immersive, interactive installations and new forms of storytelling by pushing the boundaries of what is possible in the intersection between design and technology (Design I/O). Similar to Alan Kay & Adele Goldberg, I noticed that they focus more on experiences that caters to children and uses the kinaesthetic learning style to teach.

The following 3 projects by Design I/O is relevant, but not limited to, the multimedia concepts and paradigms which are Interactivity, Hypermedia, Immersion.

Interactivity

"Interactivity is the ability of the user to manipulate and affect their experience of media directly, and to communicate with others through media." (Pang, n.d.)

Roy Ascott believes that artwork should be responsive to the viewer, rather than fixed and static. He suggests that the "spirit of cybernetics" offers the most effective means for achieving a two-way exchange between the artwork and its audience.

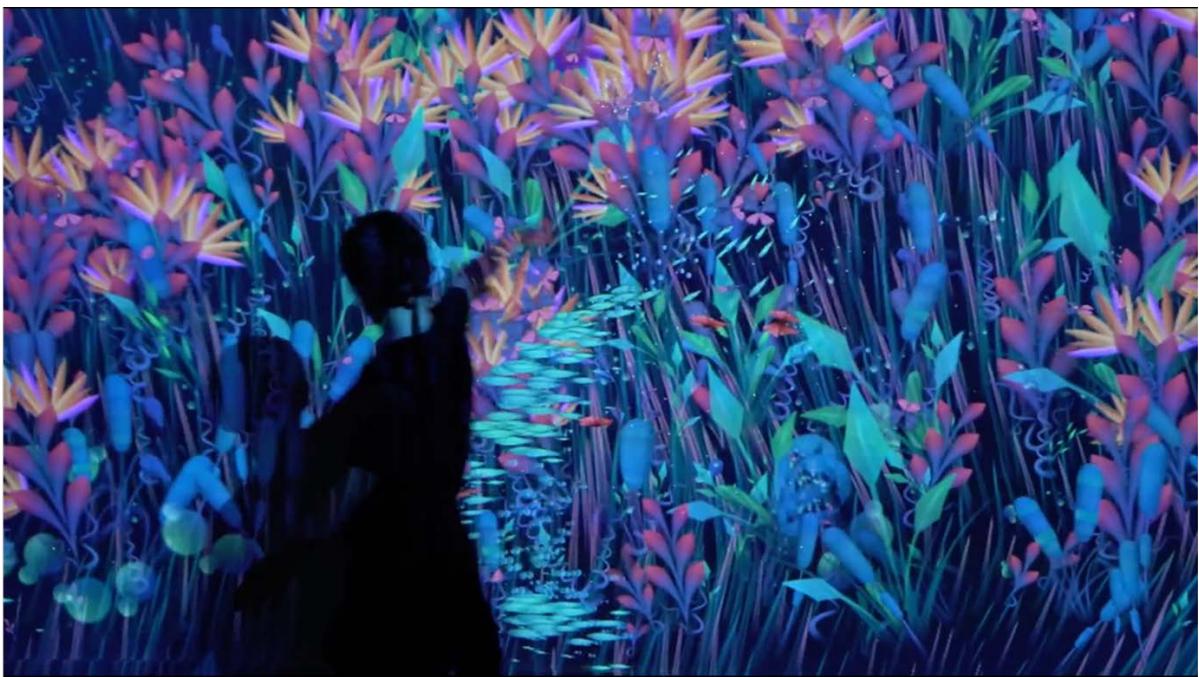


Figure 1. Design I/O, *Field* (00:23)

Field is an interactive ecosystem where visitors can transform and pollinate the environment using the movement of their bodies.

The sensors (Maybe Kinect?) capture the movements and silhouette of the bodies and translate it onto the projection with flowing particles of colour that cause flowers to bloom and grow. When participants experience the immediate feedback seen on the digital projection and are intrigued by it, they respond by continuing their interaction with the artwork by dancing and running around the artwork. It is a constant loop which makes the triad art/artist/observer an integral whole (Packer and Jordan, 2002).

Hypermedia

“The linking of separate media elements to one another to create a trail of personal association.” (Pang)

In the past, tools were invented as an extension of the human body, but never for the human mind. Vannevar Bush believed that ideas are non-linear/idiosyncratic and envisioned to have devices that operates directly as we may think.



Figure 2. Design I/O, *John Lennon: The Bermuda Tapes*

John Lennon: The Bermuda Tapes in an interactive Album App that tells the story of his life changing journey, comprising of six chapters of interactive and immersive storytelling narrated by John Lennon and more. The users are able to interact on their devices by moving, swiping and tilting, to bring to life the immersive environments and images of the story. (Design I/O)

Hypermedia is a non-linear presentation of content using text, image, audio, video elements, still or moving graphics. This app allows users to browse through information with the use of sensory input (i.e. gyroscope) to explore moving graphics, image, text, and audio. Users are also free to choose how they want to explore the app without following a specific timeline.

Immersion

“The experience of entering into the simulation or suggestion of a three-dimensional environment.” (Pang)

“A display connected to a digital computer gives us a chance to gain familiarity with concepts not realizable in the physical world. It is a looking glass into a mathematical wonderland.” (Pang)



Figure 3. Design I/O, *Connected Worlds*

Connected Worlds is an immersive, large scale installation of an ecosystem composed of six interactive walls of ecosystems that are connected together by a 3000 sqft interactive floor and a 14m high waterfall. (Design I/O)

The large-scale digital ecosystem that lives behind the screen carries a similar resemblance of liveness in real life (except for its colour and form) that represents the imaginary world behind the screen.

Participants interact and maintain the ecosystem by moving the logs on the floor to direct the flow of the stream and plant seeds to grow the ecosystem using their hands. The input of hand gestures and location of logs are captured by devices like Kinect and interactive projectors placed above the space. Like *Field*, the hand movements are translated into the digital display, activating their experience of imaginary.

By getting a real time feedback with their actions in real life reflected in the imaginary world, it's as if they are present behind the screen. As such, *Connected Worlds* also utilises telepresence where participants can feel the effect of being at another location thus immersing them into the imaginary world.

Conclusion

I love the work by Design I/O as the feedback and feedforward are very smooth, almost immediate with no delay and is also aesthetically pleasing. I believe that they used technology through the lens of art and design to design for experiences that are purposeful, interactive, and immersive. Seeing how interactive art has evolved from ideas and visions to installations like the ones by Design I/O today makes me excited for the future of interactive art.

Word Count: 762 words

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