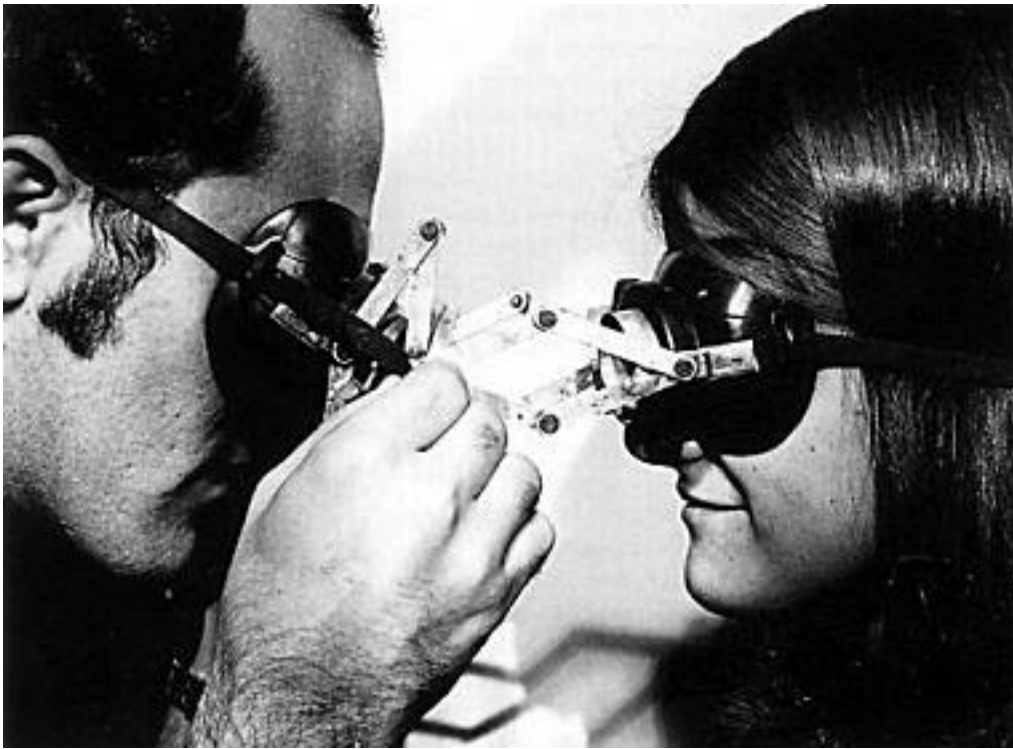


ICAM 120

Virtual/Immersive Environments: Wearing Realities



***Dialogue goggles* by Lygia Clark (1968). A conceptual art performance.**

9:30am to 12:20 pm (Tuesday)

Fall 20167

Room: VAF 228

Professor Ricardo Dominguez

E-mail: rrdominguez@ucsd.edu

Office hours: Mondays at 1:00 pm (VAF Studio 551 2nd Fl.)

Class Description:

The class will investigate the deep history of virtual/immersive environments from the paleoart of the Lascaux Cave to the histories of screenal cultures, programmed art visions and the current virtual/immersive environments being developed for Head Mounted Displays (HMD).

The class will develop 2 projects:

- 1) An individual conceptual game or platform intervention;
- 2) The final project each student will work in groups of 5's to develop, program, and produce a HMD gesture.

The students will be working under the guidance of professor Ricardo Dominguez and developing the HMD project with VR Club members.

Student Assessment is based on:

20% = Class Participation: Discussing the readings and other materials during class.

20% = Conceptual Intervention (Due November 20th)

The Conceptual intervention will be graded on: a) aesthetic risk, b) to what degree does the intervention respond to the basic protocols of the game or platform, and c) quality of the disturbance or re-frame HMD protocols or narratives. This conceptual intervention can be a 5 page paper, a story-board for an intervention, a video, an imaginary HMD, or if you have another idea outside of these, let me know, and I will consider it.

10% = Diary/Blog Process Diary about readings and conceptual development notes for your projects. The URL or .doc/PDF's will be due during mid-terms and during finals week.

20% = Collaborating with your team and producing an agreed upon HMD project. Assessment will be made on how well each student navigates individual desires, personal methods, unique style, and development process on a collective project that reflects an agreed upon frame, style, process and over all content. Each team member will be asked to evaluate other team members: great, pretty good, good, or could be better.

These evaluations will be sent to Professor Dominguez via e-mail: rddominguez@ucsd.edu and will not be shared with any other students.

30% = An HDM project. The project will be evaluated by its aesthetic risk, its use of the qualities of the platform, and to what degree it reflects the nature or speaks to the nature of the virtual/immersive sensibility of HDM.

HMD Project Builder – Unity

Download Personal Unity Game Engine: <https://store.unity.com/download?ref=personal>

General Unity Tutorials: <https://unity3d.com/learn/tutorials>

Unity Interface/Familiarity: <https://unity3d.com/learn/tutorials/topics/interface-essentials>

Code-Specific Tutorials (Scripting): <https://unity3d.com/learn/tutorials/topics/scripting>

VR-Specific Unity Tutorials: <https://unity3d.com/learn/tutorials/topics/virtual-reality>

Team taught by VR Club UCSD
<http://vrclub.ucsd.edu/>

CLASS 1 – September 27th - Introduction

Watch In Class: *Cave of Forgotten Dream* (2010) by Werner Herzog.

Class Reading: “The Metaphysics of Virtual Reality” by Michael Heim (1991)

<http://www.mheim.com/wp-content/uploads/2014/05/The-Metaphysics-of-Virtual-Reality-1991-Meckler.pdf>

Gesture: Build a “Hologram Pyramid”: <https://diyhacking.com/diy-hologram/>

or DIY 3d hologram projector using CD case & smartphone
<https://www.youtube.com/watch?v=318htTYehjQ>

or <https://www.youtube.com/watch?v=BSGDJeI2vEU>

Please be prepared to discuss reading, the documentary, and do a Hologram gesture yo present in CLASS 2.

CLASS 2 – Oct. 4th – Touching the Interface: The Telematic and The Virtual

Watch in Class: *The Mother of All Demos* (presented by Douglas Engelbart-1968)
<http://www.youtube.com/watch?v=yJDv-zdhzMY>

Watch in Class: *Centers 1971* by Vito Acconci
<https://www.youtube.com/watch?v=BIZOIoklszI>

Watch: *Ways of Seeing* (2 hour documentary):
https://www.youtube.com/watch?v=0pDE4VX_9Kk&list=PLlhSx0L1hpaGKfq1qXe1vWUhG1EgIN9Yf

Class Reading: “Touching the Interface – Interfacing Touch” by Kris Paulsen
<http://www.thing.net/~rdom/ucsd/cave/Touching%20the%20Interface.pdf>

Start investigating:

General Unity Tutorials: <https://unity3d.com/learn/tutorials>

CLASS 3 - October 11th – Simulacra and Simulation

Watch in Class: Jaron Lanier on VR History
http://media.wmeentertainment.com/w/bhcreative/jaron_lanier_speaker_session/

Watch in Class: *Tron* (1981)

<https://www.youtube.com/watch?v=1fSUos8x73I>

Watch in Class: *Lawnmower Man* (1992)

Watch in Class: *The Matrix* (1999)

Class Reading: “The Precession of Simulacra” in *Simulacra and Simulation* by Jean Baudrillard (1981):

<http://www.bconradwilliams.com/files/7313/9690/1991/Baudrillard-Jean-Simulacra-And-Simulation2.pdf>

CLASS 4 - October 18th – Gaming the Game: The Actual Intervenes in the Virtual, or Vice-a-Versa

START THINKING ABOUT YOUR CONCEPTUAL INTERVENTION

Watch: “Velvet Strike by Anne-Marie Schleiner

<https://www.youtube.com/watch?v=yAhG0PJBQAA>

Watch: “Dead-in-Iraq” by Joseph Delappe

<http://www.delappe.net/project/dead-in-iraq/>

Watch: “Shot an Iraqi” by Waffaa Bilal

<https://www.youtube.com/watch?v=DcyquvDEe0o#t=105>

Class Reading: “About Velvet Strike” by Anne-Marie Schleiner

<http://www.opensorcery.net/velvet-strike/about.html>

Class Reading: <http://seven.fibreculturejournal.org/fcj-045-reshaping-spectatorship-immersive-and-distributed-aesthetics/>

Start Working with VR Club In Class:

Read Unity’s Documentation:

<http://docs.unity3d.com/Manual/UnityOverview.html>

<http://docs.unity3d.com/Manual/Editor.html>

<http://docs.unity3d.com/Manual/Architecture.html>

[Browse Unity’s Scripts Tutorials](#) and watch at least 3.

CLASS 5 - October 25th – Becoming Virtual, Becoming Real, Becoming Transreal

Watch: “Becoming Dragon” by Micha Cardenas

<http://www.youtube.com/watch?v=pHEDym1aOZs>

Gender Sensitivity and World of Warcraft

by Angela Washko

<http://wowongender.tumblr.com/>

Watch:

http://angelawashko.com/artwork/3386990_Playing_A_Girl.html

Class Reading: “Becoming Dragon: a mixed reality, durational performance in second life” by Micha Cardenas

<http://www.thing.net/~rdom/ucsd/cave/Becoming%20Dragon.pdf>

Create a “self portrait” scene with Unity.

CLASS 6 – November 1st – Enacting Virtual Perception

Read: <http://medicalxpress.com/news/2013-07-virtual-body-impacts-perception-immersive.html>

and

<http://www.vice.com/read/how-virtual-reality-is-revolutionising-clinical-therapy-and-treatment-rehabilitation-110>

Watch in Class: Altering Human Perception and Behavior through Immersive Virtual Reality

<https://www.youtube.com/watch?v=Y-0VHEtyIR4>

Read: “Moving Into View: Enacting Virtual Reality” by Lasse Scherffig

<http://www.mediatropes.com/index.php/Mediatropes/article/view/27103>

Do Unity “Roll a Ball” Tutorial:

<https://unity3d.com/learn/tutorials/projects/roll-ball-tutorial>

(YOUR CONCEPTUAL INTERVENTION DUE NOV. 15th)

CLASS 7 - November 8th – Virtual Eros

Watch: Love Industries and Digital Sex

<http://www.vice.com/video/love-industries-digital-sex-669>

Watch: The Making of Tori Black's Virtual Reality Porn Debut:

<http://www.vice.com/read/behind-the-scenes-of-tori-blacks-virtual-reality-porn-debut>

Read: "Virtual Reality Design: How Upcoming Head-Mounted Displays Change Design Paradigm" by Christian Stein

<http://www.mediatropes.com/index.php/Mediatropes/article/view/27101/20092>

MEET WITH YOUR TEAM IN PERSON OR ON-LINE and START TO CONSIDER YOUR **HMD** PROJECT DURING THIS CLASS TIME.

Working with VR Club: UI in VR:

Interacting with a VR scene
Using the Input API
Interaction techniques
Fuse button
Gaze and tap
External Input

Check out: **Presto**

<http://presto.watch/#/>

CLASS 8 - November 15th – Cardboard Realities

Working with VR Club

Read Oculus and Cardboard Best Practices:

<https://www.google.com/design/spec-vr/designing-for-google-cardboard/a-new-dimension.html>

http://static.oculus.com/sdk-downloads/documents/Oculus_Best_Practices

<http://www.wired.com/2015/05/googles-cardboard-app-go-vr-design/>

(YOUR CONCEPTUAL INTERVENTION DUE – E-mail to Professor Dominguez: rrdominguez@ucsd.edu)

CLASS 9 - November 22nd – Rapid Prototyping Worlds

Working with VR Club

Download vrse app: <http://with.in/>

Watch “Evolution of Verse” and “Clouds over Sidra”:

<http://with.in/#films>

Read Oculus Story Studio’s blog post on Story Design:

<https://storystudio.oculus.com/en-us/blog/5-lessons-learned-while-making-lost/>

Read Unity’s manual on Terrains:

<https://docs.unity3d.com/Manual/terrain-UsingTerrains.html>

Watch: Terrain tutorial<https://www.youtube.com/watch?v=qdXT-BFz27k>

CLASS 10 – November 29th - Working with VR Club

Navigation

3D – Physics, joints, and springs
Shaders, Particle Systems and Effects

CLASS 11 - December 6th

Final Work Secession with VR Club

CLASS 13 - December 14th

WE PRESENT THE HMD WITH OTHER ICAM PROJECTS