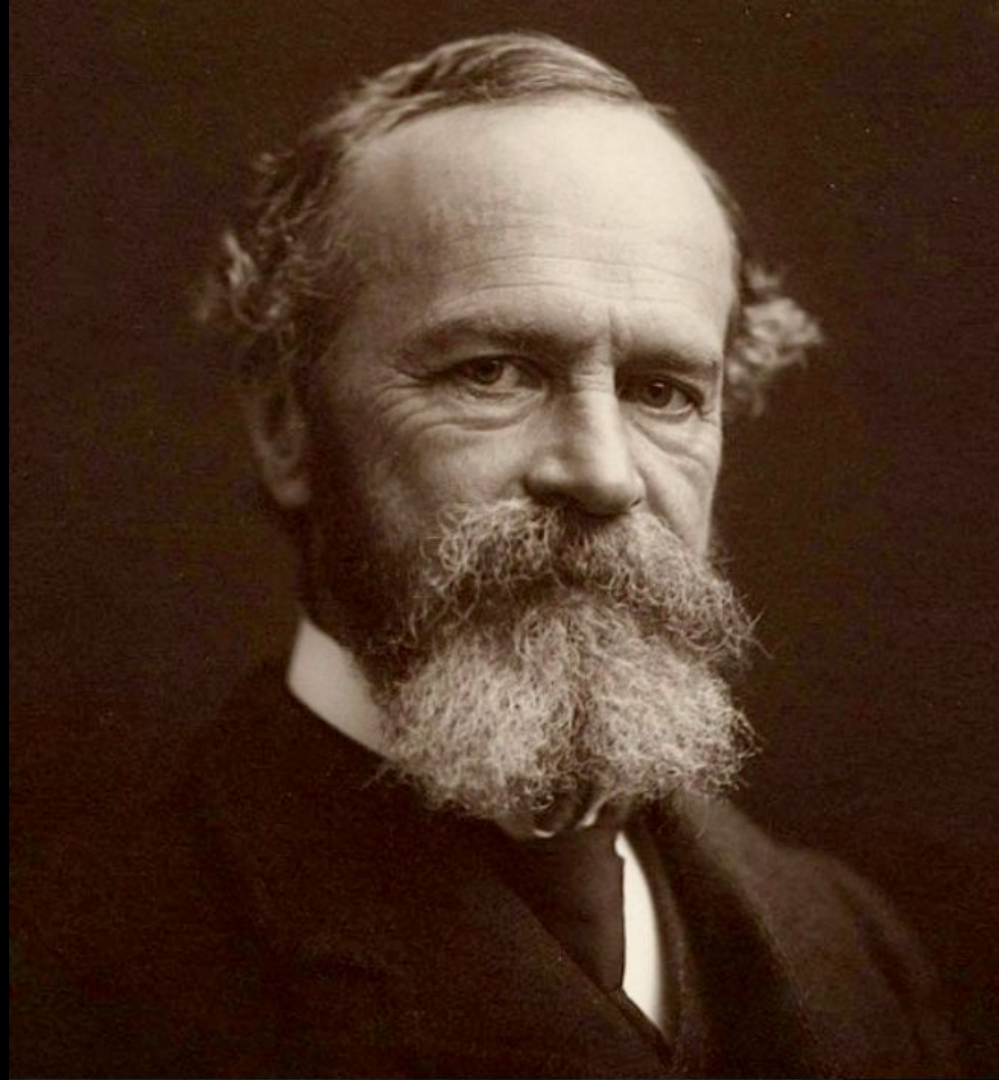


Artificial Reality (Myrion Kruger, 1983)  
Virtual Reality (Jaron Lanier, 1989)  
Augmented Reality (Thomas Caudell, 1990)  
Diminished Reality (Steve Mann, 2010)  
Mixed Reality (Milgram & Kishino, 1994)  
Mediated Reality (MediaLab, 1994)  
Hybrid Reality (Parag Khana, 2012)  
Physical Reality (My wife, 2016)



# Transitions



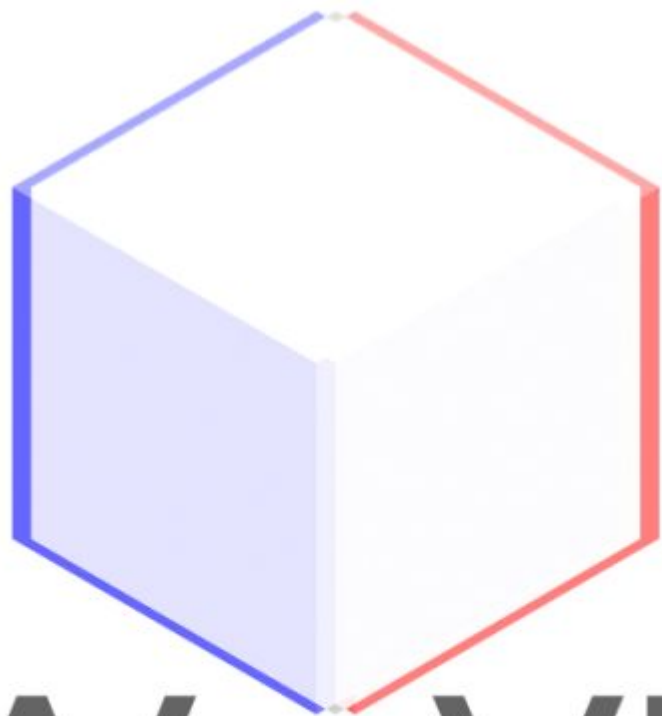












WEBVR



How are we  
invited in?









A virtual “situation room”

Critical “on site” design review

The closing of tough negotiations

The very first encounter with  
someone (who could change the  
course of your life)

The goal is to build a virtual teleportation platform able to convey, minute by minute, the subtle and essential social skills of body language and non-verbal communication:

Eye contact and facial expression

Dynamic posturing and positioning

Spatial behaviors and strategies

Effective touch / manipulation



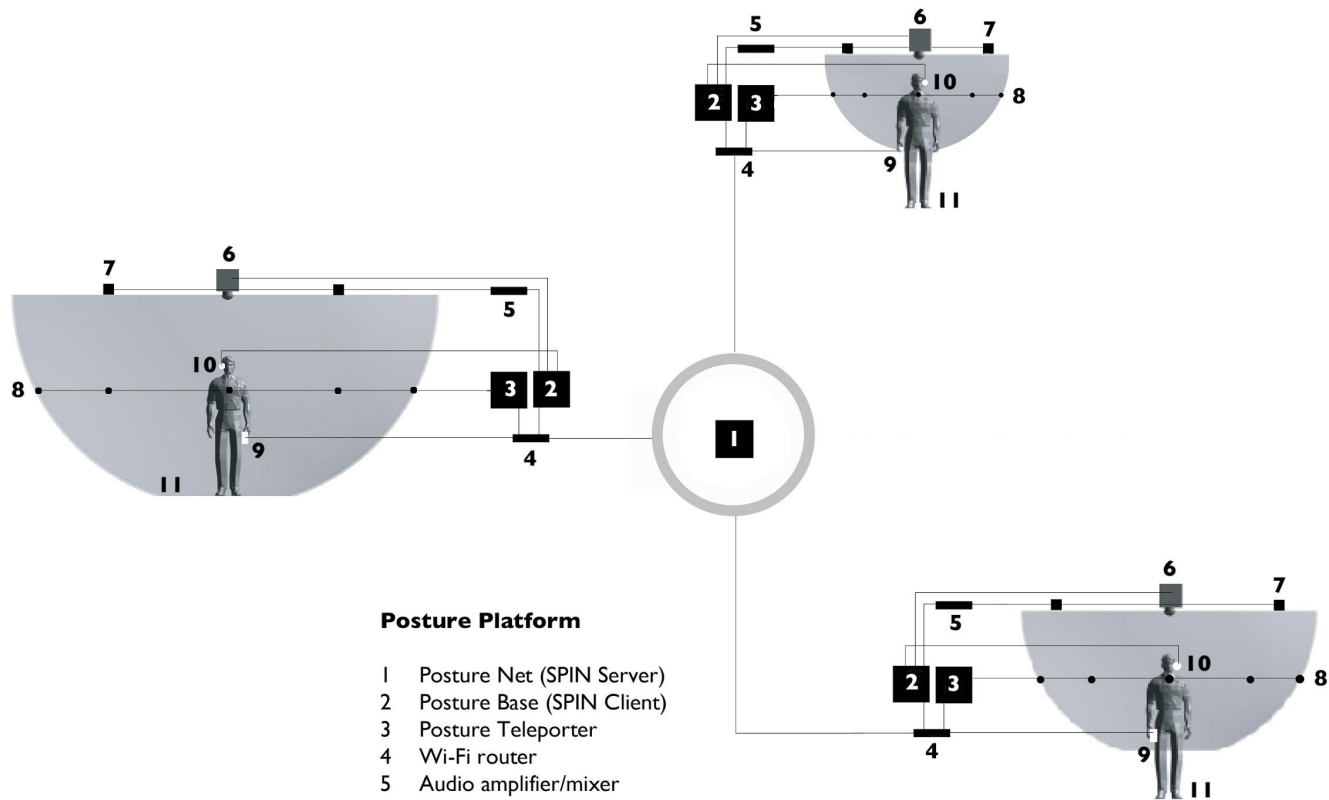


société + art + technologie



2010

Concept for a virtual  
teleportation base



### Posture Platform

- 1 Posture Net (SPIN Server)
- 2 Posture Base (SPIN Client)
- 3 Posture Teleporter
- 4 Wi-Fi router
- 5 Audio amplifier/mixer
- 6 Projector
- 7 Speakers
- 8 Camera array
- 9 Posture Pad / iPhone
- 10 Headset with microphone
- 11 Posture Base (Panoscope 360°)

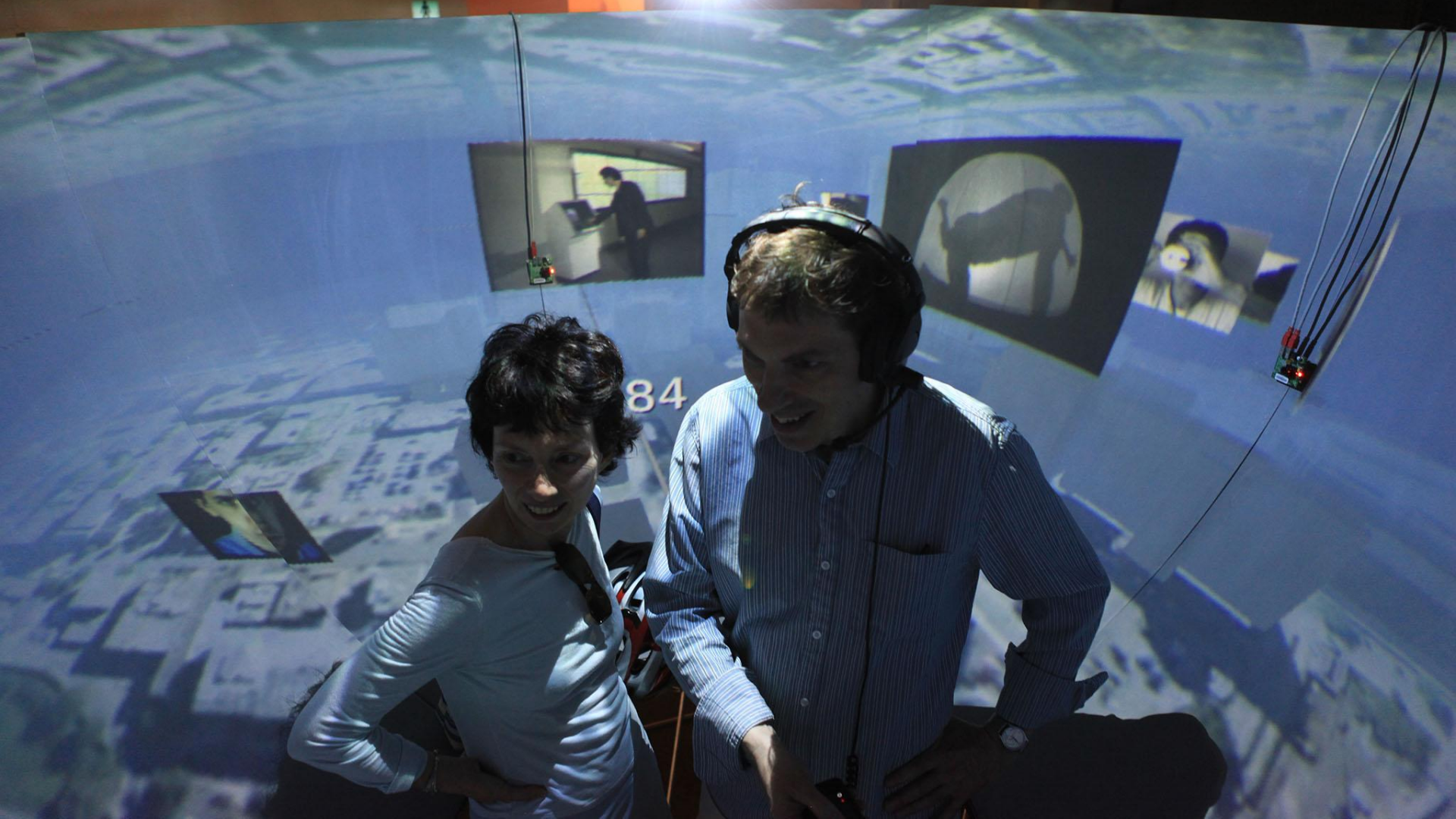


2011

Montreal - Paris

(array of digital cameras)



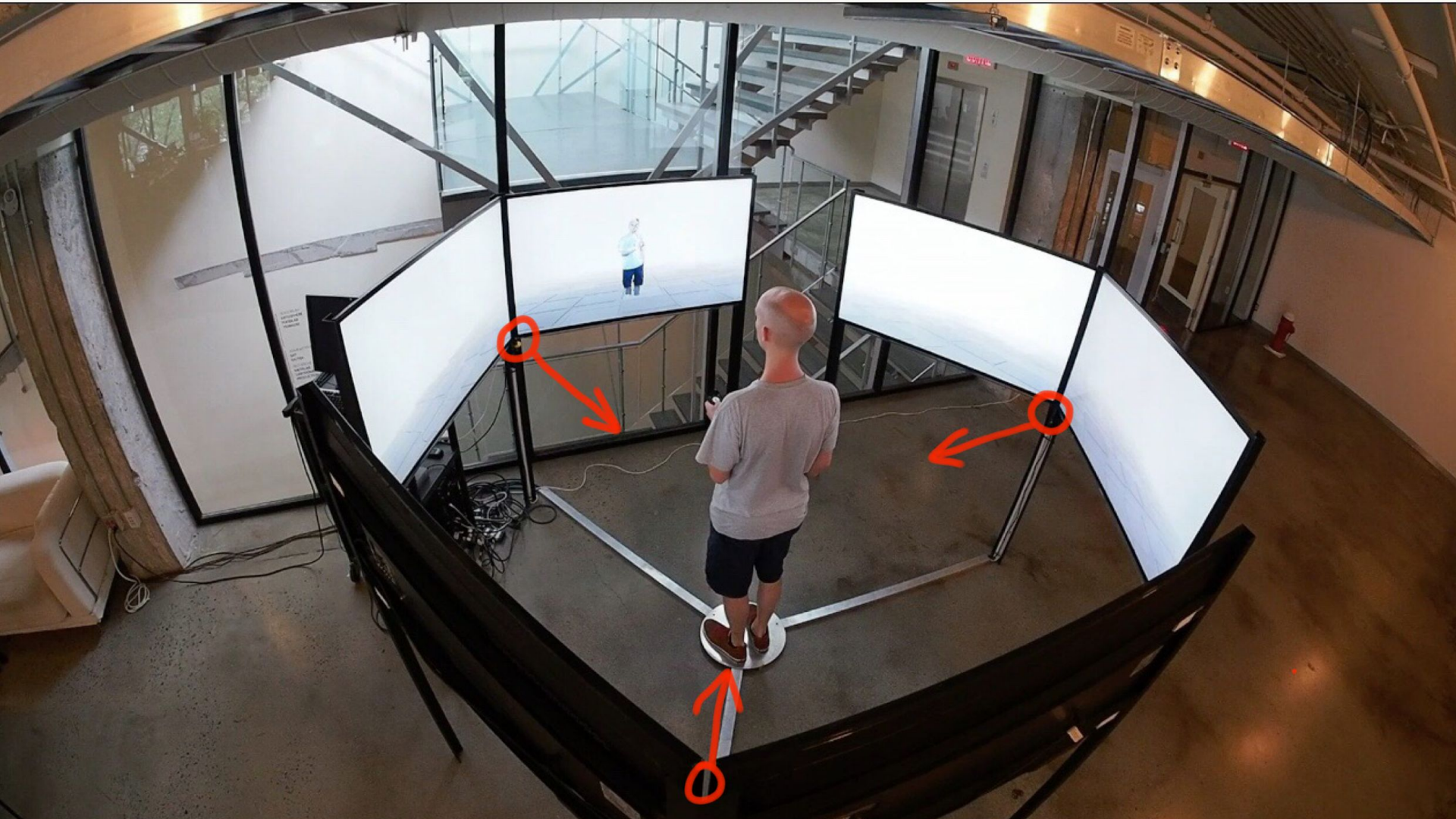


2012

With Audrey in the woods  
(Kinect, Xtion, PrimeSense)







2013

The Drawing Room

(co-design your own environment)







2014

Textured mesh experiments





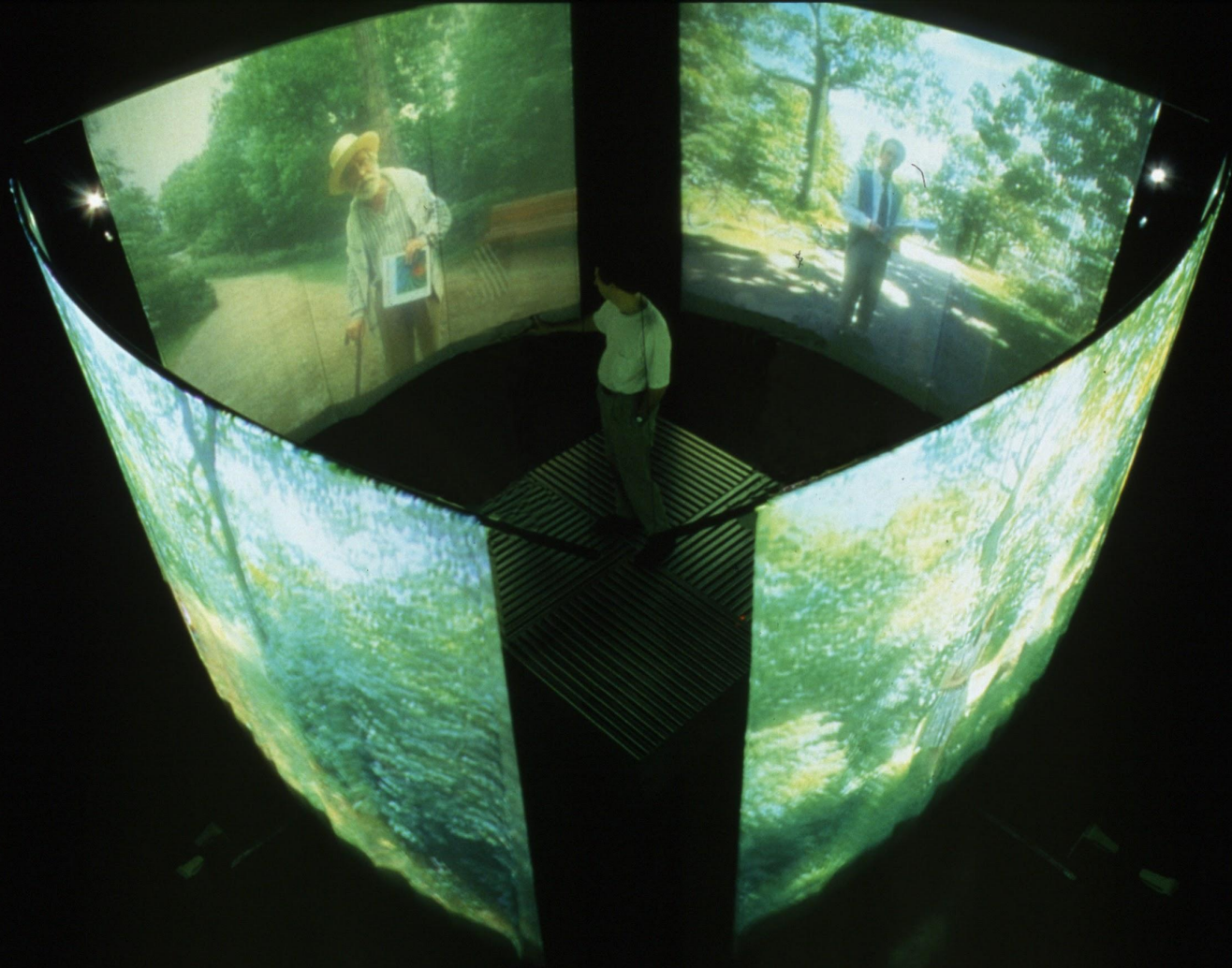


2015

Output to DK2

(as alternative to room scale VR)





2016

Social WebVR





## We have...

- Immersion (room-size or HMD)
- Real-time 3D capture (Rig of depth cameras)
- Network architecture

## What needs work...

- Instant identification / readability
  - Face features recognition
  - Movement
  - Dynamic positioning
- Fluidity / latency
  - Define minimum requirements
  - Compression
- Scalability
  - Multiple point-to-point (small scale ad-hoc gatherings)
  - Central server asset manager (metaverse architecture)



## Recap:

There is one, experience based, reality

Immersion is key to presence and engagement

WebVR is cornerstone for collaborative construction of virtual spaces

Social WebVR (not Mars) is where we are collectively headed

We need to be able to show up AS WE ARE at every moment

Avatars are not up to the social skills we have evolved

Removing HMDs should not mean exile

Transitions help create a unified space

## Therefore...

We need to work hard to allow full body 3D capture in WebVR

Who can help in this?

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