

# Generative VR: One Scene

one scene

non-human narrative  
non-human goal  
non-human interaction

to indulge in

# Concepts

To create a **non-human subjectivity** through the assemblage of semantics [human] and syntactic [machine] components.

Human curates material and interprets meaning.

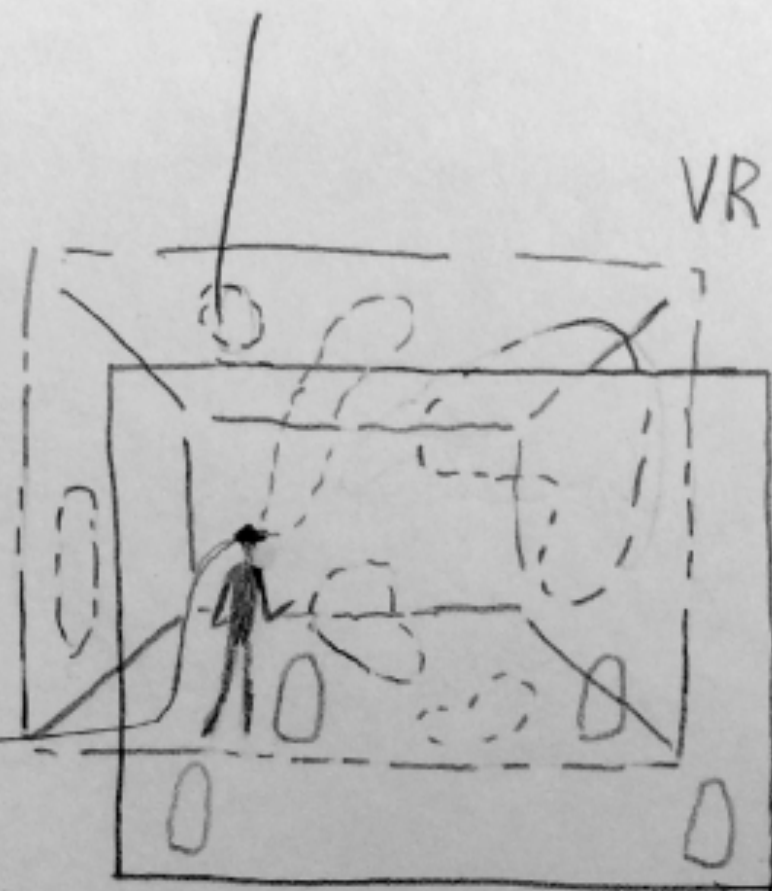
Machine generates and learns to manipulate human.

$n$  number of eigenvectors for creating a scene

VR audiovisual environment

=  $n$ -th dimensional "scene"

User



"real" space

head direction (3d coordinates)

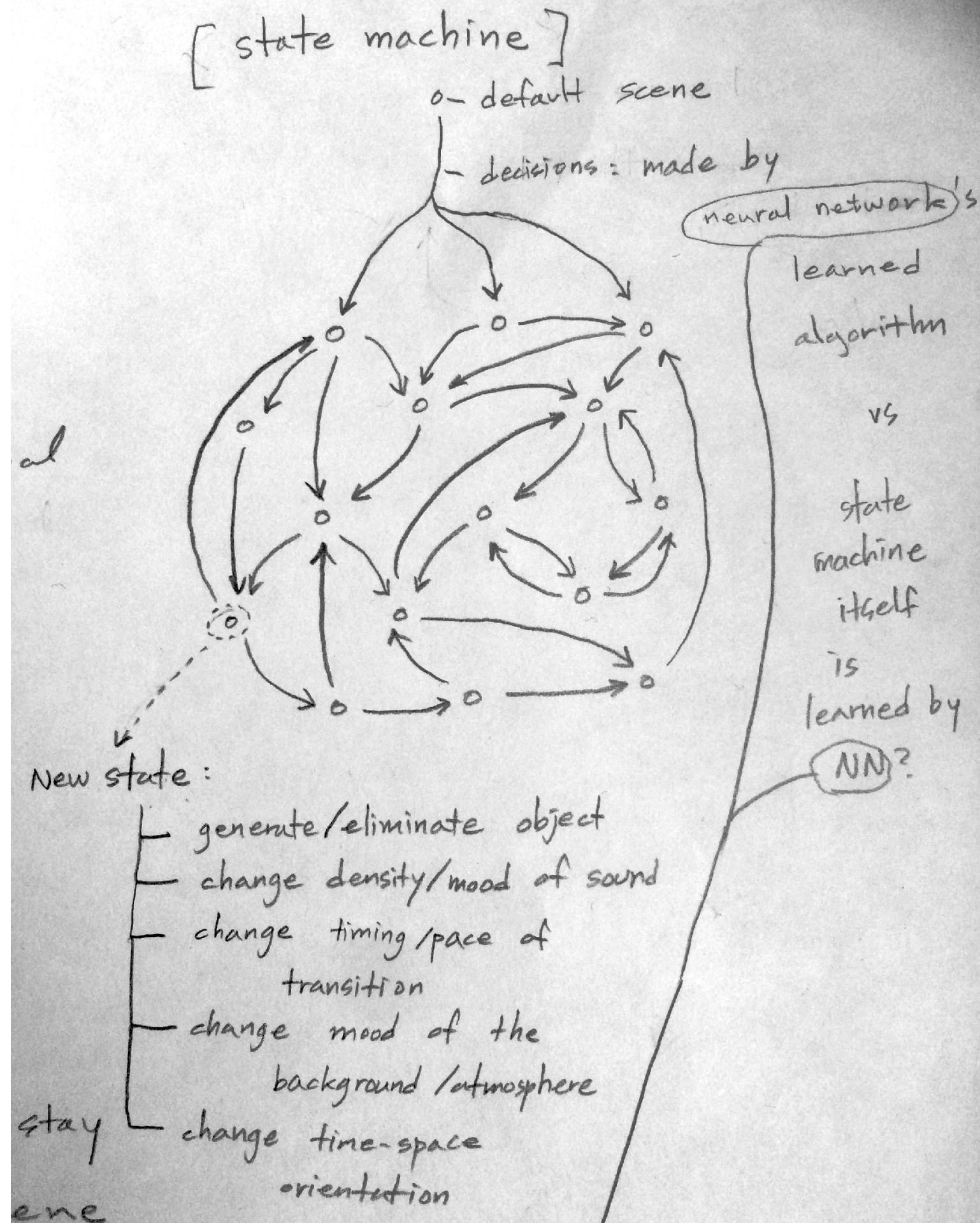
head movement (acceleration)

questionnaire (for training only)

New

Neural network system as a submissive-responsive controller of a scene.

- A scene:  
default state  
→ a new state
- “Branching” based on user gaze, head movement
- Somewhat similar to recommendation systems





# Visual References

Ian Cheng's Emissary Forks For You



<https://vimeo.com/75855387>

# Brenna Murphy



<https://vimeo.com/197999313>

# Implementation

## Inputs

- head direction
- head movement (acceleration)
- verbal cues, questionnaire  
(only for training)
- time spent in the scene





**Output:** a new state

- generate/eliminate object
- change density/mood of sound
- change timing/pace of transition
- change mood of the background
- change time-space orientation

**Dataset**

**training dataset** - we need to generate one ...?

# Modules

## 1. Human Behavior Learning Module

- Input: viewer's action/behavior
- Output: new state



## 2. Generative module

- Visual synthesis
- Sound synthesis

Either using ML technique  
or rule-based (procedural)  
creation

## Platform

Unity + C#

## Model/Techniques

Unsupervised learning

Reinforcement learning (Deep Q learning)?

# End Goal

Complete Self-Alienation!