Generative VR: One Scene

one scene

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

to indulge in
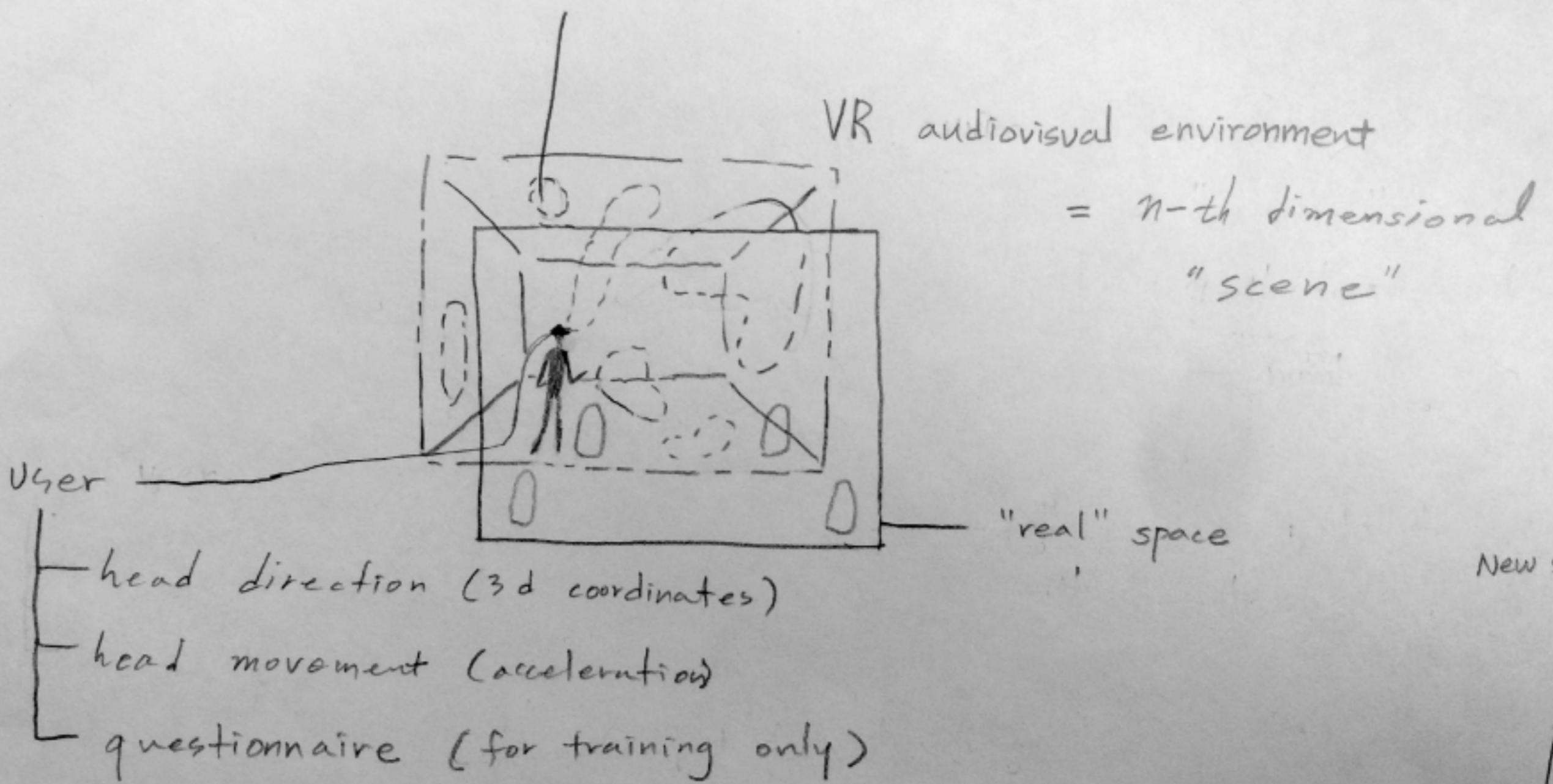
Concepts

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

Human curates material and interprets meaning.
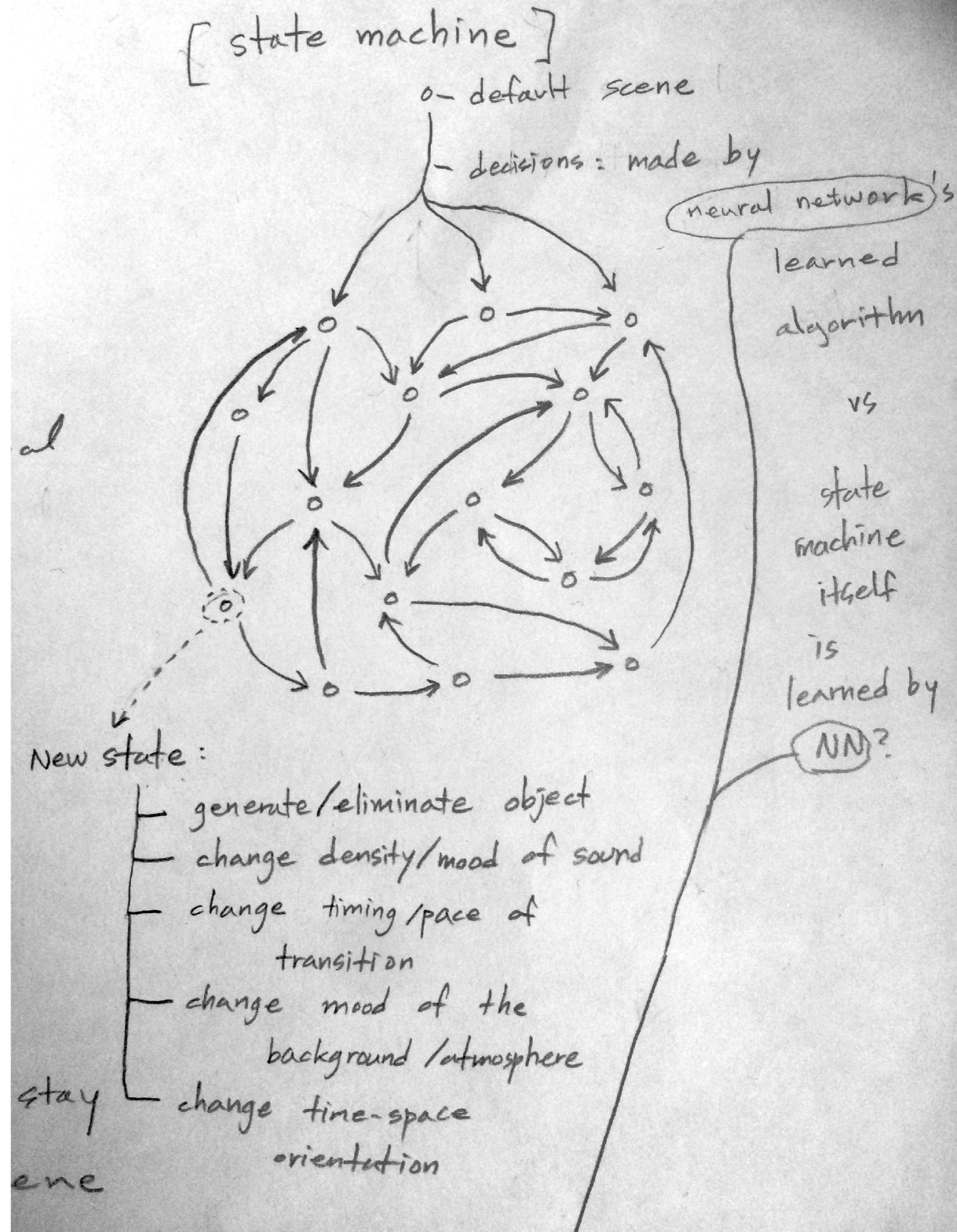
Machine generates and learns to manipulate human.

n number of eigenvectors for creating a scene

VR audiovisual environment
= n-th dimensional "scene"

"real" space

User
- 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

[state machine]
o— default scene
— decisions: made by neural network's learned algorithm
vs
state machine itself
is learned by NN?

New state:
— generate/eliminate object
— change density/mood of sound
— change timing/pace of transition
— change mood of the background/atmosphere
— change time-space orientation

stay

Visual References

2001-space-odyssey-bedroom

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 …?
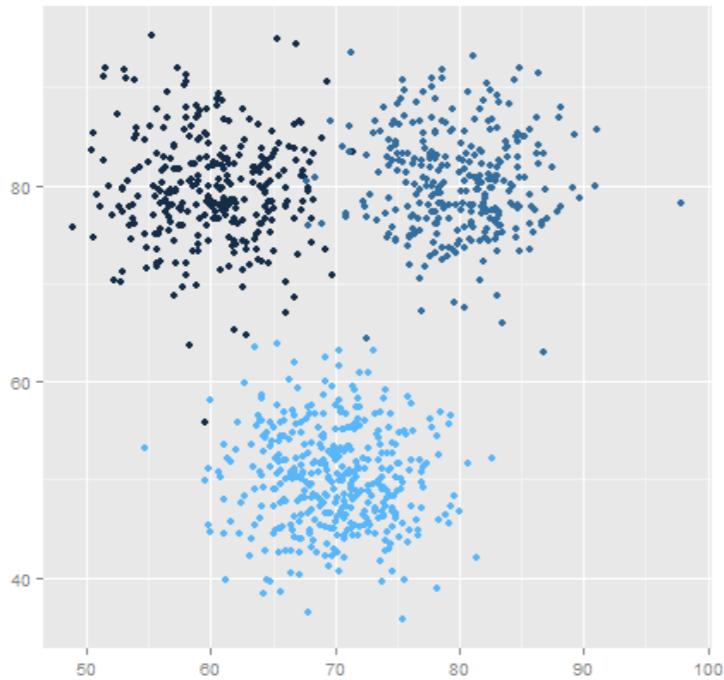
Modules

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!