

KINETICA PROPOSAL

INTRODUCTION

Midnight Collective is a new media art collective. The members are David London, Oliver Harrison, Audrey Anastasy and Paul Ferragut.



The collective is eager to uncover a hidden fantastical reality in the familiar everyday, highlighting moments that would normally be unnoticed and therefore unappreciated. Their work focuses on the relationship between contradictory notions such as the visible and invisible, or tangible and abstract, through changes in the usual norms of perception. By re-examining undiscerned trivialities Midnight Collective reveals what extraordinary realms exist beyond our 'normal' view, allowing the viewer to re-consider the poignancy of the everyday.

For our most recent project we want to create a unique interactive installation involving tropical fish.



*The neon tetra (*Paracheirodon innesi*) is a freshwater fish of the characin family (family Characidae) of order Characiformes. The type species of its genus, it is native to blackwater or clearwater streams in southeastern Colombia, eastern Peru, and western Brazil, including the tributaries of the Solimões where the water is between 20–26 °C (68–79 °F). Its bright colouring makes the fish visible to conspecifics in the dark blackwater streams, and is also the main reason for its popularity among tropical fish hobbyists.*



KINETICA PROPOSAL

SCULPTURE 1 - INPUT

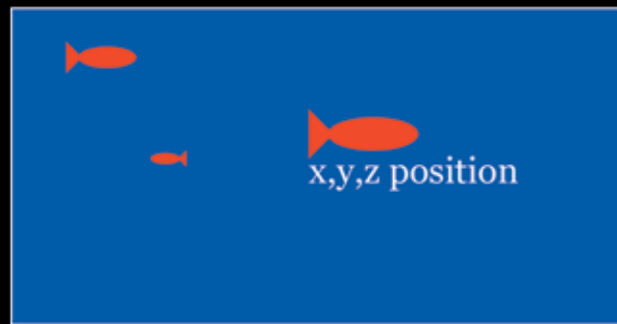
A large fish tank, filled with several species of fish whose every movement will be tracked by a Kinect. These movements offer an organic and improvisatory sculptural experience that will be translated to an output in Sculpture Two (see page 3). We will use the Kinect SDK to develop the application tracking the position of the fish.



Thanks to the Kinect depth sensor, each fish will be tracked calculating the x,y,z values of their spatial position in the aquarium. Additionally it will return different values of speed and velocity.

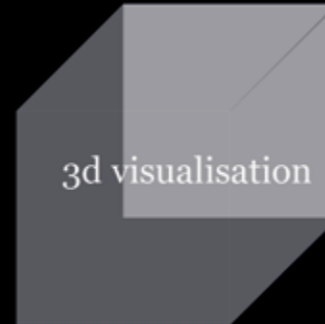
KINETICA PROPOSAL

SCULPTURE 2 - OUTPUT



Aquarium: Sculpture 1 - Input

< Kinect > Generative >
graphics

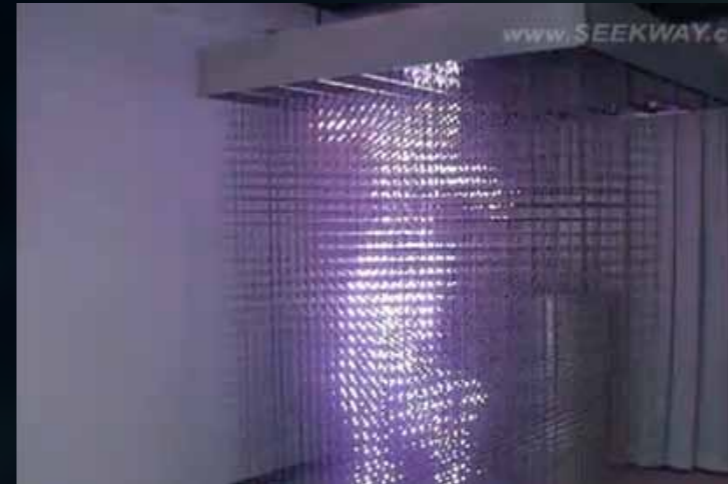


Sculpture 2 - Output

A light Installation offers a live reactive visualisation of the fish movements taking place in Sculpture One.

At this stage of the project, we are experimenting with different visualisation possibilities. Our visualisation aims to represent physically the 3 dimensions of the fishes movements. Nowadays 2d screens are more developed than holographic rendering, therefore our experimentation challenge is to provide a relevant physical 3d visualisation.

We are currently researching and refining options for the resulting output; we are interested in various techniques and materials including LEDs, fiber optics, electroluminescence, laser beams and projected lights.



LED cube
3D LED Screen-Dance



Laser and refraction
UVA - Speed of Light



Video projection and refraction
PRISMA 1666 - Interactive Installation

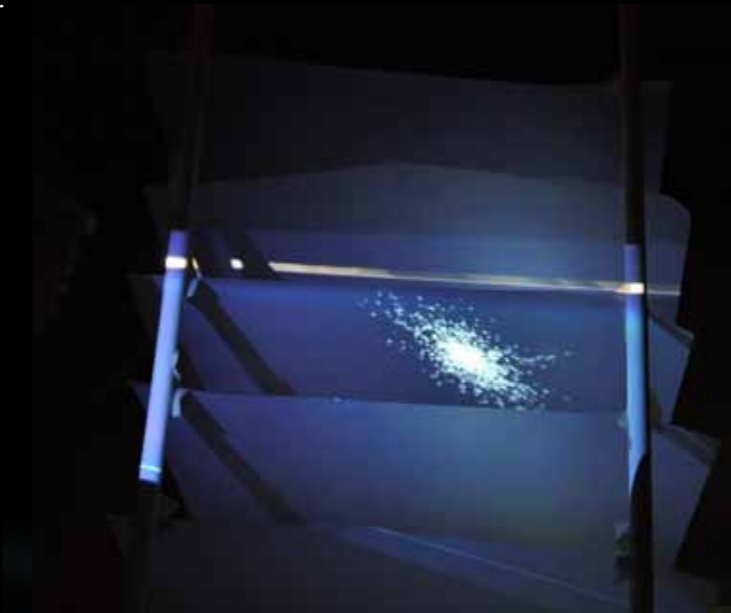
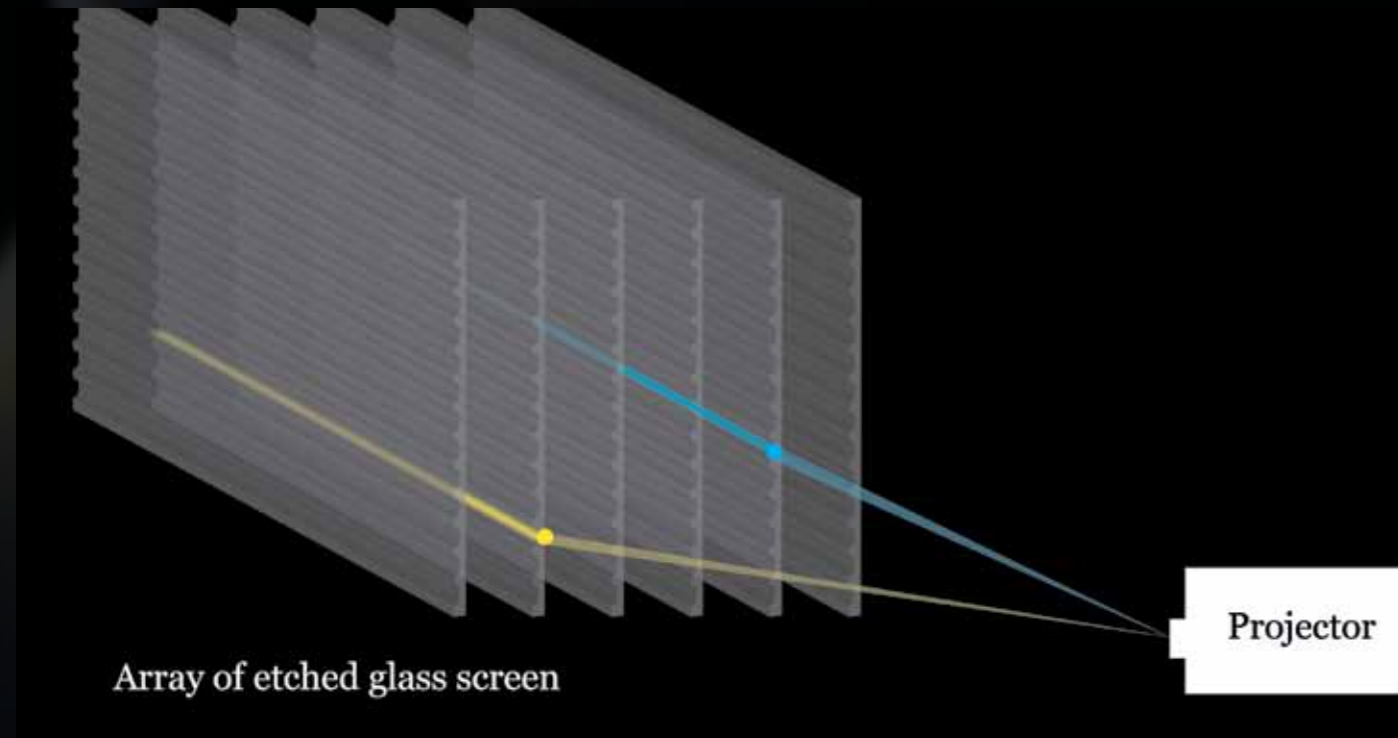


LED cube 2
Candle Light

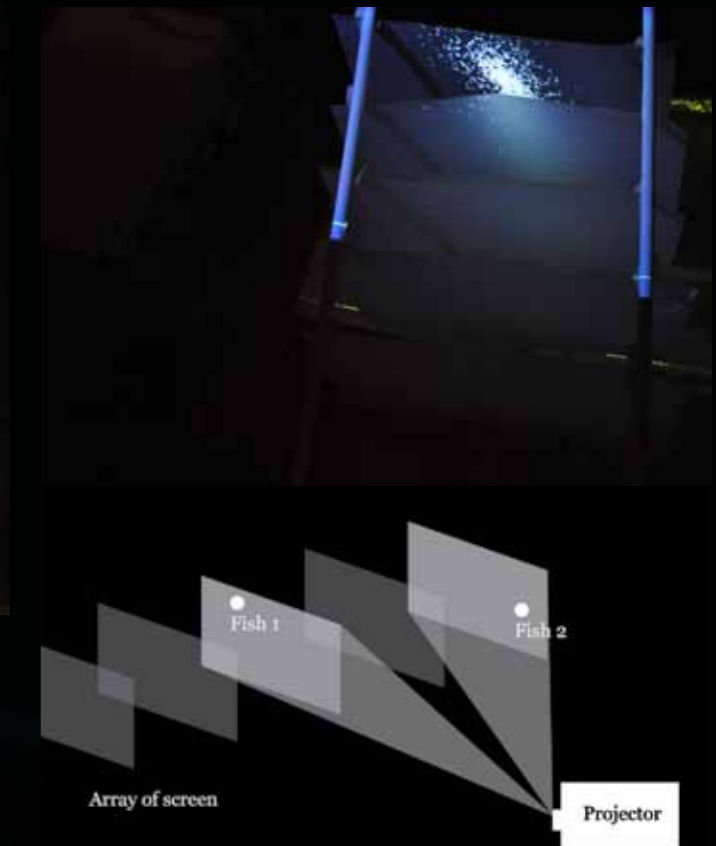
Examples of existing structures and techniques able to output 3d data visualisations.

KINETICA PROPOSAL

SCULPTURE 2 - OUTPUT



Output sculpture research 2:
Projection mapping on different screens



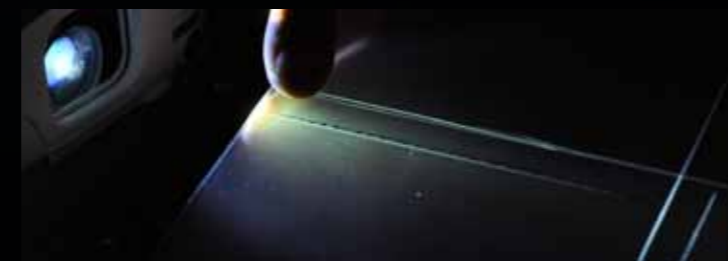
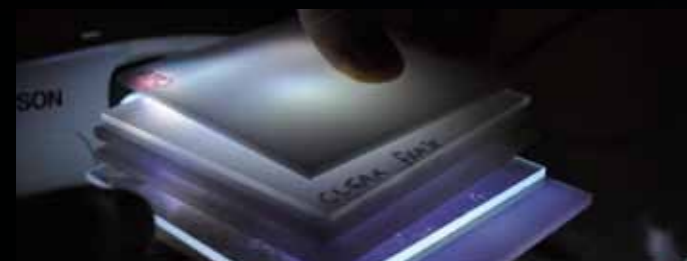
Gold by Evan Roth

Output sculpture research:

- Projected beams of light on the edge of glass screens.
- The light travels through the etched slot and indicates the position of the fish.
- The graphic above shows glass etched on the X axis only. We aim to apply the same principle for the Y and X together.
- A projected cross will indicate the movement of the fish on the 3d grid.



6 pane of Glass sculpture by Gerard Richter



KINETICA PROPOSAL

Possible development of the project:

- A minimalist website constantly showing live position of the fishes.
 - Sculpture 2 (the 3d visualisation) is situated in a different geographic location/context to Sculpture 1 (the aquarium with tracking)
-

Thank you!