

Software Algorithm

3d polar coords map

```
// rcos = r*cos(delta);
// vec->x = rcos*cos(alpha);
// vec->y = rcos*sin(alpha);
// vec->z = r*sin(delta);
```

We have used an algorithm that transforms the planar matrix of the video feed into a platonic sphere and combined this with audio and difference detection to generate variables within the algorithm. The combination of these data flows creates millions of unique formal objects that fluctuate and transform in real-time.

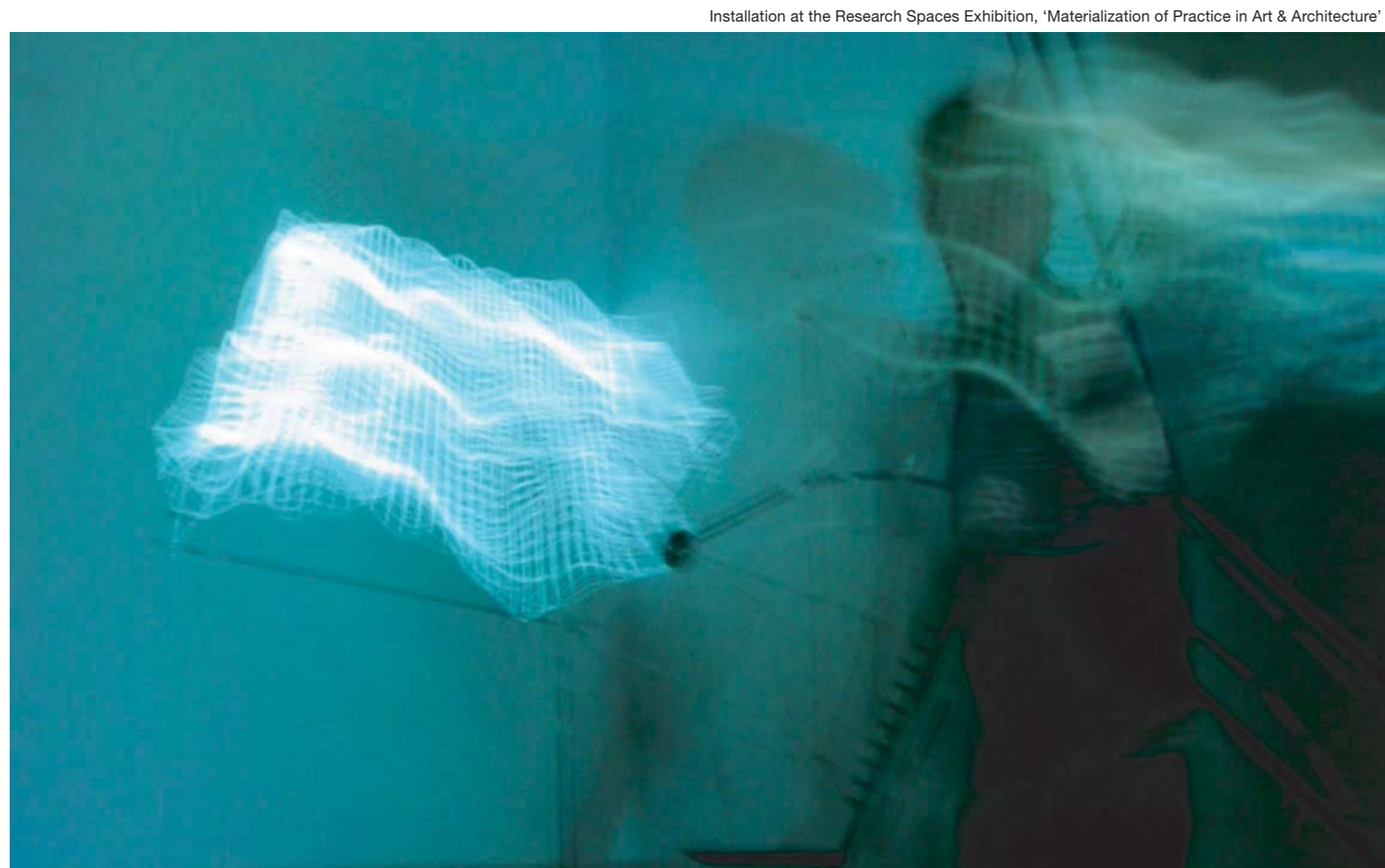
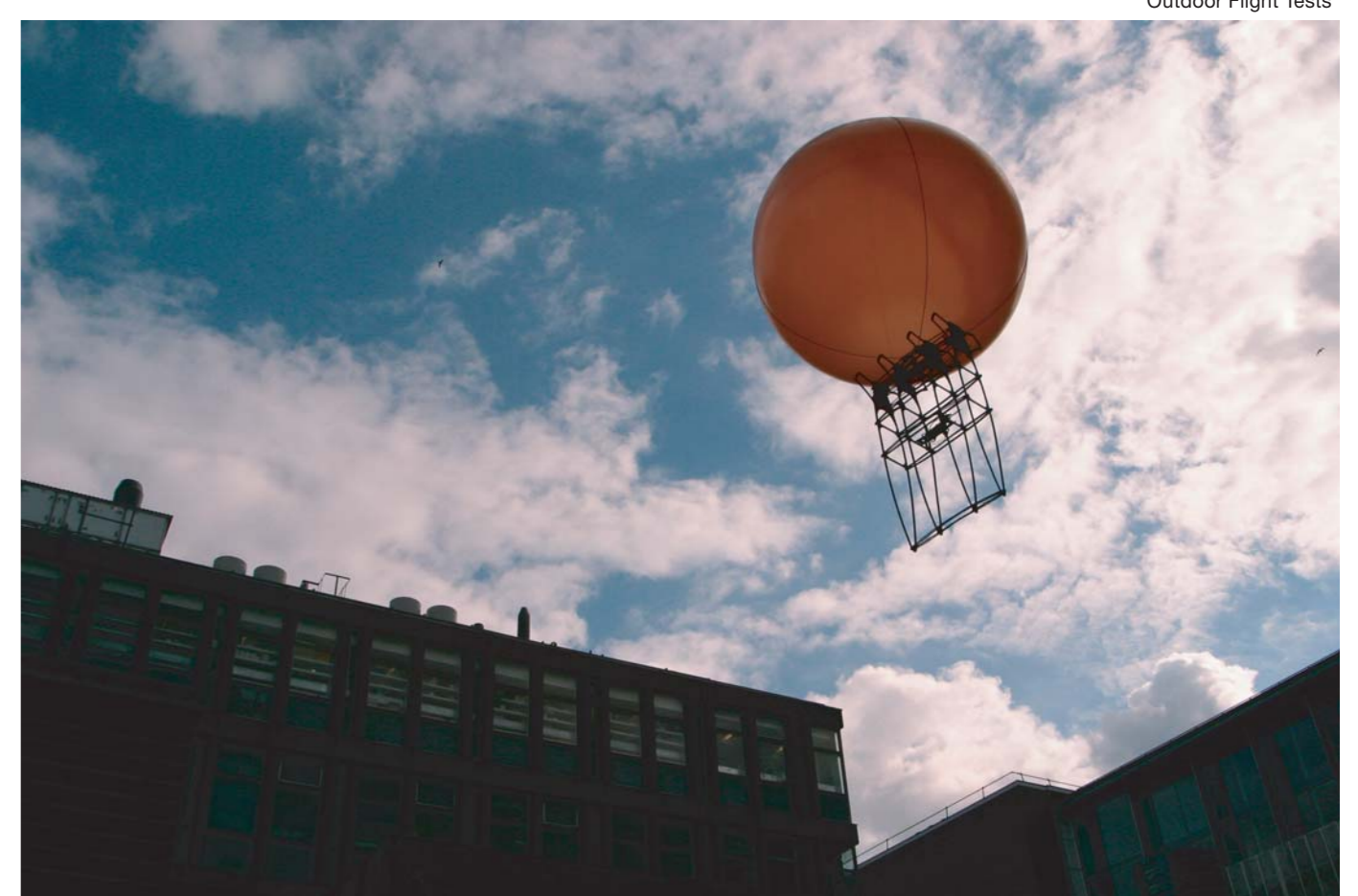
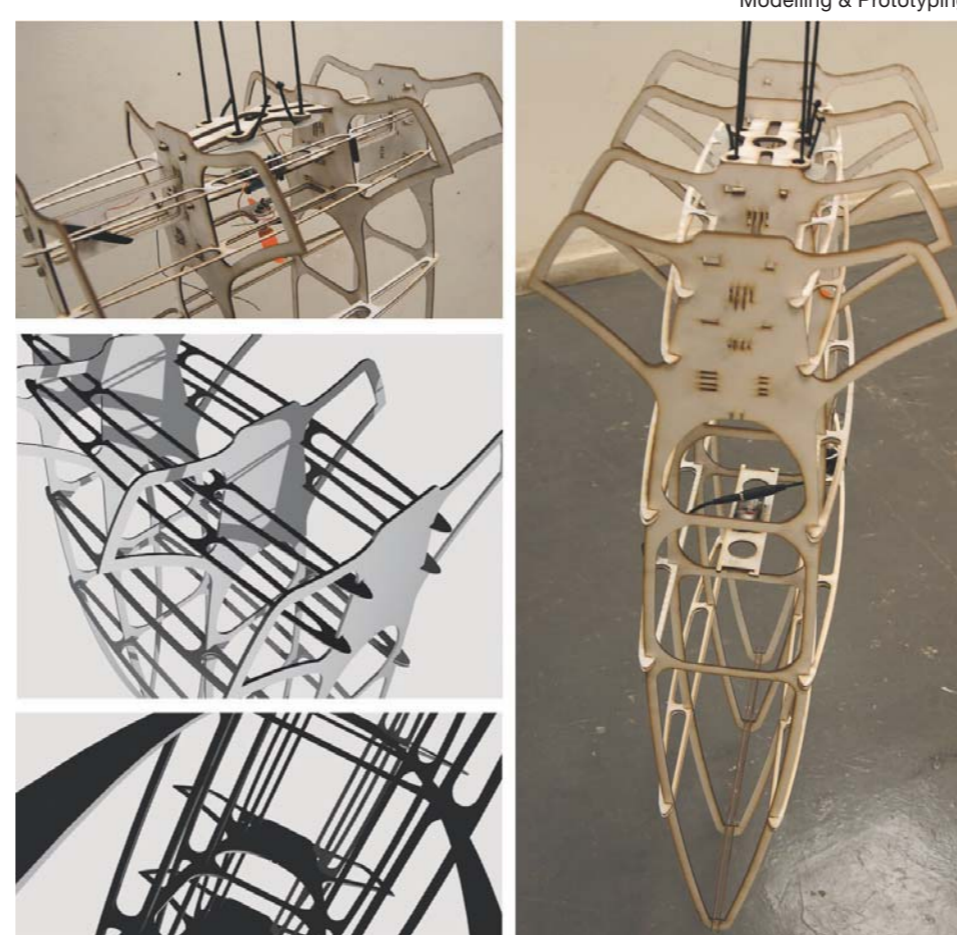
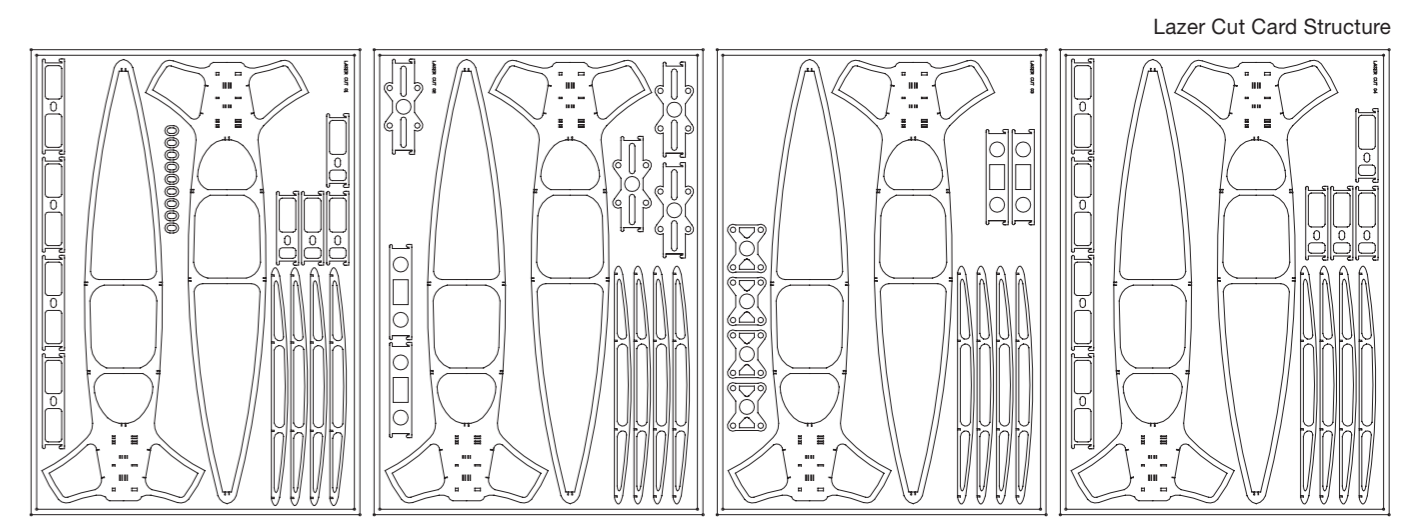
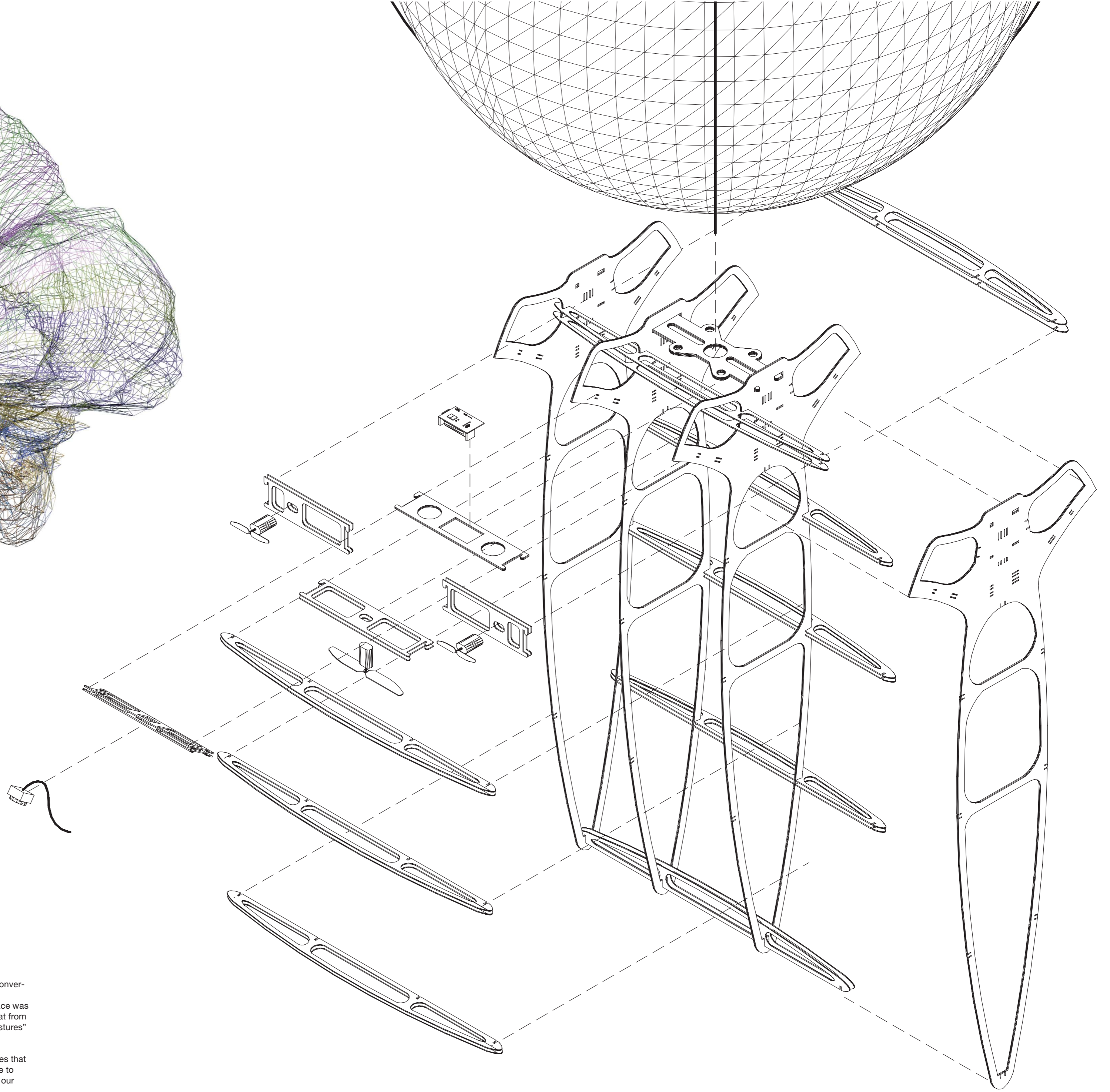
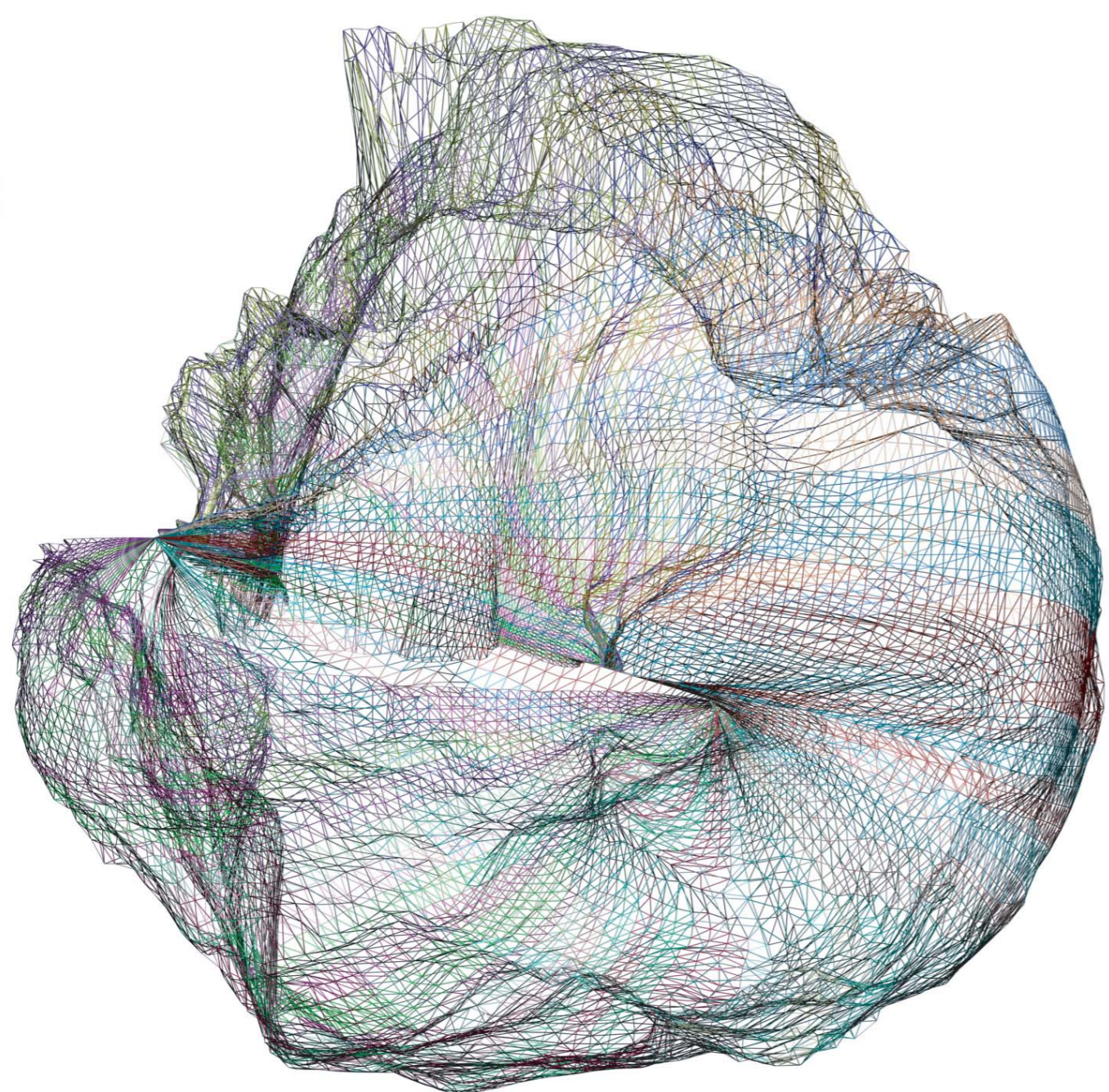
"Angel Project"

Ruairi Glynn & Paul Burres

The initial concept developed from a building study in which we created a conversation space that could transform its spatial conditions reacting to a set of protocols based on inhabitant's discourse. The constantly reconfiguring space was actuated by a series of agents that could descend, rise, approach and retreat from the people within the space as well as articulating a range of behaviors "Gestures" in an attempt to act as catalysts for the generation of new conversation.

This investigation led to us exploring the use of LTA (Lighter Than Air) Vehicles that could act independently or in flocks constructing dynamic spaces for people to meet. Our current research has explored how simple behaviors actuated by our Angels affect the experience of conversation space.

Using the Angels onboard Vision System transmitted wirelessly to a local computer we processed real-time data of conversation space using a piece of software we developed in MaxMSP Jitter that generated formal representations to support our recording and notation of the interactions that occurred. These projections also provided an added form of feedback when projected into the conversation space.



Installation at the Research Spaces Exhibition, 'Materialization of Practice in Art & Architecture'



Angel Flight and interaction testing within confined space