BODYQUAKE

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ABSTRACT

BodyQuake is the visualization and sonorization of the scientific, cultural, emotional, technological, psychological, paradoxical body disrupted by the earthquake of the epileptic seizure. All of these aspects of the body come together in this live media performance: data, visuals, sounds, presence, story arcs become one - polyphonically - to create a composite, sincretic experience, bringing together current radical scientific and technological innovation.

VIDEO

https://youtu.be/By03UY1vGVI

# BODYQUAKE

BodyQuake transforms scientific innovation in the research on Epilepsy into a participatory performance.

A Concert for BODIES + DATA

BodyQuake is the result of the collaboration between IRCCS Neuromed, Fondazione Neuromed and La Cura, together with: Art is Open Source (Salvatore Iaconesi and Oriana Persico); artist and performer Francesca Fini; Flyer Communication; the international community "FLxER Live Media" and the AVNode project.

A choreography involving the body of a performer who "wears" the data from epileptic seizures and for the bodies of the audience, who wear a device which lets them experience the BodyQuake, the telluric vibration of the seizure.

BodyQuake deals with epilepsy: it brings together current radical scientific and technological innovation on the condition with its particular social and psychological status.

BodyQuake is the visualization of the scientific, cultural, emotional, technological, psychological, paradoxical body disrupted by the earthquake of the epileptic seizure.

All of these aspects of the body come together in the performance: data, visuals, sounds, presence, story arcs become one - polyphonically - to create a composite, sincretic experience.

BodyQuake is the result of a joint research process: while scientific researchers capture and use massive amounts of data to investigate seizures, their devastating effects on the body and how to cure them, artists visualize this data and intertwine it with other data about the life, social conditions, desires, visions, expectations and wishes of the people affected by epilepsy.

The results are performed directly on the body, through a body-projection mapping, a set of wearable technologies and a series of information visualizations which radically interrupt the isolation condition of epilepsy, and transforms it into a shared concern in which multiple types of subjects can cooperate: doctors, researchers, people, through art and science.

On top of that, BodyQuake interprets and addresses the isolation of the epileptic condition: both physical, as seizures have a distinct sensory isolation effect, in which subjects turn inwards and isolate; and cultural and social, as there currently is no instrument or diffused practice to share, participate and be solidal with epilepsy.

BodyQuake addresses this fact through a wearable technology which audience can wear to feel the wave of the epileptic seizure represented in the performance - in sync, as it happens - becoming able to actually share the experience and participate.

BodyQuake is the result of the convergence of Science and the Arts. In the project, IRCCS Neuromed and Fondazione Neuromed have opened up their vast databases of case studies on epilepsy to embrace art as a different way of knowing, as an opportunity to have greater impact on society, to communicate and interact with people. For this, "La Cura", the participatory performance which brought millions of people from all parts of the world together for Open Medicine, Open Science and Open Society, designed BodyQuake: an artistic performance in which scientific analysis provides an understanding of the epileptic phenomenon which is visualized directly on the body, using images and devices, and which is united with the larger body of society, in a dance, a body earthquake, which involves everyone.

BodyQuake is a project promoted by:

La Cura, IRCCS Neuromed,
Fondazione Neuromed

In collaboration with:

AOS - Art is Open source,
AVNode, FLxER Live Media,
Flyer Communications,
Human Ecosystems Relazioni

Credits

Concept, technology:
Salvatore Iaconesi & Oriana Persico (IT)

Concept, Choreography, Performance:
Francesca Fini (IT)

Scientific Coordination, Neurosciences Research, Data
IRCCS Neuromed, Fondazione Neuromed (IT)

Projection Mapping, Stage Design, Live Information Visualization:
AVNode, FLxER Live Media (Europe / International),
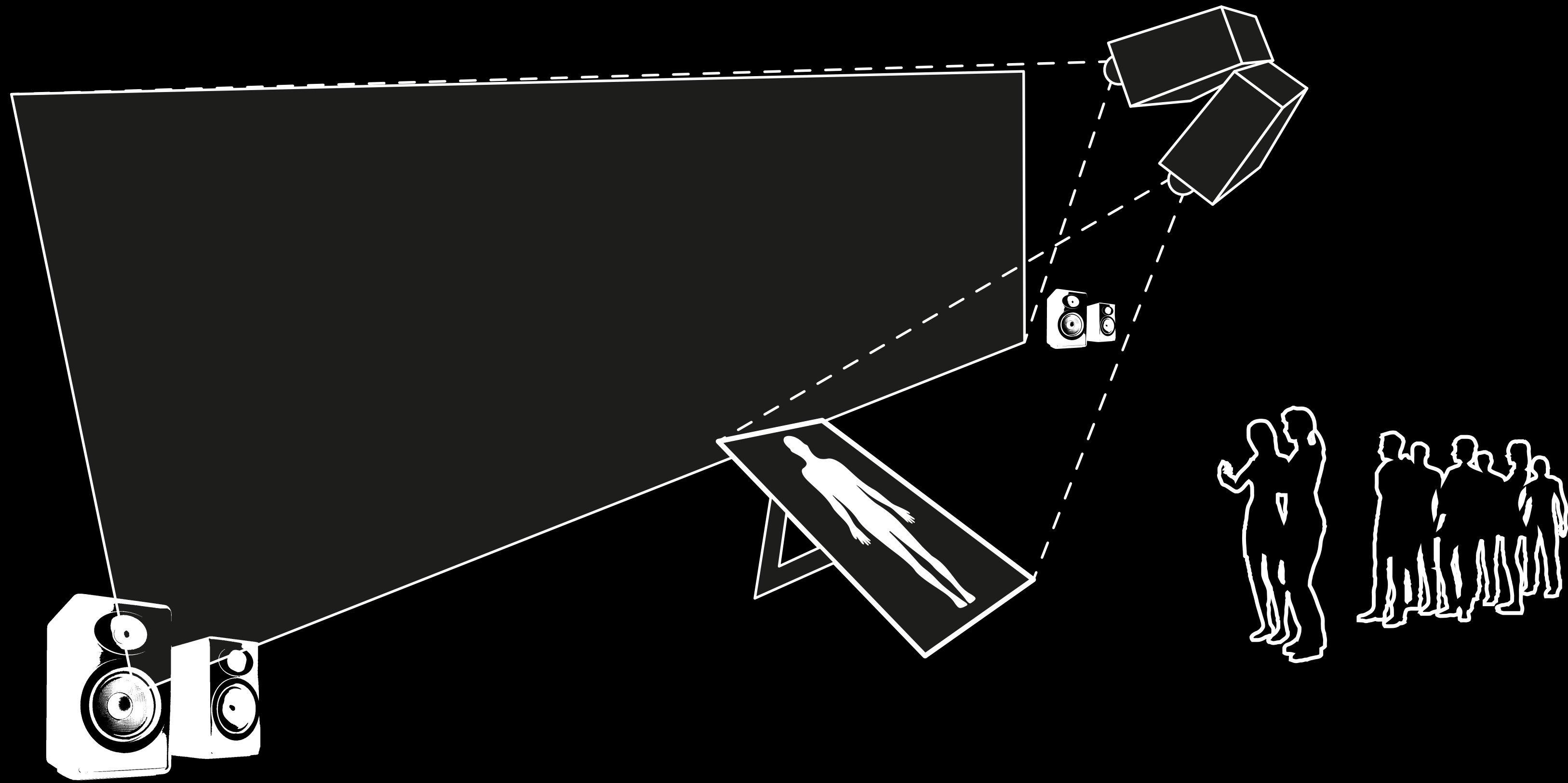Flyer Communications (IT)

Data Processing, Technology:
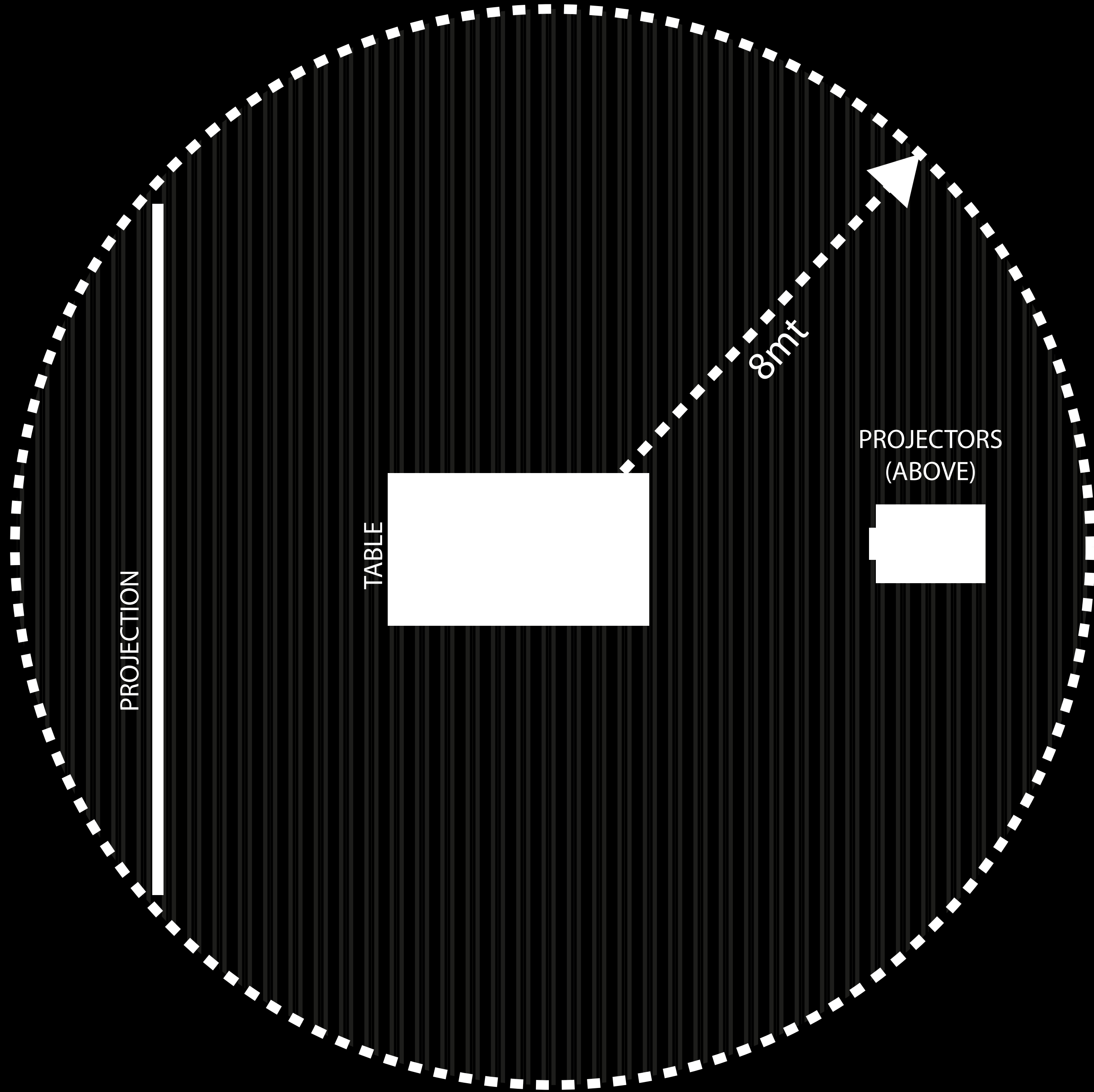Human Ecosystems Relazioni (IT)

Communication, Community, Open Science:
La Cura (IT - Global),
AOS - Art is Open Source (International)

# TECHNICAL

[ TOP VIEW ]

PROJECTORS
(ABOVE)

8mt

TABLE
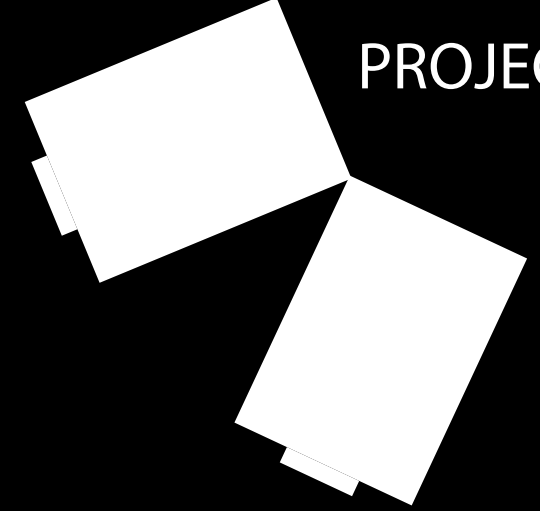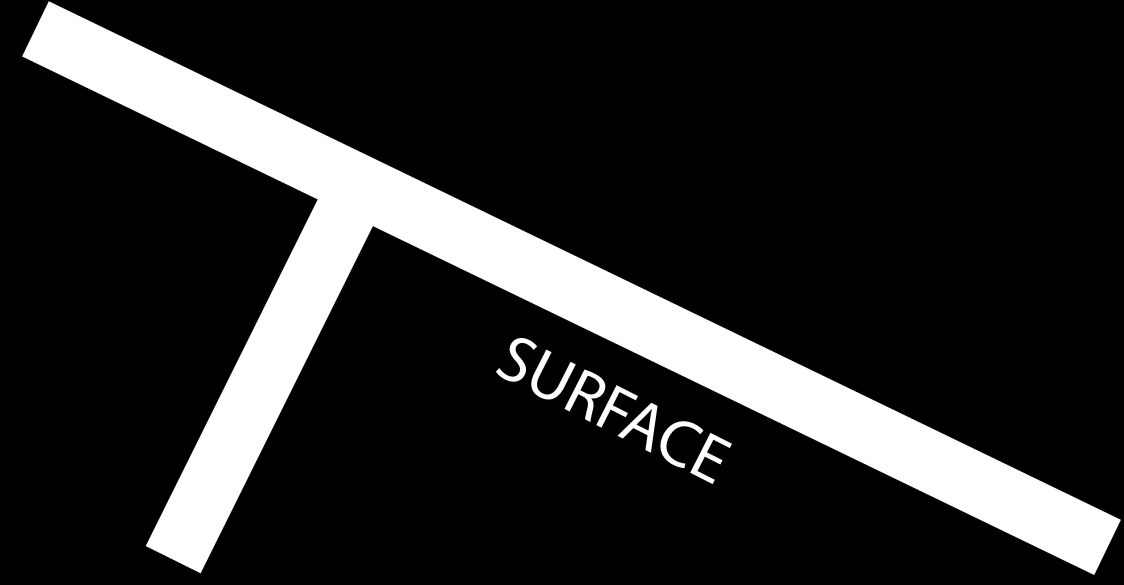
PROJECTION

wifi

lilypad + circuit
+ vibrating patterns

PROJECTORS

PROJECTION

SURFACE

## Stage Design:

a room or environment which can be made dark and immersive, and in which to place the stage at the center, so that people can walk around it

all equipment is mounted above the heads of the audience, using standalone, roof hanging trusses, or other similar solutions

1 large slanted surface (provided by us 2,2x1.5x0.75 m), matte black, opaque

2 projectors pointing at the table and projection screen from above (characteristics dependent on the environment; we use 1 7000 ANSI lumen for a completely dark environment pointing at the surface, projecting from about 4 meters distance, and 1 12000 ANSI lumen for the projection screen)

1 large, 16:9 projection surface behind the table, as shown in the diagrams

stage lighting consisting of a series of neon/led tubes attached to the bottom of the table

powerful sound system (needs to physically fill the environment with low frequencies; we use a 600W speaker setup in a 50 m2 room)

2 computers (1 for piloting the performance and projections, 1 for data, sound and for controlling the wearable devices)

dedicated wifi or cable local area network (no internet required, must be dedicated, as lots of data goes through in real-time; computers are local and close together, so it can also be a cable network; we provide the computers and the wifi network that goes to the wearables)

## Wearable Devices:

15 wearable devices (more can be prepared if we want to distribute a larger set of devices to the audience; currently software and connectivuty tests have proved that about 100 devices can operate in the same environment; each additional device costs 30 euros in materials and 200 euros of workmanship;)

a process must be placed in action so that before the performance visitors can sign in to get their device in exchange for their documents, and then return the device and get their documents back. we can organize this process, but in this case we would need expenses paid for an additional assistant

## Timing

the stage design takes around 1 day to complete, with materials arrived, available and working.

it needs 3 people to bring up: 2 electricians/technicians/sound/builders, 1 IT/Network

the performance needs 3 people to run: the performer, and 2 people at the console

if it is required from us to handle the process of giving out the wearable devices, we need 1 further assistant

## Materials

we can rent materials locally, bring our own, or use the materials that the venue otains under our instructions

each option has different benefits and costs, and we're open to discussing the options with organizers and producers