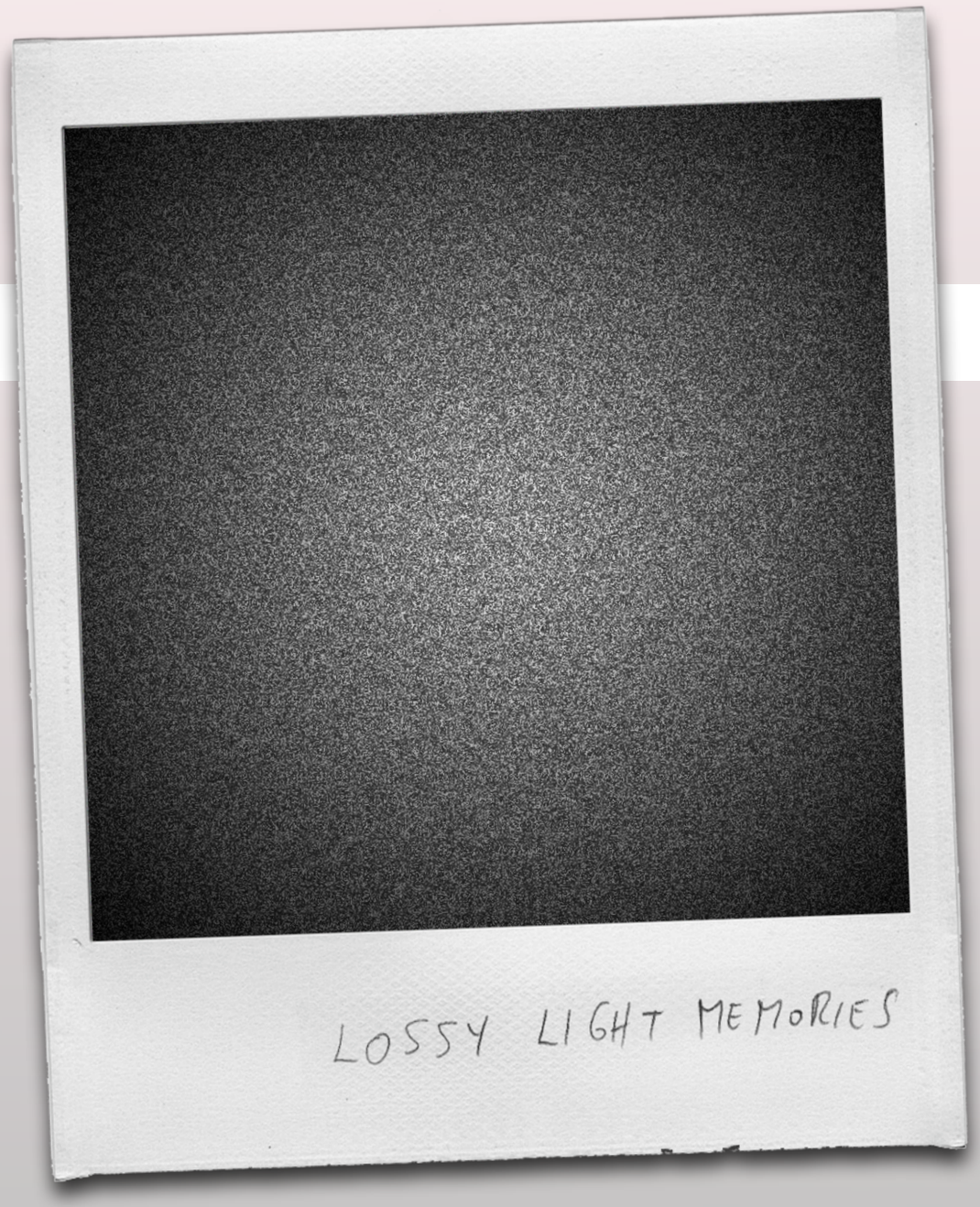
Lossy Light Memories

Claudio Lucio Midolo



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Introduction

I'm going to create a *photographic-like* device able to capture and play back visual memories, designed to be closer to their emotional nature.

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Why Photography?

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ok, now this is embarassing...

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The art of capturing images, and with them emotions and memories, has always fascinated me since my early childhood.

I remember I had my first contact with this strange world made of black boxes, strong lights and long lenses when I was five years old.

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Impetus

The impetus of this project emerged from my observations of the changes that took place during the transition from analog to digital technology in the photographic realm, changes that can be synthesized in the following list:

how we *interact* with the camera in order to take photos

how we *look* at them

how we *share* them

what *value* we attribute them.

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During the transition between digital to analog photography we *traded*

Surprise → FOR → Immediacy

Visual Identity → FOR → Quality + Speed

Intimacy → FOR → Convenience

Motivation

This initial impetus gradually evolved into the current thesis motivation crystallized in the form of

Humanity vs Productivity

Looking at the current *panorama of designs* in the non professional photographic field it is astonishing to notice how the vast majority of the proposed devices offer the *same functionalities* and follow the same leading conceptual force, an impulse which prefers raw technical *performances* over design innovation and meaningfulness.

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Quality, speed and convenience have always been the parameters that *professional* tools have been striving to meet and exceed in order to, first, differentiate themselves from the non professional tools and, secondly, in a continuous race towards the highest performances, to distinguish themselves from the other professional products to be acknowledged as the "most professional" one.

Quality, speed and convenience are at the basis of *Productivity*.

Professional tools are generally used to perform a certain kind of action which generates an item which is sold for *profit*.

Non professional tools, on the other hand, are generally used for an infinite sequence of reasons other than profit.

As an example millions of non professional photo cameras are used every day trying to capture and save from the oblivion of time precious personal *emotions* condensed in visual memories we call pictures.

A fundamental issue raises here as these tools, mainly used to deal with personal feelings and memories are conceived, designed and crafted just *mimicking* their professional counterpart, totally ignoring that the items they are acting on are of completely different value and nature, absolutely discarding all the new and powerful possibilities are offered by the digital medium to let non professional photography evolve on its own path, finally independent from the influence of their professional colleagues.

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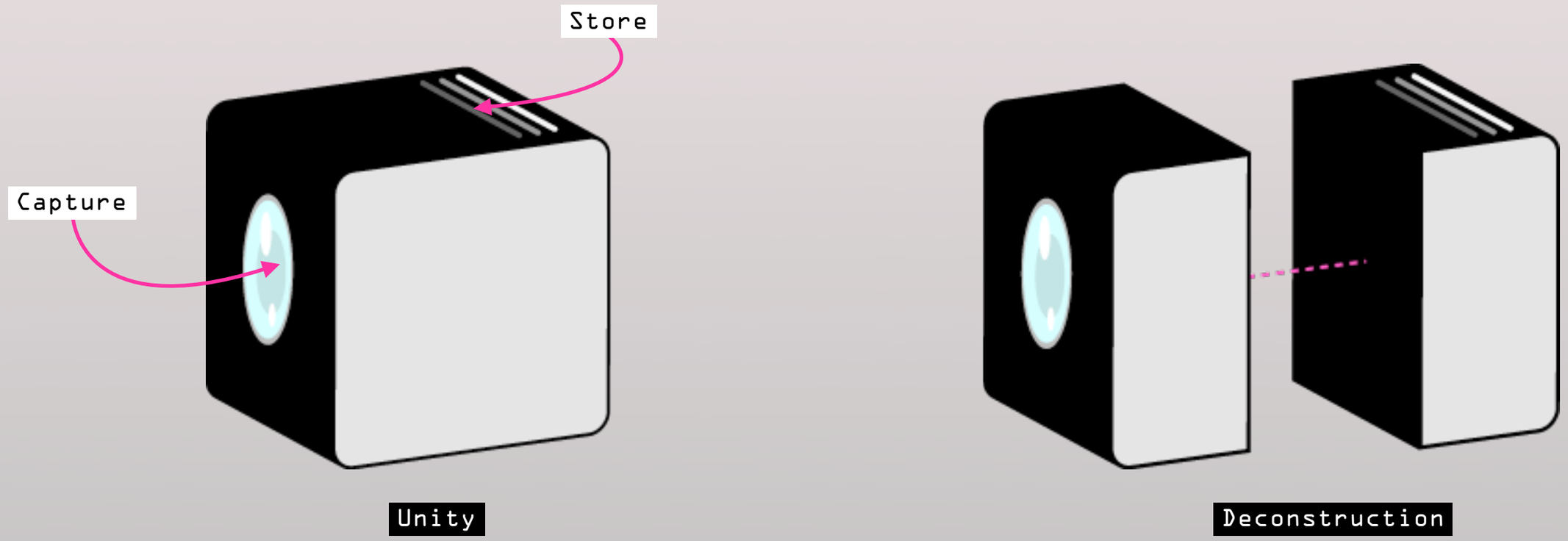
Concept

The device I'm envisioning will try to *solve* the issue previously highlighted, suggesting a possible *perspective* over a completely ignored, thus incredibly fertile, dimension of design.

It will bring back the elements of magic, surprise, intimacy, curiosity, commitment and value, currently overshadowed by means of performance.

It will accomplish this aim starting from the deconstruction of one of the conceptual fundaments of Photography, the unity of the part which captures the image with that which stores it in time.



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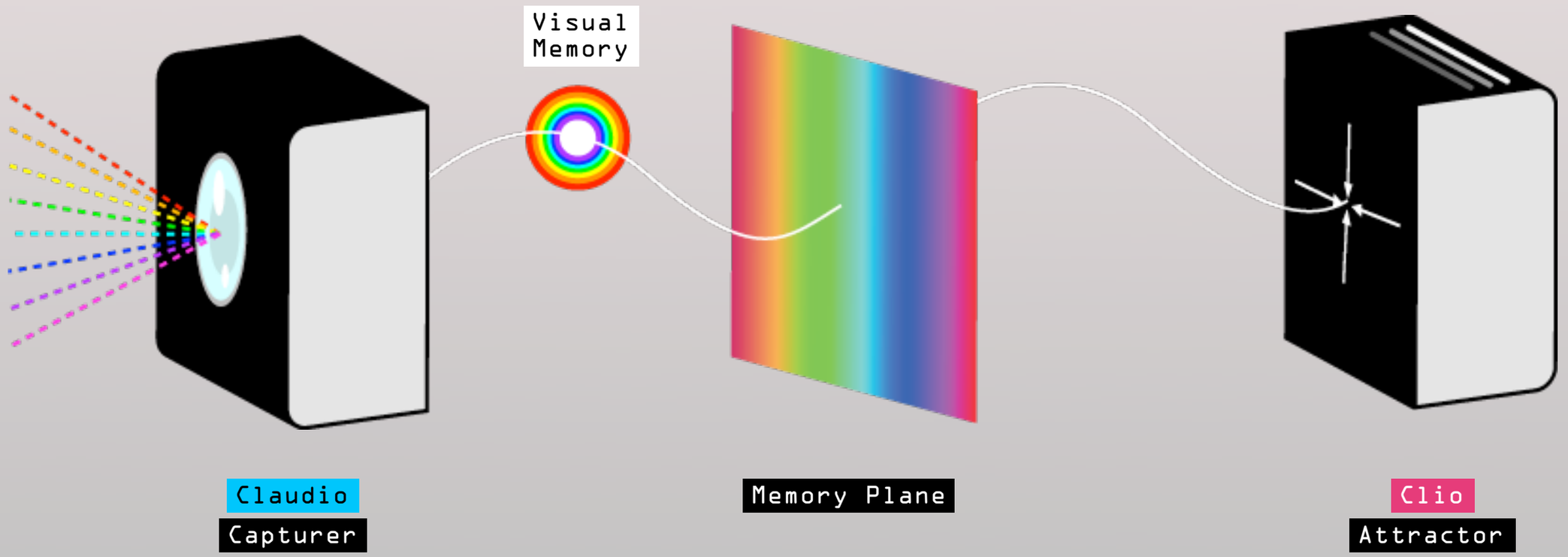
The camera will be split into two halves, each one intimately linked with the other. The *Capturer* half will be able to record a visual memory which will be immediately put into the *Memory Plane*, a median dimension where memories fluctuate until attracted by the other half, the *Attractor*.



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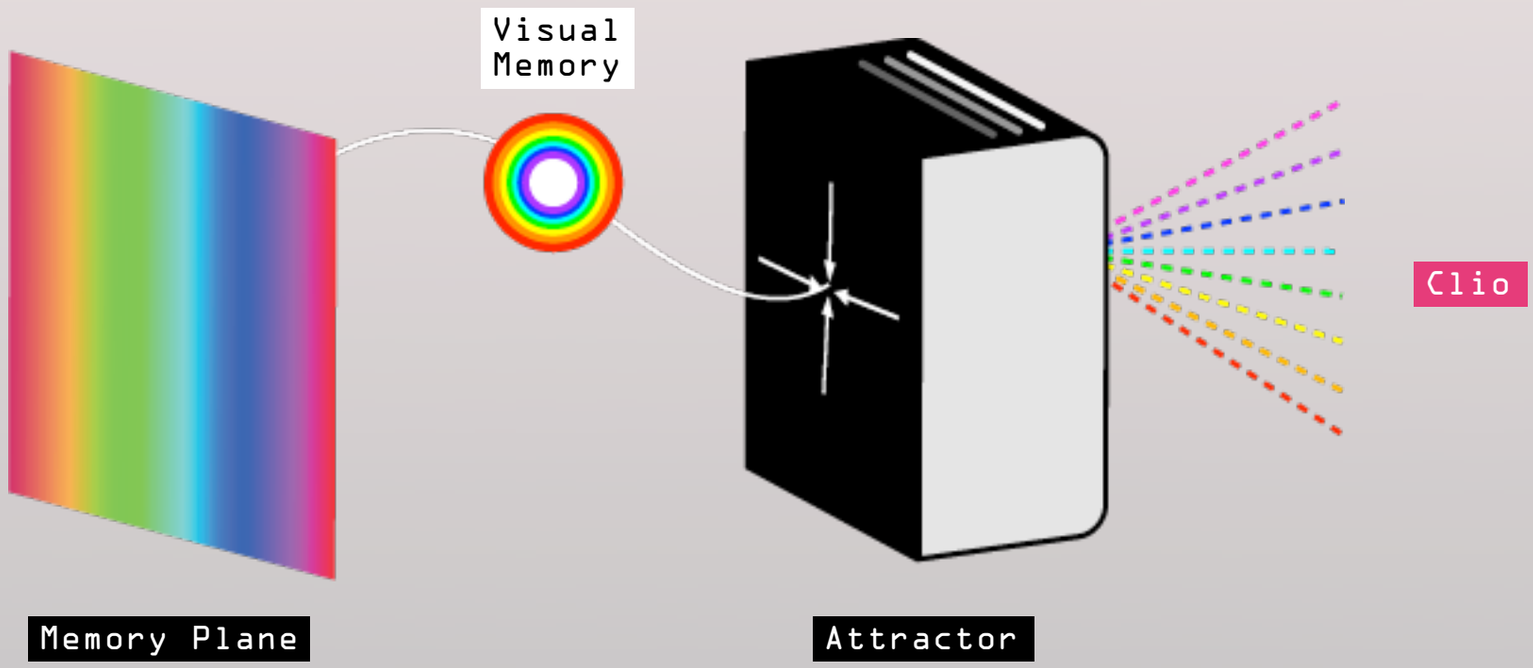
The Attractor will be able to retrieve the visual memories from the Memory Plane and play them back to the person who owns the Attractor half, in this case Clio, Claudio's girlfriend.



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Some *rules* will regulate this system

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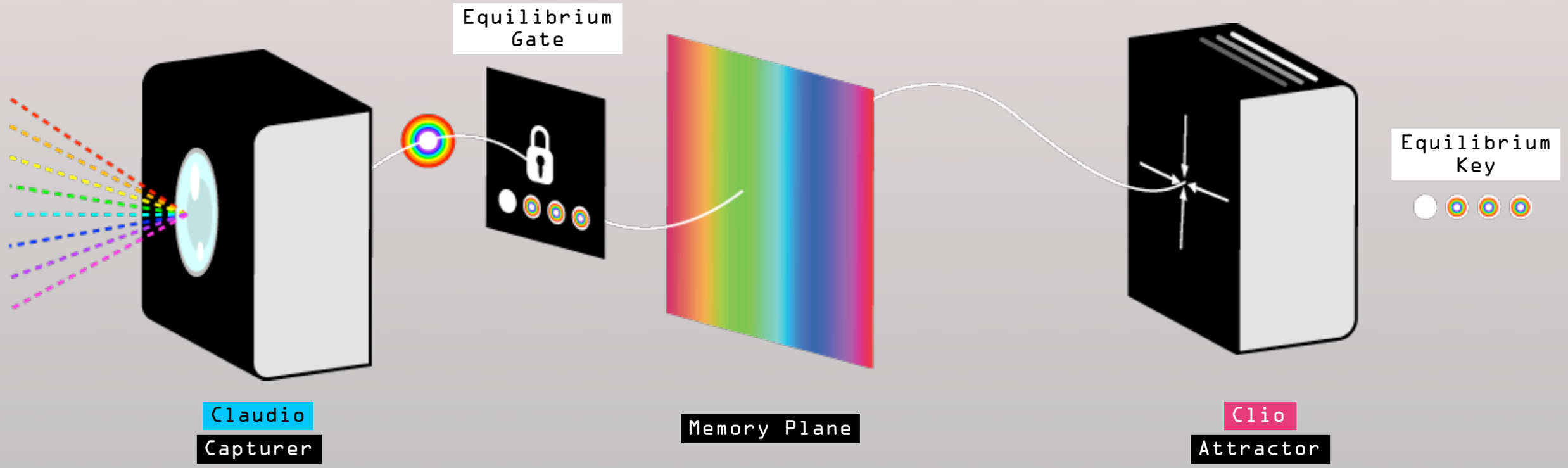
Claudio wont be able to continuously record one memory after another without any limit, but an *equilibrium* will exist relative to the number of new visual memories actually seen by Clio, and the number of the available new memory spaces available to be filled by Claudio with his upcoming visual memories.



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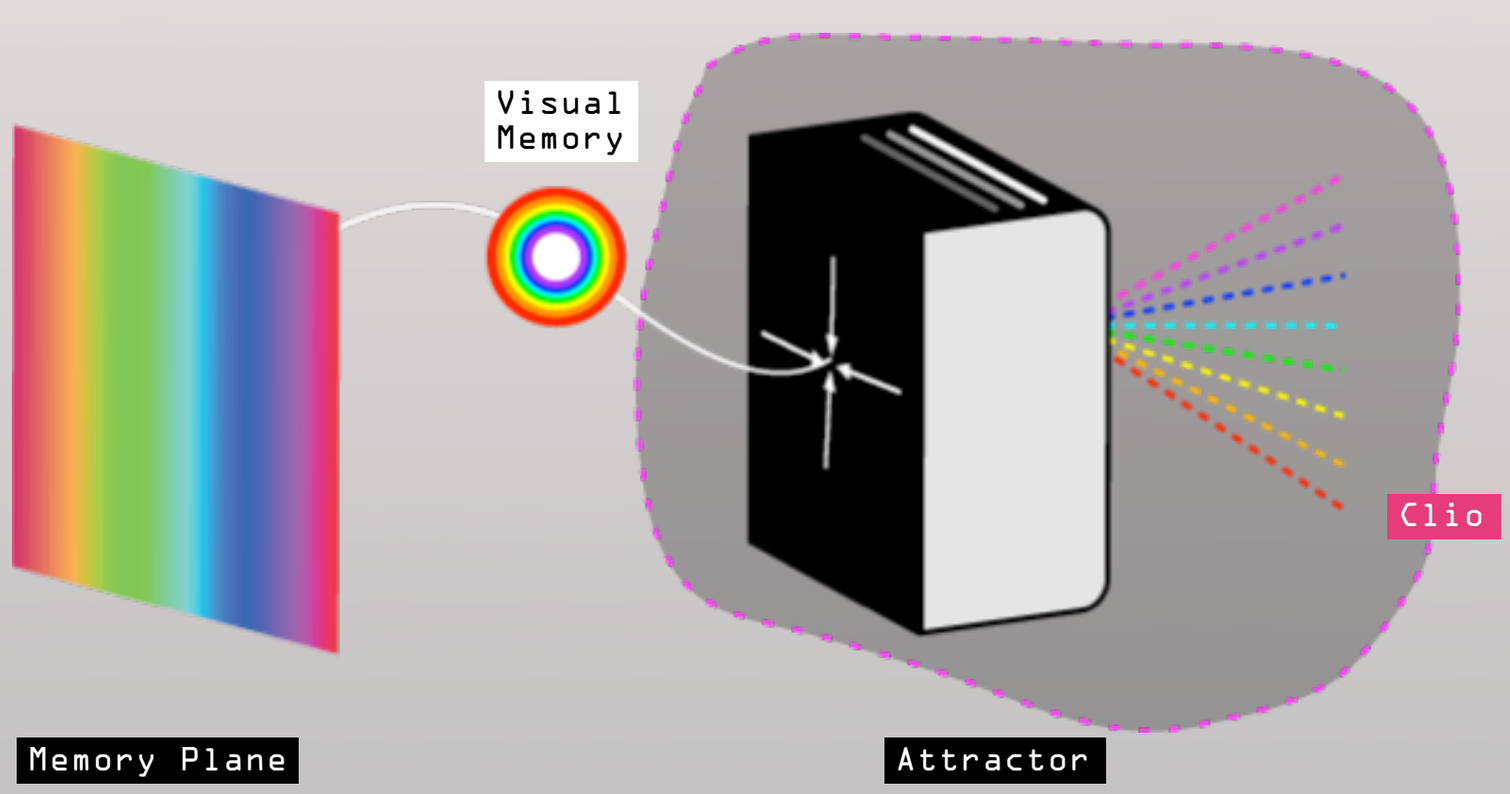
The visual memories Attractor won't work simply as a passive output, as a television, but certain *conditions* will have to be met by Clio in order to successfully attract visual memories from their plane, such as providing a silent or quiet aural environment, darkness or dim lights and presence, physical commitment.



Conditions for attraction:

Aural
Visual
Physical

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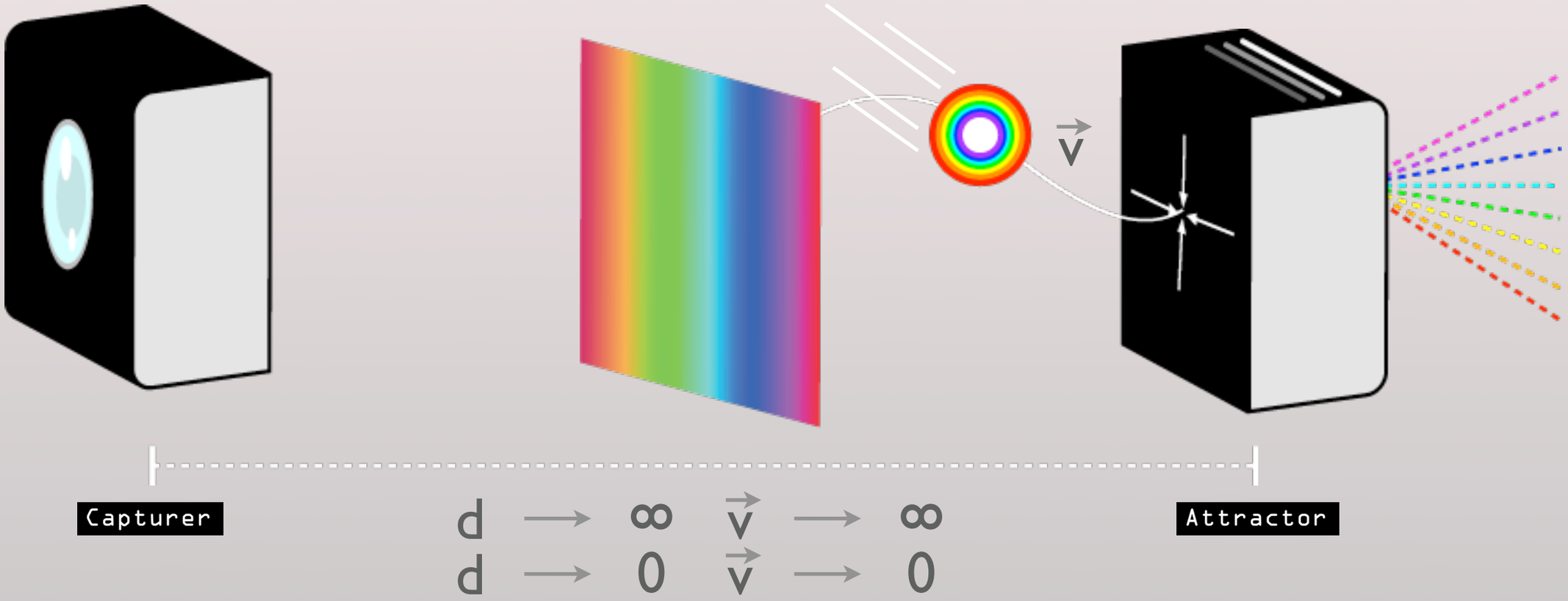
How each single visual memory is going to be *retrieved* by the attractor? It can't be simply a random attraction. The logic I've developed is based on the idea of *physical distance*.



If the physical distance (d) between the two halves is high then then speed ($\vec{v}$) the new visual memory has moving towards the Attractor is high, and vice versa with distance next to 0 speed is next to 0.

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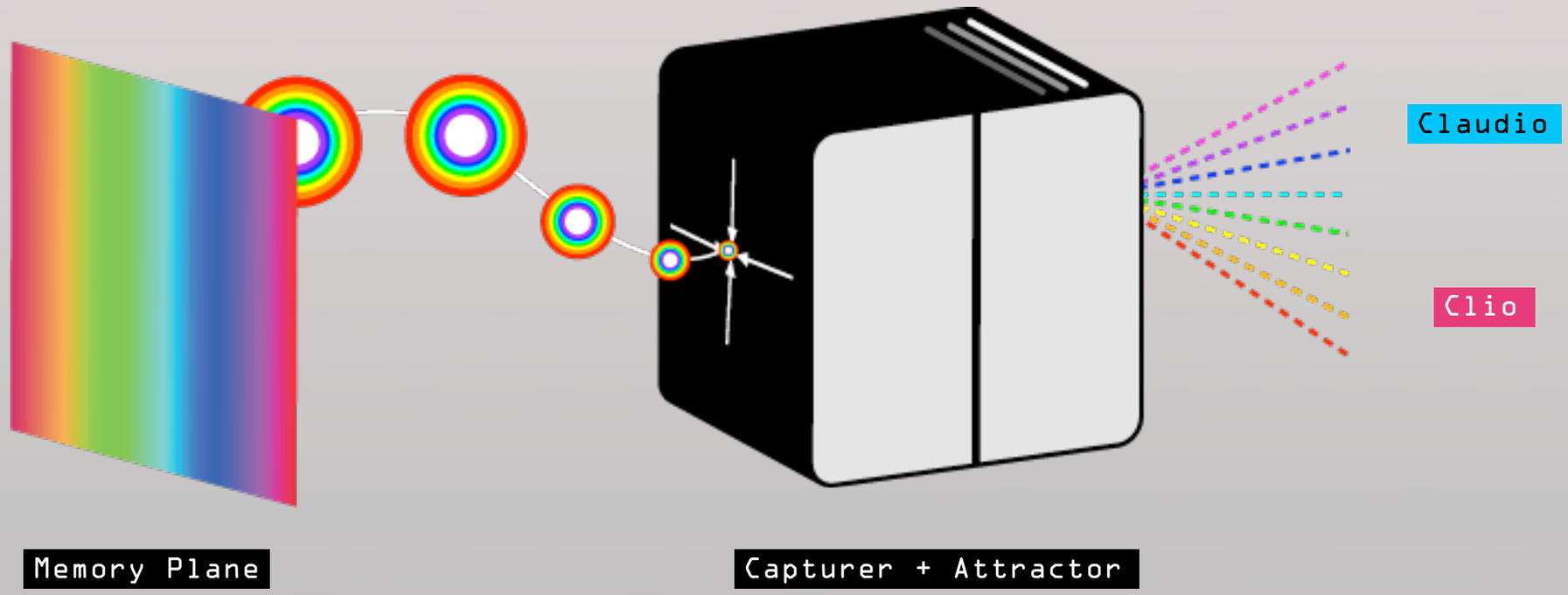
Claudio wont be able to immediately see the results of its capture, the visual memory it has recorded, until he will *physically* meet Clio, the holder of the Attractor. In that occasion something very special will happen, as the who halves will recognize each other, finally attracting all the visual memories from the Memory Plane to be enjoyed by the two persons without any limit or condition to be met, until the two parts will be separated again.



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What are the *visual memories* I'm talking about?

They are neither a still photograph nor a video stream. They are an hybrid which mixes some of the main features of the two.

At this current stage the visual memory I'm envisioning is in the form of a short high speed, high resolution video, played back at slower than sampling frame rate.

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They will be almost like a magical photograph, which seems to be still, but in reality slowly moves over time revealing new details as times passes.

I've chosen them to be a short video as conceptually I wanted them to be similar to a "breathing" photo, but not a full video stream, in addition to this, technically the longer the video, the harder to work with it becomes.

I want them to be high speed as if the source video will be at normal 24 fps I will lose much of the temporal resolution to play with.

I want them to be high resolution as I intend the Attractor more as a camera viewfinder than a digital photo frame, having more pixels to look at gives me more space to experiment with.

Precedents

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The Moment Camera

Technic

Michael F. Cohen and Richard Szeliski

Microsoft Research

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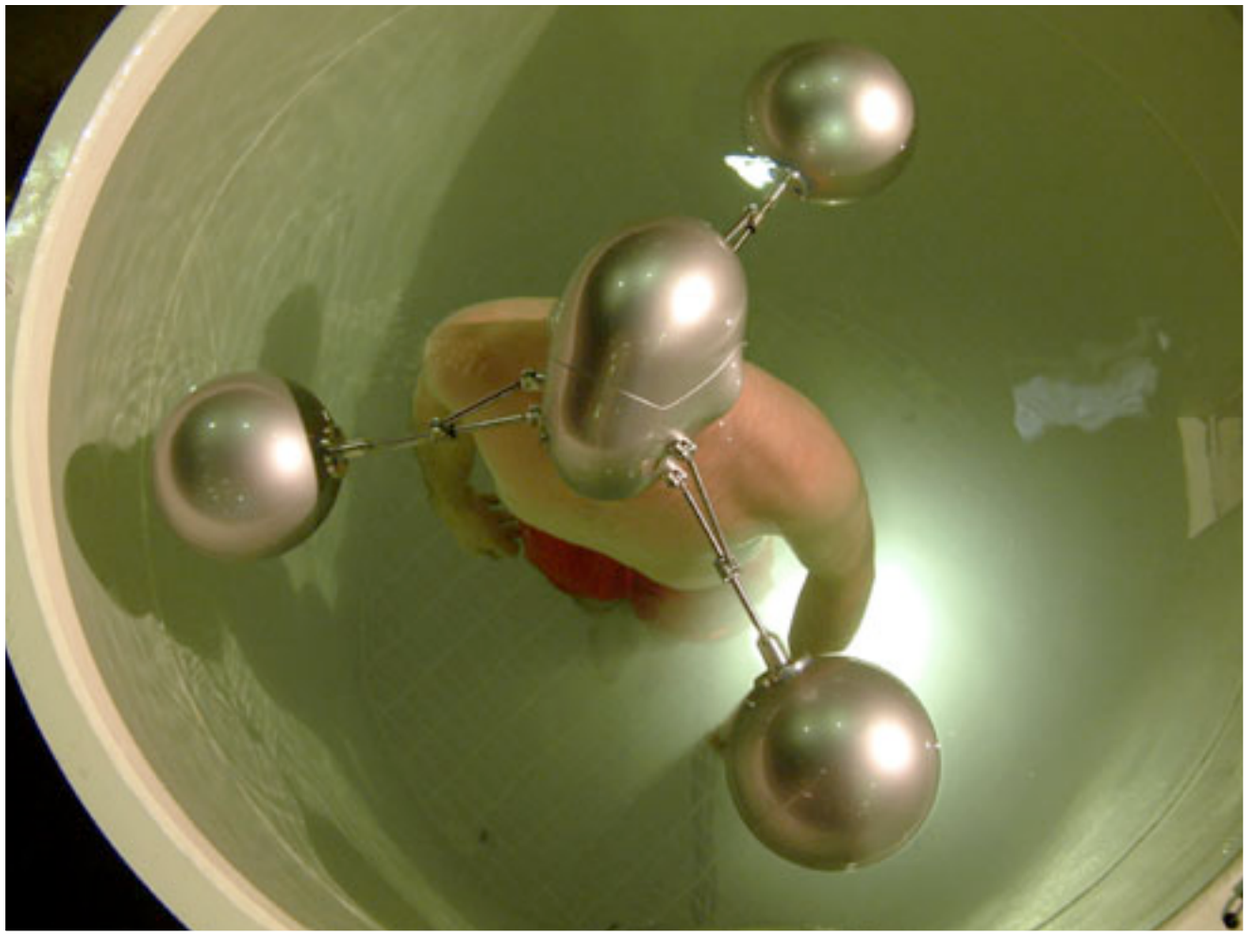
Iso-phone

Concept

James Auger, Jimmy Loizeau, Stefan Agamanolis

Media Lab Europe



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ILog

Look & Feel

Leafcutter John, Kaffe Matthews , & Thor Magnusson

IXI software

Next steps

Thanks to openFrameworks I've successfully created a first *implementation* of a technical framework which will enable me to work remotely with video.

The next technical stage will be figuring out a practical *hardware solution* to work on (umpc, single board pc), which high-speed, high resolution camera, which data provider to rely upon, the implementation of the actual network and sensing logics of the two halves of the device.

From the *look and feel* point of view, I'm going to closely explore the possible physical and aesthetic mappings of the device with the concept, to finally mix every area (role, implementation, look and feel) into the *first physical prototype* to test with, at the end of the semester.

Last minute!

I've just discovered in the pages of the Human Connectedness group at MIT Media Lab Europe the Distance Lab!

"*Distance Lab, a new research and commercialization center for distance-reducing technologies, based in Scotland. Some of the group's (Human connectedness) themes are being continued in this new lab, which opened in December 2006 and is now looking to build a network of partners, sponsors, clients, and collaborators.*"

Thursday 13 November 2008 is hosting the "Slow Technology" event:

"*... Instead of speed and efficiency, slow technology emphasizes the quality, locality, and humanity of the total experience.*"

Thank you!