

# ***WHO AM I? :*** **a Art Ludic Installation in Virtual Reality.**

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**Abstract.** This paper presents the Art Ludic Installation in Virtual Reality, named "WHO AM I?".

**Keywords:** Art, Ludic, Installation, Virtual, Augmented, Reality.

## **1 Introduction**

WHO AM I ? is an installation adapting in augmented reality the principle of the game "Le Scotché". Imagine that instead of having a card stuck to your forehead, a virtual head placed on your shoulders reacts emotionally to real time actions... The simple idea of the change of head has come up after a discussion about the no-limited capacities of the Virtual Reality. So we just thought it was funny to change our face with a virtual head! So The "WHO AM I?" Project is born!

## **2 Technical Points**

We developed "WHO AM I?" with the software Virtools Dassault Système. This software is a platform to compute graphics in real time. We installed the plugging named VirtoolKit, to use a patterns system to enable a tracking functionality within the Virtools environment. We have two computers working in network. This networking is necessary because the software Virtools can't handle two monitors in full screen in the same time.

## **3 Construction of the Box**

We built the box ourselves. We had a specific idea about the construction of our box. We wanted to hide the computers and other technical objects. So we built a 49x50cm by 88cm high box, suspended 1.50m above the ground. This box is suspended by 4 chains 1.50m long, screwed to the 4 corners of the wooden support board. These 4 chains are joined about 50cm above the box and are linked to

a 5th chain which is about 2m long. On two of the opposing faces 35x25cm rectangles are cut to make the two 17inch screens visible. Inside the box, three shelves are installed, the two above supporting the portable computers, the lower one a printer. The customised keyboards are laid in front of the cut faces, on the small shelf below the cut-out area.

#### **4 Design Points**

The design interface is very important in this project. It determines the atmosphere of this Art Ludic Installation. We wanted the design of this project to look like something elegant and fun. So like we realized virtual portraits, we have chosen to draw wallpaper to post them.

So we created original wallpaper to define a good atmosphere corresponding to the virtual head.

We also created an atmosphere around this installation, so we have chosen a real wallpaper and we made frames with paper. We created a presentation video where you can see a simulation of a tracking with 2D pictures.

A musician friend composed for this installation three musical pieces with acoustic guitar. This music style with the “WHO AM I?” design breaks with the association between virtual reality and electronic picture and music.

We want really created a special atmosphere. We want created the “WHO AM I?” specific atmosphere.

#### **5 Description of the Artistic Goals**

Computer science permits a passage from the real world to a virtual world. Here we transform a real interaction (the old game) to a virtual interactivity (the set-up). In creating this adaptation, particular care must be taken when selecting the platform because each tale, each memory, each dream has a lexical or emotional field that we must make ours to best interpret it. The interpret must therefore judiciously select the medium or platform that will best express his ideas. Here, augmented reality in the form of the installation is the platform that makes the most sense for the re-interpretation of this game.

Thanks to the augmented reality devices, the audience is more included by digital arts. In the “WHO AM I?” device, beyond the gaming experience, we propose to the players a communication through a machine interface. This man-machine interface allows to play with reality by adding, by augmenting the players for the duration of a game.

During this game, the spectator lives a symbiosis with the 3D head, they cannot be dissociated from each other without destroying this hybrid of an augmented spectator. These augmented spectators form an army of machine hybrids: cyborgs.