



PRESENCE :
EXPERIENCING MULTIPLE REALITIES

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Some possible scenarios in year 2020...

Scenario 1: TOOL FOR CONFLICT RESOLUTION

For example the Israeli-Palestinian conflict. I´m a member of the negotiating council that meets to resolve world conflicts. One of the requisites is to pass through the VR system that makes us live the different experiences associated to the reality of each one of the members involved in the conflict, during at least the past 15 years.

-Any situation where a conflict has to be resolved: school, home, relationships, new human communication and relationship

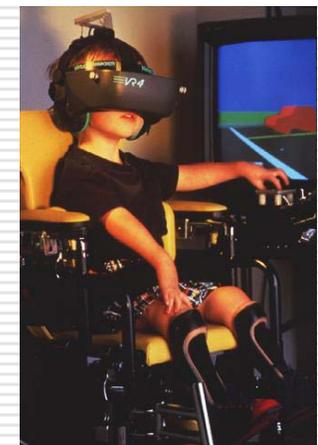


Scenario 2: TOOL FOR CHILDREN´S PERSONAL DEVELOPMENT

In the schools of the future they use a TOOL that enables a child to "experience" how the world around him/her behaves when she or he acts in front of others in a timid or assertive manner.

-If the experiences of life offer maturity to older people the new tool allows human beings to gain greater wisdom more quickly.

-A seven year old child becomes the wise man of the tribe.



Scenario 3: JAIL OF THE FUTURE (ethical issues?)

As a learning experience the prisoner is exposed to the experiences of his/her victims, to their PAIN.

The prisoner lives the REJECTION of the society due to his/her conduct.

PAIN, SOLITUDE AND REJECTION



Scenario 4: EGYPT

Experiencing Egypt from several different identities.

An interactive documentary where I assume different identities, the pharaoh, the slave, child...



CHALLENGES

To know how we conclude that the world that surrounds us is real

To develop a psychological theory about reality judgment and presence

To include "the others" in the system (persons, avatars, objects..) that will experience our presence

The others will notice that I'm present and they will be able to know how I'm feeling and will respond to me in an "emotional" and "intelligent" manner

"The others" will be artificially alive beings (new **artificial life** paradigm)

We are not simulating the reality, but creating new realities that won't have to adjust our physical universe, activating our sense of presence

THE EXPERIENCE IS BEYOND THE HERE AND NOW

POSSIBLE BREAKTHROUGHS

To consider VR as a human experience

To consider different feelings of presence according to different reality judgments

Further studies in social presence and "contextual" presence of the avatars and objects

To accept new "realities" inside this "reality": VR, AR, mixed reality

Creation of "personalities" (more or less sophisticated) assigned to aspects of the new realities (avatars and objects)

Development and creation of the ways of interaction between people, avatars...

New ways of communication channels, new interfaces (gestures, gaze,..)
new languages, new modes of communication

PRIORITIES

Key psychological factors for reality judgment and for presence

Human development guided testing (i.e. childs)

Very natural interaction interfaces (3D gestures recognition)

Ubiquitous augmented reality interfaces

New communication codes for VR (perhaps not based only speech, gestures but an emotional-gestural-biosignal language, BCI) ("communicating" with my dog)

Intelligent conversational agents in a broad sense (not only human replica)

Ethical issues

***EXPERIENCING MULTIPLE REALITIES,
"THE MAN IS AN ANIMAL OF REALITIES" (Pinillos, 1975)***

Psychology: theories of presence and reality judgment

**Social / contextual presence
Presence measures**

Computer science: avatars, conversational agents, real time CG

HCI: VR, AR, vision based interfaces, psychoacoustics

Neuroscience: Molecular imaging, new MI modalities (other than fMRI)

ENTERTAINMENT

HEALTH

LEARNING

REHABILITATION

Systems to create new realities that escapes space and time for learning, entertainment, commerce, health, politics,

The internal interaction of materia produced life



Natural life evolution will produce a new artificial life
not restricted to actual space-time laws

Integrated Project:

Multiple Realities