JOIN US FOR A STROLL IN SPIN

BODYSPIN ++

TIME'S UP

Spherical Projection INterface

SPIN, the Spherical Projection Interface, is a three metre diameter trackball that one walks inside of.

As the trackball rotates beneath your feet, the motion is taken over to a virtual space and projections from that space are cast upon the translucent walls of the ball. The effect is one of taking a stroll inside a virtual space. There is no forward, there are no goggles or other impediments, freedom of movement in spite of the space restrictions sets SPIN apart from

other interfaces. The rolling motion is used to control navigation in a virtual space - the expression walk-through obtains real meaning at last.

Placing the body within the rotationally symmetric space of the SPIN, the public individual perforates the membrane and becomes singularly immersed. This degree of immersion allows us to investigate the behaviour of the public individual in ways that have been impossible to date.
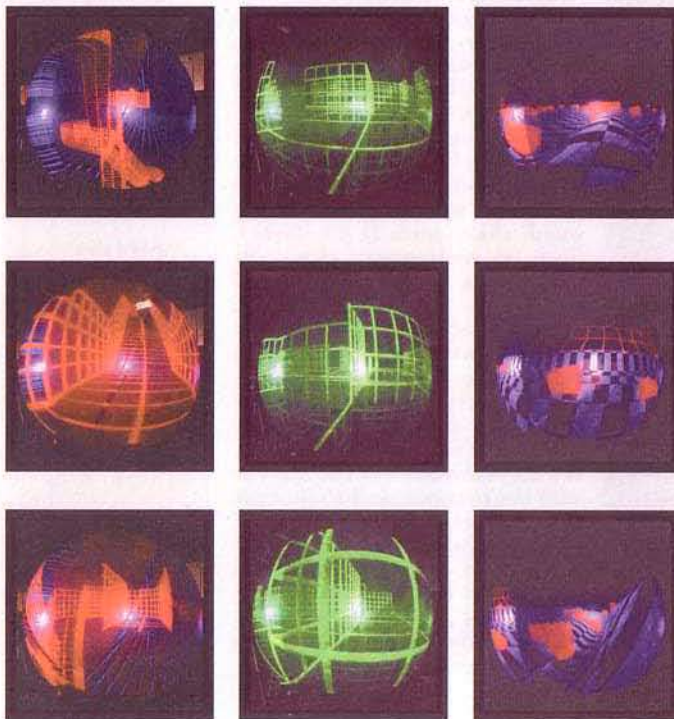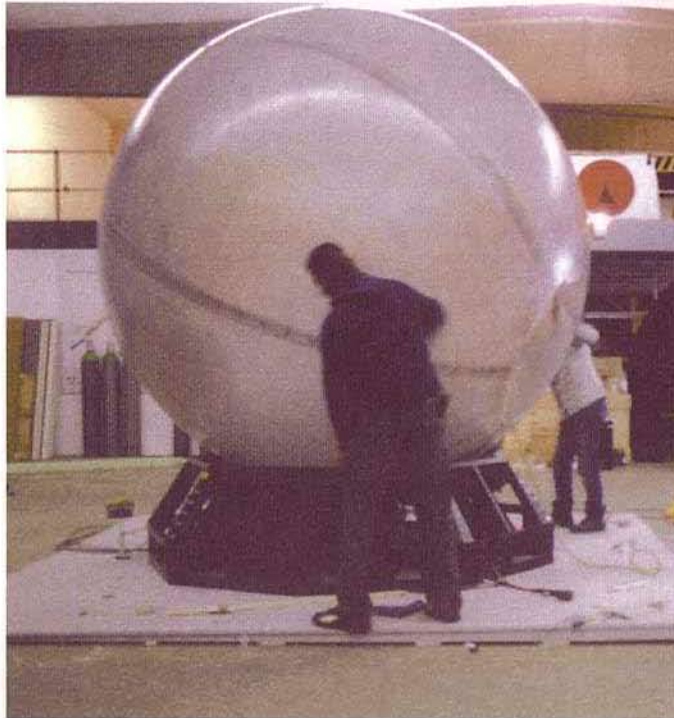
To:

p.b.b.

WHY YET ANOTHER INTERFACE?

Over the last few years **TIME'S UP** has assembled a variety of innovative devices, designed to help bridge the gap between virtual and physical environments. Our test results in the "Hyperfitness Studios" proved navigation into virtual environments via handheld devices (mouse, trackballs, data glove, etc.) to be very unsatisfying as compared to physical interfaces such as the *GetGoingCycle* or the *Velodrome*®.
Even though artificial worlds hold the promise of a cancellation of physical limitations we found the biomechanical factors in the human to be rather an extension and are continuing our investigation into the relationship of the human's dependencies upon them.

Why spherical ?

As we are aiming for a close correlation between virtual and physical worlds we are crossing the river towards the ever obsolete manifestations of 3D-environments. Even though we like the dinky glasses or the spacy helmets, we also find them a hindrance for our tasks. Nevertheless we want sensurround even in wireframe and a most natural way to take our physical body into this world and use as many of its capabilities as possible.
Thus SPIN was born - the Spherical Projection INterface.
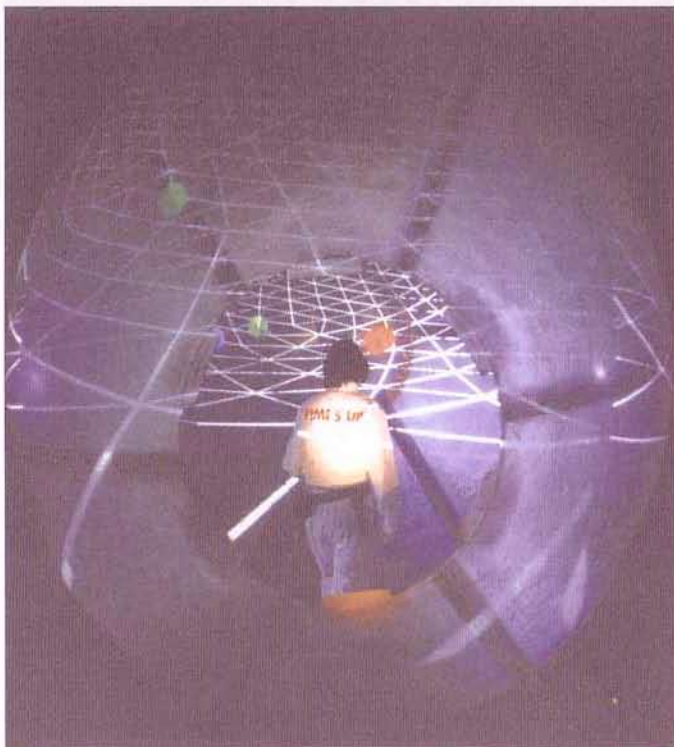
BODYSPIN++ & INVERTED REALITY SYSTEM

After intensive and detailed development and reworking in the Time's Up laboratories, we are happy to present **BodySPIN++**.

BodySPIN in general aims at researching behavioural patterns in a simulated environment that incorporates the user's body rather than trying to overcome it.

BodySPIN++ multiplies and enhances the options for immediate action and interaction with the user's body.

The research focus lies not only in the consequences of a VR-System onto the user's body, but moreover in the influence of physical presence on the creation of such a system and its feedback upon the body (loop).

The user is equipped with a small body pack to allow real-time measurement of the necessary body functions. A system for muscle activity measurements, a breast belt to allow scanning of breathing frequency and a clocking device for pulse rate are all fed back to the central world manager via radio link.

The Inverted Reality System:

The I.R.S. allows us to deal with the virtual environments in a new way, one that is neither a simple copy or simulation of a future or current (but too expensive to build) real space, nor an „artistically" well painted maze of tunnels and suchlike.
SPIN users find themselves inside a large wireframe sphere with the center of gravity pointing outward (like centrifugal force). Such an environment closes the user into a world that is closed enough to be overseen, large enough to explore.
Collisions with colour-coded balls transfer the user away from this central world. Outside the sphere the worlds are created according to the user's preconditions.
It's up to the users to become one with the program and change the course of their worlds and history with their bodily functions.
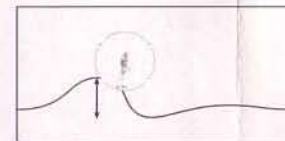A series of environments allows the user to obtain the necessary skills to get around in the space, including the space of their own biomechanical capabilities.
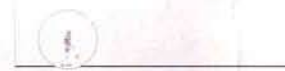
initial state: no waves
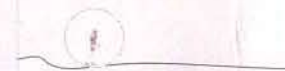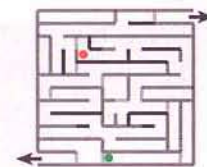
the user's breath triggers a wave

breath surf!
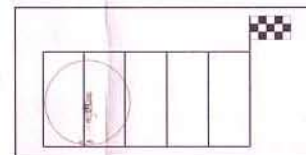
Initial complexity - few walls, few doors.

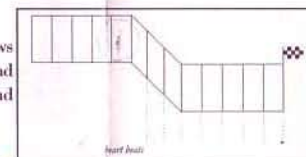*Higher stresslevel of the user: increased number of doors & walls*
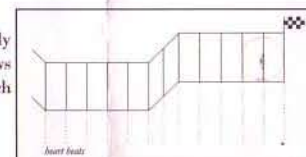
User in a state of a very high stress level .

initial state

The tunnel grows in beats, up and down, left and right.

heart beats

Moving steadily forwards allows the user to catch their heart.

heart beats

THE ENVIRONMENTS

BREATH SURF

Virtual Ocean. Whether someone will be able to surf on/in it or not, depends upon the user's ability to control their breath. There is a direct dependency between the wave formation and the test person's breath intensity.
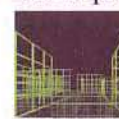Breathing in deeply and calm, will increase the size of the waves, which leads to an easy surf to the beach. Shallow, short breath keeps the user trapped in the endless ocean.
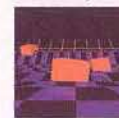
BRAIN MAZE

When the test person is in a calm bodily state the Brain Maze is rather simple.
One can find the exit by walking around. The person's activities are measured by our BodySpin System: the higher the level of stress rises, the more complex the maze becomes. Thus the fastest way out is probably not to try the most options in the shortest time but to stay in an "alert-but-calm" state of mind.

PULSE RACE

Chasing the heart, in a tunnel as it grows, weaving through space.
With every pulse of the user's heart, the end of the tunnel leaps away. The tunnel grows in beats, each section heading off; up and down, left and right. Moving steadily forwards without undue exertion allows the user to catch their heart.
Running as fast as they can, the user will not even stay in place. Beat your heart to catch your pulse.