THE NIGHTCLUB INTERACTIVE ENVIRONMENT William Bricken April 1995

This project might be called: House-of-Dreams, Responsive-Space, Innertainment

## OVERVIEW

The entire club management and entertainment environment is fully interactive and responsive to every patron and staff member in the club simultaneously. The Virtual Club is a 3D computer model of the actual club, with real-time tracking and interactivity within the virtual space for all club patrons. Clubs at various locations can interact through the virtual model. The high technology within the club is low profile, with patrons able to rent various interactive tools, ranging from voice connection to immersive VR.

#### RESEARCH AGENDA

1) Develop the human/digital/virtual functionality for entire club environment.

2) Develop proprietary knowledge, skills, and production infrastructure for "beyond-the-state" integrated entertainment environments.

3) Design and prototype market-leading experiences

# **BIG EXPERIMENT**

Will new forms of integrated human play emerge from the availability of complex interconnectivity with others, with software and virtual systems, and with oneself.

## STRUCTURAL OUTLINE

- -- Sensor saturated environment
- -- Integrated information and interaction software and computational systems

-- Display systems (audio, video, laser, computational windows, virtual environment simulations) all connectable to sensor network.

### HOW IT WORKS

A distributed intelligent operating system links all sensors, displays, and computational resources. Baseline experience is programmed by the club for each event (egs: light levels, mix of display modalities in each environment, use of interactive opinion registration tools). Through the interactive-table or hand-held *Wand*, each participant can effect each display within the club (within pre-specified constraints). The research lab and the entertainers can experiment with different forms of *experience-mix*, even in real-time.

The club is the instrument.

Clapping-in-unison, the-wave, and dancing-in-the-aisles are limited expressions of interactivity. Table, group, and club synesthetic harmonics is possible. Now overlay the environment with a virtual environment, an exact duplicate of the club *in real-time*, with the sensors, displays, entertainers, and participants all appearing in virtual as well as physical space. Through the *Virtual Club*, each participant can be anywhere at any time. Structured group games, which can occur in virtual space but have actual consequences, can link introductions and activities. The service providers of the club are linked instantaneously to all participants, able to respond to orders and requests immediately, on-line. Of course, the entire club is on-the-net, and therefore a (potentially influential, entertaining and profitable) node in cyberspace. Other clubs can be directly linked via fiber, for concurrent overlays of virtual spaces: *each club coexists with all others*. Thus, time offset globally will provide incentive for interesting 24 hour interaction.

Imagine a multi-sensor network throughout the club:

- -- pressure sensors (cheap, rugged, reliable) in the floor
- -- touch sensitive tables
- -- integrated image recognition with ceiling mounted camera coverage
- -- intelligent card money transactions, purchased in advance
- -- personal interaction terminals and tools.

Different spaces may offer different types of interaction. The club can be configured for different small group experiences in different rooms, or for a club-wide jam. Patrons could interact with each other in real-space, in virtual space, or in combinations of both. Patrons could find out what is going on throughout the club and vary activities with interest. Patrons would feel secure within the club, since the tracking system provides monitoring of all activity by staff. Interactivity could take on a diversity of forms. Patrons could rent equipment for different levels and types of experience. Some examples include

- -- personal video walls (you are the star)
- -- head-mounted displays for immersive VR
- -- live-theater with personal sound adjustments
- -- 96-channel internal video cubical
- -- wand for turning the lights up and down
- -- group orchestration of music
- -- private video phone lines
- -- cyberspace personality with super powers (like free admissions)
- -- participate in the concert as if you were the star (or the guitar)
- -- treasure hunt in virtual or real space
- -- group voting games to decide what happens next
- -- trivia contests
- -- virtual casino gambling
- -- virtual detective and tag games
- -- computer games with immersive group participation
- -- invisibility and private virtual spaces
- -- fantasy dates
- -- cross-country and remote dancing
- -- virtual team sporting events
- -- virtual shopping

The most important aspect of the interactive club is that the connectivity between patrons, staff, sensors, displays, and systems is *arbitrary*. This means that patrons and artists can explore and construct their own ideas of interactive entertainment, quickly and easily. Artists and customers will be able to define their own entertainment environment. The research group will then be able to monitor successful and not-so-successful experiments and design entertainment experiences which combines what people have demonstrated that they liked with the full capabilities of the interactive club environment. No only will this strongly enhance return customers, it will provide commercial opportunities for new forms of successful entertainment products.