# VR FOR PUBLIC CONSUMPTION

Project name: Virtual Vouni, the museum of the future.

Status: Opened 2003

Site name: http://www.virtualrules.net/vouni

Developers:

Bino Nord, Tomas Cool Colbengtson,

In co-operation with:

Reachin, Stockholm Sweden

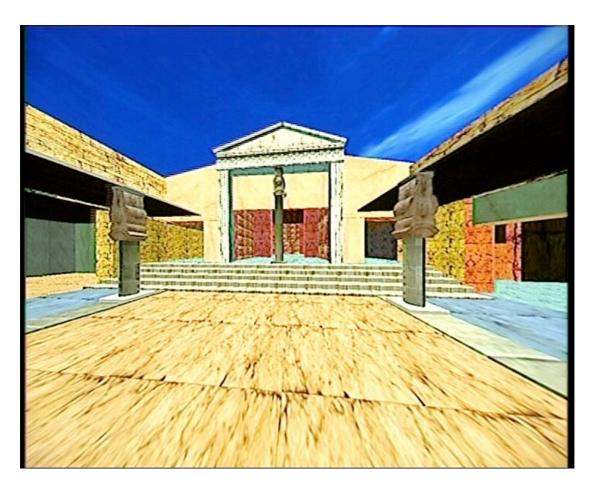
Medelhavsmuseeum, Stockholm Sweden

CID Center for Interactive design, PDC Parallel Computer Center KTH, Royal Institute of Technology

Country: Sweden

Start year: 2003 End year: 2005

Project type: Immersive distributed Virtual reality



The palace Vouni, VR-reconstruction.

## Summary;

Virtual Vouni is a shared distributed public CAVE –VR wall installation.

-a full scale total immersed virtual experience from the palace VOUNI and its surroundings and 3D-scanned objects.

The project tackles the difficult question regarding the right to museum collections (who own the past?) and questions about retrieving cultural heritage to the country of origin.

The museum had a vision to reconstruct the ancient Cypriote palace Vouni that was destroyed in 380 B.C

It has been a successful collaboration between VR-artists Bino and Cool and archeologists at Mediterranean museum in Stockholm.



Vouni, Cyprus 2003

#### Historical background;

2500 years ago a monumental royal palace was built on a mountain, rising high above the sea. Here, the king of Vouní resided together with his court. From the palace they had a magnificent view of the Mediterranean turquoise sea.

One day around 380 B.C. the palace was abandoned due to violent destruction. One of the king's officials hastily buried a treasure - the famous Vouni-treasure. The Swedish archaeologists found the treasure 2500 years later in a clay jar, which had been hidden below a staircase leading to the 2nd floor. The treasure consisted of silver bowls, bracelets of gold and silver, almost 250 silver coins and a few gold coins.

Swedish archaeological expeditions in 1929-30 in Cyprus excavated over 1000 unique artefacts. Cyprus government gave Sweden part of the collection.

Cyprus is now divided between Turkey and Greece. The original site where the palace was situated is on the Turkish side and the finds are located in Nicosia, the Greece-Cypriotic part. In the Vouni project, the collection is divided between the museum in Sweden (Mediterranean museum) and the archaeological museum in Nicosia, Cyprus.

## Shared virtual museum spaces;

The project will develop distributed Virtual Reality via Internet between museums for shared collections between different countries.

Virtual Vouni is also a new way for children to interact and communicate with each other with the language of cultural heritage and over modern borders, In other words: to engage the youth in our common cultural heritage.

The project is designed to connect the two parts of the Cyprus collection between the museum in Sweden (Mediterranean museum) and Cyprus. Visitors and archaeologists in both Sweden and Cyprus can explore and share the immersion .

### The Artists work;

The artists Bino and Cool have, with help from archaeologists at the Mediterranean museum in Stockholm, reconstructed the palace and its surroundings. Most of the reconstruction is based on the work of a Swedish archaeologist, done in 1930. Due to the fact that the palace was totally destructed in 380 B.C. and there is only small remains, the artistic work have been important.

We have used Maya and Multi Gen for the modelling. Textures from the remains.



Bino and Cool in the six-sided CAVE at KTH Stockholm, Sweden.

## Haptics by Reachin;

With the help of Virtual reality and haptics, sensitive and exclusive artefacts can be explored and touched by the public.

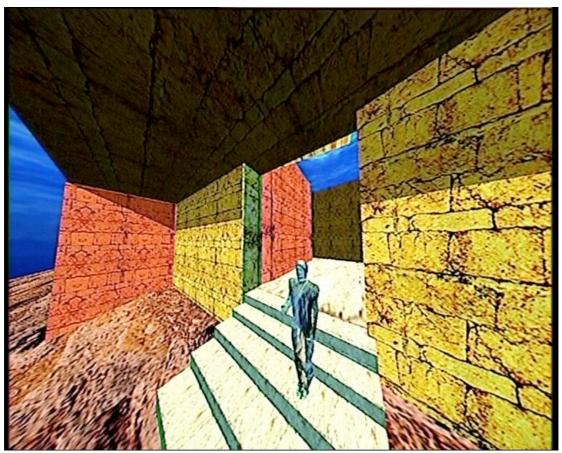
In the project we are using the leading haptic software solution, the company Reachins products: Reachin API and Reachin display, - the ultimate platform for building touch enabled applications, today with world leading tools for the medical and oil sectors, tomorrow also for the museum sector... it looks like.

Haptics is an important complement to VR, interesting to use for exploring and textiles, we constructed a haptic model of the the bull that was found in the Athena temple at Vouni, It's an exciting experience for people in all ages and from different disciplines, to learn about, and to remember the ancient objects through the "feeling experience".

It is of big importance to open up the museums for visually handicapped, who can touch the virtual object with haptic devices, the project also gives handicapped people the opportunity to experience museum environment.



Haptic VR -The touch friendly Reachin Bull



Reconstruction of the temple at Vouni with an avatar.

© Bino and Cool 2003

### The Museum of the future;

A new way for museums to complete their collections with virtual environments and reconstructions.

The project "Museum of the future" is important to attract more visitors to Swedish museums and to make the museums more attractive for the new generation.

The help of historical reconstructions give visitors a "bigger picture" of how the ancient places once looked like.

The project is also of big importance for educating entertainment, e-learning and understanding for schools.

It also solves the problem of sharing cultural ancient collections.

Virtual Museums for science, to spread unique collections and to develop low budget multi user systems for permanent exhibitions, and will bring in Virtual reality in the society for a broader audience.

The purpose with the project "Vouni" was to find a way to get in contact with the Cyprus collection from both sites, both in Stockholm and Cyprus and to show reconstructions on big VR Screens.

In the museums permanent collections

The artistic work was needed to create the vision, to make avatars become alive and to reconstruct the objects, the palace and the surroundings.



Public consumption

## Experiences from the Exhibition;

Vouni has been successfully shown as a public experience with a fully booked exhibition start in November 03 end -Feb 04 at the VR Cube (6 wall CAVE system) at KTH-Stockholm. Viewing for groups 7 persons at a time, ages between 5 -100. The exhibition has been so successful so it had to be extended. It has been covered in positive articles in TV and in Sweden's biggest daily news SVD, DN, Computer Sweden, Ny Teknik, Uppsala Nya, SVT 1, The Press hyped the exhibition by giving the parents the advice; take the children to The VR CUBE for an exiting history lesson and some educating entertainment instead of having them in front of the computer at home playing violent computer war games.

# Technical description;

6 - 1 wall back or front projected

VR-walls Tracking

Active or passive stereo Internet Distribution

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