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## Virtual Tour of the Cone Sisters' Apartments

Baltimore Museum of Art

### Virtual Tour



Original photograph of Etta's Living Room, Circa 1930s,  
from the collection of The Baltimore Museum of Art

Etta and Claribel Cone were two sisters, who over a period of 30 years, amassed one of the world's most acclaimed collections of early 20th century French art. This "Cone Collection," with its incomparable holdings of work by Henri Matisse and major examples of Picasso, Cezanne, van Gogh, and Renoir, was donated to The Baltimore Museum of Art (BMA) along with most of the sisters' possessions and furniture in 1950. During their lives, however, the Cone sisters lived with, and displayed their collection in their apartments. They were passionate about collecting, and their apartments were full of items.

This project meticulously reconstructs the early 20th century apartments as they were and gives a glimpse of how the sisters incorporated their collection into their everyday life. This virtual rendition of these original apartments allows viewers to "walk-through" the collection as the Cone sisters did daily and certain objects such as a cabinet in Claribel's Print Room, a grouping of travel books, and letters from Matisse may be opened and their contents revealed.



Virtual Reconstruction of Etta's Living Room.  
Screen grab from the Interactive Installation

### Visualization

Reconstructing the Cone sisters' apartments was difficult, because there are few remaining records of the original building. After locating floor plans of the original apartments, the Imaging Research Center (IRC) started the complex process of creating a computer-generated, real-time, 3-D reconstruction of the apartments, building wall by wall and room by room. Using measurements taken of the existing building, the IRC was able to accurately place 34 of the 37 existing photographs from the 1930s and 40s that document the Cone sisters' apartments. Each of 600+ objects and artwork has been painstakingly modeled and textured to appear three-dimensional in the virtual home of the Cone sisters.

Spatialized audio is also used to represent the apartments. In one room where the sisters hung a group of Matisse drawings in tribute to their friendship with Gertrude Stein, an excerpt of Stein's "cubist" essay of the two sisters, entitled "Two Women" is heard.

(over)

## Virtual Tour of the Cone Sisters' Apartments



BMA gallery visitor using the interactive touch plasma screen on permanent display in the Cone Wing.



BMA gallery visitors wearing 3D glasses to view the large scale installation of the Virtual Tour. Additional monitors display a map giving the viewer's location as well as showing the original apartment photographs.



Some of the IRC staff. from left to right: Brinton Jaecks, Alan Price, Christian Valiente, Sala Wong, Ethan Berner, Dan Bailey  
Photo by Mike Morgan

### Navigation and Installation

The Virtual Tour of the Cone Sisters' Apartments is presented at the Baltimore Museum of Art as a real time interactive simulation. Viewers navigate through the corridors and rooms of the Cone Sisters' apartments, immersed in the environment in which the sisters exhibited their extensive collection of then contemporary masterworks. Two versions were developed simultaneously.

First, a touch plasma screen version was developed for permanent display in the Cone Wing of the Museum. Viewers explore and move about the apartments by intuitively touching objects, doors, and artworks. In some instances, certain pieces of furniture can be opened and their contents explored. An interactive floorplan of the building is available as a means to quickly move to a specific room, and a 3D view of early 20th century Baltimore helps viewers situate the model with time and place.

A second version was developed to give viewers an immersive experience and was installed at the Museum for two weeks in April of 2001. Driven by multiple CPUs networked together, the apartments are presented on a large rear-screen multiple projection screen in polarized passive stereoscopic vision. Gallery visitors navigated through the apartments by using a joystick fashioned after a door knob from the original apartments

### Production Notes

Project Title: Virtual Tour of the Cone Sisters' Apartment

Project Directors: Alan Price, Dan Bailey

Scene Layout, Modeling and Texturing: Brinton Jaecks

Scene Layout / Audio: Christian Valiente

Lead Modeling and Checking: Ethan Berner

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