

Virtual Reality and Art Education: Experiments at the Ingenuity Festival

Jared E. Bendis

jared.bendis@case.edu

Creative Director of New Media

<http://www.case.edu/its/itac/nms/>

Instructional Technology & Academic Computing

Case Western Reserve University

Cleveland, Ohio 44106

Leonard Steinbach

lsteinbach@clevelandart.org

Chief Information Officer

The Cleveland Museum of Art

11150 East Boulevard

Cleveland, Ohio 44106

"Gazing into the Future" was the theme as The Cleveland Museum of Art pavilion at the 2005 Ingenuity: a festival of art and technology showcased and experimented with a variety of innovative technologies. Among the pavilion's exhibits were: a welcoming hologram of the museum's iconic 5,000 year old Statuette of a Woman: "The Stargazer," an autostereoscopic animation of the museum's 14th century Table Fountain, and a stereoscopic video wall displaying a specially commissioned 3D video "short feature film" of the museum's 18th century French writing desk.

To create the hologram of Stargazer 200 high resolution photos of the Stargazer were taken over an arc of 60 degrees. This high resolution integral hologram allows viewers to experience the Stargazer at more the twice its actual size.

First displayed at the exhibition Dukes and Angels: Art from the Court of Burgundy (1364-1419), the animated Table Fountain allows viewers to envision, with the aid of computer graphics, gears turning, water flowing and bells ringing in this one of a kind object. For the Ingenuity Festival this animation was re-rendered from 9 different views to be able to display it on an autostereoscopic display which allows for the viewer to see it in 3D without wearing special glasses.

The award winning filmmaker Kasumi was commissioned to produce a 3D film "the French Writing Desk" as an experiment in art object interpretation and representation that transcends the bounds of labels, photographs, and other standard didactics. Indeed it demonstrates an extraordinary collaboration among artists, technologists, and curators as well as a unique visitor experience. This 7 minute video was shot using twin 3CCD Sony DV Cameras.

This presentation outlines the technical and aesthetic challenges that went into creating these works.



60° / 90° / 120° Images of Stargazer Statuette



9-Tile Autostereoscopic Table Fountain Renderings



Stills from Stereoscopic Video "The French Writing Desk"