




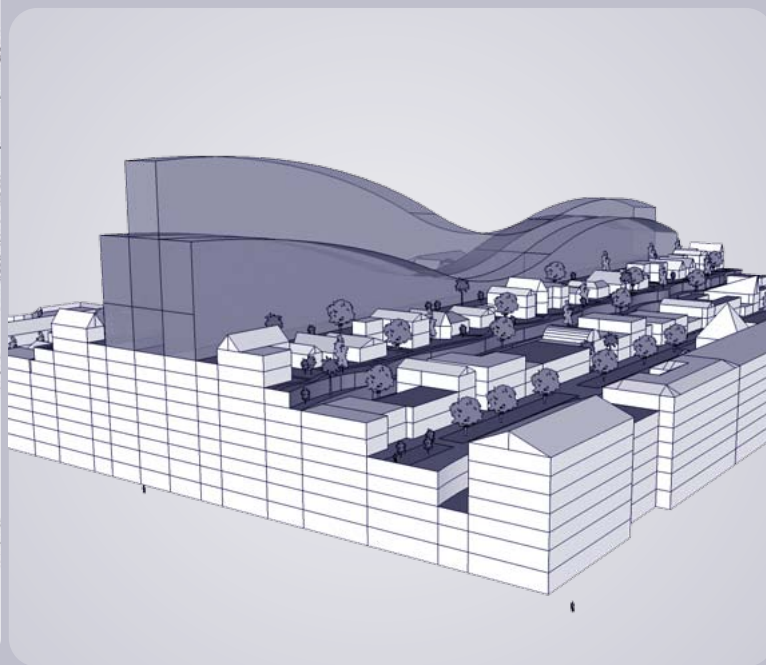
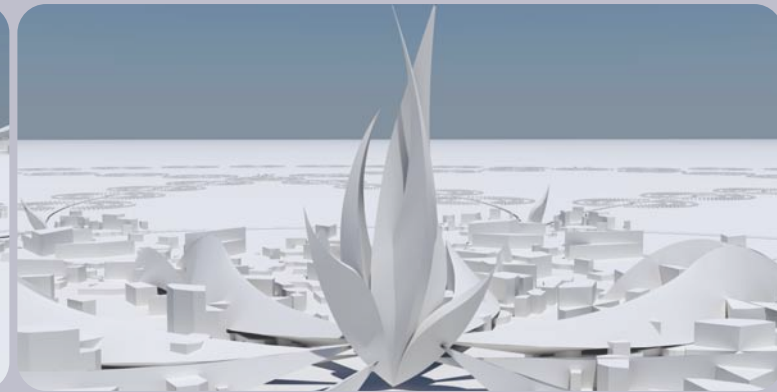
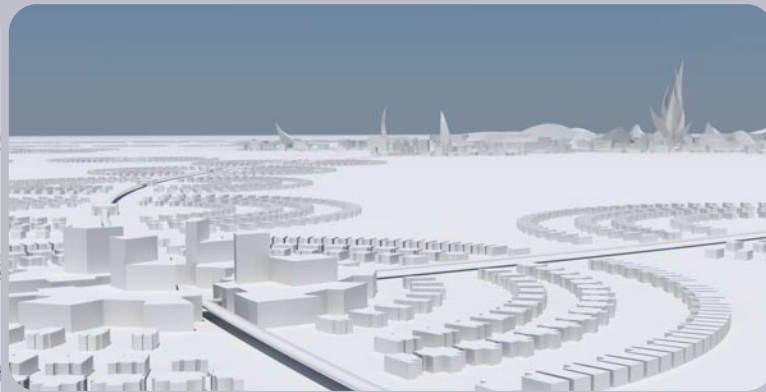
peter f. schaab
design for an **optimistic future**



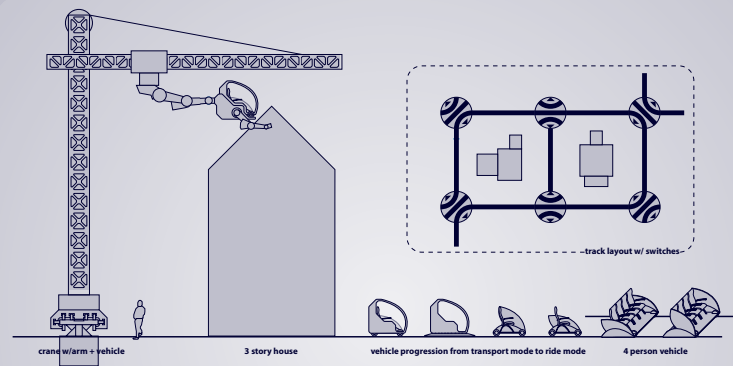
To those who say “that’s just the way the world works,” we must respond “the world is what we make of it.” It takes strength to keep abreast of current events and not become discouraged. Much of the global population lives in squalor—their opportunities limited by corrupted political and economic systems. It’s no wonder popular culture features a plethora of dystopian visions of the future. I support the proliferation of opposing visions—visions that show we have enormous potential to shape our collective future into one where childhood wonder and possibility does not give way to adult cynicism and disappointment. This portfolio is a record of a personal evolution towards the goal of helping to

design that optimistic future. It is not perfect. Most of the proceeding work represents my previous focus on inspiring positive change purely through entertainment design. Forthcoming projects are directed towards more broad and fundamentally vital issues such as urban/regional planning and social sustainability. There is no certainty of what the future holds in store for us, but I am certain we can make it one worth looking forward to.

Robert L. Summers



Novus Vita is a long-term project with which I'm learning about and developing potential solutions for challenges in urban design, transportation, energy generation, food production, economics, education, and government. The images on this page are an early glimpse of the context for those solutions: a city responsibly built on virgin land and highly adaptable to evolving thinking on how society can flourish in a sustainable manner. While purely hypothetical, I hope that Novus Vita will spark new interest in bold and bright action for the future.



Balance is a theatrical presentation located at the center of *NaturaFaire*, a traveling fair dedicated to the wonders of and potential in learning from the natural world. The show is the Fair's conceptual heart.

Balance

PAVILION

Transparent Organic LED (TOLED) panels act as secondary video screens as well as partitions from surrounding activity (cafe, fair, etc.)

The main focus of the show is a 16 foot diameter sphere covered with TOLED's. Most of the imagery for the show will be featured on its surface. The sphere can open up like a flower, revealing the Animatronic "host" of the show, Gaia. It also can be removed allowing guest speakers to hold lectures on various topics during special events.

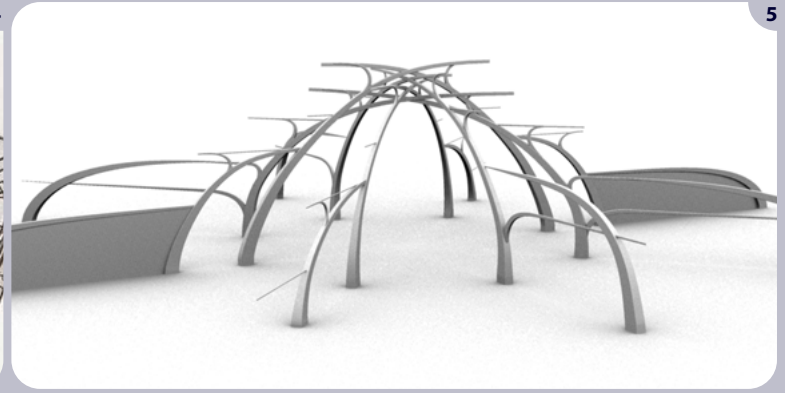
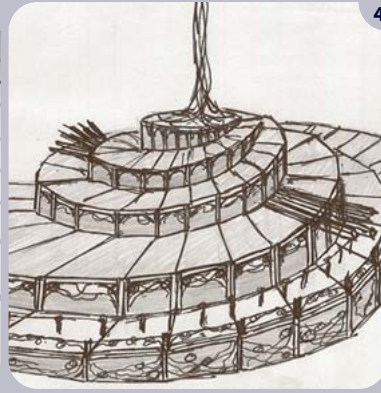
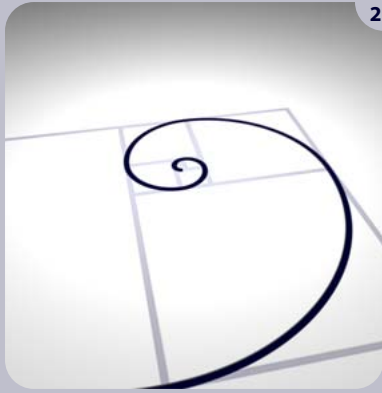
Removable panels form the pavilion's canopy. Each panel is constructed of recycled steel covered in an organic membrane. The membrane allows vines, flowers, and other plants to flourish throughout the canopy.

Theater-in-the-round seats 525 people

Entry from queue

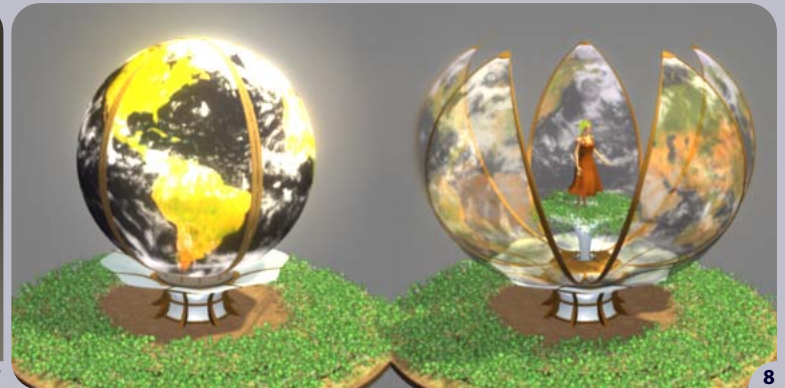
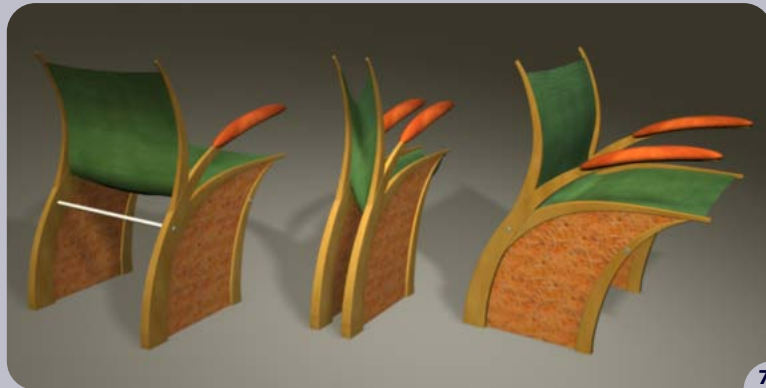
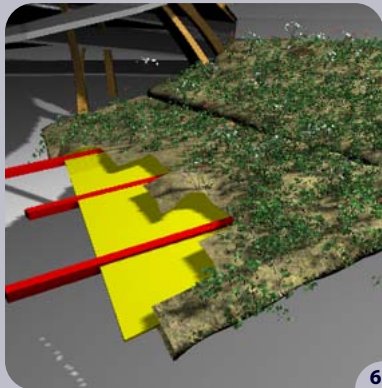
Two small cafes serve a healthy selection of organic foods. Patrons can also catch a glimpse of the show.

Two intersecting Logarithmic Spirals form the basis of the architectural design. What results is a fantastic swirling form that is ever-changing in dimension but always retaining a structural order.

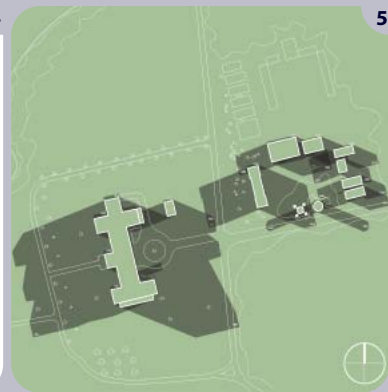
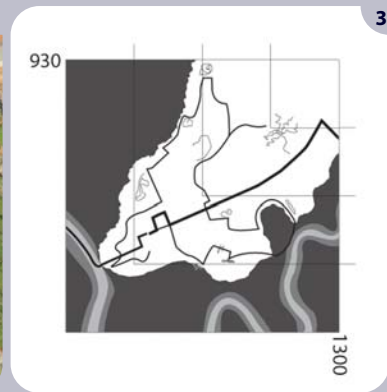


The Balance Pavilion is a concept for a show that would travel around the United States to fairs and carnivals spreading an entertaining yet important message about environmental responsibility. Inspiration for the building's form came from the logarithmic spiral [2], a pattern found throughout nature. I mirrored the spirals and projected radial lines from the center [3] - their intersection defined the placement of the walls and roof panels. After a lengthy development process exploring different layouts, narratives, and technologies, the building evolved from an indoor theater [4] into an outdoor pavilion that still featured a theatrical show but added two outdoor cafes serving healthful cuisine. Along with

the seemingly suspended roof panels, the curving structural supports [5] create an abstract forest canopy inspired by my old daily commute down the oak-lined streets of Savannah, Georgia. The roof panels are meant to be constructed of recycled steel encased in an organic, moss-like membrane that allows leafy vines to grow around them [6]. Every element is custom designed, down to the collapsible theater chairs [7]. The focus of the main show is the Gaia/Mother Earth Animatronic revealed at the center of a rotating sphere [8]. The sphere paneling is made of Transparent Organic Light Emitting Diodes allowing imagery to be displayed at varying opacity.

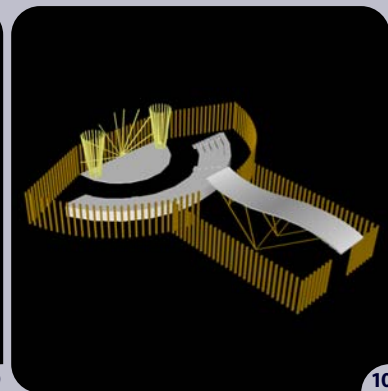
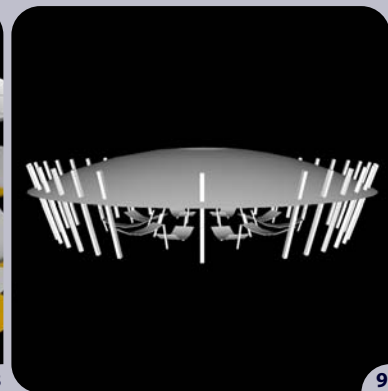
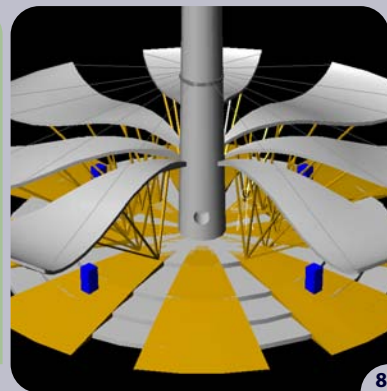


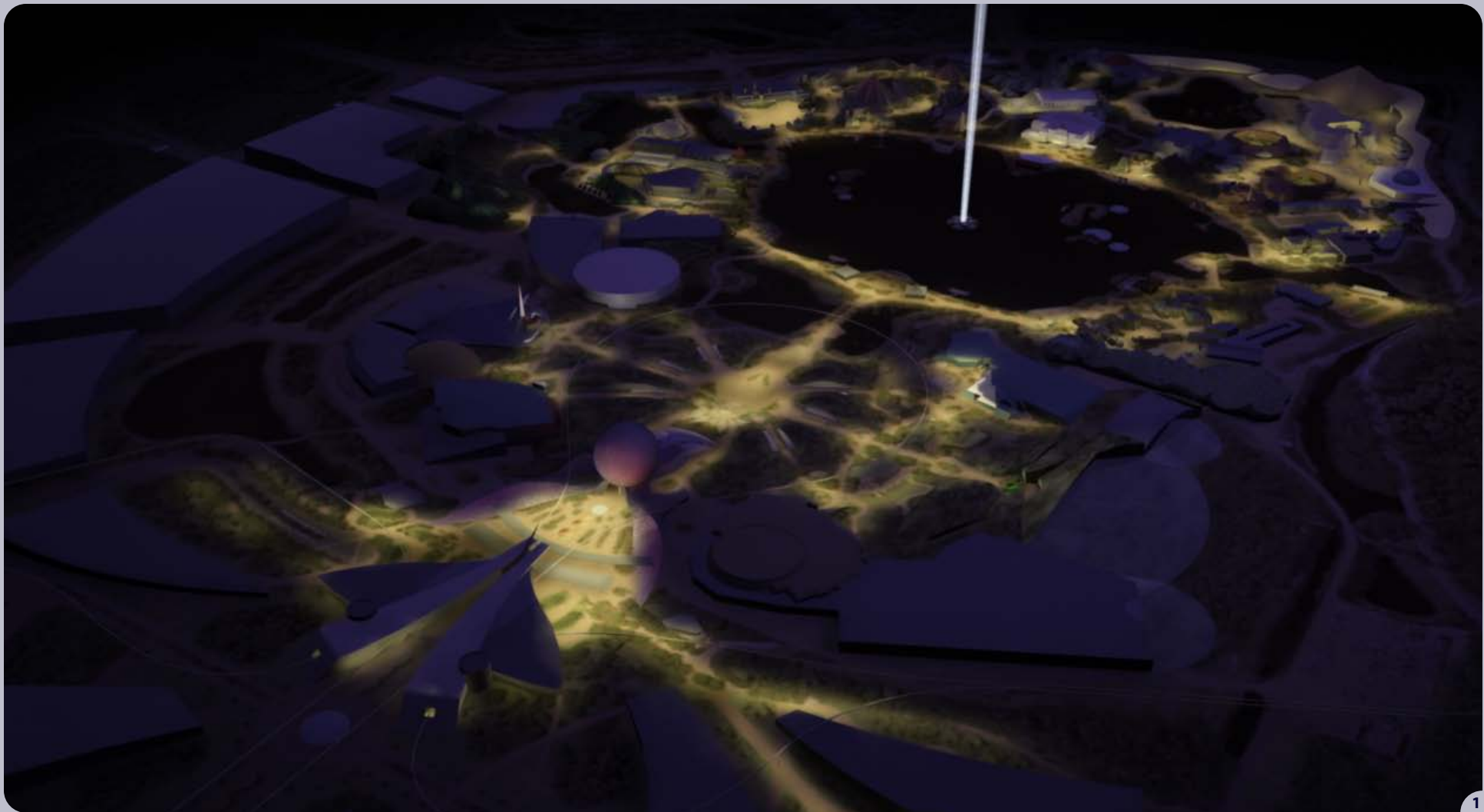


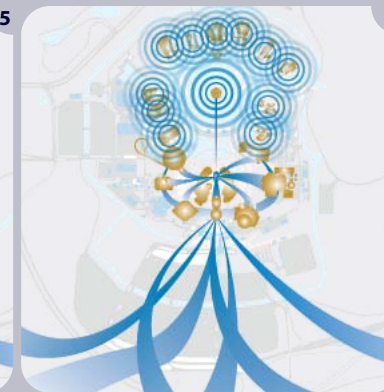
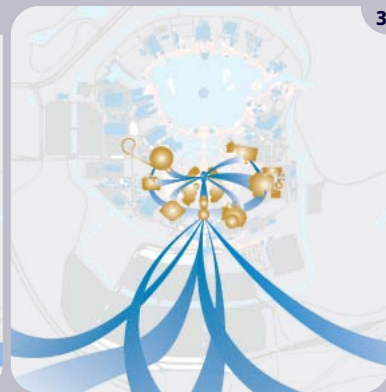


The Oatland Island Discovery Center was a concept to revitalize a local school board's natural sciences education site [2]. I started by analyzing the dynamics of the site including its pathways [3], flora [4] and fauna, and how the sun cast shadows from its structures [5]. The real joy of the project came from working with elementary and middle school aged children to gain their insight into our ideas [6+7]. The final design would involve visitors approaching a tall icon that was a visual example of alternative energy: a wind turbine combined with a photovoltaic panel that adjusted its position for maximum receipt of solar rays. At the base of the wind turbine's support was a point where visitors would pick up abstract trees that would be taken to columns that fronted each

section of the park. Only when the trees were placed in the column would the visitor be allowed to proceed [8]. Colored plastic balls (with the colors representing water, nutrients, pollution, etc.) were sent by pipes around the perimeter of the park. Visitors had to make sure the "pollution" balls did not block the pipes or the particular section's activity would shut down. Other attractions at the park included a water cycle playground (visitors "became" the water molecule), an area where visitors could relax in hammocks while projections of aerial and underwater flight played on a dome above [9], a wall of edible plants that substituted as a food court, and a small amphitheater where visitors could play instruments along with recordings of natural sounds in the background [10].

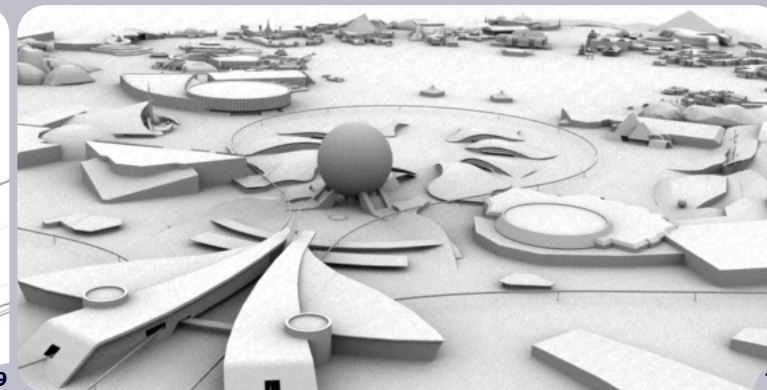
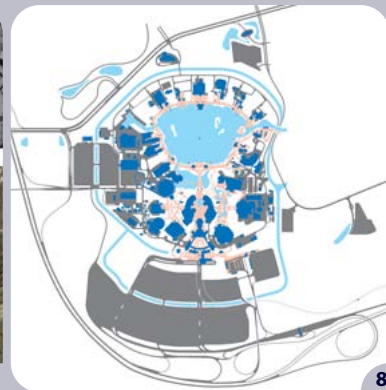
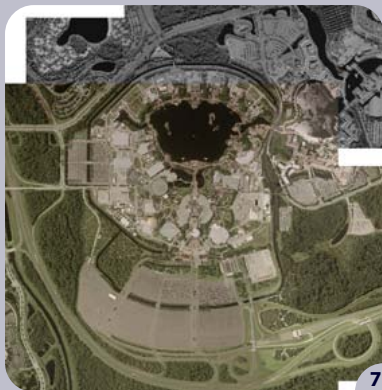


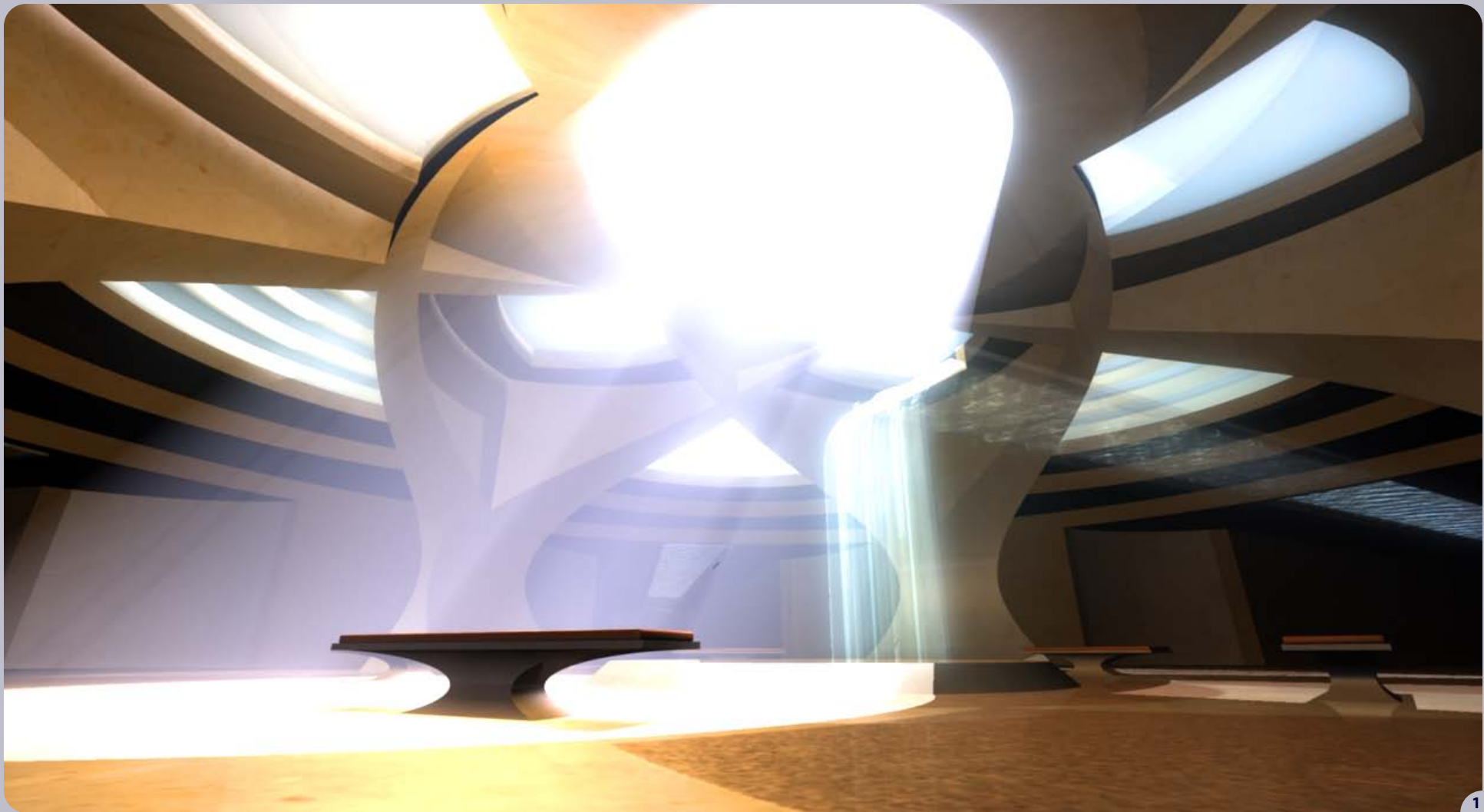


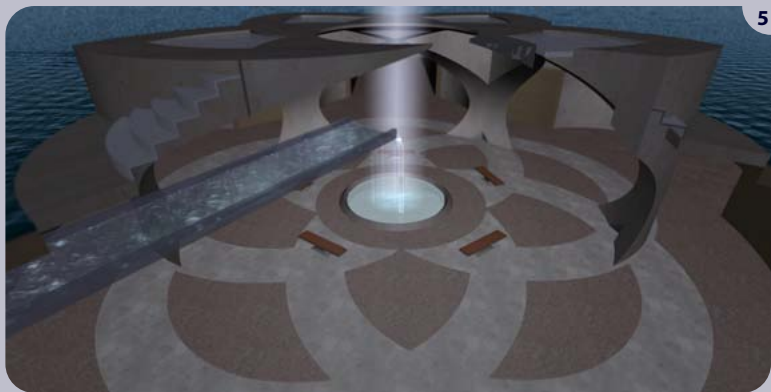


The Epcot Theme Park Redesign Project was the largest scale design challenge I undertook during my college career. Imagining a new master plan of the Orlando-area theme park ten to twenty years in the future was a strong personal desire since adolescence. The primary goal was to restructure the park in such a way that its two sections, *Future World* and *World Showcase*, wouldn't be as thematically disparate as they can seem today. What resulted is "Focus and Transmission," a conceptual framework that suggests that visitors flow through the park as would ideas and information through a global network. A collective body of knowledge would develop inside the working laboratories/pavilions of

Future World, be focused into a "river" that runs along the central axis of the park, and finally be "transmitted" to the global community represented by the *World Showcase* pavilions [2-6]. Once this framework was in place, it was expanded upon by integrating an arts and sciences university, a new transportation center, and concepts for new attractions into a revitalized *Epcot*. Since an official site plan of the park was not available, I created my own scale plan in Adobe Illustrator by compiling information from satellite imagery, aerial photography, old maps, and personal observation on the ground [7-9]. The completed design was visualized as a large scale computer generated model in Autodesk Maya [1+10].

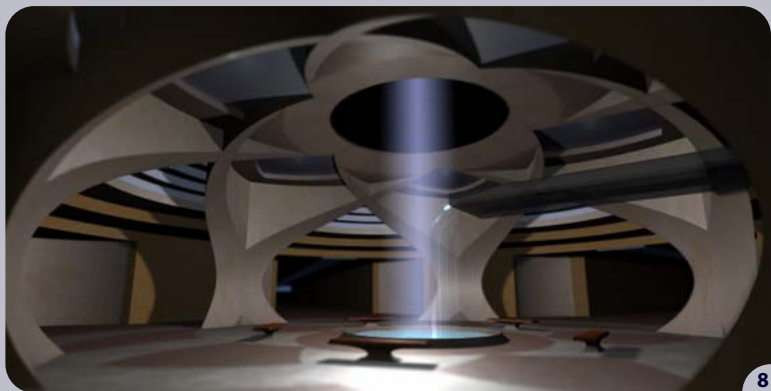
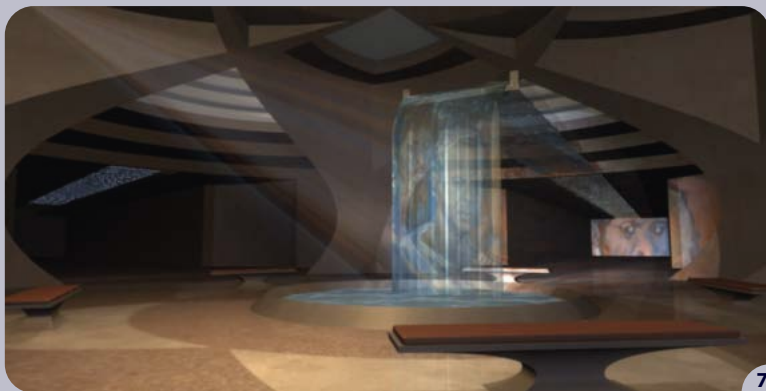
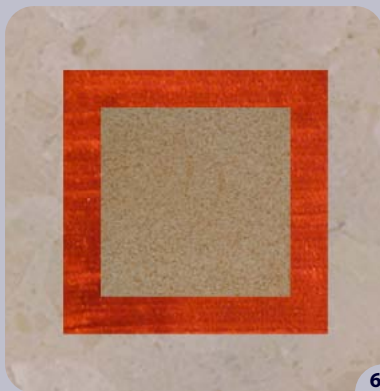




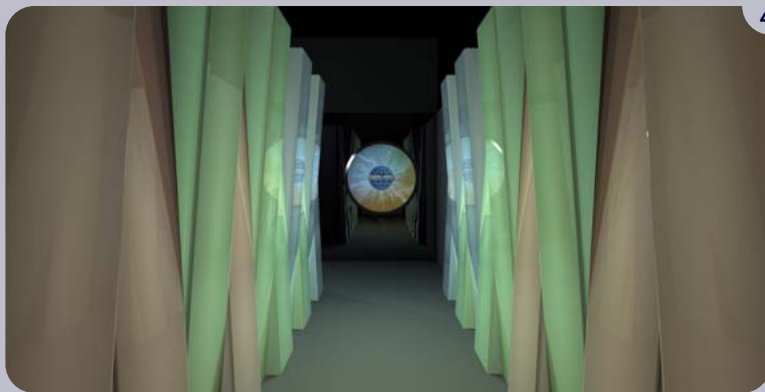


The Epcot Universal Library is an integral component of the aforementioned “Focus and Transmission” concept. Thematically, it is meant as the point where the collective technological and experiential knowledge developed in *Epcot’s Future World* is transmitted to the global community. In a practical sense, the EUL is conceived as a library that contains most of the written and visual works created since the dawn of recorded time. Space would be allocated for physical books and paintings as well as areas for accessing content stored digitally. The form of the library’s atrium is based directly on the original symbol of *Epcot*. I extrapolated the form through a careful process of adding and subtracting from the

symbols’ circular shapes [2-4]. Most of the building is submerged just below the surface of the World Showcase Lagoon [5]. As a consequence of my architectural background, I paid special attention to materials, choosing a warm palette of textured marble, woven fabric, and ceramic stone [6]. The arm-like intertwining columns surround a shallow pool that serves as space for informal audio/visual presentations projected onto a laminar flow waterfall [7]. At night, a shaft of light emanates from the shallow pool, symbolizing the transmission of knowledge [8]. The model and texturing was my very first work in Autodesk Maya while the lighting and animation was refined as my experience with the software grew.







The Horizons Exhibit is a temporary attraction designed for an independent Disney fan convention. While I had already sworn off work on any further Disney-related projects when the opportunity for this project arose, I couldn't resist developing a tribute to the classic EPCOT Center ride whose optimistic vision of the future made such a positive impact on my childhood. Using a virtual model created in 3D Studio Max, I worked closely with the conventions' organizers to develop an experience evocative of many of the rides' most memorable elements—all contained within a 50'x40' space [2]. Visitors will once again be able to stand at the threshold of the Futureport [3], gaze out a window onto Mesa Verde, and

skip along a rainbow-colored corridor [4]. Perhaps the most exciting moments will come when visitors are seated in a full scale replica of a Horizons ride vehicle to watch a video recording of the entire ride on a rear-projection screen that telescopes into place to fill their field of view [5]. The virtual model also allowed invaluable pre-planning of construction techniques and relatively simple creation of blueprints. Construction of signage [6] and the first Futureport arches [7+8] has begun but challenges with potential venues, manpower, and funding has put the effort on indefinite hold. For more information and updates, please visit www.wedconfl.com.



peterschaab.com

mail@peterschaab.com

619.245.3919