Inside Bruce Goff's Creative Mind

Using 21st-century technology, the Fred Jones Jr. Museum is giving a new generation the chance to tour the unconventional world of the famous architect.
early 30 years after the death of their creator, buildings that once existed only as blueprints are thriving in a virtual reality at the University of Oklahoma's Fred Jones Jr. Museum of Art. The exhibit, "Bruce Goff: A Creative Mind," showcases the genius of the former director of the OU School of Architecture and the creative spark he still ignites in others.

That spark leapt barriers of time, space and disciplines when Ghislain d'Humieres, director of the OU art museum, began circulating his idea for a Goff exhibit. His plan was to showcase projects that had never been built or that had been built but later destroyed. Blueprints, site plans, even fabric samples had been preserved in archives and in the memories of former Goff assistants.

Like a general contractor, d'Humieres set out to build a team that would take the architect's designs to finished product. But instead of carpenters and electricians, he would need virtual designers and 3-D engineers to pull it off. By opening night, the project had the unprecedented collaboration of the OU College of Architecture, the College of Engineering, Oklahoma City's Skyline Ink Animation Studios, the Art Institute of Chicago and the Price Tower Arts Center in Bartlesville.

"Our plan was not to create, but to use all the original renderings by Bruce Goff. They were so detailed, we knew we could re-create with 90 to 95 percent absolute accuracy," says d'Humieres. For the other five percent, the team began contacting former students and protégés who had worked with Goff. Questions like, "What color was the glass?" and "What flooring material was used in the chapel?" helped fill in the blanks. The common thread that united all those involved was an admiration for the self-taught architect who changed the American landscape.

At one time the only thing d'Humieres knew of Oklahoma was that Bruce Goff had lived and worked there. While an art history student at the Sorbonne, d'Humieres had developed an appreciation for mid-century design. His knowledge of that period led to work at the famed Christie's and Sotheby's auction houses before he accepted the assistant directorship at the De Young Museum in San Francisco. The opportunity to lease a Goff house from the University might not have been the deciding factor for the move to Norman, but it certainly did not hurt.

The Ledbetter House at 701 West Brooks, with its "flying saucer" portico and interior waterfall, was featured on the cover of Life Magazine in 1948. Thousands toured the house the first weekend the Ledbetter family opened their home to a curious public. As both curator and resident of the historic home, d'Humieres wanted to show a new audience that Goff was still as relevant today as he was in the 1950s. To do that he needed the 21st-century technology that he found at Skyline Ink, an animation company founded by OU alumnus Brian Eyerman.

"Ghislain came to us and mentioned the Goff project and did we have any thoughts on this?" says Eyerman. "And we said, 'Oh, yeah, we've got plenty of thoughts on this. Let us help you.'"

Eyerman had been a huge fan of Goff as an architecture student in the 1990s. "I constantly referenced Goff in my student work," he says. "His work was so driven by intuition—there's no overt explanation for any of the particular details [as in the dime store ashtrays used as decorative prisms], but you can see how they work, how they lend themselves to this amazing, free-flow approach."
Ghislain d'Humieres sits in the living room of the Goff house he leases from the University. A longtime collector of mid-20th century furniture, the Fred Jones Jr. Museum of Art director says he feels like he lives in "a work of art."

Eyerman became the project's point man at the Art Institute of Chicago, where the Goff archives are housed. For a frantic day and a half, Eyerman and wife Lu sorted through thousands of Goff documents looking for clues that would provide the missing pieces needed to replicate Goff's vision in the 21st century.

"It was like private detective work," says Eyerman. "Notes in the margin of one sketch would say 'terrazzo' and on another sketch from the same project you could tell that the material was white. So, okay, we knew he intended to use white terrazzo."

From handwritten notes, sketches, photographs and models, Eyerman gleaned enough information to put the architect's finishing touches on 12 blueprints. The crew at Skyline Ink eventually would donate more than 4,000 hours reproducing Goff's designs in animation.

Meanwhile, d'Humieres had recruited the help of Dr. Kuang-Hua Chang in the School of Aerospace and Mechanical Engineering. Chang's school had access to a 3-D printer that could process information and "print" pieces of the buildings. The pieces were then assembled into scale models by students in the College of Architecture under the direction of Nick Safley.

The result of this collaboration was a fusion of past and future—a presentation of Goff's timeless designs through a technology he never lived to see. Plasma screens featured animated videos of 12 Goff designs with eye-popping detail. Five of the projects were also shown on a 180-degree, tri-screen theater nicknamed "The Pod," which gives viewers a virtual "walk-through" of each building.

The Pod, which can be disassembled, moved and stored, was a major contribution from the College of Architecture, under the direction of Dean Charles Graham. Designed and built by Safley and Thomas Cline, the three-sided portable theater presented plenty of opportunity for creative thinking that would have made Goff proud.

Students packed the lower gallery on opening night, embracing architecture in a medium that was as familiar to them as Facebook. "This is amazing," said a Tulsa
Museum, 1978, resembles the winter palace of some mythical creature. Serene and majestic with elements of traditional Japanese architecture, Shin'enKan looks as though it was lifted gracefully from the earth rather than built on top of it.

The Crystal Chapel, designed in 1949 for the OU campus, features a soaring ceiling of pink glass and a spaciousness that welcomes humans and deity alike. Goff's organic touch is again apparent in the Perez residence he designed in 1953. With its gentle curves and palette of soothing blues and greens, the Venezuelan beach house combines elements of surf and sky so skillfully, one wonders where the ocean ends and home begins. "Just as remarkable is the Garvey House. Designed for an Urbana, Illinois, family in 1952, the house is its own solar system of silver spheres and yellow suns orbiting an interior fountain.

The most famous Goff house to the OU family might well be the one the ar-
Nick Safley, right, oversees the construction of a scale model of the Crystal Chapel by OU architect students. Students assembled pieces produced by a 3-D printer in the School of Aerospace and Mechanical Engineering.

The finished model of the Crystal Chapel, complete with pink-tinted panels and reflecting pools, is admired during the student opening of the Goff exhibit.

ABOVE: Rendering of the Crystal Chapel by Bruce Alonzo Goff; Herb Greene, delineator; Crystal Chapel (project for the University of Oklahoma), 1949 Gift of Shin'enKan, Inc., 1990.854.1-9; The Art Institute of Chicago, Reproduction ©The Art Institute of Chicago.

Built east of Norman with native stone and student labor, the Bavinger House resembles the prow of a ship sailing boldly across the prairie. But to a hawk overhead, the home is a chambered nautilus, with round rooms suspended from the circular staircase.

"It's not just that they look amazing, it's that they are completely livable," says d'Humières.

From the buzz in the gallery, a whole new generation of OU architects is speaking of Goff in present tense. "This could be something students could expand on," says Eyerman. "If further research proves something in the animation needs to be changed, we can change it. It could be an ongoing project in the digital world. At one time these buildings did not exist, but now they're preserved forever."

Lynette Lobban is associate editor of Sooner Magazine.