

ADVANCING THE POWER OF PLAY *WITH BIM*

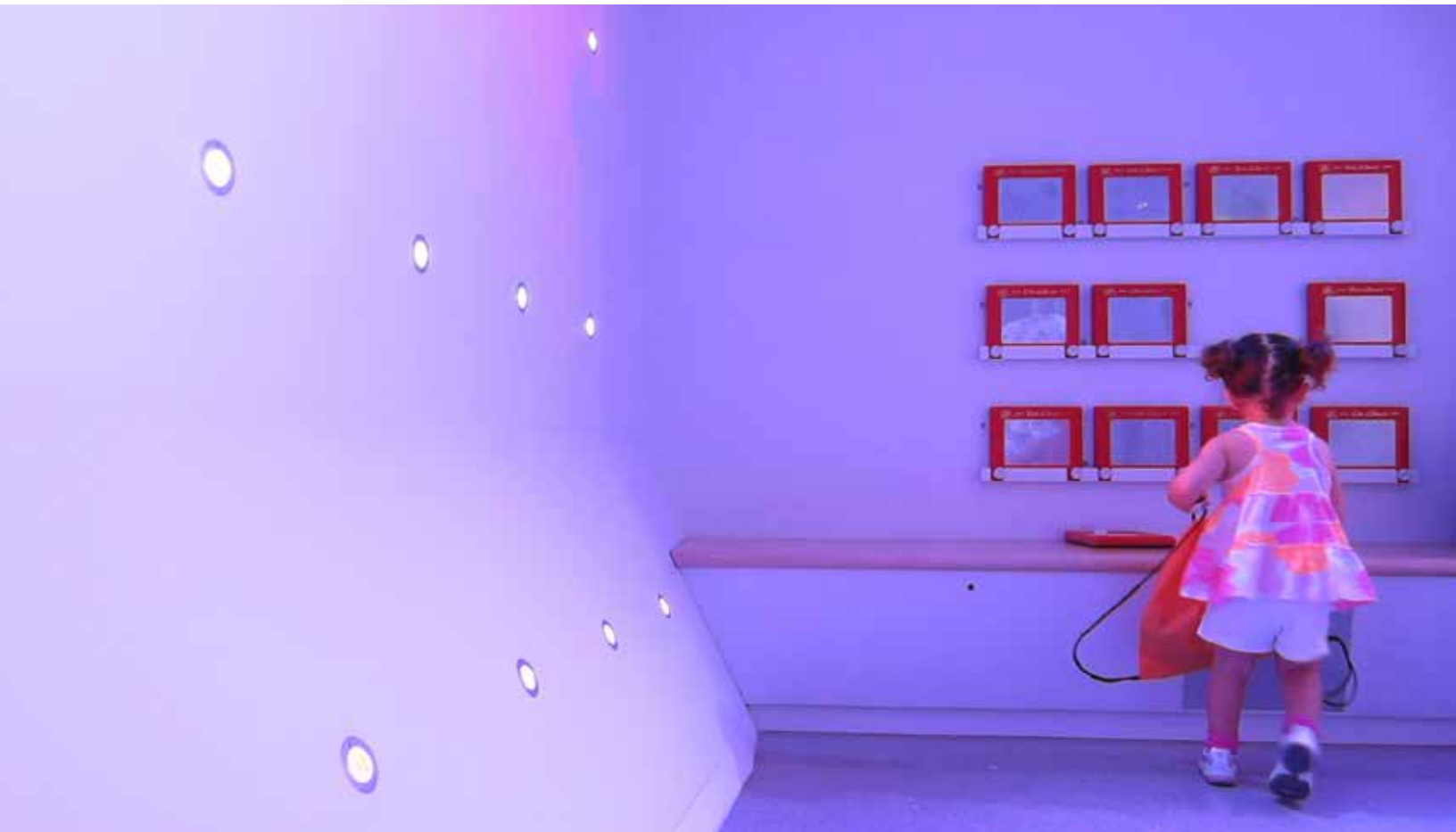


For award-winning architecture and design team Peter and Sharon Exley, fun elevates the everyday. “We’re playmakers,” enthuses Sharon. This husband and wife team’s unique approach taps the limitless possibilities of a child’s wide-open way of thinking. “We fail to remember play in our busy adult lives,” Peter says, “and that childhood experience shapes who we become and is therefore a critical touchstone. There is levity and wit in our work to make it more accessible, and we wish there were more of this in the built environment.” Their Chicago-based firm, Architecture Is Fun, makes this their mission.

Architecture for Children

The pair first met at Skidmore, Owings & Merrill, followed by stints at Venturi, Scott Brown & Associates for Peter, and Safdie Architects for Sharon. But the birth of their daughter, Emma, in the late 1980’s changed everything. Spending more time in children’s public spaces, they quickly noticed a lack of advocacy for architecture with children in mind.

“We saw gaps in Emma’s world, places that needed help in architecture, materiality, and quality, as well as the 4D nature of how you move through spaces,” Sharon says. So the team elected to craft their professional ambitions toward making meaningful, interactive places and spaces for families. With Architecture Is Fun, they elevate the standards of design for learning environments through the construction of new paradigms in pedagogy, play, and participatory experience. One of their first clients was the internationally renowned Chicago Children’s Museum; other children’s museums, exhibits, and adult cultural spaces soon followed.



Peter and Sharon Exley’s creative vision and artful design yields a portfolio of substantive play environments like South Florida’s Young At Art Museum.



Architecture Is Fun appreciates the capabilities of Vectorworks Architect software's intuitive 3D modeling capabilities, remarking that it helps them visualize and communicate their design intent to clients effectively.

With playful intelligence and a palpable energy in dress and mannerism, Peter and Sharon's thoughts on learning and growing through play are transformative and contagious. Being a kid means exploring possibilities and seeing infinite potential. Their work, dubbed "Educative Design," speaks to children on their plane. "It's about appealing to the kid who is interested in nature, sports, art, literature, in being in a group, in going under the table and 'digging to China,' and bringing adults along for the ride, making a space interesting and engaging for everyone," says Peter.

Sharon later created FunFinders in 2011, as a source of art, artists, furnishings, props, and décor that dovetails perfectly with Architecture Is Fun. "FunFinders allows me to control what I call the sensory and beauty component of each experience."

Fun Design with BIM

Peter is a huge advocate for his design tool of choice, Vectorworks® Architect software. "With intuitive 3D modeling, Vectorworks lets us visualize our projects in different ways and provides effective presentation tools."

Peter also praises Vectorworks for its BIM capabilities, explaining that BIM is how architects can provide immeasurable, lifetime value to their projects. "We'd be foolish not to use BIM," he says. "It's an amazing opportunity because rather than handing over the keys when a project is done, building information models allow architects to have life-long relationships with their projects, maintaining and leveraging value with owners for a building's lifecycle, supporting changes, and driving efficiencies. BIM has the opportunity to generate more revenue streams, make buildings more cost-effective, reduce the cost of the buildings, reduce waste in a project, and drive more collaboration."



Architecture Is Fun's design for St. Chrysostom's Day School achieved needed vibrancy and community vitality, reclaiming a formerly underused space and repurposing it with endearing architecture meant for play, storytelling, and exploration.

Finding Fun in a Fire Stair

Peter employs BIM workflows for all projects, including an outdoor play area at Chicago's St. Chrysostom's Day School. The 450-square-foot space was bisected by an outdoor fire escape, meaning it could not include a standard play set. Architecture Is Fun transformed the space into a bright and airy gothic garden—a fanciful place for exploring and interacting, where children paint, perform, tell stories, grow plants, and sit with friends. Rooted in curriculum and embracing gothic shapes, it's a children's garden in every sense, a place to nurture growth. The firm's design wasted no space. A crawling tunnel burrows under the steps for exploration, and little numbered half-rounds serve as impromptu theater seats. A daisy chain with the school's logo makes a delightful stage curtain, and cheerful pink flowers and lyrical wind chimes invigorate the play area.

The firm actively involves its clients to achieve such purposeful spaces. In this case, the preschool's staff provided input on how to leverage their mission and create new areas for play and learning. The children also had input. "That's the distinction with our work," says Peter. "Learning is a rich, deep experience; working with students and teachers informs the participatory process." Sharon agrees, adding, "We don't think that participation should stop after programming; our projects reflect what everyone has said through the project's development."



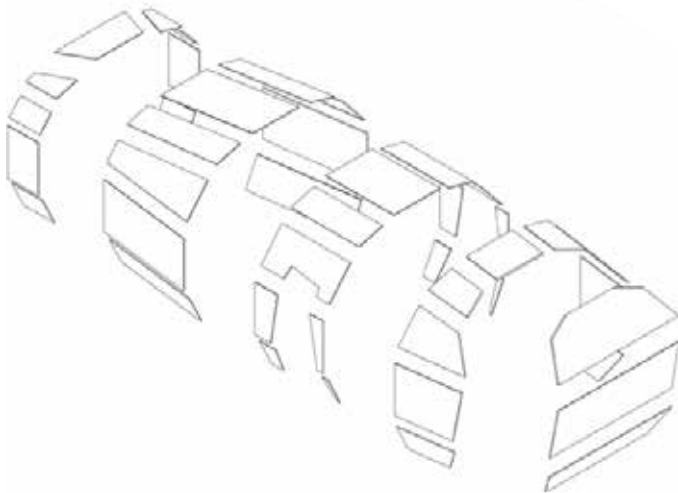
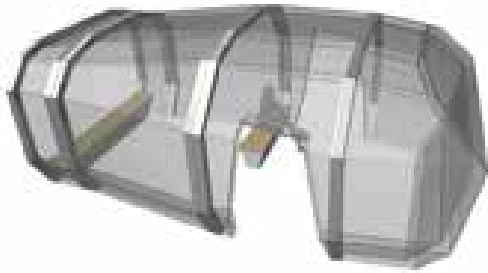
The Young At Art Museum's interior exhibits, galleries, and art installations were enhanced by layers of meaning and method. All throughout the museum, there is beauty and the development of aesthetic study.

Serious Art for All

Executive Director Mindy Shrago at the Young At Art Museum appreciates Architecture Is Fun's participatory approach. The team recently revolutionized the children's museum world when Shrago introduced art usually reserved for serious adult museums and then bravely removed the word "children's" from the Davie, Florida facility's previous moniker. Peter enthuses, "Young At Art broke the mold and, with Mindy, we came up with a really important, I think paradigm-shifting, concept for the way children's museum exhibits are curated and installed."

Today, the museum delights multigenerational users. Shrago and Architecture Is Fun commissioned 75 acclaimed artists to enliven 22,000 square feet. Sharon is delighted by the effect, noting, "You have a strong visionary leader who believes that learning can be done through art." The John S. & James L. Knight Foundation calls the result, "one of South Florida's most transformative arts initiatives." Young At Art Museum even received accreditation by the American Alliance of Museums, one of only a handful to receive the distinction.

Case Study: Architecture Is Fun



Four core galleries anchor the museum. WonderScapes, inspired by Alice in Wonderland, features dozens of highly sensory interactive pieces with layers of meaning, including engaging sculptures, plush seating areas, curvy tunnels, soothing water play structures, and cozy reading nooks, in the fantastical style created by acclaimed illustrator DeLoss McGraw. The museum's dynamic, open-ended nature inspires curiosity and growth. "The museum becomes a canvas of play," says Sharon. "It's for others to activate, use, and grow with, and to nurture in the same way you nurture children moving through it."

For this complex and varied project, Peter notes that generating data-rich models enabled exemplary coordination with the building architect and consultant's BIM models. Often, the exhibit concept was in development before the interior space, so having a comprehensive model informed the architectural design. In addition, the building is operated by a public entity that values the model in real time for monitoring systems and other facilities management needs. Architecture Is Fun's Vectorworks files also integrated seamlessly with those from other software platforms, Peter explains. By using IFC to transfer important BIM data, or using DXF/DWG/DWF to transfer 2D information, Architecture is Fun is able to share 2D, 3D, and important semantic data with its design partners and clientele.



The Cave installation at Young At Art features 5,000 years of images of art and its histories set to music.

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The Frost Art Museum is rich in evocative objects and commissioned art installations that inspire active learning, choices, and social engagement. The discovery gallery frames museum visits and was designed to be worthy of a child's curiosity and adult admiration.

A Thoughtful Rebirth

After achieving success with the Young At Art Museum, Architecture Is Fun was approached by the esteemed Patricia & Phillip Frost Art Museum at Florida International University with a request to upgrade its family gallery, located on the main floor of the art museum. It needed to have impact. With limited funds, Architecture Is Fun yet again shaped a paradigm shift. They commissioned artists, repurposed pieces from the old gallery, edited objects that weren't working, and salvaged elements that were. Small building blocks, tablet computers with proprietary activities, and comfortable child-height seating invite people of all ages to explore in a non-linear fashion. It is not a typical children's gallery, and now, it's one of the crown jewels of the museum.

Peter notes that the Vectorworks model for this project was used to prototype scale models of furniture and millwork using a MakerBot® Replicator® 2 desktop 3D printer, and digital files went straight to millwork fabrication with only minimal need for shop drawings. Increasingly, Architecture Is Fun leverages embedded data to generate efficiencies and accuracies in design and documentation phases; it makes for a more accurate, profitable process and brings value to clients and the architect/owner relationship. This is especially useful for furnishings and equipment as Architecture Is Fun can attach relevant data during their design process to select, order, track, and install furniture, as well as manufactured and custom casework, by project stakeholders using other technology solutions. Sharing this data via linked databases can even accommodate partner workflows that are not model-centric.

BIM as a Sea Change

When the team isn't working on projects, or teaching as Peter does as a professor at the School of the Art Institute of Chicago, they're active on the speaking circuit, imploring the need for more fun and creating it using a BIM workflow. As past president of AIA Chicago and through his industry involvement today, Peter emphasizes the importance of BIM, urging architects to seize its opportunities. And while some refer to BIM as "CAD on steroids," he views BIM as a sea change, enabling architects to remain "design-focused, sustainably minded stewards of the designed environment." Peter continues, stating, "The ambition of Vectorworks Architect is a robust example, illustrating a workflow that is familiar and analogous to traditional architectural design process while producing a forward-looking, data-rich, and coordinated BIM. Compared to experiences of competitive products, Vectorworks Architect presents a superior outcome with less effort, that's profitable to the architect and client partnership."

The firm also wants to see more play for adults at their homes and places of work, as well as the notion of play and public space being important and valued. Sharon says, "The 4D experiences we work on help people have moments where they can take a breath and enjoy, and I think it's important that we enrich and elevate those experiences." Peter agrees, noting, "We've got to be in spaces that reflect our values, our personalities, and the cultures that we aspire to, and they all intersect out of design." Sounds like fun for everyone.



Peter and Sharon Exley are mindful advocates for architecture with children in mind.

Acknowledgements

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