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INSPIRATION

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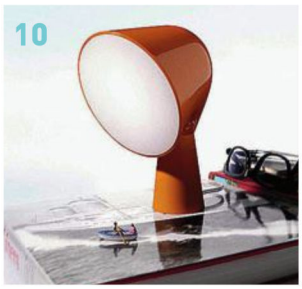


DEPARTMENTS

FEATURES

Kulapat Yantrasast, wHY Architecture
Grand Rapids Art Museum

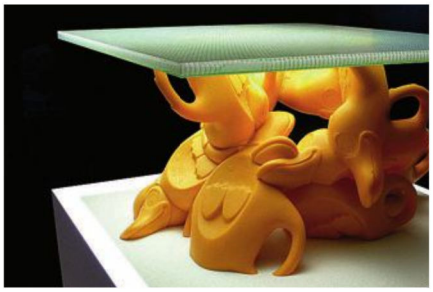
Cultivating Creativity

Three architects seek and find inspiration BY JACK SKELLEY

In the great division between the practical arts and the fine arts, architecture comes close to being both. It's not just that structural design includes a strong sculptural component. Architecture, as with the fine arts, often requires one intangible element to ensure its success—inspiration. Despite the rigorous education and training involved with the practice, inspiration can't be taught and can at times be difficult to find. But when architects see it as something to be actively pursued and nurtured, their work can be rewarded in innovative and surprising ways.

Photography by Steve Hall at Hedrich Blessing

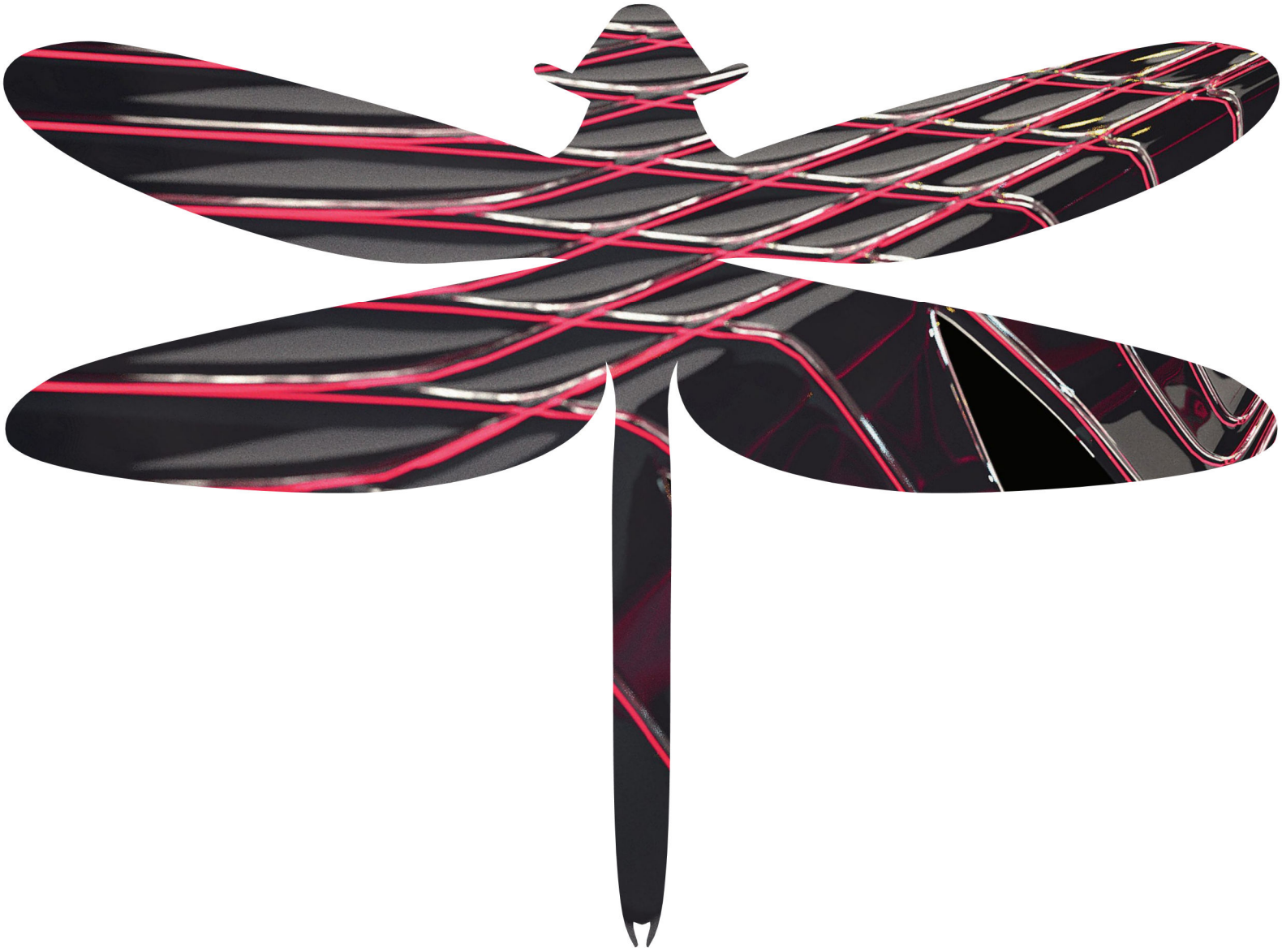
Greg Lynn, Greg Lynn Form
Fountain

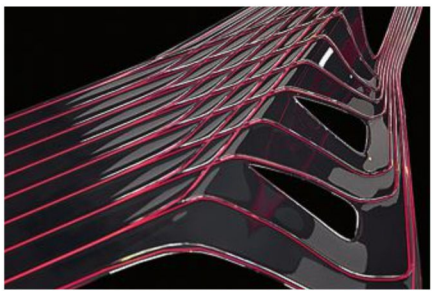


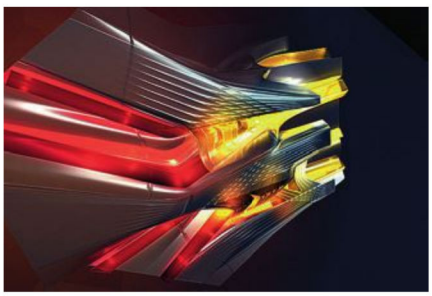
When architect Greg Lynn looks at his kids' plastic toys he sees more than fun and games. Lynn has pioneered a way of recycling these toys into art installations, like *Fountain* (far left), and furniture (left). The process involves scanning the toys into a computer, cutting them apart with robots, and welding them together with a machine used for repairing car fenders.

Courtesy of Greg Lynn Form

Tom Wiscombe, Emergent
Batwing







Tom Wiscombe looks at the biological systems of animals, birds and insects as working models for architectural innovation. Everything from the intricate structure of toucan beaks to the function of the cartilage-like veins of dragonfly wings has played a part in his designs, including inspiring the pleated armature of the Batwing air-conditioning system (far left and left).

Coutesy of Emergent

"If you don't lead an interesting life it's difficult to be creative." —Kulapat Yantrasast

Kulapat Yantrasast, a disciple of celebrated Japanese architect Tadao Ando, absorbs inspiration directly from high-level visual artists. Yantrasast, with his team at the Culver-City-based wHY Architecture, designs art spaces ranging from the new gallery for L&M Arts in Venice, California, to major projects like the Grand Rapids Art Museum. "Art is a window through which you discover life and the world in a different way," says Yantrasast. "It's inspiring to work with artists because of the uncompromising vision they have. In architecture you want that as well, but, of course, you have many masters to serve."

Architects also need to sustain excitement during projects that can take years to complete. For this reason, wHY Architecture holds weekly inspiration sessions, focusing on art, movies, books and food. "If you don't lead an interesting life it's difficult to be creative," explains Yantrasast. Most engaging for the wHY team are its in-house food competitions. Members vie to create the best sorbet, for example, with the prize being a coveted office parking spot. Yantrasast calls these contests icebreakers. "People shouldn't be too shy or too cool."

For him, food is architecture's perfect creative corollary. "It's one of the fundamental needs—food, medicine, shelter," he says. "It involves skill to master the craft, plus creativity to bring it forward. An architecture firm is like a restaurant: You can choose to be a large, family-style restaurant or a five-star restaurant. If you're a five-star people come to eat what you cook, not to order what they want. They are willing to be taken places. We want to be a five-star."

Greg Lynn, principle of Greg Lynn Form, based in Venice, has found inspiration in an unusual source: children's toys. A leader in computer-aided design that advances technology for design and fabrication, Lynn had an "a-ha!" moment one day looking at his kids' molded plastic toys, such as Little Tikes rocking animals. "I've long had the ambition to create out of plastic something that functioned like brick or stone," he says. "So here I am looking at toys and houses, and I realized we're surrounded by plastic constructions. If I scanned and intersected these forms on a computer, I could use a robot arm to cut and interlock them to make a contemporary version of the rusticated stone wall."

Using rotomolding, Lynn builds a mold cast, turning the toys' roundness and bright colors into abstract bricks. This "upcycling" can be applied to build interior walls or outdoor landscaping furniture. *Fountain*, a recent installation at the Hammer Museum courtyard in Westwood, is a functioning fountain created from more than 57 whale and shark teeter-totters.

Recently, Lynn has turned from toys to boats, collaborating with nautical designers Fred Courouble and Tim Kernan on two luxury power catamarans used for shuttling passengers in Abu Dhabi. In this case, Lynn's goal was to bring architectural styling to boat design. "What's funny about boats is that the hulls and rigs are high-tech, but the cabins are literally cabins: like goofy houses dropped on top." So he integrated a bold cabin and deck typology into the overall concept. "I did the architecture and they did the performance part of the design," he explains. "These were both very much a collaboration, and that can be very inspiring."

Many designers cite nature as an inspiration, but Tom Wiscombe takes it a step further. Wiscombe—who worked for Coop Himmelblau as chief office designer for the world-famous BMW Welt in Munich, Germany, before starting his own design office, Emergent—is more interested in the fluidity of functions in nature, interacting in ways that are far from purely abstract or iconic, but are, as he says, "messy."

His recent prototype air-conditioning system, Batwing, is inspired in part by the biology of wing systems, such as those on dragonflies. "Their wing structures include cartilage-like veins filled with fluid. Wing behavior is dependent on variable structural stiffness driven by fluid pressure and dynamics—it's a great example of the co-evolution of systems," he says. Similarly, Batwing integrates HVAC, water, lighting and other building systems inside the hollows of wing-like pleats.

He has also found a model in the beaks of toucans. "For many years, scientists couldn't figure out a reason for their large beaks," he says. "It turns out the beak is a gigantic cooling instrument of fine, spongy material that acts like a giant radiator to expel heat from the bird as it's flying. The feature isn't expressing what it's doing, but has been co-opted by the metabolic system. There is a huge amount of messiness between formal features and functional behaviors in nature. It's not a superficial approach in any way."

To get such messy info, Wiscombe attends biology conferences, such as the 2009 "From Insect Nest to Human Architecture," by the European Centre for Living Technology in Venice, Italy. "I found lots of kindred spirits," he says. "There are the biomorphic guys stealing shapes from nature. Then on the biomimicry front are all kinds of offshoots, sustainability being one of them."

Outside of architecture, Wiscombe follows the rapid evolution of jetfighters and other high-end designs. "There's a huge revolution occurring in the world of jetfighter frames and skins," he says. "Making the skin structural, with composite materials—say fiber and resin, like a surfboard—creates a lightweight, easy to form, extremely strong design. This is just coming into architecture now, although it's not available because of the cost. But you're already finding mass production bringing costs down in China." Wiscombe advises architects to learn about these materials and then coax clients into using them. "I'm pointing at the future right now," he says. ■