



*Professor Mary LaPorte's Home*

## INTERVIEW WITH MARY LAPORTE

**Professor of Graphic Design**

Mary LaPorte, professor at Cal Poly in the Art & Design Department, teaches Graphic Design classes, including: Symbology, Corporate Identity, Package Design, Advertising Design, Typography, and Illustration. Over the last several years, Mary and her husband Dennis have been designing and building a home in San Luis Obispo. On a beautiful Sunday afternoon, while exploring her property, Mary La Porte shared her philosophies on sustainability, recycling, and living in harmony with the land.

*JZ: Mary, what is your definition of sustainability?*

*MLP:* That's a tough question. It's almost like, "What is Art?" I think sustainability can deal with items that are not 100% involved in the natural cycle. Working within the earth cycle systems, we need to build structures that are part of the natural processes of earth, and do not drain resources, yet are practical and cost effective.

For example, in building our house, we used a unique design technology. Building a stick frame house would have been less expensive to build, but in the long run, styro-foam block construction saves resources because it promotes efficiency of heating and cooling systems. When planning our landscaping, though using artificial rocks would be less expensive and easier, salvaging giant boulders from construction sites creates a distinct character, and recycles precious natural materials. I believe in recycling everything!

Originally, we started with 5.5 acres of over grazed land, and with an eye on environmental concerns and aesthetics we are bringing the land back to a natural focus. By becoming land and climate sensitive, using real stonework, and recycling materials from other sites, we have incorporated the idea of sustainability into our project.

*JZ: Can you tell me more about the design technology of your house and barn?*

*MLP:* We started by living in a trailer on the property, in order to get the feel for winds, storms and views. After researching ideas, we built our barn using straw bale construction. Straw is a very user-friendly material. The interior of each wall is filled with straw bales, which make the barn quiet, as well as cool in the summer and warm in the winter. The best straw to use is rice straw, because nothing eats it. Plus, using rice straw helps to get rid of a rice by-product that can no longer be burned. This little rectangular opening is a truth window. All straw bale structures have one in order to see the interior of the wall.

*JZ: Did you consider using straw bale construction in building your house?*

*MLP:* We considered it. With straw bale construction, the outer surfaces of the wall are covered with stucco. As you can see, the structure is very organic—the rounded walls can be difficult to work with at times—perhaps too much so for a house when you consider adding cabinets, windows, doors, etc. After reading lots of books and consulting with local people involved in construction and architecture, we decided that styrofoam block construction would work well for our needs.

*JZ: What is styrofoam block construction all about?*

*MLP:* This technology has been around for more than 45 years, and is used a lot in Canada and the Southeastern coastal states. Our house is very sturdy, with 14-inch thick walls, and five foot wide footings. The 20-inch high styrofoam blocks are 20 inches wide by four feet long, and fit together like Legos. The blocks are stacked, plastic webbing inside each block holds rebar for stability, and concrete is pumped in to fill the blocks. Once the house is finished the exterior is covered in stucco, and the interior walls are fitted with wallboard. Overall, this creates great insulation; the combined R value is in the 40 to 50 range. Plus with stucco under the eaves and a steel roof, the entire house is extremely energy efficient as well as fire safe.

*JZ: Did you address other energy efficient issues?*

*MLP:* The house was built for two people to live in, so we kept the size at 2200 square feet. The design includes two wings with a stone terrace between them. This outdoor room is designed to connect the outdoors with the living space and kitchen, and includes a huge fireplace with a nine foot long rock slab for a mantle. The inside is heated with an energy efficient fireplace that heats up to a 3000 square foot house. We installed a furnace with complete ductwork, but do not use it. The fireplace heats the house sufficiently, so far. Also, large south-facing windows allow for passive solar gain.

We installed solar tubes for extra light, and we use efficient systems such as a front-loading washer to cut down on energy use. We could have used solar or wind power—perhaps we will get there in the future.

The most expensive new materials in the house are the windows and exterior doors. We used custom double-paned Milgard windows made of extruded fiberglass, fir wood veneer, and energy efficient e-glass. We wanted to create a natural effect of the outside coming in, so we had specially designed sets of doors that fold back upon themselves and match up the design of the wood trim.

But one of the most unique features for this area is our cistern.

*JZ: What is a cistern?*

*MLP:* People around here don't use cisterns. We moved from Iowa where we lived in a pre-Civil War house with a brick cistern for water underneath the house. On this

property, there is not a strong well for water, so we installed a cistern near the house with 20,000-gallon tanks tied into the house gutters. Rain runoff is collected from the metal roof. From the barn roof alone, two rainstorms will capture about 10,000 gallons of water. We also intend to recycle gray water for landscaping.

*JZ: This is quite a project. Where did you find inspiration?*

*MLP:* The permaculture and sustainability movement in Australia inspired us. As to architectural inspiration, we looked at the Arts and Crafts movement, as well as Bernard Maybeck, Greene and Greene, Frank Lloyd Wright and Julia Morgan. The land inspired our personal design elements. Color ideas came from a stand of 100-year-old Eucalyptus trees on the property, and the native serpentine stone from the area. We wanted to work with natural stone as much as possible. And we wanted to add a touch of the whimsical. I carved animal heads on each of the giant beams of the house to represent the animals that we have had on our property: there is a goat, an owl, a hawk, a horse, and others.

*JZ: That's a very personal touch. Your house is unique.*

*MLP:* That's also a side benefit of recycling. Our house is filled with character. Almost every feature of our house has a story.

Our house beams were salvaged from the Cuesta Grade railroad tunnel. We have bricks and tongue and groove lumber from the old Spreckles sugar factory, including 100-year-old boards that we used for our library ceiling. They still had the original square copper nails in them. We designed the master bath around original Julia Morgan tiles we rescued from a Montecito mansion re-do. We have beautiful redwood windowsills recycled from the old Oceano city water tank. A former student found our copper front doors at a remodeled Hollywood home. And some of our interior doors were rescued from the old Sinsheimer Building.

The find that took the most effort was our flooring. Originally, we were going to use 2000 square feet of wood from the Spreckles Factory. Later, we bought 6000 square feet of wood flooring from Laurel Lanes Bowling Alley when they closed. Lanes, ball return and mezzanine sections were stored for several years until we were ready to lay the floor. We went through a saw blade for each cut of the tremendously thick wood.

In our landscaping, we salvaged giant boulders from construction sites. Some people chase ambulances; I chase dump trucks. We brought in rocks from all over, even the 3rd lane on Highway 101. It took 21 hours to move all the rocks from the Islay sub-division. The boulders were free, we just had to pay for the trucking.

I also rescue uprooted trees. Some people will pull up a tree and leave it exposed until they are ready to dispose of it. If I see a plant that is neglected for a day or two, I won't hesitate to ask if the owner would like me to take it away. I have saved many trees. We


plant strategically for the birds, mostly with native plants, but also with odd rescues. By rescuing that giant palm from the Marigold Center site, owls can perch to hunt rodents, and help balance the eco-system, plus a beautiful tree doesn't die. We balance the effects of our own personal pets and animals, and create environments, like our seasonal pond, for natural wildlife. We want to live in harmony with the land.

*JZ: You really go the extra mile to see that items of value don't go to waste. Do you carry the idea of sustainability into your classrooms?*

*MLP:* I try to emphasize that Eco-Design is not a fad. I recently heard a guest speaker who produced a beautiful catalogue and saved 25 full trees through selective paper and printing. He was a great inspiration. He spoke of utilizing an awareness of inks, papers, air pollution, and water pollution as a growing part of our life. We need to save what we have left.

The second classroom assignment I gave this year to my Senior package design students was based on an ecology theme. Students needed to find a natural type product, carry ecological philosophy into the packaging of the product using green resources, and design marketing with green benefits in mind. It has been a very successful project and created a wonderful awareness for students.

*The afternoon was getting late, and I thanked Mary for such an enlightening interview. As we stood saying our goodbyes, the cry of a hawk pierced the air.*

*MLP:* That cry reminds me of why we work so hard to keep in touch with the land. You see, hawks love to perch in the giant Eucalyptus trees. We used to hear a pair of hawks communicate constantly, and watch their soaring dance. They were beautiful and a pleasure to watch. One day, we found one dead—electrocuted by the power wires. It took PG&E one and a half years to get a rapter bar placed on top of the pole. The remaining hawk was alone for a long time, but now it has a new mate. It's hard to be a steward of the land, but it's worth the effort. 

*Interview conducted by Jan Zahn, who graduated from Cal Poly with a B.S. in Art & Design in 1997, and is currently working on her M.A. in English.*