

A Japanese Roof Raising in Boston

The joinery of Japanese master craftsmen forges new bonds between sister cities

by J. Tevere MacFadyen

Photographs by Sarah Putnam

In the bright sun of a late September afternoon, a long spruce shaving curls gently from the mouth of a plane. The shaving is a clean and continuous ribbon of wood, rippling at the edges, almost translucent as it spills away from the tool and hangs for a moment in the light. Masashi Kawabe, master carpenter, goes about his remarkable business. He is engaged in the transformation of a large pile of rough lumber into dozens of small piles, the precut parts of a traditional Japanese wood-frame house facade.

The joinery involved is exceedingly complex. Each small piece has its place in the plan. Each is pared and whittled with the chisel, fitted, then put aside. When countless joints have been cut and tested, the framework will be assembled without benefit of screws or nails, every tenon finding a matching mortice and every bond drawn tight with a slightly offset peg, driven into place and nipped off with its four protruding edges chamfered in the craftsman's distinctive signature.

But Kawabe still has plenty to do before assembly can begin. Stopping to hold the plane up to the light, he removes its blade and crosses to a corner where the whetstones are kept that preserve the razor edge on his tools. As he moves, he is shadowed by a small woman carrying a big camera. Kawabe drops to his haunches to sharpen his chisel. He is humming

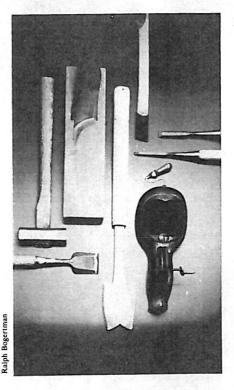
softly to himself. The presence of a film crew does not seem to fluster him any more than the mystifying combinations of joints, but it suggests that this is not an ordinary job.

Kawabe and the four other members of the crew are employed by the Yasui Moku Komuten Company, a Kyoto firm specializing in historic preservation and restoration. The house they are constructing, or rather reconstructing, was built 150 years ago in the kyo-machiya style. It is a silk weaver's home and shop from the Nishijin neighborhood of Kyoto.

The carpenters' tools and building materials are Japanese. The gravel for the rear garden was quarried from the Shirokawa River. Even the pop music from a portable cassette player is Japanese, but this house is not being built in Japan. It is being built on the third floor of a 100-year-old warehouse on the waterfront in Boston. Massachusetts, and it is an exercise in international friendship on a grand scale. The warehouse has recently been converted into the new home of The Children's Museum, and the Japanese house being built inside will be the centerpiece of the

The Japanese House and an introductory exhibit now in preparation will open to the public this April. Before that time, visits may be arranged by calling Eleanor Chen at 617-426-6500.

Right: Inside a Boston warehouse, carpenters assemble the framework that will form the skeleton of a Kyoto townhouse/workshop.



An array of traditional Japanese woodworking tools includes saw, plane, hammer, chisels, and the ornate marking line and quill.







Top: Intent on his task, one of the carpenters chisels holes in a beam to support the latticed bay windows forming the shop front. Bottom: An artist with chisel, this workman knows how to whittle and fit every piece in the complex design of a kyo-machiya house.

museum's East Asian program.

The choice of this exhibit was hardly arbitrary, and contains much of what Kyoto and Boston have in common: a densely populated city center, a diversity of neighborhoods, and a deep pride in heritage and tradition. The kyo-machiya style in Kyoto evolved for many of the same reasons that townhouses did in Boston; rising taxes and shrinking open space demanded that dwellings be placed in long, narrow lots, sharing bearing walls and a consistent facade. Today, it is becoming fashionable in Kyoto to renovate and restore the old kyo-machiya houses, much as American city dwellers have begun to reclaim older neighborhoods.

The kyo-machiya incorporate essential aspects of Japanese design, including the separation of "outside" and "inside" areas by means of a clearly defined entrance pattern. A garden bridges the gap between natural and manipulated space, maintaining a contact with nature while accommodating the urban forces of compression and miniaturization. The buildings combine living and working space, with dai goshi (latticed bay windows) serving as shop fronts.

This building type, still very much present in older neighborhoods, seemed ideally suited to conversion into an exhibit, offering a glimpse into several different facets of Japanese culture within a single coherent structure. It reveals that Japan is not a nation polarized between the two extremes familiar to most Americans—an ornate formal culture in conflict with the aggressively technological society symbolized by the Japanese electronics industry.

The foolishness of this view is convincingly demonstrated by what has been taking place inside The Children's Museum. Since early July, when the shipping crates were rigged into a third-floor loading door, a piece of this old warehouse has been metamorphosed into a Nishijin street. On entering the exhibit, a visitor passes through a narrow gate onto a narrow lane lined with lattice doors, bay windows, and the arched bamboo dog barriers called *inuyari*.

It is as if, having turned innocently down a corridor, you have been bodily transported across the Pacific and dropped out of the sky above Kyoto. More than once during construction, visitors would happen by accident into Bay 6, where the kyo-machiya was in progress and the atmosphere was thoroughly Japanese. After looking around, they would shake themselves and ask with genuine astonishment, "Where are we?"

The house and all its furnishings and fixtures were donated by Kyoto citizens. So was the labor of the carpenters who meticulously dismantled the house in Kyoto, packed the pieces into 43 huge crates, and followed the crates to Boston—where they have spent most of four months reconstructing the building in a two-story-deep bay of the museum. The project's entire budget, which approaches a half-million dollars, was raised by contributions from the people of Kyoto and Boston.

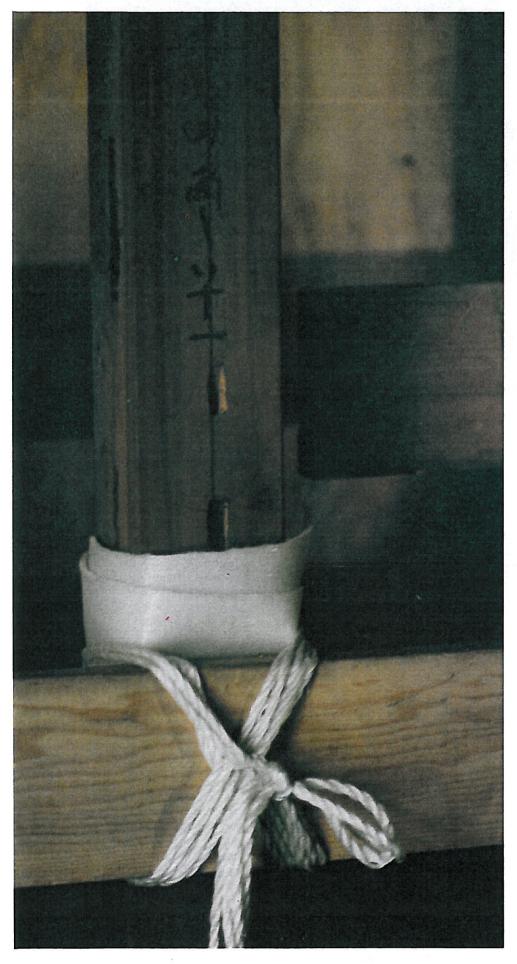
But despite its imposing size and complexity, the kyo-machiya project, like Kawabe's joints, really implies something quite simple—an appropriate solution to a problem. It is an effort built on a foundation of personal relationships, and it illustrates, among other things, the importance of individuals in the growth of crosscultural contacts.

The project's roots go back a long way and draw on two of Boston's unique assets-its Children's Museum and its official affiliation with Kyoto as a sister city. The museum has long worked to make the cultures of Asia, especially of Japan, accessible to teachers and students through the exhibition of artifacts and other innovative activities. And the bond to Kyoto has existed for 20 years. Like most such relationships, however, this one has waxed and waned with the enthusiasm of volunteers on both sides. The recent upsurge in interest, which is dramatically demonstrated by the kyo-machiya, can be traced in large measure to the determination and energy of an American woman, Karen Anne Zien.

In 1971, when she was a young mother of two and a graduate student at Harvard University's East Asian regional studies program, Karen Zien took her daughters to The Children's Museum, where she had heard that there was a Japanese exhibit for young people. Though the exhibit was simple—a nice tatami mat room with sliding paper doors-and, she thought, "not too beautiful," Karen was intrigued. The possibility that Asian studies might be presented to an uninitiated audience had never even come up at graduate school. Following the visit, she became convinced that something better could be done. "So I wrote them a letter and said: If I had that exhibit, this is what I'd do with it. And I went on for

A view of the beams shows tenon joints (foreground) that, when fitted into the mortices, will create the facade of the house.





about three pages." She pauses, looking around her cluttered office with a slightly rueful grin. "I'd say now," she admits, "that I'm still following that outline."

Today, Karen Zien directs a joint program in East Asian education sponsored by Harvard and the museum. Its purpose is to equip primary and secondary school teachers with the means for exposing younger students to Asian cultures. "I'm a translator," Karen Zien explains. "I translate the backlog of scholarship on Japan into a form teachers can use at eight o'clock Monday morning. With the kyo-machiya project, I'm also a translator for a lot of people in Kyoto who firmly believe that I'm their megaphone in America." It is primarily through Karen Zien's efforts, her friendships with people in Kyoto, that a very tangible representation of Japan's past and present has made its way to Boston.

On one of her first trips to Japan for the museum, she was befriended by Kiyoshi Yasui. This turned out to be a valuable friendship indeed. "For me, it's very important," she said a few weeks before the house and crew arrived, "that the person I've known longest and best in Kyoto is one of four brothers in a family that's been in the construction business for 14 generations, and that it's their car-

penters who are coming."

When a Kyoto delegation came to Boston during the Bicentennial, Karen's magic had already begun to work its charm. The group made a point of visiting the museum, and in an expansive moment on hearing of the impending move to the waterfront, Kyoto's Mayor Funahashi offered a new exhibit. The translator for the group, a friend of Karen's, told the mayor that she would not translate unless he was serious, knowing that once the pledge was made, it would have to be honored. And it was made-without any preparation or politics.

Later, Karen told the mayor that what she wanted was a two-story house and shop, which was eventually just what she got. In planning the exhibit, Karen wanted to establish a balance between old and new, be-

The scaffolding is held in place by knotted twine, rather than nails, which are rarely used in traditional Japanese building.

tween the dramatic and the commonplace. The building had to evoke a historical tradition while serving as a realistic representation of modernday Japan. "I was concerned about the fact that we're always telling people in this country about tea ceremonies and imperial palaces, but we don't tell them anything about the way people actually live. I wanted something everyday, something more middle class, more urban."

The kyo-machiya, with a history of adaptation for continued use, nicely fill this demand. In construction and organization, they employ classic techniques, but in application to an urban setting, they have come to embody both old and new. Some of the buildings are hundreds of years old but have been rebuilt piecemeal as improvements were introduced. A home might include modern plumbing and wiring, kitchen and bathroom appliances, while retaining the building's original design and structure.

"When I designed the house," says Masaru Kumagai, the Kyoto architect who supervised the dismantling and designed the Boston installation, "I wanted it to be just as it would have been in Kyoto. So I put in a new kitchen and bathroom." He smiles. "And I would like it if the museum would replace them with a new style when a new style comes to Japan!"

The Japanese wood-frame house, in its basic construction, is something like a very highly evolved New England post-and-beam barn. The design depends on a delicate balance of tensions. A house is essentially a web of skeleton and skin, and much of its eventual strength is achieved through intricate joinery rather than simple mass. The houses are built in successive layers, each new grid imposed on the one before and carrying a proportionate share of the total weight or stress. The results are extraordinarily light in weight and appearance.

In Kyoto, where typhoons rage through each year, massive clay-and-tile roofs serve as anchors that solidify the framework beneath them, preventing excessive racking or swaying. Both the design and construction of the roof make it an integral part of the whole house.

It is this kind of foresight that characterizes traditional Japanese architecture, the aesthetics of which are well known and appreciated. There is no contemporary Western



Above: With loving attention to detail, the workers fashion fans for the celebration marking the end of their labors on the house.

Right: Mr. Yasui, representative of the project's restoration firm, doubles as a Shinto priest for the shunko-shiki ceremony.



architect who has not studied the Japanese tradition, and few who have avoided its influence. On the technical side, the Japanese method has advantages as well. It allows for the use of much simpler materials in small sizes that are more manageable, and it permits tools to be smaller and lighter.

The average Japanese tool box is likely to include a mix of hand and power tools that offer some understanding of how neatly the culture is balanced between the past and the future. Old-style tools-hand saws, hand planes, and chisels—are very much in evidence and in use. An ornate marking line consists of a spool of thread running through the spitting mouth of a carved turtle, into a carved pond of inked silk, and out to be snapped onto a board for a clean, straight edge. But cordless electric drills, electric surface planes, and power saws also have their place. There is no discrimination in the tool kit. That which is valuable is valued.

This was on the mind of an American member of the Boston/Kyoto Sister City Foundation when he visited the project. "One thing I've learned from the Japanese," he said as he watched the carpenters, "is how differently things can be done. I used

to think that the American way was the only way to do things. Then I went over there and found that they did everything 180 degrees different; they pull their saws instead of pushing them! Now I am beginning to realize that there's no right way, there is only the way that works. And their way works just as well as ours—or better."

On the day of *shunkō-shiki*, the ceremony of completion, the third and last of the ceremonies that celebrate and protect the house under construction, a fine October morning begins a perfect fall day, cool air and brilliant sun. A week ago it seemed unlikely that the house would be done in time for today's ceremony.

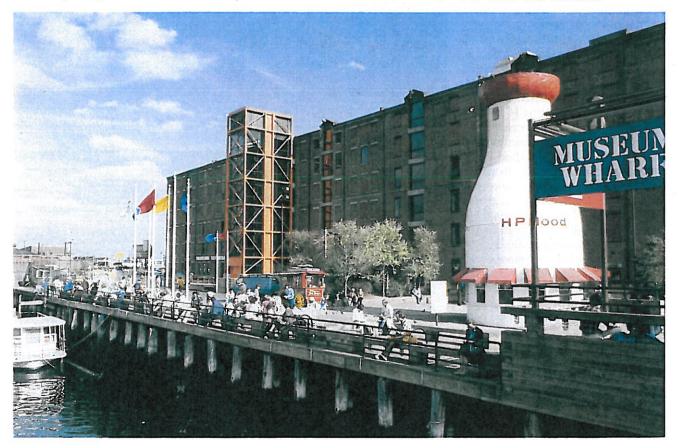
The crew has worked wonders. Most of the painting was completed in a single night. The translucent and opaque paper doors have been set onto their tracks and slide easily open and shut. Tatami mats, the central organizing force in Japanese house design, have at last been laid over the bare floorboards. The kyo-machiya not only looks like a Japanese house now, it smells like one too.

In back, off the rear veranda, a small rock garden has been installed. The ground there is covered with pebbles from the Shirokawa River, and a stone lantern presides over one end. The garden is rich with deep green moss, and Kiyoshi Yasui, who has returned with Masaru Kumagai to oversee the final weeks of work, grins when asked about it. Apparently, no greenhouse in Boston carried the right moss, so he and Kumagai went off hunting for it. They finally found a patch that pleased them beside an interstate highway.

What is remarkable is that even here, artificially lit on the third floor of a warehouse, the garden performs just the function it is intended to. Standing on the stone path, you feel some sense of nature, of being at the intersection of home and landscape.

This is a day of last-minute details, but there is surprisingly little frantic rushing about. One carpenter prowls the site with a bucket of dark stain, searching for places that have been missed while painting. Yasui stands behind the street facade. He will officiate, acting the part of a Shinto priest in the ceremony this afternoon, and now he bends over a scroll, brush in hand and ink stone beside him, let-

The Japanese house occupies the top story on the far left of the 100-year-old warehouse that contains The Children's Museum.





Above: A hallway recreates the narrow lane of a Kyoto street and leads to the front of a silk weaver's 150-year-old home.

Right: The interior of the main room shows tatami mats and sliding paper doors that provide the basic unifying design elements.

tering. Tools are packed and tucked away. A group of volunteers arrive and are sent into the house with damp rags, just barely staying even with the clouds of dust raised by another crew with brooms.

This is a strangely emotional time, and at least one museum staff member will admit to having burst into tears at the sight of the kyo-machiya in its final form. The carpenters, eager to be going home and yet sorry in some ways to be leaving, engage in considerable play and wisecracking. Somehow, the whole effort is being orchestrated toward a crescendo. What needs to be done is getting done, and a last-minute panic at the absence of a piece of shellfish necessary for the altar display abates when the restaurant owner who had offered to supply it suddenly appears bearing the belated lobster.

The guests begin to filter in. Soon, to honor the completion of the house, representatives of the governments of Boston and Kyoto will snip a red and



white ribbon tied across the lane on which the kyo-machiya sits.

Just now, three people—Masashi Kawabe, the head carpenter who will soon be returning to his Kyoto home, a Japanese woman living in America, and an American woman who grew up in Japan—are conferring on how to tie the ribbon. They personify the mix of cultures that, through numerous individual contacts, has been the soul of the project.

After a choice has been made and

the big bow tied, Kawabe moves up and down the street, stooping, splashing water from a bucket onto the concrete to settle the dust and freshen its appearance, exactly as he might have done each morning in Kyoto. He pauses at the ribbon and reaches toward it, making one last adjustment, drawing the bond tight.

Massachusetts-based freelance writer J. Tevere MacFadyen has a special interest in woodworking.