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Ban Interview with Shigeru

Interview

Interview by trans, January 2010, Paris.

Problems as an Approach to Architecture

The effectiveness of participation in global, humanitarian efforts depends greatly on the combined ability to act swiftly and inventively with few resources. Shigeru Ban demonstrates this capacity with astonishing results. At first glance, his humanitarian work might appear too insubstantial to be able to deal with the enormous number of victims resulting from a disaster. However, his application of prototypes and innovative employment of local materials in designing shelters have the potential of achieving a widespread impact.

Participation is also an indispensable component of Shigeru Ban's approach to design. He directly involves his users in the process of converting their desires into architecture and provides them with interior spaces that can be modified at will.

We visited Shigeru Ban at his Paris office to talk with him about his humanitarian work, his strong involvement of the user in his projects and his unconventional approach to materials.

Interview with Shigeru Ban.

Acting Globally

Does working on three continents require you to constantly adjust to a new time zone?

I always change the clock, but I don't follow any specific time zone. I start working whenever I need to work, which prevents me from experiencing jetlag. I just don't think it's very healthy.

How did you initially get involved in humanitarian projects?

After starting my own office, I came to realize that architects throughout time have primarily worked for the rich and privileged as well as the government and other authorities. Since power and money are invisible, prestige architecture becomes the means to parading it. But in my opinion, architects should also invest their skills and experience in projects that affect the broader society. Rwanda's horrific genocide in 1994 led to countless suffering refugees who lacked sufficient shelter. Even the plastic sheeting provided by the United Nations could not protect or prevent them from freezing. Medical care was useless without the necessary proper shelter. I responded by proposing an upgraded form of shelter to the Office of the United Nations High Commissioner for Refugees (UNHCR) in Geneva.

Just one year later, the Kobe earthquake struck and I began doing work in this area as well.

PAPER EMERGENCY SHELTERS FOR UNHCR, fig. a-c

PAPER LOG HOUES, Kobe

How does the local population respond to your projects?

It depends entirely on the project. I had a very interesting experience in Turkey in 1999. I started building temporary housing using locally produced paper tubes provided by the manufacturer. The local architect I was working with doubted that Turkish people, who are used to concrete houses, would stay in structures made of paper tubes. He thought that only Japanese people would feel comfortable living in paper houses because they are used to living in wood constructions, which are comparable to paper.

But the outcome was completely different. Even those people whose homes had not been destroyed by the earthquake were sleeping in tents in their gardens for fear that their concrete houses were unsafe. Everyone was extremely grateful for the security the paper houses provided because these were not only less likely to be destroyed by an earthquake but would also be less destructive were this to occur.

It just goes to show you that people don't always react the way you think they will.

PAPER LOG HOUSES, Turkey, fig. d-f

Does the local population ever further develop any of your projects?

Yes, definitely. When I worked on permanent housing in Kirinda, Sri Lanka, following the Tsunami in 2005, fast action was of the essence and there was no time to respond individually to all the requests. So people who wanted to integrate a shop into their house merely took things into their own hands and started amending and supplementing the finished homes to fit their own particular needs and interests. We typically make a very basic prototype to which everyone is free to add and change at will.

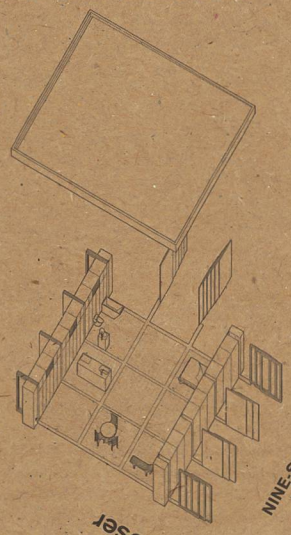
HOUSES- TSUNAMI RECONSTRUCTION PROJECT, axo. b, fig. h-j

What advantages do private-public partnerships bring to development work? Do private companies seek out development work?

Normally, private companies don't foster such partnerships because they don't see any potential in investing in such an area. They would rather just sponsor a Formula 1 race. Unfortunately they are not aware of the greater sustainable solutions that could be achieved by employing their products.

The project in Turkey is a really good example of this potential impact. All the materials used for the struc-

ture of the houses – the wall, the paper tubes and the beer cases – were provided free of cost. The companies expended practically nothing to donate these materials and they were actually pleasantly surprised at the effective outcome generated by their simple actions.
They had not been able to imagine in advance that their products could be employed in this manner.
For the construction of the roof, I approached a Japanese contractor about donating a material used on his company's construction site. I specifically requested plastic covering that displayed his firm's brand logo, in order to provide him with some PR in return. You know, most companies are concerned and eager to help, but they just don't know how. They find it easier to donate their products than their money. Asking them to donate products rather than money is actually a really good strategy that should be implemented more often.
One time in China, I did have a company try to charge us more than the market price for their products!



axo. a
NINE-SQUARE GRID HOUSE.
Kanagawa, Japan, 1997

Involving the User

Another interesting aspect of your work is your strong involvement of the user.
In the Naked House and in the Nine-Square Grid House, for instance, the user plays a very active role, even modifying the rooms. Tell us about these projects.

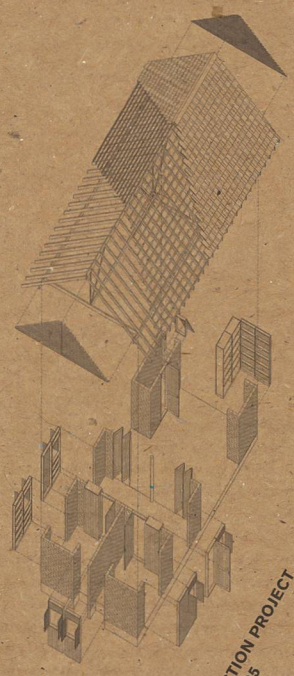
While the rooms in the Naked House offer varying degrees of privacy, the Nine Square Grid House has no rooms at all. Designed as a home for a gay couple not planning to start a family, it does not require any children's rooms. Any unused room would merely go to waste in this small house. I tried to divide the spaces in a way that still allows the users to employ the entire expanse whenever they choose to – for parties and what not.
The Naked House, on the other hand, was designed for an average family household that includes a grandmother. The number of household family members typically changes every five to ten years as the children move out or the grandparents pass away. As family members leave, the number of vacant rooms increases. When my brother and I left home, my parents found themselves with a surplus of storage space that served no purpose. That's why I wanted to do a house that could continually adjust to fit the current size of the family. In the end, my design depended entirely on the family's requirements and their particular and unusual requests. It's easier for me to design when I can react directly to a specific requirement.

NINE-SQUARE GRID HOUSE: axo.a, fig. o

NAKED HOUSE axo.c, fig. j-n

Since the requests of the user seem so important to your projects, we wonder if you also ever design architecture without knowing the user in advance?

We once designed some apartments for people we did not know in advance.
I also designed a house in Tarragona before knowing who was to live there.
Not knowing the clients in advance is interesting, but it's just easier when I have a client who brings a specific set of requirements. The same goes for the land: it's easier to design on land that has its particularities. Problem-solving serves as the point of departure to my design. If there's a problem, I can always solve it through design. A lack of limitations makes it difficult to conceptualize.



axo. b
HOUSES- TSUNAMI RECONSTRUCTION PROJECT.
Kirinda, Sri Lanka, 2005

Have you ever designed any buildings made of concrete or brick?

Yes, I use all kinds of materials. Brick is not considered a useful structural element in Japan because it is seen as an earthquake hazard. The primary structural elements used in Japan are concrete, steel and wood. My only interest is in using the appropriate material for the appropriate solution.

The quality of a material has nothing to do with its price. Neither do the soundness of a building or its capacity have anything to do with the strength of the materials. Actually, an earthquake is quite capable of destroying a concrete building, but not a building made of paper.

Stronger materials and advanced technology can be employed to make a building skinnier; however, some people misunderstand the point of advanced technology. They use it to create stronger, more complicated constructions that have no purpose. In fact, innovative methods can make weak materials strong.

What can you tell us about the materials you used for the Nomadic Museum?

It was the client's request that led to the solution here as well. I was asked to design a 4000 m^2 museum that could be transported from city to city. Moving such a big building in an economical manner is very difficult. It needs to be easy to build and easy to dismantle, but this doesn't resolve the high transport costs involved. I searched for a strategy that would enable me to exclusively use local materials. I then asked myself what was available at all times, all around the world? This ultimately led me to the idea of the standardized shipping container.

Other architects have also employed the shipping container as a building element, usually in interior spaces. But I think that containers are made for things, not people. I've seen people living in containers following an earthquake. These are always very terrible spaces, not because of their size, but due to their lack of utilities. I am only interested in the container as a structural module.

NOMADIC MUSEUM SANTA MONICA, fig. s-u

In closing, we would be interested in finding out the latest on your design for the Tamedia building in Zurich. We heard about it some years ago and are curious about how it is progressing.

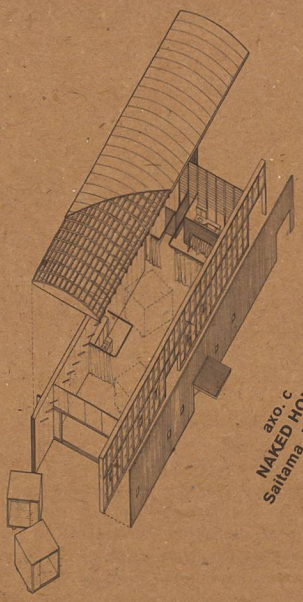
Well, it's going very well. Tamedia is one of the best clients I've ever had! (laughter)

Is there something you want to add before finishing the interview?

One thing: I'm working with students on a project in Aquila, Italy for a temporary concert hall.

Are you in need of any students for the project?

If the students are able to come on their own and cover all their own costs, then they are more than welcome. But normally I work with local students and local experts.



axo. c
NAKED HOUSE,
Saitama, Japan, 2000

fig. b

fig. a

fig. c

PAPER EMERGENCY SHELTERS FOR UNHCR -
Rwanda, 1998

fig. d

fig. e

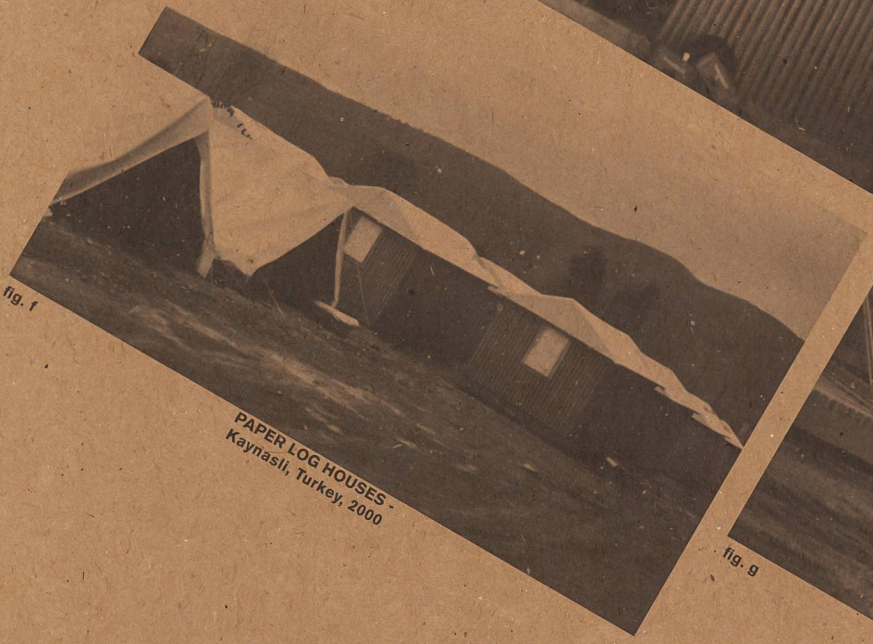


fig. f

fig. g

PAPER LOG HOUSES -
Kaynasli, Turkey, 2000

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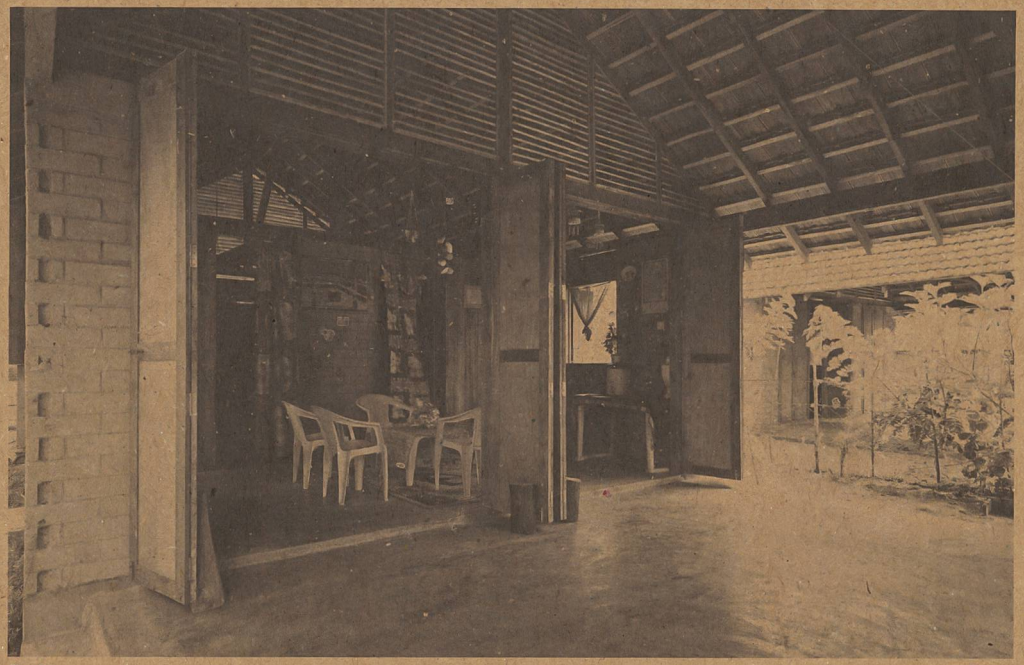

fig. h

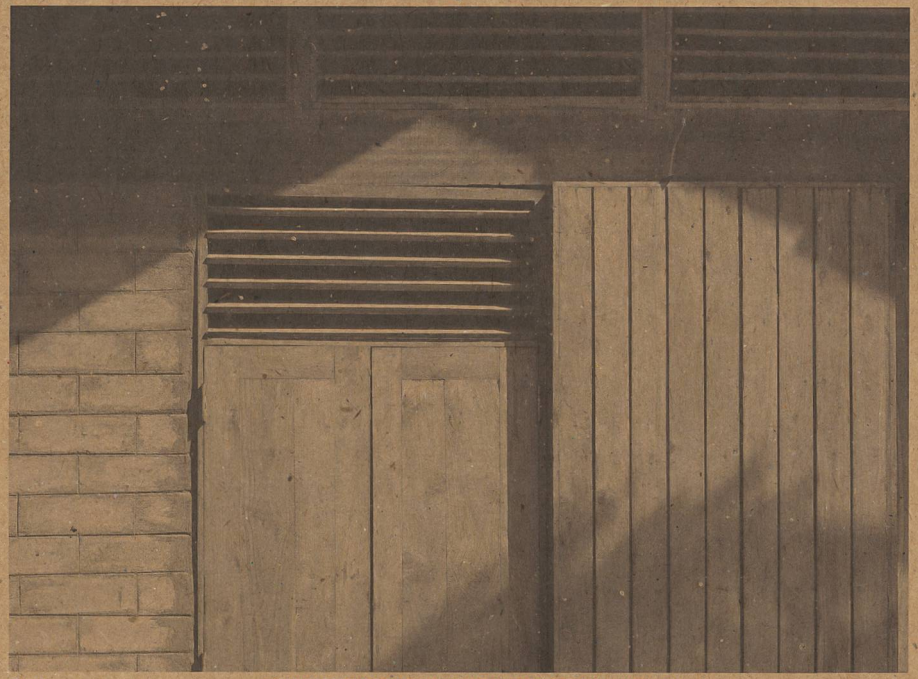

fig. i

TSUNAMI RECONSTRUCTION PROJECT IN KIRINDA -
Kirinda, Sri Lanka, 2005

fig. j

fig. k

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NAKED HOUSE -
Saitama, Japan, 2000

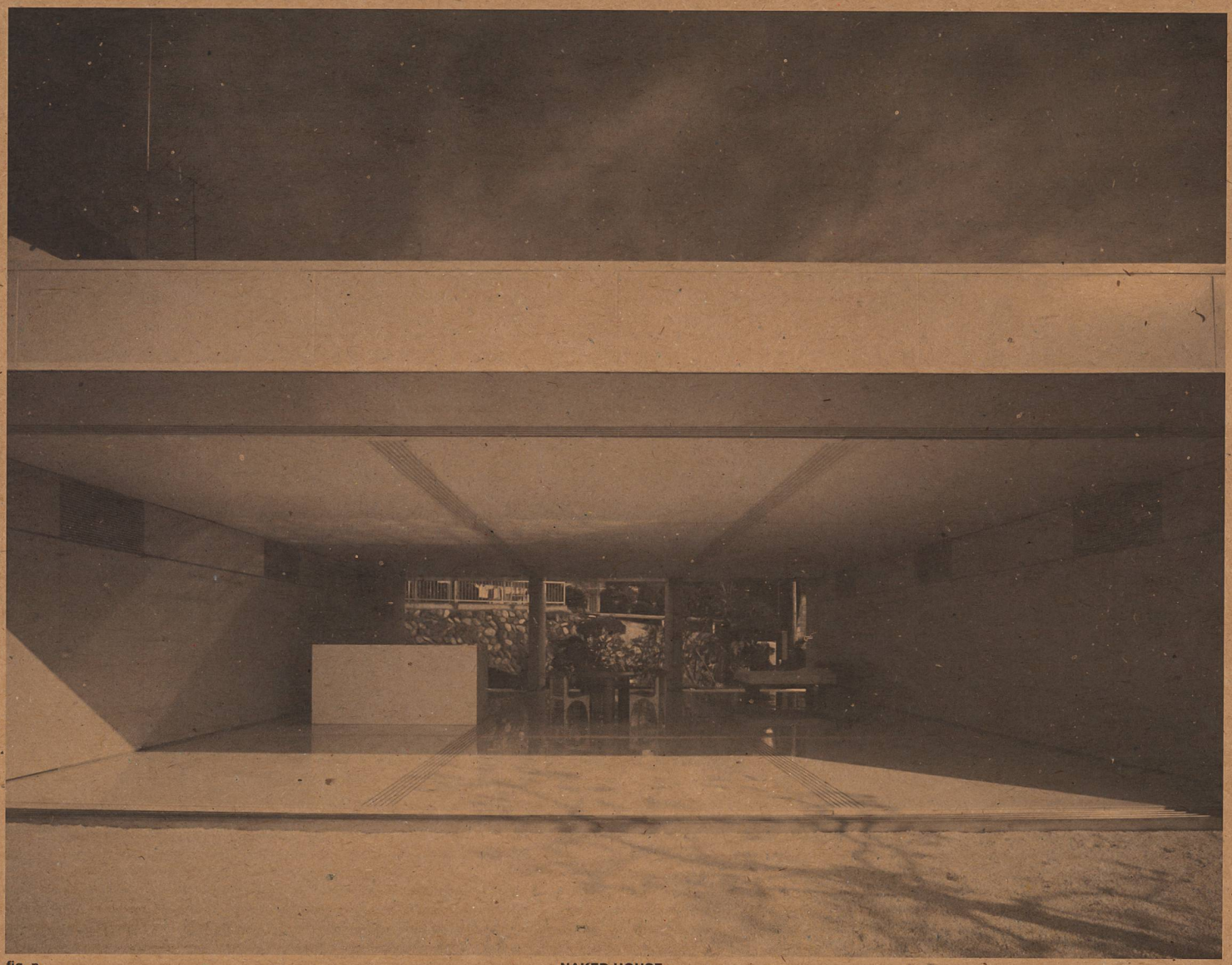

fig. p

NAKED HOUSE -
Saitama, Japan, 2000

fig. r

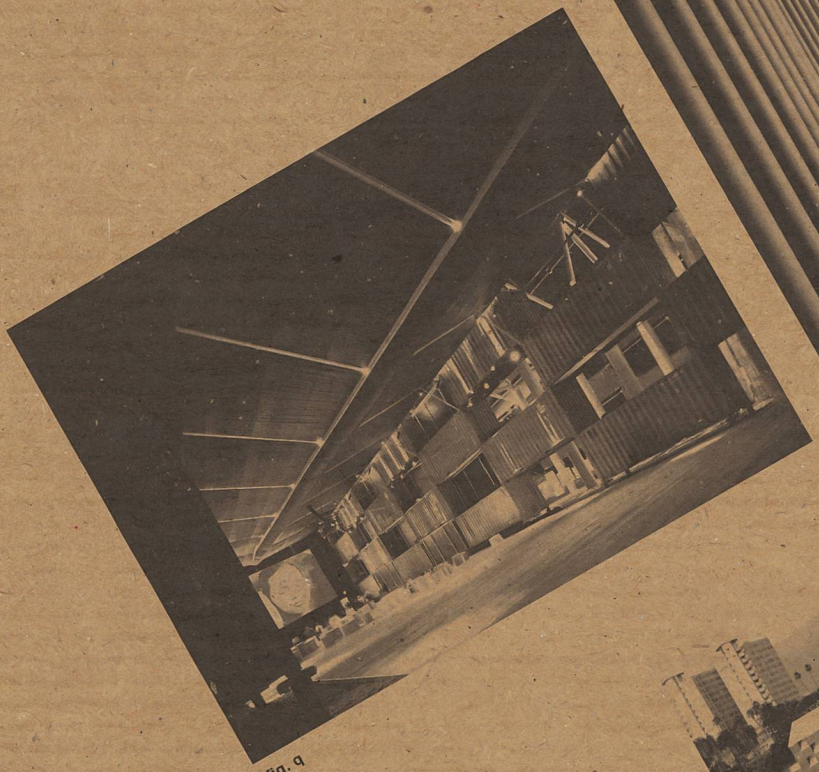

fig. q

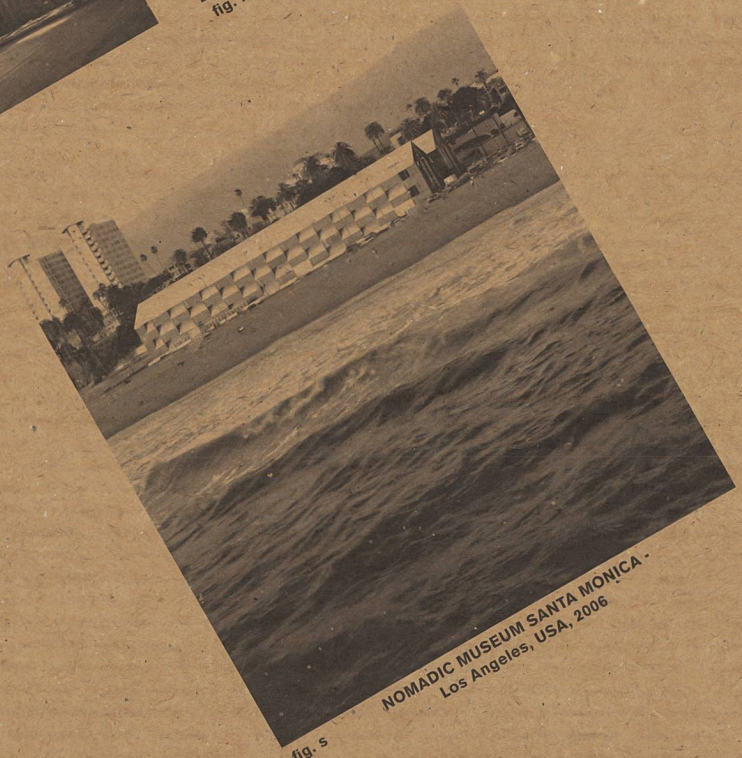

fig. s

NOMADIC MUSEUM SANTA MONICA -
Los Angeles, USA, 2006

fig. a-u and Descriptions

fig. a-c
PAPER EMERGENCY SHELTERS FOR UNHCR -
Rwanda, 1998

The Rwandan Genocide in 1994 resulted in the mass killing of hundreds of thousands of Rwandan people under the Hutu Power ideology. More than two million Rwandans sought escape from the genocide. The Office of the United Nations High Commissioner for Refugees (UNHCR) supplied plastic sheets and aluminum poles that could be rigged as temporary shelters. Rwandan refugees sold the aluminum poles and then cut down trees to use the branches for structural support. Due to the deforestation, alternative materials had to be found. Shigeru Ban developed a prototype for a shelter using a framework made of paper tubes and three plastic sheets. A paper tube manufacturer trained MSF (Medicin sans Frontières) staff to handle the tubes and demonstrated the potential in producing large quantities of tubes on-site in an emergency situation.

PAPER LOG HOUSES -
Kobe, Japan, 1995

On January 17, 1995, a massive earthquake struck the southern region of Japan's Hy go Prefecture, just outside of its capital, Kobe. Approximately 6,000 people lost their lives. Shelters were built primarily for Vietnamese refugees whose jobs, schools and supportive community kept them from leaving the vicinity. Ban responded to the crisis by designing approximately twenty-seven paper log houses that were built by a team of volunteers who had come to help with the nearby construction of Ban's Paper Church. The foundation consists of donated beer crates loaded with sandbags. The walls are made of paper tubes and the roof of tenting material. The cost of materials for one 52 m^2 unit is below $2000. The units are easy to dismantle and the materials are easy to discard or recycle.

fig. d-g
PAPER LOG HOUSES -
Kaynasli, Turkey, 2000

Ban participated in relief efforts in Western Turkey when a catastrophic earthquake that hit on August 17, 1999, and its aftershocks left more than 20,000 people dead and some 200,000 homeless. He based his design on the shelters in Kobe, Japan, while improving and adapting it to the setting in Turkey. The size of the unit was slightly larger due to the standard size of plywood employed in Turkey as well as the country's larger average household size. In addition, each unit was furnished with increased insulation made of shredded wastepaper that was inserted inside the tubes along the walls and the fiberglass in the ceiling. Cardboard and plastic sheets provided additional insulation depending on the individual needs of the residents.

fig. h-j
TSUNAMI RECONSTRUCTION PROJECT IN KIRINDA -
Kirinda, Sri Lanka, 2005

Located on the southeast coast of Sri Lanka, the village of Kirinda is an Islamic community of fishermen. Most of the village's buildings were swept away by the Tsunami resulting from the Sumatra Earthquake on December 26, 2004. The villagers were forced to live in temporary dwellings under severe conditions. This post-tsunami rehabilitation project includes the construction of sixty-seven houses, a mosque and tree plantation. The principal material is CEB (a compressed earth block), which is inexpensive, widely available in Sri Lanka and doesn't require trained laborers to assemble. The blocks have an uneven surface making it easy to interlock and stack them like legos. The units are pre-fabricated and set up on the spot.

fig. k-o
NAKED HOUSE -
Saitama, Japan, 2000

The house is comprised of a large two-story space that contains four mobile private rooms set on casters. To reduce weight and optimize mobility, these rooms are not very large and hold a minimum of belongings and furnishings. They can be rearranged according to the needs of their user. The boxes can be placed up against the walls of the house or connected to the heating or air-conditioning units. Placing them side by side and removing their sliding doors can furnish a larger room. They can also be put outside or on the terrace to open up the entirety of the space inside. They can also function as a supplementary floor to create a children's play area.
The external walls are made of two sheets of corrugated fiber-reinforced plastic and the inner walls are made of a nylon fabric. Both are mounted on wooden stud frames and positioned parallel to one another.
Insulation is provided by clear plastic bags, carefully padded with strings of foamed polyethylene that run along the cavity of the walls. These bags allow a soft diffused light to fill the interior of the house.

fig. p
NINE-SQUARE GRID HOUSE -
Kanagawa, Japan, 1997

The furniture units constructed for the Nine-Square Grid House House were made of steel studs – a system that could certainly be improved upon. For example, the addition of urethane-foam insulation during

the production process enables a simpler and less noisy assembly process on site, avoids condensation and eliminates annoying vibration. The house is comprised of two load-bearing walls with integrated sliding walls. The floor-to-floor sliding doors can be used to divide the large 10.4 × 10.4 m^2 area into nine smaller square areas. These sliding walls allow for a variety of spatial arrangements that can be modified to accommodate seasonal or functional needs.

PAPER CHURCH -
Kobe, Japan, 1995-2005

The Paper Church was constructed shortly after the devastating earthquake that shook the Kobe region in 1995. It had burned down the existing Takatori church. The primary objective of the design of the church was a low-cost, easy-to-assemble structure that could be quickly and simply erected by volunteers to provide a place of worship for the victims of the earthquake. Intended to be only a temporary structure, the church made of paper tubes is still standing to this day.

fig. q-s
NOMADIC MUSEUM SANTA MONICA -
Los Angeles, USA, 2006

Gregory Colbert, a filmmaker and photographer, originally conceived the idea for a sustainable traveling museum as a showroom for his “ashes and snow” exhibition in 1999. He envisioned a structure that could easily be assembled in ports of call around the world, providing a transitory environment for his work on its global journey. He collaborates with innovative architects to integrate the most recent advances in sustainable architecture and give new expression to the museum as it travels. The first Nomadic Museum opened in New York City in March 2005 and was designed by Shigeru Ban. Developed for easy assembly and dismantling, the building is made up of standard steel cargo containers. They are «borrowed» at each location to eliminate the need for transport. The structure of the roof trusses is mainly constructed of paper tubes that rest on 75cm paper tube columns.

In 2006 the Nomadic Museum paid a visit to Santa Monica, California. The site was shorter and much wider than New York’s long pier structure. Columns out of paper tubes supported the membrane ceiling. A museum cinema and a shop were added. It was possible adding further functionality without increasing the number of containers. In 2007 the Nomadic Museum moved to Odaiba, near Tokyo, for the spring. Simón Vélez designed the most recent Nomadic Museum in Mexico City, moved in 2008. It is the largest bamboo structure ever created.

NEW TAMEDIA OFFICE BUILDING - Zurich,
Switzerland, 2009

The new headquarters and radio studios for the Swiss media company Tamedia are situated in the heart of Zuerich on the Werd Areal. The five-story building will create three hundred additional workplaces. Construction is planned to start. The primary structure of the building is entirely designed in timber. The building’s glazed building skin reveals the interior filigree wood construction. Special attention has been given to achieving low-energy transmission levels that meet the most current, strict regulations for energy consumption.

The End of the Interview

fig. a

Bund Vierzehn

fig. b

fig. c

fig. d

fig. e