## Layout and sketches: by David Lynn

## Reflecting on JAPAN

A view of the influences which shape the directions of modern Japanese architecture...

Francis E. Wood

Francis Wood is a student at the School of Architecture at McGill University. "I have, in my place, books about English history; I like the bloodiness of it. I have one set of eight volumes. I read only the first volume, and of that, only the first chapter, in which each time I see something else. But really, I am interested only in reading Volume Zero, which has not been written. And the volume Minus One."

Louis I. Kahn

HAT IS ARCHITECTURE? Well..." Architecture has many aspects and a host of facets. We can characterize and discuss architecture on various levels and from different points of view; it is a multi-dimensional kaleidoscope of reciprocating effects it has always had with people and their being. It is on the verge of this given notion that the study of architecture begins to pave a road of interest for me. The question has continuously stimulated much debate and writing, and will forever affect all contributions architects of the world make towards it. In this article, another attempt is not being made at defining the impossible; however, I share the troubles all involved should have as a result of what we assess to be a confused state of architecture.

Japan, widely and more poetically known as the 'land of the rising sun', has become a land of great beginnings. In Japan during my first stay, the two years held a procession of endless surprises about the varying modes of life. I have since returned to Japan for a visit and discovered some of its colour which I had failed to see during my first visit.

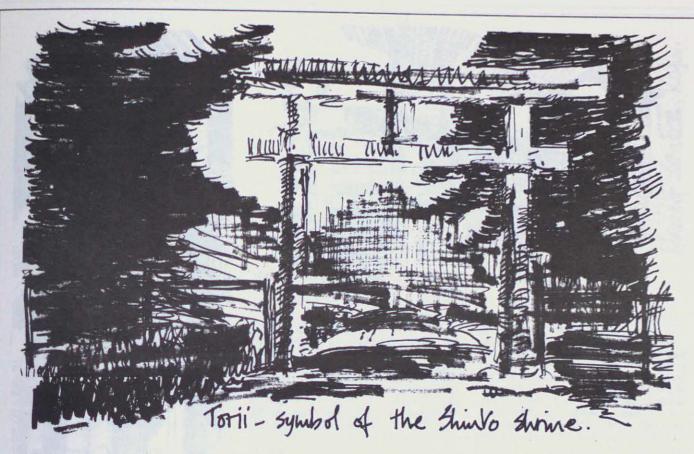
A beginning can be isolated when coherent and consistent improvisation occurs. We find and distinguish between periods and styles in architecture when this process of improvisation is identified. The heart

of architecture pulses on the life from a list of factors which make for infinite improvisation, which is more than just a hopeful thought. A less poetic reputation Japan has cultivated finds root in the Japanese pursuit for improvisation on ideas and inventions conceived outside of Japan. Due to their patriotism and pride, commercialism ensues, prominence worldwide is gained, and the culture evolves. Where business is concerned, Japanese agressiveness has been linked to fatalities suffered during the Wolrd Wars, especially at Hiroshima and Nagasaki, but that is a subject deviating from my thesis. On account of the image of a beautiful silkscreen one may have picked up with one's remaining yen when leaving Japan, it is strange that, as against their less serene quality, they manage to be so

The curious manner in which the Japanese maintain homeostasis, a traditionally dichotomous culture rich with contrasting facets of business-like agressiveness and serene gardens, begs some understanding. The country is politically settled; is in good standing economically; has a low crime rate even in Tokyo, the world's greatest urban aglomeration; has had an architecture which had profound influence on many architects, not to mention Frank Lloyd Wright; and is deep in evolution of an impelling architecture being sculpted by Kisho Kurokawa, Kiyonori Kikutake, Arata

Isozaki, Fumihiko Maki, and a host of others known as Metabolists, all led by one of today's masters, Kenzo Tange. My preoccupation rests, then, to shed some light on some of the motives which drive current Japanese architecture, and hence, an architecture.

The first surprise Japan offers is a hint of its lifestyles, especially during that first ride into Tokyo from the airport. Never before has the conventional highway, let alone the elevated shuto expressways as they exist in Japan, wound its way between little houses and small buildings. At some points, these expressways rise over other elevated shuto, leaving ground level beneath them for city streets, railway tracks, or some other essential urban use. For even greater articulation of the urban landscape, add fly-over monorail tracks, neon signs which read sometimes incoherently in both Japanese and English, and leave the background to the profile of a Buddhist temple and the silhouette of Mount Fuji rising above the clouds, all if you are lucky enough not to be suffering from the high smog content in the air. Japan is not all the chaos which delights like Tokyo does, for there are many traditional cities like Nikko and Kyoto which attract a horde of tourists each year. Tokyo, however, is unique for it is there that Japanese society becomes most mysterious, and it is also only there that modern and traditional



architecture must coexist so closely, often touching each other at some tenuous threshold of equilibrium. It seems telling that only a people with a strong social structure and philosophy could put up with the chaos that is Tokyo.

Japanese social history is of quintessential importance in the study of any aspect of their architecture. Included in the analysis will be a discussion of population trends, the mobility of the people, the importance of technology, and the reliance on wood as the staple building material. Of all, however, the role of religion must be the dominant element.

Religion in Japan has endured the fight against modernism. The evolution of Western thoughts and attitudes, according to Auguste Comte's fundamental theory, has run from the theological to the metaphysical, and in now transcending the leg of positivism. In Japan, religion is as much a part of life today as it was yesterday. It is for this reason, perhaps, that Japanese people are not 'dehumanized' by such articles as the 'Sony Walkman'.

It is needless to say that religion is usually the elicitor of architecture. Generally speaking, Japanese architecture has remarkable Buddhistic elements. This naturally comes from the fact that Japanese

culture itself is to a great extent Buddhistic, 1

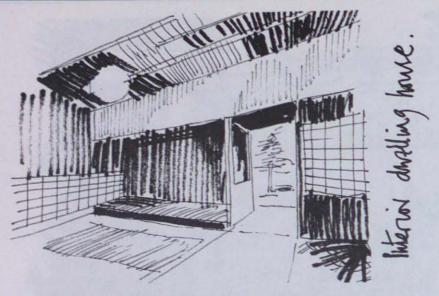
Buddhism was taken to Japan from China and adopted into the culture, evolving into what is now Zen One strong Buddhist Buddhism. concept is the idea that essential emptiness is true existence. It is the idea of maintaining order, of clearing a path through which to see, that molds architectural space in Japan. The notion, again, has bearing on the design of Japanese gardens. The attempt at perfect composition and spaciousness with a few elements in the garden is the goal of the artist. It is an attempt at a peacefulness, the true essence of relaxation. religion is a philosophy which gives the impulse for almost any activity in Japan. "Buddhism influences the way we perceive and compare space and the kinds of relationships we establish between nature and architecture, and between technology and humanity."2

The socio-cultural development in Japan ties together with Buddhism to structure a mentality that can accept the urban landscape described above. Not only do we associate Japanese architecture with the small scale buildings of temple, shrine, and house, but it is impossible to visualize a Japanese skyscraper. In the case of the pagoda, we have an image of temples stacked above each other, and not of a tall entity in itself. Japanese architecture is also admired

for its place with nature. The garden is an artistic concept which is as much itself as it is part of the building which it compliments. A deep philosophical understading and respect for nature is manifest in the architecture, especially in their love of materials.

Japanese architecture has a social and cultural history rooted in building with Although wood was the predominant material of construction and veneer because of its availabilty and because of earthquake concerns, it was also used for the enjoyment derived from it. The nature of wood is such that it is subject to the activities of the elements and rots relatively quickly. For this reason, it is customary that Shinto shrines be totally rebuilt every twenty years. Amazingly enough, the shrines are rebuilt in the same form. "Since we are faced with the inevitable mortality of all our constructions, the physical form becomes only the intermediary conveying the poetic essence of nature."3

Accepting that the given material desires of construction in a certain manner, it has become traditional, therefore, that the post and beam construction contribute to the image of Japanese building. The shrine is the picturesque 'villa' of the Japanese garden and is a medium in itself for boasting a skillful employment of construction and use of materials. There was a deep sense of integrity



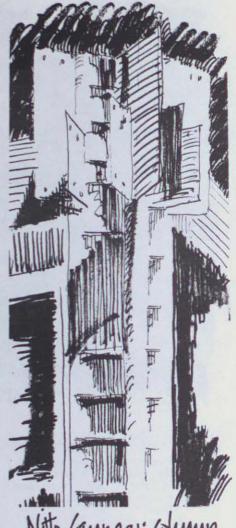
and harmony - only beauty - that was felt when I ascended the long set of steps and landed in the garden of a shrine in Nikko. Without hesitation, it is the trees, the rocks, the colour, the fresh air, the wood, and the tradition of the shrine which came together and created an ambiance of beauty only the Japanese garden can afford. It were as though it just happened. It was there. The attempt of the Metabolists to derive an architecture from such traditions is clearly seen in their work. The exposed concrete, the exposed beams for anticipated construction, and the 'alien' image - a reference from the West with respect to current Japanese architecture.

The advantage of wood, as made mention of above, is supported by the Japanese geography. "...The country is situated in an area of epicentres that provides it with a daily cycle of very slight seismic upsets, an annual cycle of earthquakes of quite respectable violence, and another larger cycle, which we have heard referred to as generational, of truly awesome catastrophic disasters."4

You may never have felt a 'slight seismic upset', but a jolt registering five on the Richter scale of eight feels as though it were one of the 'truly awesome catastrophic disasters." Not only does the wood withstand earthquakes better than masonry, but bamboo is being researched for its hollow properties which give it great stability. One of the skyscrapers in the Shinjuku district of Tokyo is basically triangular in plan and is hollowed out, enabling one to see the sky from the middle of the lobby. The concept is based directly on that of bamboo. It is evident on the basis of its geography and availibilty of wood as a material that everything in Japan is thought of as temporary. It negates the Occidental notion of a lasting architecture, manifest by the use of stone.

Inhabiting the islands of Japan are a people who have taken the production of the automobile to limits, partly because they are very mobile. Historically, the capital of the nation found itself in Nara, Kyoto, and Kamakura, before Tokyo. Nara and Kyoto are therefore very rich in traditional architecture. Customarily, agricultural workers have migrated to the cities to seek employment during the periods of unintense farming. To this day, there is also much travel and pilgrimage to temples and shrines, encouraging friendship and an exchange of ideas between various regions, especially the four main islands of Honshu, Kyushu, Hokkaido, and Shukoku.

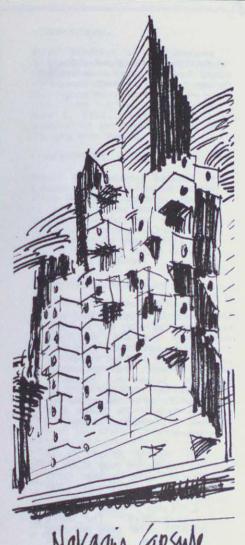
The importannce of technology is now one of the aspects we immediately associate with Japan. Although seen as really Western, technology was thought of as being able to be infused with the traditional evolution of the people and thus utilized with a different state of spirit. The Japanese don't see technology as being different and opposing humanity and nature. They see themselves as a product of nature - guided by it - and technology as a product of themselves. Hence, they belong to one and all. In a country where much of the land was said to be uninhabitable, technology has meant more than a deliumanizing element. Not beautiful and inspiring from afar, virtually hostile and deadly for living, this land accounted for about eighty percent of the land area until the advent of technology. Now expressways tunnel through mountainous terrain, offering at the light the most panoramic view of villages imaginable. The great network of roads and railway/subways have made for an efficiency one can only imagine after visiting, although the hunched over sixty-year-old lady may be seen in the early morning train runs taking to the city a huge



Nito bannery: Lumin with joining plates for puture expansion.

sack of agricultural produce. The routine has mapped out an array of wrinkles on her leathered face and I don't know whether to feel sympathy or envy for her ability to carry the load.

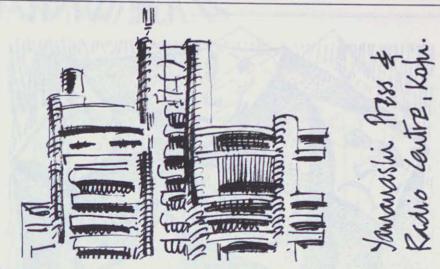
Finally, the population of Japan is growing at an extreme rate not only because of a high birthrate but also because of an increase in the elderly population as a percentage of the population - a result induced by modernization of the environment, advances in medical science, improved medical and health care systems, and growth and development of the economy. The average life span is on the increase and problems of housing and habitation, on twenty percent of a samll land area, indicate a need for expert urban planners. Indeed, the architects are very concerned, and the government has an administrative body that sternly watches over the utilization of all available land.



Nakagin Capsule

An understanding of the history of Japan begins to offer insights into the definition of Metabolism, which was to be an architecture of distinctive character utilizing the new universal market of materials. Metabolism was given birth to in 1960 when a group of architects voiced their concerns about the direction of archtiecture in Japan. Kunio Mayekawa and Junzo Sakakwa had taken to Japan from the studios of Le Corbusier an architecture alien to Japan and proposed it as the new direction. Kenzo Tange paved the way of the architecture that was to follow, but the Metabolist group were apparently doubtful of its philosophy. At least, they had to clarify its meaning with respect to Japan, for was it in many ways alien?

Le Corbusier represented a dynamic of sorts, inventive in a very exciting way which caught even the Japanese architects by surprise. The continued



Modern exposure of the naked material, the expression of structure, the delight in open space at the expense of partitions and furnishing impediments, and the satisfaction in the use of a module were all positively alive in the tradition of Japanese architecture. The dominant use of wood not only as structure, but as veneer as well; the resulting expression of structure in post and beam, instrumental in the overall beauty; the open plan so much derived from the notion of nature pervading all space and all space being part of nature. It would almost seem as though traditional Japanese architecture was the foundation for 'Modern' architecture. In any case, the new architecture was to entail a substitution of concrete for wood, being careful to maintain the integrity with which wood was used in their traditional architecture.

The Metabolist manifesto was not only an architecture of change, transformation, and growth, but one which relished in the transmutation of sorts between the traditional architecture of Japan and the International Style pursued by the release of new materials and new technologies. Reassured by the similarities Modern architecture enjoyed best with Japanese architecture, the Metabolist directive was to find some principles upon which a superstructure of thought in the future would have a good foundation.

At any rate, Metabolism became an extended biological analogy meant to replace the mechanical analogy of orthodox Modern architecture. It compared buildings and cities to an energy process found in all of life: The cycles of change, the constant renewal and destruction of organic tissue. The metaphor was, however, not so new as it looked to the West. In many ways, it was

just the recent Taoist philosophy of cosmic change and eternal growth which makes for endless variations on the same theme, 5

The Metabolist philosophy of change and transmutation has a timeless goal which is almost literally manifest in the architecture. By allowing those elements of a building which have faster rates of deterioration to be replaced (mechanical equipment, for example) and the more stable elements to be reinforced (such as structure). the image of the city may be evolved which is coherent but offers a variety of detailed imagery by allowing parts to be changed. Their ideal is to design cities so flexible "in its connections that its parts could grow, transform themselves and die while the whole animal went on living."6

The country is dotted with architecture of such philosophy, but Tokyo is and will always be a mixture of a good and bad modernism and a traditional vernacular. hesitation, I must express the richness of imagery in all the chaos that Tokyo is, and for that matter, most of Japan, though not quite of so potent concentration. The Japanese are one people on many islands and have accepted Modernism. Today when one is questioning from where Modernism was given, they are developing on it, improving on it, and enjoying the successes and failures. It seems it is only from where the sun rises that beginnings are being born these days.

## Notes

1. Hideto Kishida, Japanese Architecture, 1936, p. 48. 2. Abby Suckle, ed., By Their Own Design, 1980, p. 32. 3. Suckle, p. 32.

 Maria Lluisa Borres, Contemporary Japanese Architecture, n.d., p. 34.
Kisho Kurakawa, Metabolism In Architecture, 1977, p. 9.

6. Kurakawa, p. 9.