Matching Living Space To Modern Needs

By Tokuhiko Suzuki

The Japanese housing industry is enjoying a boom, buoyed by the rising trend in housing starts. It is playing a key role in the expansion of domestic demand, essential to Japan's industrial policy, and is promoting not only quantitative growth in residential construction but also long-overdue qualitative improvements in Japan's housing standards.

Despite its current prosperity, however, the housing industry was in fact relatively slow to develop compared with other industries in Japan. This was due in part to the peculiarities of traditional Japanese-style housing. But it was primarily because the industry stagnated for so long after virtually ceasing to exist during World War II.

Acute shortages

During the last year of the war, in 1945, residential areas in Tokyo and many other cities were devastated by heavy U.S. air raids. As a result, acute housing shortages plagued the nation in the immediate postwar years. People lived out of makeshift barracks in ravaged areas. They were fortunately spared the worst cold of winter because most of the bombed-out cities were in the more temperate western and southern parts of the country. Yet some Japanese were forced to live in air raid shelters for as long as three years because they lacked any other housing.

The most basic of human needs at that time was food, followed by clothing and shelter. Housing construction thus only began in earnest some 10 years after the war's end.

By then the industry had lain dormant too long. In the absence of urban planning, people settled randomly, wherever they could obtain a small patch of land. This was something that had never happened before the war, and it resulted in chaotic urban development. Land became a prime object of transactions, so much so that it is now more commercialized than in any other country. This commercialization of land set the stage, for instance, for the recent land price escalation in Tokyo and other urban centers.

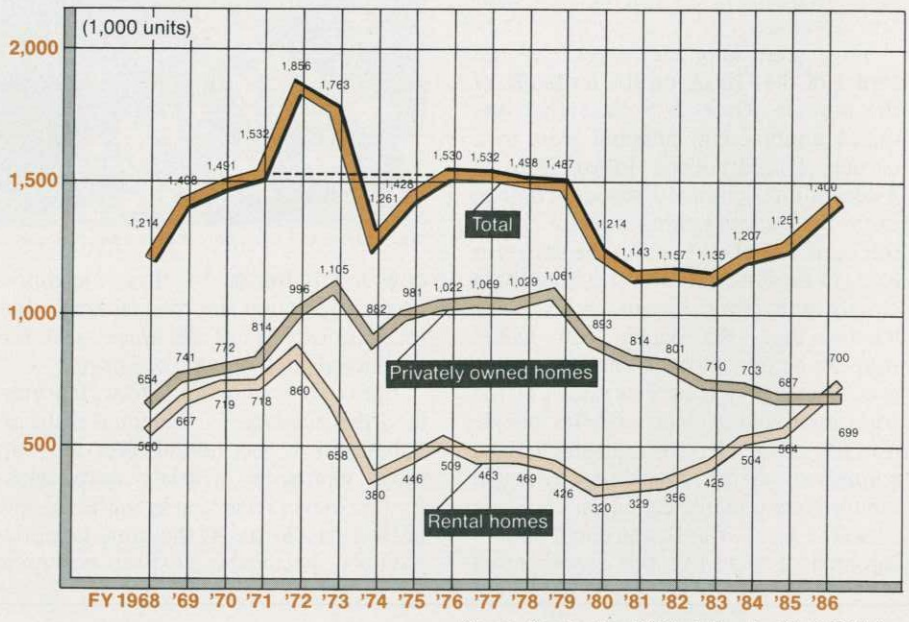
Around the mid-1950s, the government belatedly formulated a housing policy. The centerpiece was a housing corporation, established in cooperation with the private sector, which was to supply large numbers of multiple-unit dwellings to meet the housing shortage. In prewar Japan, apartment houses were a rarity. From the mid-1950s on, however, multiple-unit dwellings mushroomed across the country.

The apartments built by the Japan Housing Corporation (Nihon Jutaku Kodan) were fairly well-equipped by the standards of the day. At the same time, the surge in public housing projects prompted private companies and landowners to build similar dwellings, which they called *manshon* (mansions). It was a misnomer, to be sure, for these small rental units, yet it quickly became a household word.

At the time, the Japanese economy was verging on a period of explosive growth which would give further impetus to residential construction. Housing starts tend to increase roughly in proportion to population. In normal times, the number of yearly starts equals about 0.7% of population, rising to 0.9% in good times. In Japan's case, however, there were nearly 1.5 million starts in 1970, a figure equivalent to 1.4% of the population. This building boom peaked in 1972 when 1.86 million units, equivalent to 1.7% of the population, were begun. Residential construction dropped markedly in the wake of the first oil crisis in late 1973, but it recovered in due course. Between 1970 and 1979, an average 1.5 million units were built annually in Japan, primarily reflecting rapid economic expansion (Fig. 1). Nonetheless, it still took until the second oil crisis of 1980 to effectively end the housing shortage in Japan. As construction tapered off, the era of quantitative housing expansion came to an end.

The problem of quality, however, re-

Fig. 1 Trends in Housing Starts



Source: Construction Ministry's Housing Starts Statistics

mained. Generally speaking, most of the new dwellings were uncomfortably small and poorly equipped. Of the huge number of units constructed each year, many were single-room (with six tatami mats, roughly equivalent to 10 square meters) apartments in wooden buildings. No wonder so many residents were unhappy.

Since the early 1980s, priority has gone to improving the quality of housing. A combination of factors has contributed to these efforts, including lower housing loan interest rates, expanded loans from the Housing Loan Corporation, housing-related tax incentives and, last but not least, the new government policy of expanding domestic demand. As a result, annual housing starts again exceeded 1.5 million units from 1986 through 1987. The new boom, however, is not due to an actual shortage of housing, and is not likely to continue as long as the previous construction rush. A reasonable bet is that housing starts will hover around 1.3 million units a year for the time being.

Building tradition

Changes in the number of housing starts reflect changes in the housing industry itself. Residential construction is a traditional industry in more ways than one, and in Japan's case, craftsmanship has always been one of its most salient features. This is because home builders, and especially carpenters, plasterers and scaffolders, are in a sense all artisans. The techniques and materials they use have been developed and handed down from generation to generation. Craftsmanship was the basic ingredient of what is now called quality control.

These traditional craftsmen had a field day during the postwar housing shortage. A great many dwellings, however cramped and ill-equipped, had to be built as quickly as possible using the building techniques already available. The need to develop new techniques and materials to improve the quality of housing took second place.

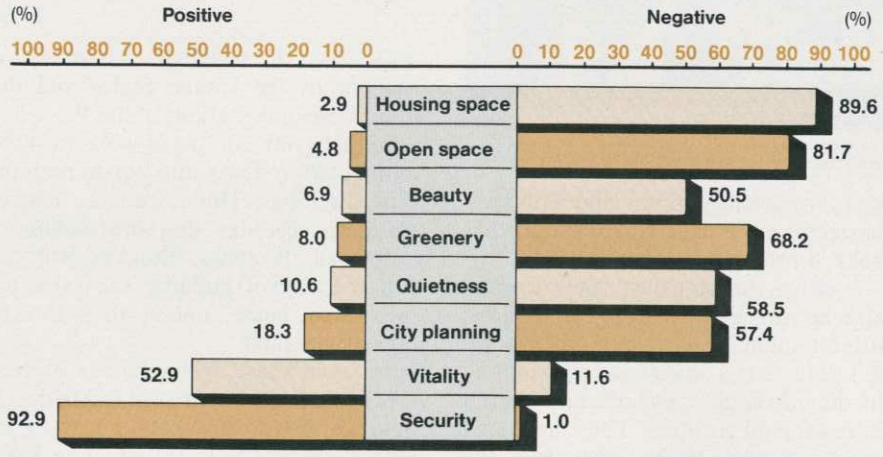
As the shortage was alleviated, however, people's attention turned increasingly to the question of quality. Airtight construction, for example, was something to be avoided in traditional Japanese-style dwellings which lacked a chimney or central heating. The reason for this, of course, was that drafts were essential to ventilate the poisonous carbon monoxide gas from small kerosene and charcoal heaters. Similarly, the idea of insulation against outside noise was alien to traditional home-building. But once people had a roof over their heads, they began to look for something more. They wanted homes that were warm and airtight. They did not want to be constantly annoyed by noise coming from next door. Thus residents began making new demands for more functional dwellings that could not be met by traditional techniques. Because of this, research and development by individual construction firms took on new importance.

These efforts began producing tangible results in the 1980s. The number of dwellings supplied by corporate builders increased rapidly, while the craftsmen's groups that had heretofore played the central role in home-building yielded their leadership position to the new corporate entities. The entry of modern builders brought tremendous progress in home equipment, including air conditioners, ventilators, kitchens, bathrooms and toilets. These soon became standard fixtures in each and every dwelling. The housing industry in Japan entered a period of modernization and structural readjustment as craftsmen's unions gave way to corporations.

Restructuring has greatly boosted the functionality of housing in Japan. While the dwellings mass-produced, as it were, in the period of housing shortages left much to be desired quality-wise, those put up in recent years, including both single-family and multiple-unit housing, are highly functional. In terms of functionality, Japanese housing is now much better than housing in many other countries.

In terms of overall comfort, however, Japanese dwellings still fall short of Western standards. Most Japanese continue to live in unsatisfactory environments despite the remarkable functionality of their dwellings. The ultimate purpose of a home—to provide comfort and relaxation—has yet to be achieved. Filling this qualitative gap is both the responsibility of the housing industry and a challenge for individual residents. In Japan there has also been little change in the disorderly clutter of Tokyo and other cities around the country (Fig. 2).

Fig. 2 **Foreign Residents' Evaluation of Japanese Cities**



Source: Construction White Paper, 1985

Different philosophy

There is no beauty of symmetry such as is often to be found in Western residential districts. But this difference stems partly from a different philosophy of city-building.

In Western countries many cities have been built on the basis of an overall layout. Individual dwellings ideally represent an integral part of the whole, and the end result is a city that gives the onlooker a sense of harmony. Not so with Japanese cities. Dwellings are built with little re-

Photo: Misawa Homes Co.

A house being built with ceramic materials, which have great potential as a substitute for brick or stone.

gard for overall harmony and without a master layout. What emerges is a city that looks disorderly and overcrowded.

Even in the so-called "new towns," large housing complexes in the suburbs, little attention is paid to harmony. Would-be residents buy small plots prepared by dividing up larger tracts of land reserved for residential purposes. They then build homes according to their own tastes, the shapes and colors of different homes varying widely. But such custom-made dwellings destroy the harmony of the overall environment.

The Japanese formula has a great advantage, however, in that it helps upgrade the functionality of individual dwelling units. Take the new field of home automation. In the United States and the other developed nations of the West, it is extremely difficult, profit-wise, to build automated systems into condominium-type dwellings. This is because master planning precedes the construction of individual dwellings. Builders will not run the risk of building such systems into each house unless they foresee enough demand.

In Japan's case, where homes are custom-built, there is no risk of loss in developing a home automation system so long as there is demand for some 3,000 units or so. Similar systems can also be adopted in multiple-unit dwellings or condominiums by applying the experience gained with custom-built homes. And this is, in fact, what has been happening. Progress in home automation technology has greatly improved the functionality of both single-unit and multiple-unit dwellings.

In Japan and other Western industrialized countries, home components are increasingly produced at factories to predetermined specifications.

In the United States and Europe, most housing companies develop land and subdivide it into housing lots, where they build houses. Therefore, the number of houses to be supplied by one housing company is limited. The maximum number of houses supplied by a single housing company in the U.S. or Europe in one year is 9,000 by U.S. Home Corporation. By contrast, in Japan, where house-building companies have nationwide sales networks for custom-built houses, there are five companies each supplying more than 10,000 units annually. Sekisui House, the largest, produces 40,000 units. Misawa Home turns out 30,000.

Mammoth Housing Complexes

The Japan Housing Corporation (Nihon Jutaku Kodan) was founded in 1955 at a time when large housing complexes seemed to offer an instant solution to the critical housing shortage created by the destruction of Japan's cities during World War II. It was an undertaking unprecedented in Japanese housing history.

In this way were built the first of the mammoth housing complexes now known as *danchi* that have since become an inseparable part of Japan's housing scene. Their inhabitants were known as *danchi-zoku* or "danchi-ites," and in the 1950s and 1960s it was the dream of Japanese city-dwellers to join their ranks.

At first, the standard *danchi* apartment consisted of two bedrooms floored with tatami mats and a wooden-planked dining room-kitchen area. These were dubbed "2DK," meaning two rooms and a dining room-kitchen, and the term soon became synonymous with *danchi* housing.

By the 1970s, however, Japan's quantitative housing shortage was a thing of the past, and winds of change were blowing for Kodan housing. A 2DK might have been enough for a young couple and a baby. But as baby got bigger and needed space of his or her own, and as more babies followed, the once-coveted 2DK shrank into a small and cramped apartment. The new dream of the danchi-ite was to escape to larger quarters. The JHC strove to build more spacious public housing, but the growing difficulty of acquiring land for new housing developments limited what could be done.

One of the mammoth *danchi* housing complexes built in the 1950s. Most of the apartments consist of two rooms and a dining room-kitchen.

Today, the dream of most Japanese city-dwellers is to buy their own house in the suburbs, or at least to get into a high-class "mansion," as condominiums are euphemistically known in Japan today. Nonetheless, the old 2DKs, still only part way through their long useful lives, remain "home sweet home" to many Japanese, who also enjoy relatively low rents and, in the case of conversion into condominiums, modest purchase prices. In today's awesomely expensive Japanese cities, there are not a few danchi-ites who have put up with their cramped 2DKs for decades, and will likely do so for many years more.

The Japanese system of supplying single-family housing mainly through the construction of custom-built homes is responsible for the rapid growth of the nation's housing industry in recent years. At the same time, however, overseas expansion seems unlikely for the time being, exactly because the Japanese system is so different from that in other countries.

Nonetheless, moves are under way to promote international exchange between the housing industries in Japan and other countries. One thing Japan can contribute is ceramics, a building material high in quality but low in cost. This material shows great promise in regions where buildings have traditionally been made of stone. This is because ceramics have better moisture-adjusting properties than stone, and can significantly increase living comfort.

Other potential technology exports include the home automation systems and factory production processes developed by Japan's housing industry.

Leisurely lifestyle

On the other hand, Japan still has much to introduce from abroad. Just one example is the more leisurely lifestyle of the United States and European countries, and all the interiors and furniture that go with it. Japan's residential culture being even more susceptible to change than that of other countries, this would likely greatly alter the way Japanese live. Already, imports of manufactured goods are rising rapidly, aided by the recent appreciation of the yen.

How will the Japanese housing industry evolve in the years ahead? Certainly the substandard housing supplied during the period of postwar shortages will continue to be upgraded. Both the government and the private sector will see to it that young workers live in small dwellings in city centers, while older people settle in houses in suburbs or resorts, hosting their urban children on weekends. Living of this type will be the norm in Japanese society, and could even take on international dimensions as growing numbers of Japanese choose to live abroad. One thing is certain. The Japanese housing industry still has tremendous growth potential in an era of diversifying needs.

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One Room Makes a Mansion

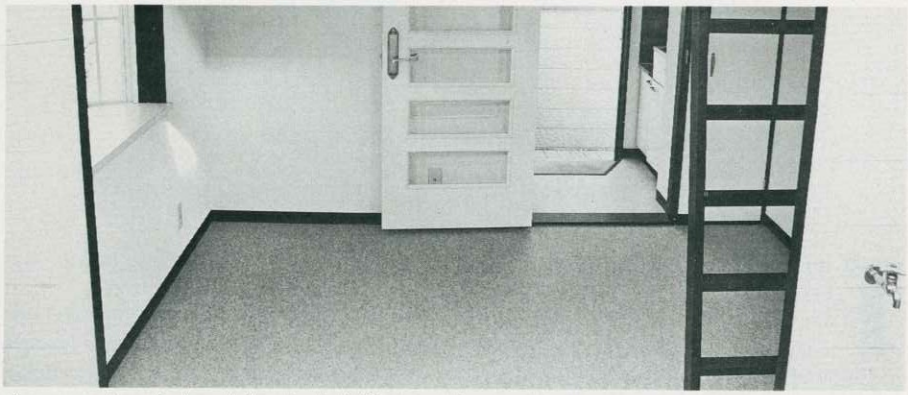

Photo: Kyoei Company

A one-room "mansion" consisting of a single Western-style room with a tiny cubicle attached for bathtub and toilet.

Foreign visitors to Japan are often bemused to hear small, high-rise apartments grandly referred to as "mansions." In fact, *manshon,* as the word is pronounced in Japanese, first entered the lexicon in the 1960s, when commercial builders were eager to differentiate their relatively luxurious condominiums from cramped public housing.

Recently a derivation on mansion has drawn special attention in Japan. This is the so-called "one-room" mansion. One-room mansions are nothing more than their name suggests—condominiums consisting of a single Western-style room with a tiny cubicle attached for bathtub and toilet.

Three types of residents seem drawn to these miniscule apartments. The first are members of that fraternity that has become so commonplace in Japan—*tanshin funin*, or bachelor businessmen. Reassigned by his company to a different city, the *tanshin funin* businessman leaves his family behind to follow his job, returning on weekends, or in some cases only a few times a year, to see the wife and kids. For these solitary workers, the one-room mansion is a place where they can lay down their weary bodies for a night's rest after a wearing day at work.

The second main user-group is university students from smaller towns who have moved to the big city to go to school. For the more affluent student eager to imbibe the freedoms of city life, these little rooms are attractive indeed.

And then there is the third and newest group—businessmen who live with their families in their own homes in the city suburbs. In Tokyo, there are countless men who must spend two hours each way commuting to and from work. To avoid fatigue and the wasted hours on the train, these men are increasingly renting or buying downtown one-room mansions to serve as second homes. Sleeping alone in their cubicles on weekdays, they return to their families on weekends for a well-earned rest.