THE 5TH MISAWA HOMES PREFABRICATED HOUSING INTERNATIONAL DESIGN COMPETITION "A SOUND LIFE IN A SOUND HOME"

TREND OF WINNING ENTRIES WITH HIGH MARKS

Four works, ranging from the first prize to the third, were submitted in the competition. One of them is a stressing on spaciousness. Floor space of the first prize work is 18.5m², the second 9.4m², the third 10.2m² and 10.7m². These figures are far larger than the average floor space (71.2m²) of newly constructed houses in Japan. Statistics on Dwelling Space Construction Started for 1972. This means that the average space of 8.3m² per person for individual living in Tokyo is far smaller than the above-mentioned figures. (Source: National Census 1970).

Though we don’t know whether the design of these works put forward “spaciousness” as one of the factors for “A SOUND LIFE IN A SOUND HOME”, we can clearly understand through high-ranking entries the importance of living density among various influences on human-beings. The second feature found in the works is an attempt to create the private character of the house. Any novelty was noticed neither in the technique nor in design. Also, excellence in utility was not found in the entered works. We regard these factors as a return to unpretentious technology and as a preference for gaining a cozy space in housing rather than as the smart utilization of prefabricated process or poor design. In the background of unpretentiousness, there may be a way of thinking based on technology assessment.

The third feature is that a house is considered as a space which will harmonize with a community and not as a single substance. Mr. Kiyoshi Kakekake, a noted Japanese architect pointed out the accumulative effect of houses at the memorial lecture meeting for this competition. He cited following examples:
"space in space"タイプの住宅は、本来C、ムーアの自宅の用途に用いられた邸宅で
す（第1図参照）。ここではある間隔を
設けています。まず、一戸一つの大空
間を所望し、その空間の中に、機能的で
美しくある空間をとられた住宅、サテライトとを移動可能なムードユニ
ットとして取り入れ、狭いた形でも成や食
気の多様な空間にしようとすると、ジェニ
コーンのVISONA（第2図）をとれる効果的に住宅が実現されています。
このタイプの住宅はเฉพาะ物品に限らず、外国作
品にとれる特徴があり、小作品の一貫化を
占めています（第3図）。またスベストモ
ダックスのクラウド型住宅と同様に住宅内に
8つ、外国作品9つ以上（第4図）。
応募作品の全般的な傾向
全作品の特徴としては3つ特徴があります。
その1は、不規則な形でムードユニット（新
間隔の20年）空間の接続が基本になっている。
全作品の中に147つ、64.7％の作
品が不規則な形で接続する住宅の接続で
あります（第5図）。またムードユニット間の視界を
いやすように、多くの作品が規則の
くない形で配置をしています。さらに、不規
則な形で配置されているムードユニ
ットのリスムが、3つ以上、多く、特に、断
面図で5つから8つに、多くの作品が
規則のない形で配置されています（第6図）。
ライラック、禁酒型、行動の生活化の三
要因でモーダックス効果する家の提
案例図の73.5％を占めていた点に注意をし
ます（第7図参照）。
第7図に示した、大規模な密閉型を意
図した提案が圧倒的に多く（提案作品40点、外国作
品10点）もしたことから、近年の世
界のエネルギー危機に対する反応の大さ
さが示されているようですが（第8図）、
外見出た建築家の提案を含め、 BOTH Architectures
and Design
Research Institute
新宿区新宿2-5-24
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Table 1: Living density envisioned in high-ranking entries

Table 2: Living density in "New Town"

Table 3: Construction of "Metabolic Space"

Table 4: Reasons for proposing "Metabolic Space"

Illustration: Slides, drawings, and text by BOTH

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TREND OF WORKS OTHER THAN WINNING TOP WORKS

One of the features found in the trend of works other than winning ones in "SPACE IN SPACE" type house. This work of "SPACE IN SPACE" type house originated with Mr. Charles W. Moore. He used it for the explanation of his own house (Illustr. 1). But here, it means as follows:

This plan is based on an idea of having small spaces inside a large space as notable room units such as a private room, a kitchen and a bathroom whose functions are relatively limited. The rest of space is to be used as multi-functional space such as a living room or a dining room. This idea was already materialized in the experimental house of the 1950s and 1960s.

These types of work account for 15, 11 from domestic companies and 4 from overseas, and they come up to about a little more than one tenth of all participating works (Blud 1). In addition, there were 12 proposals for the work type house which will be inserted between two slabs (8 from Japanese architects and 4 from overseas) (Blud 4).

GENERAL TREND OF PARTICIPATING WORKS

There are three features in the trend of all works. One of them is that there are many proposals which adopt metabolic space in the technological aspect. One hundred forty-six works or 97.1% of the whole works envisaged some transformation of houses either in a degree or in design. Table 3 is the statistics regarding the technology of developing metabolic space. The table shows that the number of capsule type housing ranks for the most of all metabolic works.

The type most frequently found in the proposals of metabolic space is the life cycle type, which accounts for the largest percentage (47.3%) to meet the change of family members. The idea of giving a room to each member family comes next, and it represents 13.4%. The third place is the idea of changing the lifestyle for the sake of "SOUND IN A SOUNDBOOK" (11.6%).

It is interesting to note that these three factors, namely, life cycle, single room and life style change, occupy 72.2% of all proposals for "A SOUND IN A SOUNDBOOK" (refer to Table 4).

The second feature is that there are ten proposals, two from domestic enterprises and eight from overseas designers, concerning the utilization of solar energy. This shows the quick responses of house designers to the recent worldwide energy crisis.

Among the works from overseas, besides the idea of solar energy collector, there were ideas of Fuel Cell installation and re-utilization of, impression membranes or drinking water (refer to Table 4). The third feature is that there are some proposals for the approach based on the theme "A SOUND IN A SOUNDBOOK" (Blud 4). These works put too much stress on technological improvements in prefabricated components.
FUTURE PROSPECT

The Misawa Homes Institute of Research and Development (MHID) is now engaged in the project entitled "A SOUND LIFE IN A SOUNDBEDROOM" as part of the latest competition, and is active in the research and development in vast coverage of different scientific fields such as architecture, medical science, psychology, human engineering and environmental engineering. This project naturally includes the space problem mentioned above, utilizing skills for solving community and metabolic problems. The ultimate aim of the project is to pursue an ideal residential environment. In order to attain this purpose, we are always striving to identify characteristics of human-being, and to bring it in a living environment for materialization. Let us give you some examples of important aspects of human-beings.

1. Human-being is possessed of various functions to meet surrounding environment. The more these functions were saturated, the more the human health is enhanced.
2. Human-being has a physical and mental rhythm which cycles daily. Disturbance of this rhythm causes illness.
3. Unlike other animals, human-being is possessed of unique mental power which enables us to question our habits. Therefore, housing set-up should be designed to meet these human requirements. However, we regret, these considerations are not taken into many present-day houses. Rather, there seems to be a strong trend of ignoring these facts in housing design. To name a few, an excessive air-conditioning system, furniture and interior design which place emphasis on appearance only, and uncomfortable, living-room with fixed concept are among these examples. These trends would form permanent environment for human-beings. We are fully devoted to materialize "A SOUND LIFE IN A SOUNDBEDROOM". Our aim is to build up a living environment in which we can live in a more healthy way with both mental and physical aspects for retaining our youthfulness.

PUBLICATION OF "A SOUND LIFE IN A SOUNDBEDROOM"

The MHID published "A SOUND LIFE IN A SOUNDBEDROOM" which is now one of the most famous books in Japan. It is a comprehensive study of the effects of sound on human health and how to create an environment that promotes well-being. The book provides practical advice on how to design and install soundproofing materials, how to select and install window treatments, how to arrange furniture to reduce noise, and how to create a peaceful and relaxing environment in the living room. The book also includes interviews with experts on soundproofing and tips on how to use sound to enhance the living environment. The book is highly recommended for anyone interested in improving the quality of their living environment and promoting their health and well-being.