A Study on the Relationship Between use of a Building and its Shape

The Citizens' Library in Fukuoka-City (Photo 1) is a library whose use has been converted. Before its use conversion, it was a private amusement center. At present, it is used entirely as a library, and no part of it is used as an amusement center. However, those who use this library still see in it its former use— an amusement center.

The reason are twofold. On the one hand, it retains the characteristic features of former use and, on the other, the many people who use it know that it was formerly used as an amusement center. These two elements were important theme in the facility use conversion. The content of this theme are explained in detail below.

1. Characteristics in a shape of a building showing its use

Buildings have different shapes according to their use. This may appear quite obvious, but no serious attention has so far been paid to this point in the institute of architectural planning. The relationship between the use of a building and its shape is recognized through a each one's experience and study. For instance, looking at Photos 2 and 3, people of one generation may see that these buildings were a primary school and a fire station respectively. However, primary school children of today will be unable to see them as such. This is because they take it for granted that a school is a reinforced concrete building and because
today no fire station has a fire lookout tower.

What are the characteristics of a building which can be recognized through experience and study? A study on this question will be made below, with respect to buildings whose functions have been changed.

One of the characteristics by which the use of a building is shown is the symbol which shows its use. Photo 4 shows a building which have been converted to a discount-shop. It was a bowling alley before. This is clear from the bowling pin placed on top of the roof. The bowling pin is the symbol of a bowling alley. The “T” mark on a post office building, the rotating neon sign of a pinball parlor, and patrol cars in front of a police station are similar symbols. Signboards and goods displayed in showcases are also such symbols. A box-like building without any characteristic individuality clearly shows its use if such a symbol is shown.

Such symbols, which show the uses of buildings straight-forwardly, are more often than not removed when their uses are changed. However, if any such symbols like the bowling pin shown in Phot 4 are left as they are, the former uses of the buildings before conversion can be shown.

Another feature that shows the old use of a building is the result of rational design implemented in consideration of the function of the building, or the construction work.

For instance, the layout of the building in front of a school playground in Phot 2 can indicate that it was formerly a school. Viewing it externally, the weather boarding outer wall and the arrangement of waist-high windows indicate that it was formerly a school building. Inside, the long side corridor with the washing sinks and, in more detail, the wooden shoe boxes and furniture make one recognize the former use of the building. The features of this school building are due to rational reasons that a playground is an educational necessity and that the weather boarding wall can be got easily and can be constructed easily, and so on. Meanwhile, the features of a fire station building are determined by its functions – a fire lookout tower which is necessary in order to discover fires, and a garage with a large entrance facing the road to permit fire engines to go out from the garage easily onto the road in case of need.

The educational functions required of public primary schools are the same throughout the country. As children are taught in classes, school rooms of the same shape are arranged along the corridor. A certain number of various classrooms are located in a place convenient for common use, and playgrounds and swimming pools are rented according to a unified standard set by the Ministry of Education.
struction costs are determined at about the same unit price. It is quite natural that, because of these conditions, school buildings look alike.

In Japan, public buildings such as schools, post offices, fire stations, railway stations, police stations, public housing, etc. are standardized in terms of design by the respective central government agencies in order to rationalize and simplify the contents of the design. Because of these design standards, the unity of uses and design results in making such buildings conformist rather than similar in terms of the atmosphere they create.

A third characteristic of a building which shows its use is seen in Photo 5. This shows the city-center in Tokorozawa City designed in 1968, which was later converted to have a different use. The fair-faced balcony of this building, influenced by the design of the Government office in Kagawa Government office designed by Kenzo Tange, shows an aspect popular in those days, of government buildings. Obviously, although the balcony is functionally useful, it was designed more to have an appearance suitable for a government office building. The design of a facility is determined not only by the need to meet the rational factors required of it, but also by the need to satisfy design requirements.

In the early years of Showa Era (in the latter half of the 1920s), a certain architect designed a government office and a public hall alongside each other about the same time in Shizuoka Prefecture*. He designed the public hall as a building devoid of decorations following the trends in the movement of modern architecture. However, in contrast, he designed a high tower of a classical style for the government office, which was totally unrelated to its internal functions. This architect changed his attitude regarding the design of the government office and the public hall according to their different uses.

A classical style of architecture was used to make a building look like a government office in prewar days, fair-faced balcony, as shown in Photo 5, symbolized city office built twenty to thirty years ago. Today, tiled walls and a large entrance hall are taken as the symbol of a city office.

This third aspect of a government office was not too highly evaluated from the standpoint of the modern architecture movement. Therefore, fair-faced balcony were given by designers some functional roles. Whatever the case, it is an important element of design to express uses as symbols.

In the above, the characteristic features to show uses are classified into three categories. This does not always mean that a building which expresses its use has these three different characteristics. The classification of these
characteristics into three categories is only for the sake of convenience. In the case of the public bath house in Photo 6, the Japanese phonetic symbol “YU” which means hot bath left undyed on the sign certain, the large building with a chimney and high windows, and the Irimoya gables— all these show the use of this building. It would be easy to understand the characteristics of a building which show its use, if one classifies these characteristics into three kinds, regarding the sign curtain as a “mark”, the chimney and high windows or the shape of the building as a “function,” and the Irimoya gables as a “symbol.”

In planning the facility use conversion, it is important to consciously understand the following as the design elements, namely, that part of the building which makes one recognize its former use, the form in which the new use is to be expressed, and the characteristics of the building which show its use. Viewed from this standpoint, converting the use of a building offers possibilities which are lacking in designing an entirely new building.

2. Uses of buildings and accumulated memory

One of the reasons why the former use of a building is recognized after its use has been converted, is that one has an accumulated memories of the building.

For instance, suppose a prison building is to be converted to a home for the aged. Both are dwelling facilities, and the plans for both may be similar. If the plans are similar, it may be easy to change the external appearance of the prison building by using different facing materials, changing the size of the windows, and removing the iron bars. Even if the construction work is easy, it would not be a pleasant experience for ordinary aged people to live in what used to be a prison building. It is therefore not recommendable to convert a prison building to a home for the aged.

It is the example which people have negative memories of a prison building, but there are buildings of which people have pleasant memories. Many people have happy memories of amusement centers, movie theaters, and zoological gardens. If public buildings have existed for a long time, almost all people near them will have had the experience of using them, and will therefore have memories associated with them. Therefore, almost all local residents know the former uses of such buildings even after their uses were changed and, so long as the shapes of the buildings remain the same, they can still feel their former uses. If such buildings are pulled down, they will feel a certain emotion about them. No people have a memory or an experience of a entirely new building.

Of all public buildings, it is school buildings about which almost people have the deepest nostalgic feelings. A school whose use is converted into something else without being removed, is not only useful because of its new use but also means more than that to those who studied there. The feeling of sweetness which they have toward their old school is something like the feeling which one has toward the landscape around one’s home town.

Public buildings which continue to exist in the same places can give a sense of assurance to people today when the environment the landscape are changing so rapidly. This is one of the reasons why it is meaningful that public buildings should continue to exist even after their use has been converted.

*Hiroyasu FUJIOKA : “Japaneseess” among the Japanese Architects who Supported Rationalism in the Late 1920s and the 1930s, Journal of Architecture, Planning and Environmental Engineering Number 412, June, 1990.