1. Introduction

Identity is a key word in discussing the visual environment especially those landscapes in major cities which have modernized during this century and have metamorphosed to some extent from pre-modern landscapes more deeply rooted in their native cultures. Japan which developed a unique cultural identity in urban landscape design during the several centuries of national isolation, has more recently experienced a rapid modernization by importing Western culture and technology. The urban landscape in major Japanese cities has completely changed from its pre-modern state so that now it seems difficult to find visual aspects characteristic of the traditional design. However close investigation of the changes in Japanese urban landscapes brought about by the continuous process of rebuilding cities with Western cities as models reveals a new view point by which to identify Japanese urban landscape design.

This paper takes as its the main field of investigation Tokyo in the period before World War II, focus of the largest expenditure of energy to modernize and the beautify the city, and the author examines these points: (1) the kind of Western urban landscape design imported and translated as model, (2) examples of realized design and the influence of Japanese traditional design upon them, (3) Japanese preference in and the manner of adoption of urban landscape design, (4) some problems of today’s urban landscape and a view for a new model.

2. The models

Japan started the modernization of cities at the turning point of Meiji Restoration (1867) and abandonment of its national isolation policy. One of the strongest reasons to rebuild its cityscape in a modern Western style was that the government intended to represent its national power by the Western style cityscape. Thus those who regarded modernization as equal to Westernization actively imported design models from Europe and America by means of invited professionals and literature.

In the early stage of Westernization in the Meiji era (1868-1911), invited professionals themselves planned or designed some districts and structures in Tokyo according to the Japanese government intention. The unrealized plan for the administration office district in Hibiya, designed by German professionals (1886), showed the contemporarily favored form which was forcibly superimposed on the city pattern of Edo, the former Tokyo (fig 1).

In the next stage in the Taisho era (1912-25) and early Showa era in the 1930’s, the number of Japanese professionals increased and some of them wrote books on town planning and urban design by referring to Western literatures so that Western style models were translated and became more popular. The models for urban landscape design described in most of the books were street patterns and the treatment of street crossing, which provide the basic composition of urban landscape.

As to the street pattern the combination of radial and grid pattern connecting the monumental structures at key places in Baroque style was recommended as their ideal model. Plans of the city of Paris, Washington and perspective pictures of those cities quoted from original books must have seemed attractive and distinguishable enough for Japanese to set it as their model representing national dignity. This street pattern model was applied to some proposed city plannings, for example the reconstruction work of Tokyo after the Kanto Great Earthquake (1923), but none of them were realized. But the impressive perspective view and distinguishable symmetrical plan of vista composition were realized on a much smaller scale. This will be described later.
The other model was the treatment of street crossing. This was originally discussed as a design technique for improving traffic management while in Gothic towns preserving the concept of positive space surrounded by solid buildings. Various plans of street crossing were drawn up originally (fig. 2) but it is doubtful that the idea of the positive space were transferred correctly by Japanese who had scarcely experienced such space. Anyway Japanese planners/designers considered that street crossing form arrangement was one efficient way of building a Western urbanscape.

3. Realized models

(1) Vista design

As already mentioned Baroque style street patterns on a large scale were never realized in Tokyo and other historical cities. But we can pick up some examples of a structure with a straight approach on its axis which are regarded as having been designed after the Vista model. Here the vista model is defined as the combination of a large structure and its approach which forms a symmetrical one-focus scene.

The vista model was applied to four large monumental buildings in central urban area in Tokyo: Akasaka palace (building 1909 / street: before 1916), Tokyo station (1914 / 1930), Kogakuran building in Meiji Shrine Park (1926), National Assembly hall (1936 / after 1953). Those buildings used to be deeply related to the Emperor so that the largest effort was devoted to build up a perfectly Western style urbanscape to represent the dignity and symbolic character of the buildings. But these examples, although the closest approximation in Japan to a perfect manifestation of the vista model, still failed to develop another radial axis approach or to extend the main axis to form a vista network. They were completed in a block and were superimposed on existing urban space as if they were an independent element. This suggests the difficulty in adopting the model as an urban structure.

Other notable examples in which the vista model was applied are found in the planning of campuses, parks and also stations in residential suburban area. The major buildings in large urban campus, University of Tokyo for example, were frequently located at the end of and facing down a straight approach. Hanazono Park (1929) had a straight street with four rows of trees as its main approach. Denenchofu (1923) and Kunitachi (1927) stations were located at the focal point of radial streets. But in almost all of these cases a kind of transformation occurred: too small structures at the focal point, plants in front of the focal building obstructing a part of its facade, too thick foliage trees along the approach to obstruct the view of the main structure, approach street shifted from the central axis. Those transformations make the view of the focal structure more obscure and also make the realized scene informal and a less geometrical composition when compared with original Western vista design (fig. 3).

The imported model has been influenced by an aspect of Japanese traditional space design, which is the tendency to avoid showing significant elements too obviously. This tendency is seen in Japanese garden design in the placing of a small obstruction in front of the main element to make its view more interesting ("Sawari"), and in the typical layout of shrines in the concealment of significant element inside a multenclosure. Another possible reason for the transformation is that the Japanese designers/planners adopted the vista model only by means of a two dimensional plan not by means of scene reflecting three-dimensional space composition. The distinguishable symmetrical plan must have been easy for them to apply in their sites but the space composition and the volume balance among the elements must have been difficult to adopt and reproduced. The plan had played the role of a sign of modernization/Westernization especially in the early stage or in minor projects.

Here we need to examine a Japanese traditional urban design mode shown in "Meisho-zue", a series of pictures of noted places in cities. This mode resembles the vista model (fig. 4). It is called "Yama-ate" (to direct a street axis toward a particular mountain) and was one of the most popular urbanscape design modes in pre-modern cities. But the space recognition on which "Yama-ate" is based is different from that of a Western vista design. Firstly the Japanese one relies on natural elements in defining the street axis not on antifocal structures. Secondly the means which links the street and the focal element is different. The large mountain at the focal point, Mt. Fuji in fig 4 which is 70km away from the street in the heart of Edo, has a much smaller
size in the real scene. The drawn size expresses the significance of the mountain. It suggests the Japanese link the street and the mountain by meaning rather than by the position in visual form. It is therefore not necessarily important for them to maintain a real clear view of the focal element once the connection by meaning has been established. This consideration on the Japanese manner of space recognition also supports the transformations on the vista model.

(2) Street crossing space

Street crossings, where traffic meets and departs and which articulate a streetscape, are one of the important places to compose an image structure of a city. The construction of modern streets in Tokyo forced the pre-modern street crossing design to metamorphose. The Japanese plant and designers learned the street crossing treatment in various forms as their model. As a result corner-cut and traffic island (including the rotary) arrangements were widely adopted but other patterns, forming a small plaza at street crossings, never appeared. Moreover the realized examples of rotary style crossings, which originally had not only a traffic function but also a visual impact on the streetscape, lacked sufficient structures or trees to catch people's eyes. This illustrates the fact that the model had worked mainly as a functional model to improve the traffic safety as transmitted by plan but the effect on the urbanscape had been almost totally ignored.

We can see a typical metamorphosis of the design in the Ginza Owari-cho crossing, the most popular one in Tokyo since the Edo era. Owari-cho in the heart of downtown in Edo had a grid street pattern. The main crossing lacking any particular visual elements apart from a small gate for the night guard, was noted for its famous clothes shops and the lively commercial activities there. This district was rebuilt in a Western style by the "Ginza Brick Street Project" (1872), the first large city modernization project planned and designed by invited professionals. The project produced the streetscape of a wide street along with unified design brick buildings with colonnade. At the Owari-cho crossing all the corners were cut to produce a plaza like space but one corner building designed at a right angle disturbed the space even though the form of the other three buildings were unified in corner-cut facade facing to the crossing center. Since then buildings standing at Owari-cho crossing at the core position in the Ginza shopping district have experienced several reconstructions but they have never been uniform in style though each building has been strikingly designed and fashionably accented with corner decorations such as a clock tower or dome on the top.

We find here again the Japanese traditional manner of urbanscape design still succeeded in the street design. That is, a space memorized as a node in the city was characterized by the collection of various elements of striking image located at the place and by the activities carried out there. The design of another identifiable place "Hashi-zume" (bridge end) illustrates it more clearly. "Hashi-zume" in Edo city tell us that there were no monumental structures to mark the place but many temporary structures and street furniture (information board in Fig 5) were brought together to serve the human activities. The significant position of "Hashi-zume" in the city continues in modern Tokyo and the Westernization of structures began first at this place. Attractive Western style design bridge and buildings developed a new urban space in Tokyo. But the realized scene of the place differed from the Western cities in the considerable disuniformity in building design. Even though each building was carefully designed to attract people's attention at its facade, the effect of harmoniously designed structures surrounding a positive space was hardly observed (fig 6).

This predisposition is considered to be based on the traditional space recognition not to define a space by physical surroundings but to define it by the combination of a stage and elements contributing to the activities in the place. So the elements are not necessarily given unified or stable forms. The attractiveness of each element or the notable episodes in their histories were highly valued to establish the image of the place. As a result of this, the imported model brought the plan of corner-cut and island for traffic safety into Japanese street crossings and corner buildings with various eye-catching designs emerged almost as a symbol of Westernization. But the traditional space recognition and design manner prevented the model from being adopted as an idea of space.
4. The characteristics of Japanese urbanscape design seen in the adoption of the models

The adoption and transformation of the notable imported models, vista and street crossing design, is illustrated in fig. 7. The investigation and analysis of them that the author has tried in this paper reveals that the pre-modern Japanese urban design manner and the space recognition continued unconsciously in the modernization. That is summarized as follows:
1) a preference for undefined and weak visual connections between the elements composing the space rather than for physically defined space in geometrical form.
2) an emphasis on the meaning of elements and episodes related to them rather than on visual form.

We also find that the levels of adoption of a model have largely been concerned with the degree of transformation. The idea of space is the most difficult to be transmitted as it is incompletely described in plan or picture. The idea of scene is the next most difficult and with little scope for transformation. So plan and function are most easily adopted and at the same time transformation in the realized scene can occur easily.

5. Today’s problems and a view for the future

Estimations of today’s Japanese urbanscape can be roughly divided into the two opposite camps. The negative side deplores its disintegration and still admires the urbanscape in good order in Western cities. The positive side values the chaotic and vital situation and protests any controls on design. Aside from which stance will be bright in future, it is true that the Japanese contemporary urbanscape is a large gathering of different elements without an explicit order on them.

This situation is explained by the traditional manner of Japanese urbanscape design summarized in the foregoing chapter. The lesser attachment to complete uniformity allows disorder in a streetscape. The habit of relating elements and identifying a place by meaning rather than by visual form accelerates the juxtaposition of different elements and the distortion of forms. All these phenomena occurred when the limitation on structure materials and construction technology and the ethical order established under the feudalism called “Kaku” (a rank) disappeared in the modern age. In this regard, the metamorphosis of Japanese modern urbanscape is understood as what the change in material and society laid on the unchanged space recognition and preference. Therefore a new index of future identifiable urbanscape design should be established based on the unchanged aspect.

The result of the active adoption history of Western style described in this paper suggests that further blind adherence to a foreign model will hardly develop an identifiable urbanscape in Japan. Planners and designers should adopt a model at several levels (function, plan, scene, space, system, and so on) and recompose it with the consciousness of Japanese predisposition for space design. Moreover the Japanese traditional urbanscape itself should be examined as a model. In closing this paper some possible focus, which require further investigation, are noted as follows: invisible orders in the relation between place and element, an improvement in the technique for the juxtaposition of visually disparate elements, the stable correspondence of design and meaning based on the idea of “Kaku”.

I'd like here to express my thanks to Mr. Katsuya HIRANO, University of Tokyo, to whom this paper especially the part on vista design is much indebted for his graduation thesis.

Notes: * Some master plans in a Baroque style designed by Japanese were realized in overseas territories escaping from the influence of existing traditional space. But even in this condition they were transformed a little (1).

References:
(1) O. Shinohara (1991), Vista composition design in Tokyo - an experience of Modern Westernization in urban design -, Sixth international conference of the European association for Japanese studies, preprints urban and environmental studies, pp77-88
(2) Y. Ishida & H. Durin-Wosywat (1991), Urban form and the “hidden urban designers” in Japan, ditto pp48-62
Fig. 1 Unrealized plan for the administration office district in Hibiya (1886)

Fig. 2 Street crossing patterns quoted in Japanese book, by Y. Kataoka (1935)

Fig. 3 Transformed vista design with "Sawari" (Ochanomizu Univ. 1936) proffered by K. Hirano
Fig 4 “Yama-ate” example, Sunuga-cho street, named after the province in which mt. Fuji is located.

Fig 5 “Hashi-zume” a famous node in Edo city, near Nihon-bashi br. drawn in Meisho-zue (part)

Fig 6 Hashi-zume space in modern age, the same place in Fig.5
Fig. 7 The adoption and transformation of Western urbinscape design in Japan

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