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Value on Traditional Machiya Building

Introduction

Machiya, one of the categories of vernacular house in Japan, offers its beautiful and look-alike façade as one of the charm of the street scenery. Machiya directly abutted the public street, and combined residential functions with the accommodation of a workshop or manufacturing space, office and retail space. The shop usually occupied the front part of the house and had sliding or folding shutters of various sorts which opened to the street to display wares. Machiya could be found everywhere throughout Japan and become popular through its historical and traditional background. Machiya means townhouse composed of Japanese words machi means town and ya means house, but it is known also as merchant house. It was the urban house for craftsmen, artisans, or merchants belong to group of townspeople in the mediaeval period through the Edo period (1600-1867) into the Meiji era (1868-1912). Traditionally, machiya had transcended the values of its typical elements from generations to generations as well as its remarkable variations among different places.

What value machiya as vernacular building has through the characters displayed in the facades is what this study wants to conclude as the purpose of study. Those characters convey the values that reside in the traditional buildings as well as in the new buildings to prove the existence of this value by generations beyond the conditions in its time. To recognize the character of its visual elements one should be able to identify the features of the object upon which the study is carried. According to Sanoff, the ability to identify features in our environment is to recognize visual elements that stand out in the landscape by their size, height, color, or any other aspect that contrasts with the surroundings. And the ability to identify parts of the environment allows us to recognize the familiar as well as to appreciate the new ("Visual Research Methods in Design" xv).

Among many castle towns in Japan, where many traditional machiya buildings were built and preserved, Kyoto and Sasayama were selected as the source of data collection besides the unique historical backgrounds. Kyoto was a capital of Japan in the Heian period (794-1185 AD) after moving from Nara (710-784) and the heart of culture and politics for over 1,000 years. Sasayama was chosen as a military base because of the location by building a castle surrounded by moat in 1609. It was once considered as a suitable replacement for moving the capital from Nara, but Kyoto overtook it due to its
mountainous area. Sasayama town grew between the period of the capital Kyoto and Western Japan\(^1\) where Edo was. Therefore, Sasayama, while being influenced strongly from the traditional culture of Kyoto, has grown in its own culture at the mountainous Tanba district in Hyogo.

The observations to get the data resources were conducted in Kawaramachi of Sasayama in June 15\(^{th}\), 2005 and around Oikedori of Kyoto in June 18\(^{th}\), 2005. Comparing the machiya buildings in these two different locations is to gain broader knowledge about the character of machiya. Kyoto and Sasayama was decided to be the site locations as both are places where hundreds of machiya building exist and form the main character of the area. Both places have strong historical background of the machiya building, and in both places did the remaining traditional machiya buildings exist that were built in Edo period to the Meiji period.

This paper is written based on a short study in Japan as follow: (A) existence of machiya among other types of building in Japan, (B) brief history of Kyoto and Sasayama, (C) characteristic of façade of traditional machiya in Kyoto and Sasayama, (D) values of traditional machiya building, and (E) conclusion.

A. Existence of machiya among other types of building in Japan

Japanese traditional building morphologically are divided into four types of building as follow: machiya (townhouse or shop house), nagaya (row house), nouka (farmhouse), and teitaku (mansion/manor house).

![Diagram of traditional Japanese buildings](image)

Figure 1. Morphological types of traditional buildings in Japan (Ueda and Tsuchoya, 1975: 50)

\(^1\) Western Japan is the area of Japan, which is to the South west of Nagoya.
\(^2\) Compiled from the lectures in Osaka University by Prof. Narumi, 2005)
farmland next to it. The farmland separated the house, or group of houses, from others so that no clear demarcation such as high wall fence was there. *Teitaku* was a detached house with fence or wall separated it from other houses so that this type of houses has a clear demarcation by wall or fence for privacy. *Teitaku* was a house for samurai, law officers, and priests.

![Kyoto](author, 2005) ![Osaka](author, 2005) ![Saijo](unknown, 1984) ![Sasayama](author, 2005)

Figure 2. Pictures of the four types of traditional building

*Machiya* building has a long history since the early period of Japan, and until now those traditional *machiya* building remains preserved by government. *Machiya* has characteristics that are specific to this building type. Traditional *machiya* building is made of mostly wood, and usually left to its natural state. Traditional *machiya* is also noticeable by its shape, which becomes popular figure in books and magazines.

Despite of the fact that *machiya* seems to have been built continuously or abutting directly to the next, *machiya* is an independent building structurally built and occupied by the owner. Some have specific features according to the place where they are located, but generally *machiya* has common characteristic. In the past times, *machiya* building had to follow the regulations implied at those times that brought forth some of the common characters performed in the elements of its façade. For example, the similar narrow frontage of the houses was result of the *maquchi* tax*⁴* implied to every building facing the street.

Rows of *machiya* flank the street enable us to enter the building directly from the street since the entrance door was apparently at the street side with no particular border between the street and the building such as side walk. The buildings look adjoining each other forming group of buildings, but actually between two buildings there is a space though little and each of the building are separated in structure meaning that each is an independent unit. Some *machiya* districts are specified as preservation areas that become popular tourist spots.

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*⁴ The length of the front facade of a building or frontage of a plot of land from corner to corner, *maquchi* is measured in precise dimensions, either Japanese feet, *shaku* or yards, *ken*. In the Edo period, *maquchi* referred to the front entrance of an urban merchant’s house.
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Figure 3. Elevation along Hanamikoji, Kyoto (Yamasaki, 1994: 80)

Figure 4. Block plan of machiya in Nakagyo ward, Kyoto (Yamasaki, 1994: 70)

*Machiya* is a building where the owner of the house lived in the house while he could work at the same building. *Machiya* is considered as ordinary house inhabited by common citizens who was merchants, and mostly found in the towns or cities instead of rural area. In plan, *machiya* shared with the other type of traditional building, the farmhouse, *nouka*, a similar internal division into an un-floored service and circulation space like passageway. As with the farmhouse, a great door, giving access to the passageway was the usual main entrance to the dwelling. The typical *machiya* plot was narrow but deep.

**B. Brief History of Kyoto and Sasayama**

Kyoto was formerly a capital city of Japan before the Edo (Tokyo) and after Nara. After the first capital city moved from Nara to Kyoto in 794, many *machiya* buildings were burned down in the wars and disasters happened along the history of Japan in the period after Heian period\(^1\) around the 14\(^{th}\) century until Tokugawa\(^6\) brought peace for the next two and a half century. *Machiya* was then rebuilt again and growing as the result of

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4 It is customary for the common merchant to live under the same roof with the shop, or in a contiguous building.

5 Heian period is the period when Kyoto was the capital city (794-1185).

6 Tokugawa shogunate (the highest military leader) started the military government (Tokugawa bakufu), and this period is known as the Edo period where Edo, the former name of Tokyo, was the seat of the Tokugawa bakufu (1600-1867).
the distinguished culture developed by the powerful or rich merchants. Around this period of civil war known as sengoku jidai, the new ruling class, which was of warlord leaders and merchant elite, was emerged to govern themselves over the area they were living in. During these turbulent times of competing for power and territory, wealthy merchants were doing a flourishing business in collaboration with the member of the ruling class as well. In the 16th century, they developed a distinguished culture by combining the culture of the old aristocracy and the Ashikaga shoguns with that of the farmers as well as foreign cultures that filtered into Japan from other parts of East Asia.

In the World War II, Kyoto was spared from the air raids due to its historical value to leave the condition intact. Countless shrines, temples, and other priceless structures survive to this day. Kyoto was known as the heart of culture and politics as Kyoto was the seat of the Imperial household as well as the master artisans who gathered there to serve with various skills such as pottery, fabrics, tea ceremony, cuisines, dance, and calligraphy that are highly regarded throughout Japan. Therefore, many machiya buildings function as the workshop of these skills.

Figure 6. Map of Kyoto-Nakagyoku (data in Lab of Urban Design Osaka University, 1988)

Survey of Kyoto was conducted in the center of the town, which was at the north and south part of Oikedori in Nakagyoku (June 18th, 2005). This specific area was chosen regarding to its location that is in the center of the city. In the past time, the Nakagyoku was ruled by samurai that built Nijo castle at the northwest of Oikedori. Now Nakagyoku
developed into central of business and commercial. The remaining traditional *machiya* building competes with new and tall buildings (marked with hatch filled area on the map of Kyoto). The local government actively either manages or appoints some of those buildings to preserve that help to maintain these traditional buildings in its original conditions.

![Figure 7. Map of Sasaayama-Kawaramachi (Miyawaki, 1975)](image)

Tanba Sasayama is an old castle town located amongst the small mountain ranges in the mid-eastern part of Hyogo, northwest from Osaka. Sasayama known as a castle town for it has a famous castle erected by Tokugawa Ieyasu (1543-1616), the founder of the Tokugawa or Edo shogunate, in the year 1609 as part of his offence on the Toyotomi shogunate. It is from this that the name of the town was derived. The Sasayama town was growing between the then capital Kyoto and Western Japan since the old castle town constructed in the Edo period. Therefore, Sasayama’s growth was influenced strongly from the traditional culture of Kyoto at the mountainous Tanba district in Hyogo Prefecture. Old streets of merchants formed partly the town still remains of old Sasayama and alienated from modern development.

Sasayama has samurai houses and *tsunai* style merchant houses in Kawaramachi, main street and merchant district of Sasayama, below the castle. During Edo period, Sasayama became the political, cultural, and economical center of Tanba, and the center of business in the town was Kawaramachi. Sasayama was a planned town built below a castle in the Edo Period by the shogunate in order to keep watch on western Japan. Sasayama is not as big as Kyoto in size of town, but amazingly has preserved and well maintained numbers of traditional *machiya* building. The number of these houses facing the road alone reaches one hundred and sixty about 30 years ago based on the survey conducted by the students of Mayumi Miyawaki’s seminar at Hosei University (Miyawaki, 1975: 4). Though this number was probably reduced due to the new and redevelopment of buildings up to nowadays, still many were found along this street that date back to the 17th century.
C. Characteristics of Façade of Traditional Machiya in Kyoto and Sasayama

Figure 8. Rows of machiya in Sasayama & Kyoto (author, 2005)

Facade of traditional machiya building in Kyoto and Sasayama has common features regarding to the conditions of politics and economics in its time. These common features contribute to the whole characteristics of traditional machiya building which were shared and found in both places. Below are the common features that form the characteristics of traditional machiya buildings based on the data of 84 individual traditional buildings taken as sample figures. Each place provides 42 figures of buildings selected potentially as representatives of the traditional machiya buildings in the certain areas in Kyoto and Sasayama.

The main pattern of the characteristic of façade of traditional machiya building in Kyoto-Nakagyoku and Sasayama-Kawaramachi consists of: (1) main roof, (2) upper part, (3) projecting roof, and (4) lower part. Each of the parts varies in shape according to the elements below.

1. Main roof consists of gable roof in tsunairi\(^7\) style (T) or hirairi\(^8\) style (H) and other style (O).
2. Upper part consists of small opening with koshi\(^9\) (K), mushiko\(^10\) (M), or frame style (F) or combination of the two of those styles.
3. Projecting roof consists of hanging eaves (R) found in Kyoto and Sasayama.
4. Lower part consists of entrance and window style in latticework (EW) or full entrance style with or without latticework (E) and few of display windows (EDW).

\(^7\) The entrance of a shrine or temple building in one of the gable ends, constructed in such a way as to have the axis of the approach parallel to the ridge of the roof (www.astf.or.jp).
\(^8\) The complementary opposite of tsunairi, the entrance to a building constructed parallel to the ridge (idem).
\(^9\) Latticework.
\(^10\) From mushikonnado; mushi means insects, kago means a basket or a cage, made means window.
Table 1. Category of Elements in Kyoto and Sasayama (source: analysis)

<table>
<thead>
<tr>
<th>Types</th>
<th>Kyoto</th>
<th>Sasayama</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Main Roof</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(H)</td>
<td>41</td>
<td>17</td>
<td>69%</td>
</tr>
<tr>
<td>(T)</td>
<td>0</td>
<td>25</td>
<td>30%</td>
</tr>
<tr>
<td>(O)</td>
<td>1</td>
<td>0</td>
<td>1%</td>
</tr>
<tr>
<td>2. Upper Part</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(K)</td>
<td>5</td>
<td>7</td>
<td>14%</td>
</tr>
<tr>
<td>(KM)</td>
<td>2</td>
<td>2</td>
<td>7%</td>
</tr>
<tr>
<td>(M)</td>
<td>10</td>
<td>16</td>
<td>31%</td>
</tr>
<tr>
<td>(FM)</td>
<td>4</td>
<td>1</td>
<td>6%</td>
</tr>
<tr>
<td>(F)</td>
<td>19</td>
<td>12</td>
<td>37%</td>
</tr>
<tr>
<td>(FK)</td>
<td>2</td>
<td>2</td>
<td>5%</td>
</tr>
<tr>
<td>3. Projecting Roof</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(R)</td>
<td>42</td>
<td>42</td>
<td>100%</td>
</tr>
<tr>
<td>4. Lower Part</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(E)</td>
<td>3</td>
<td>12</td>
<td>18%</td>
</tr>
<tr>
<td>(EW)</td>
<td>34</td>
<td>26</td>
<td>72%</td>
</tr>
<tr>
<td>(EDW)</td>
<td>3</td>
<td>5</td>
<td>10%</td>
</tr>
</tbody>
</table>

Table 2. Percentage in Each Category (source: analysis)
According to observation both in Kyoto (Nakagyoku) and in Sasayama (Kawaramachi), typical elements of façade of traditional *machiya* building comprise: (1) main roof part in *hirai*ri style, (2) upper part with frame or *mushiko*, (3) projecting roof part of hanging eaves in all *machiya* buildings, lastly (4) lower part in latticework of entrance and window.

![Figure 9. Typical elements of traditional *machiya* building (source: analysis)](image)

Besides the typical elements above that form the main pattern of the façade of traditional *machiya* building in Kyoto and Sasayama, there were other additional elements that add to the richness of detail in each building.

1. Name sign (*kanban*)
2. Slashed curtain (*noren*)
3. Eave’s lantern (*kakuton*),
4. Icon (*shoki-san*)
5. *Imi-yarai*
6. *Battari-shogi*
7. Water conductor

![Figure 10. Additional elements of façade of traditional *machiya* building (source: analysis)](image)

**D. Values Of Traditional *Machiya***

The characteristics that form the façade of traditional *machiya* building constitute values that reside in the original design. These values performed in the outer appearance of those buildings are defined through their relations to the historical or traditional reasons...
that follow the concept of original design. These values that belong to the traditional machiya building are found in the new buildings as well.

![Machiya Buildings](image)

Figure 11. The typical low-height machiya building of in new buildings (author, 2005).

The façade that consists of upper part and lower part was considered low in height. In Edo Period, it was to prevent merchants who were considered as the lowest rank of society from overlooking the samurai. At that time, there was a system of daimyo’s alternate-year residence in Edo where the daimyo of the countries had to live in Edo every second year. For this reason, daimyo that were samurai came from every place through the streets, which led to Edo. Thus, the owner of the house made no room for living in upstairs but to use it for storage under the attic. After all, the low height of the building was for the commoners, as the building should be low in order to humble itself. Only building designated to the high class or temple building could be outstanding in size and shape. Therefore, the low height of machiya building shows humility. The original design for the upper part was very low for it consisted only upper window, but new buildings have upper part higher as to accommodate room under the main roof though it might consist of upper window viewed from the outer appearance.

The width of the façade was basically narrow compared to the length of the plan. Tax levied according to the length of the frontage of the building was the reason. The wider the frontage the more tax paid to the officials. To avoid this, the owner had to develop backward instead of sideward. The narrow width of the frontage was also determined to leave rooms for other merchants to selling various goods instead of selling the same goods from a single machiya building. Therefore, this is showing the equity.

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11 Warrior, also known as bushi.
12 New territorial lords, lords of domain in feudal period.
13 Known as magnific tax.
Figure 12. Lack of decorative elements in façade design (author, 2005).

The façade was lack of decorative element. The absence of the decoration was for a particular reason to remove the gap between the rich and the poor by not showing any decorative elements. This also showed value of humility of the townspeople for only the temple or shrine in the public place was allowed to have decorative elements. The only distinctive element was the additional elements such as signboard or the slashed curtain on top of the entrance door indicating the name of the owner or kind of goods it sold.

In Kyoto is it difficult to find out the goods it sells from the façade only, unless one could read the Chinese character on the signboard or approaching the building to a very close distance to have a look at the sample display at the window or near the entrance area. Unlike in Kyoto in Sasayama it is usual to display the goods by opening the shop fully.

Figure 13. Latticework for window covering and additional ornaments in new buildings (Sasayama, author, 2005).

Despite of lacking of decorative elements, some houses display their goods at the entrance area or top of the roof to attract the customer. A recycled bicycle shop in Kyoto put an old bicycle on top of hanging eaves. Another shop in Sasayama put a pottery on top of the hanging eaves.

The latticework that covered the window and entrance door in the lower part was made from barred wood without ornament. The doorways of old shops were large square openings strongly but neatly barred with a portion of it being made to roll back or slide aside. The sill (base part of the frame) of this kind of sliding door is some little distance from the ground. The door was placed on the side of the façade either on left or right, instead of on the center. A heavily barred and protected window on side of the building originally provided for the gatekeeper from which he can see anyone that passes in or out. The latticework of the window allows the insiders to peeping out. This window was generally designed to stick out from the wall in some distance from the ground. This design was imitated to new buildings by simply using barred metal as the cover of window or door. This is to protect the glass panel of the window or door.

Latticework was then popular among the townspeople as it was a simple design with no curve or circle shape, but straight and plain vertical wood sticks arranged and hold
by horizontal wood sticks. This latticework was also popular in color as many people could furnish it with dark color or just expose the natural color of the wood material to contrast to the bright color of the wall.

Figure 14. New design of signboard, decorative lantern, and slashed curtain at the entrance area of new buildings (Kyoto, author, 2005).

The additional elements attached to the façade of machiya buildings added the richness of identity of the house as it functioned as the distinctive elements of the façade. The signboard (kanban), slashed curtain (noren) or eave’s lantern (kakutou) would state the name of the machiya building or state the goods provided for customer. Many new buildings set up signboard in new material and design or eave’s lantern in attractive way as in the figure above, whereas slashed curtain would stay hanging at the entrance door waving to welcome the customer.

Figure 15. Inu-yarai, lantern, signboard, and slashed curtain at the entrance area (Sasayama, author, 2005).

The inu-yarai or covering fence usually was made of bamboo or curved sticks assembled in a frame that slopes out from the wall at an angle to the ground at a few distance away from the wall. This was to keep away dog from pecing the house, which was equal to its name, among other reasons such as to protect the house from mud spattering up from the road, or to keep away car from parking close to the house, or people to lean against the wall. The last two reasons were realized into another form of protecting device other than the curving shape of inu-yarai in the form of a low fence of wood stake bind together with sill wood at the lower ends. To the new buildings, inu-yarai could be useful to cover the utility device such as gas pipe.
The battari-shogi or sitting place in front of the house is very special design of seat that could be straighten back up to the wall. Sometimes we could see a simple bench covered with red cloth with flyers contain information or goods.

F. Conclusion

Characteristics of the façade of traditional machiya building identified by the visual elements that stand out in the surrounding are first of all the shape, then the color, material, size, and so on. The other elements are blending to the surroundings and varied in many ways, but shape of traditional machiya building is constant. Thus, the other qualities of the visual elements also determine the value of the traditional machiya building. Altogether the values of the traditional machiya building are defined by firstly the shape of building represented by the typical elements that form the main pattern: main roof, upper part, projecting part, and lower part. Secondly the values of the traditional machiya building are defined by the additional elements that enrich the detail of the façade.

The values of traditional machiya building that reside in the characteristics of the façade are humility, equity, simplicity, and popularity. Humility here means humble, being in low position as they belong to townspeople, the lowest rank in society in former times. Equity means being fair (fairness), not excessive or extreme in the overall shape of façade even though machiya building is a type of building for commercial purpose. Simplicity means the quality of being simple and lack or ornamentation. Popularity means the quality of being admired or accepted or sought after by the people.

These values had been transcended through generations to the new buildings by having similar pattern as traditional machiya building or using the typical elements and the additional elements in the design of new buildings.
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