## POLITECNICO DI TORINO Repository ISTITUZIONALE

Contemporary residential streetscape: how colors and materials differ from traditional streetscape. A case study in Tokyo

Original

Contemporary residential streetscape: how colors and materials differ from traditional streetscape. A case study in Tokyo / Alessio, Lorena. - ELETTRONICO. - Vol. XII B:(2016), pp. 231-242. (Intervento presentato al convegno Colour and Colorimetry. Multidisciplinary Contributions. tenutosi a Torino nel 8-9/9/2016).

Availability: This version is available at: 11583/2658136 since: 2017-11-14T10:18:49Z

Publisher: Gruppo del Colore - Associazione Italiana Colore

Published DOI:

Terms of use:

This article is made available under terms and conditions as specified in the corresponding bibliographic description in the repository

Publisher copyright

(Article begins on next page)

# Contemporary residential streetscape: how colors and material differ from the traditional streetscape. A case study in Tokyo

<sup>1</sup>Lorena Alessio

<sup>1</sup>Dept. of Architecture and Design, Politecnico di Torino, lorena.alessio@polito.it

#### 1. Nature, sensations and colors

Traditional Japanese colours' origin and meanings derive from a very unique aesthetics, which was developed in Japan through centuries. Japanese culture is embedded by local Shinto, but was also influenced by Chinese and Buddhist philosophies. In fact, Japanese culture is characterized by periods in which foreign cultures entered into the island and others, in which the country was closed to the outer world. Those enclosed periods were fundamental for the creation of the specificity of Japanese aesthetics, which influenced arts and the view of the world.

Shinto brought a strong sense of the importance of being in harmony with nature. In Shinto nature is strictly connected to spirit. Each natural element has its own god *kami* (<sup>‡</sup>), a "soul". Flowers and animals, rocks and rivers, bays and islands possess their own and autonomous spiritual life (Calza, 2004). Thus, relationship between man and nature is quite different from the Westerners, because Japanese people feel the need to be immersed into nature. By feeling nature, people get closer to the spiritual world.

Nature is loved with its cycle and seasons. Buddhist philosophy enhances the perception of things in nature. For instance. Mono no aware (物の哀れ) is the concept describing the ephemeral beauty of things in nature. Aware means "feeling" but also "sadness", and mono means "things". It is about the attention and admiration for what is flowing and irreversible, it is about a melancholy feeling and loneliness, about acceptance of transience. Thus, perception of space in Japan is connected to time and seasons being the transience of things deeply rooted into the Japanese culture and tradition. Coming to colors, the Japanese color world is a direct expression of the Japanese culture. Thus, it is not surprising that most of (伝統色), the traditional colors, have names deriving from nature. dentouiro Names are depicting colors from flowers and plants in all different seasons, and also from birds and rocks. Nowadays, we can count around 500 names for traditional colors. In Figure 1 the chart represents a Red Series of them. We could say that the chart refers to traditional colors as in Japan in Edo period, as well referred by Sachio Yoshioka (2014).

Colors in nature have many different hues, and they can change based on sunlight and climate conditions. Especially, spring and autumn are seasons in which Japanese can appreciate the variety of colors, such as the famous and beautiful views of mountains in fall with red leaves from maple trees, as in Figure 2.

Traditionally, also the moon was highly considered as creating beautiful and special colors, reflections and atmospheres. Names of colors define those different atmospheres.

#### Red Series [edit]

Name	Romanized	English translation	RGB	Hex triplet	Name
調羽色	Tokiha-iro	Ibis wing color	245,143,132	4755734	桜鼠
長春色 Chōshun-iro Long spi		Long spring (season) color	185,87,84	eB95754	唐紅/韓幻
藝脂色	Enji-iro	Cochineal red/rouge	157,41,51	#202933	深維
甚三)I	Jinzamomi	Thrice-dyed crimson	247,102,90	ATTRESA	水がき
梅鼠	Umenezumi	Plum-blossom mouse	151,100,90	#976¢5A	蘇芳香
赤紅	Akabeni	Pure crimson (dye)	195,39,43	#C32728	真朱
小豆色	Azuki-iro	Red bean color	103,36,34	#672422	銀朱
海老茶	Ebicha	Maroon (Shrimp brown)	94,40,36	#5E2824	栗梅
曙色	Akebono-iro	Dawn-color	250,123,98	AFX7052	珊瑚色
猩々鯡	Shōjōhi	Red-orange (lit. orangutan-colored)	220,48,35	\$DC1023	芝翫茶
柿渋色	Kakishibu-iro	Persimmon-juice color	147,67,55	#934337	ǎI樺
紅鳶	Benitobi	Red kite (bird species)	145,50,40	\$913228	紅檜皮
黒蒿	Kurotobi	Black kite (bird species)	53,30,28	#351E1C	別耕
照柿	Terigaki	Glazed persimmon	211,78,54	6034836	30)
江戸茶	Edocha	Red-brown (Edo brown)	161,61,45	#A13020	紅柄色
檜皮色	Hihada-iro	Cypress bark color	117,46,35	\$752E23	宗色
洗朱	Araishu	Rinsed-out red	255,121,82	1117452	赤香色
ときがら茶	Tokigaracha	Brewed mustard-brown	230,131,100		黄丹
蘇比	Sohi	Overdyed / refreshed red-brown	227,92,56	#E35C39	遠州茶
唐茶	Karacha	Spicy red-brown (Chinese tea brown)	179,92,68	(B35C44	樺茶
宗傳唐茶	Södenkaracha	Faded spicy red-brown	155,83,63	#95533F	雀茶
栗皮茶	Kurikawacha	Chestnut-leather brown	96,40,30	#60281E	百堪茶
熏色	Tobi-iro	Ibis-color	76,34,27	#4C221B	

Fig. 1 – Red Series of traditional Japanese colors chart. (https://en.wikipedia.org/wiki/Traditional\_colors\_of\_Japan)



Fig. 2 – Nature's kaleidoscope of autumn: mountain colors of Japan. (Kateigaho, International Edition, Vol. 24, pp. 23-24)

#### 2. Japanese traditional streetscapes

At the end of the XIX century, first Westerners who visited Japan found Japanese cities and architecture too simple and without ornaments. Edward Morse appreciated and understood Japanese culture, declaring its differences from the American architecture and cityscape. And when describing Tokyo' streetscapes he affirms "... Japanese house is... unsubstantial in appearance, and there is a meagerness of color. ...Where external walls appear they are of wood unpainted, or painted black; and if of plaster, white or dark slate colored. In certain classes of buildings the outside wall, to a height of several feet from the ground, and sometimes even the entire wall, may be tiled, the interspaces being pointed with white plaster." (Morse, 1990: 6-7). Mainly, traditional architecture is built out of wood. Wood is left unpainted.

In the built environment, natural materials kept their original colors and features. The finishing of materials should emphasize the material peculiarities or irregularities. Among elements of beauty we can find the irregularity of materials, and their textures. Thus, wood is appreciated in its veins and torsions; rocks in their peculiar shapes. A traditional Japanese house was designed for looking at the landscape and the changing of seasons. Interior spaces were characterized by warm and consistent atmosphere, based on subtle variations of intensity and gradation of few colors connected to colors of wood and earth.

When writing about traditional Japanese architecture and aesthetics principles, Atsushi Ueda (1990), Sachio Yoshioka (1999) and Mira Locher (2015) underline the consciousness of the use of few colors in architecture.



Fig. 3 – Kanazawa – Samurai Residences Streetscape. (Photo by the Author)



Fig. 4 – Kyoto –Gion Area Streetscape. (Photo by the Author)



Fig. 5 – Takayama - Old Streescape. (Photo by the Author)



Fig. 6 – Takayama - Old Streetscape. (Photo by the Author)



Fig. 7 – Kyoto - Facades in Gion Area. (Photo by the Author)

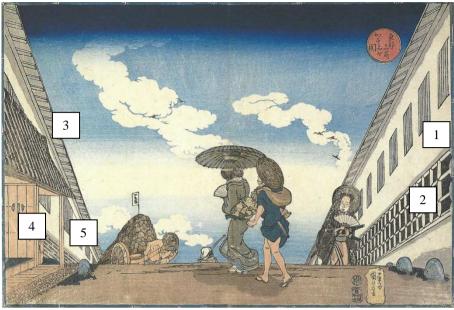


Fig. 8 – Above: Utagawa Kuniyoshi. "Kasumigaseki". Series: Famous Places of the Oriental Capital (Edo). (in Ukiyo-e. Il mondo fluttante, p. 318) NAME ROMANIZED ENGLISH RGB



Fig. 9 – Torii Kiyonobu I. "Courtesan in front of a Tea House" (in Ukiyo-e. II mondo fluttante, p. 341) Colors are generally the colors of natural materials which are used in construction. Zen strongly influenced Japanese aesthetic concepts. Among the most loved ones: *wabi*, simplicity and poverty expressed through extreme synthesis of forms, *sabi*, the coat showing the passage of time in all things and *yugen*, the subtle incantation of things which cannot be expressed through words. The quality of material, the uniqueness of what it is used for a specific site are crucial qualitative values. Thus, as said, if a piece of wood is curved and it presents peculiar texture, then it will be used emphasizing its natural properties.

In traditional Japanese architecture, the built urban landscape in streetscapes appeared quite homogeneous, providing a strong visual identity to space.

A traditional streetscape presents few colors, mainly ranging among brown, grey and black tonalities. In existing historical areas of Japanese cities we can still visualize those characteristics, even if changing according to the locations and styles (refer to Figures 3 to 7). In traditional art, we can find views of streetscapes, which resemble the Morse's description of Edo.

In Figures 8 the Utagawa Kuniyoshi's Ukiyo-e represents the street view of Kasumigaseki in Edo (the old Tokyo). And in Figure 9, "Courtesan in front of a Tea House" by Torii Kiyonobu I, the tea house has a more colored façade, with blue colored plaster. The colors of the buildings depicted in Figures 8 and 9 have been associated with the traditional colors palette, as referred at the Japanese traditional colors chart (https://en.wikipedia.org/wiki/Traditional\_colors\_of\_Japan), with names and RGB (see page 5).

#### 3. Contemporary residential streetscapes

Nowadays, most of the Japanese residential areas are composed by a vast number of single house buildings. Housings are located one next to the others, being separated by very narrow spaces (the minimum space ranges between 50 to 100 cm). Few areas are left for outdoors, but nevertheless greenery finds its place.

Housing's forms can be various, but when coming to colors they tend to present variations among grey and brown colors.

In most of the newly built houses' environment the actual tendency is even stronger, in showing very few colors in façades: large façades are white (as visible in Figures 10 and 11). The newest pamphlets advertising new housing settlements denote a tendency to wide and white façades (as in Figure 12). Colors are present thanks to plants and flowers located in front of the houses: the pamphlet at Figure 12 denote a late cherry blossoming in spring days.

Japanese people tend to personalize their settings through the use of plants, small vases in which continuously they change flowers and arrangements. Those flowers, area selected at seasons. Colors change accordingly. Those vases, mainly located at the houses' entrances, are positioned at various heights, to be easily visible at ground floor level. Vivid colors are there, in small spots, combined together according to the inhabitants' own taste and sensibility (see Figures 17 to 20).

Regarding the built environment, Figures 13 to 16 an analysis on-site show the main colors in facades. A chart of traditional Japanese color samples was used for comparison on-site.



Fig. 10/11 – Kamisaginomiya – Tokyo. Residential Streetscape. (Photo by the Author)



Fig. 12 – Pamphlet promoting new single housing in a contemporary residential area in Tokyo. (Diana House)



Fig. 13/14 – Residential buildings Façade in Kamisaginomiya - Tokyo. (Photo by the Author)

▼ NAME ROMANIZED ENGLISH RGB in the traditional color chart:					
	1.	利休鼠	Rikyūnezumi	Greyish dark green	101,98,85
	2.	瓶覗	Kamenozoki	Inside of a bottle	198,194,182
	3.	藍白	Aijiro	Indigo white	235, 246, 247

NAME in the tradition	ROMANIZED onal color char		RGB
1. 藍鼠	Ainezumi	Mousy indigo	92,84,78
2. 鳥の子色	Torinoko-iro	Eggshell paper	226,190,159
3 白鼠	Shironezumi	White mouse	185 161 147



Fig. 15/16 – Residential buildings Façade in Kamisaginomiya - Tokyo. (Photo by the Author)

<b>I</b>	NAME in the tradit	ROMANIZED ional color cha		RGB
	1.素鼠	Sunezumi	Plain mouse	110,95,87
	2. 蒸栗色	Mushikuri-iro	Steamed chestnut	211,177,125
	3.鳥の子住	き.Torinoko-iro	Eggshell paper	226,190,159

NAME in the tradi	ROMANIZED itional color ch		RGB
1.素鼠	Sunezumi	Plain mouse	110,95,87
2. 蒸栗色	Mushikuri-iro	Steamed chestnut	211,177,125
3. 白鼠	Shironezumi	White mouse	185,161,147



Fig. 17/18/19/20 – Use of green in front of residential buildings in Kamisaginomiya - Tokyo. (Photo by the Author)

#### 4. Materials

Comparing to traditional housing, nowadays typologies and construction techniques are completely changed. Materials as well. Housing facades present different cladding according to the construction's period.

It goes from wooden material to plaster, from tiles to plastic. Nowadays, a major tendency it could be found in the use of printed plastic materials, resembling natural materials, such as bricks and stones. Figures 21 to 36 illustrate materials' images and colors.

#### Wooden Materials and natural colors.



Fig. 21/22 – Wooden facades' details in Kamisaginomiya - Tokyo. (Photo by the Author)

#### Plaster finishing and colors.







Bricks walls (especially as fences).

Fig. 27- Facades' details in bricks.

Kamisaginomiya – Tokyo.

(Photo by the Author)

Fig. 23/24/25– Facades' details. Plaster finishing - Kamisaginomiya - Tokyo. (Photo by the Author)

#### Polished concrete and natural color.



Fig. 26– Facades' details . Concrete. Kamisaginomiya – Tokyo. (Photo by the Author)

#### Facades in tiles.







A Contraction of Contraction of the	Statement Statement and
NAME OF TAXABLE PARTY.	the supervised in the local data
and the second second	and the second se
the state of the s	and the second s
the second s	the second se
1	Statements and statements and statements
and the second second	and the second se
A REPORT OF THE PARTY OF THE PA	Company and a proper statements and
NOVE CONTRACTOR DESCRIPTION	and the second se
a second s	and the second se
And the second s	and the second se
and a second sec	the state of the local division of the local
The state of the s	No. of Concession, name of

Fig. 28/29/30/31/32/33- Facades' details. Tiles cladding - Kamisaginomiya - Tokyo. (Photo by the Author)

#### Facades in printed plastic imitating natural materials.







Fig. 34/35/36- Facades' details. Cladding in plastic- Kamisaginomiya - Tokyo. (Photo by the Author)

### 5. Conclusion

At first glance, residential streetscapes in Japan look monotonous and lacking of a strong identity. Those settlements define large parts of Japanese cities. Comparing to traditional streetscapes it is possible to notice a lack of order in facade composition, and a growing tendency in using artificial materials for cladding. The plastic materials used for cladding barely reproduces textures of natural ones. The use of plastic is justified by its low costs and easy maintenance: *sabi*, the coating on materials defined by the passage of time is not anymore a value. Regarding colors, the tendency to avoid vivid colors is still present. Moreover, colors just resemble the faked materiality of wood, stone or brick. It is not always possible to refer colors to traditional ones. In further studies the definition of traditional and contemporary colors should be explored and questioned. The relation with nature is kept through the plantations on small spots of land facing the houses. Flowers accurately change according to seasons and from trees' blossoms. Those trees have been chosen to be alternately blooming in different moments of the year. With movable objects such as vases, inhabitants express their personal taste and sensibility choosing flowers and arranging them. The attention to seasons and colors that traditionally was also visible in clothing and especially in kimono's wearing, nowadays is exclusively visible in the small gardens' arrangements. The built environment is waiting to be en-lighted by colors of nature, offered by the small and ever changing green spots. The present study is still very wide. It focuses on several issues. It regards colors in urban life. The research would be further conducted on studies about:

- the notions of the traditional Japanese color world;
- the definition of "traditional colors" and "contemporary colors";
- the notion of color in urban life, with analysis of nomination of colors, the color of clothing, the urban coloring, and deepening the analysis on the exterior architecture as well as gardens.

#### Bibliography

- [1] G.C. Calza, "Ukyoe. Il mondo fluttante", catalogo mostra, Mondadori Electa, Milano, 2004
- [2] S. Murasaki, "La storia di Genji", Einaudi, Torino, 2015
- [3] E.S. Morse, "Japanese homes and their surroundings", Ticknor and Co, Boston, 1886 n.e. Charles E. Tuttle Company Inc., Rut1and, 1990
- [4] L. Ricca, "La tradizione estetica giapponese", Carocci, Roma, 2015
- [5] L. Dalby, "Kimono. Fashioning Culture", Vintage, London, new ed., 2001
- [6] S. Matsuoka, "Origins of a Reflective Culture", p. 39-53, Kateigaho, International Edition, Debut Issue, Autumn 2003, Tokyo, Sekai Bunka Publishing Inc.
- [7] S. Miyake and S. Iida, "Autumn Reflections", p. 14-31, Kateigaho, International Edition, Vol. 24, Autumn/Winter 2009, Tokyo, Sekai Bunka Publishing Inc.
- [8] M. Locher, "Japanese Architecture: An Exploration of Elements and Forms", Tuttle Publishing, North Clarendon, 2015
- [9] A. Ueda, "The Inner Harmony of Japanese House", Kodansha International, Tokyo, 1990
- [10] S. Yoshioka, "Kyōto machiya iro to hikari to kaze no dezain"/京都町家色と光と風のデザイン/ 吉岡幸雄", Kodansha, Tokyo, 1999
- [11] S. Yoshioka, "12 months of colors in Japan"/日本の色の十二カ月について, Shikosha, Tokyo, 2014
- [12] http://www.tofugu.com/2013/09/12/the-traditional-colors-of-japan-making-modern-history/
- [13] http://www.colordic.org/w/
- [14] http://www.temarikai.com/CulturePages/TradJapaneseColors.html https://en.wikipedia.org/wiki/Traditional\_colors\_of\_Japan