



# STUDY ON THE ANALYZING STREETSCAPE COLOR- FOCUSED ON INSADONG, SEOUL

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## ABSTRACT:

Placelessness represents a phenomenon of weakened place regarding its uniqueness, various experience, and identity, and it is one of the negative features of modern city environment. Currently, our cities are having very confused features in visual aspect. There are many ways in describing visual information of cities but in this study, we are focused on color.

This study proposes detailed analyzing in colors of streetscape and contributing in providing rationalized data so this can be used effectively in accomplishing/reserving/creating the unique characteristic of places in the city.

Insa-dong is a place where considered as well-preserved in aspect of cultural traits and is a special zone for tourism in Seoul. The range of this study follows the main street of Insa-dong from north to south.

**Keywords: Streetscape, Streetscape Color, Environmental Color, Placeness**

# 1. INTRODUCTION

## 1.1. BACKGROUND OF THE RESEARCH

One of the negative features in a modern city is a placelessness. The place presents the basic instinct for human being, also, safety and identity for personal or group. It is considerably important to keep it create and preserve for a place which has a meaning in our lives. However, it is easy to be found for sign of a placelessness - phenomena of weakened place regarding its uniqueness, various experience, and identity.

The city is full of symbols. Symbol can have an authority as a symbol once it is construed, at the moment the meaning is weakened by an excess of symbol in a city. As a result, it is getting hard to construe with an instinct and this makes the placelessness of the city even weaker. However, it emphasizes to construe the city at present paradoxically. It helps for an interpretation of the city, as a text, to find a clue about placelessness in the city.

The visual environment analysis is the most efficient way to analyze the city environment as visual information is dominant information from its environment. There are various ways to analyze the visual information of the city, however, it is focused on color in this research. Color is the major factor to decide the image of the city as well as influence on human being psychologically and cognitively.

## 1.2. THE PURPOSE OF THE RESEARCH

Currently, the city has quite a confusing figure visually. The city has been changed a lot in a short time compressively, all the process is mixed in the environment at present. However, the environment at present is the result of the history so it is too chaotic and disordered. It is not also interpreted accurately.

In this research, the factor of color at present environment will be analyzed with light adjustment under these circumstances. It needs to be analyzed efficiently in interpreting the color information which is confused at the moment as there are various factors on streetscape.

The purpose of this research is to provide the reasonable basic information that streetscape color will be analyzed in detail, and is to find, preserve and create the placeness of the city.

### 1.3. FIELD AND METHOD OF THE RESEARCH

The range of this research is limited on the color among the visual information of environment in the city, and the street which is available to feel the spatial feature a humanistic scale for a spatial range. Every fixture except a natural object is the object for the visual information, unfixed factors such as human being and transportation are excluded, and it is used for photo shooting with digital camera and macroscopic observation to estimate the color at the same time.

The object place is Insa-dong in Seoul where preserved its traditional culture quite well. Insa-dong is a place where gets famous to the public by the event called 'the street without car' since 1997 and road of enquiries for history and culture which is completed in 2000. It is analyzed for 600 meters of main street from South backyard in Jonglo to North backyard in Anguk-rotary.

These are the method of analysis. First, a panoramic photographing process of facade is conducted. Second, making color scheme process is performed. Third, reconstitution color scheme process by each element is completed.

## 2. THE CONCEPT OF STREETScape COLOR

### 2.1 THE VIEW AND COLOR OF THE CITY.

The concept of place has a feature that is untouchable and changeable by the time. However, every place is physical and has the visual feature, which is the view. That is one the most obvious character. The reason why the place is considered as a view is the visual feature represents the human activity and reflects the value and intention of human. (Therefore, the identity of place is decided by the view.)

The most basic factor is the physical environment among the physical environment, human activity and meaning which is three factors for the identity of place. The physical environment factor is divided into the nature and artifact, most of physical environment in the city are artifacts made by human. 80 % of the information from the environment is based on visual evidence, physical environment which is the most important factor among the three factors depends on a visual experience, so the visual information from artifacts is remarkably important in experiencing the city.

The physical environment is divided into color, shape and matter visually. Generally color is the lowest link in these three factors. However, color is more dominant than the others in stimulating sensibility and the eyesight of human. As stated above, even though color affects a lot on sensibility or eyesight of human, it is considered as a lowest link by the theory of an artificial environment. The theory is about the color is changeable and the expenses are lower than others for changing. It is necessary to observe the view at this moment in an aspect of the color as the city is full of phenomena from a result of this theory.

## 2.2. ENVIRONMENT COLOR ON STREETSCAPE

Street makes feel the spatial feature in experiencing the city with proper scale for human. It happens with walking along the street to experience the certain place which has a same identity in the city. Place ness exists along the street in the city, couples of major streets are the image of the city.

Streets are the place on the way of moving for pedestrians, in this case, color effects stronger than shape or matter and appeal more to senses. When a person realizes an object, color stimulates 80% within 20 seconds, 60% after 2 minutes and 50% after 5 minutes. Therefore color is more important than other visual factors for pedestrian behavior which look more objects in a short time.

These streetscape colors have a different range with others in environment color, city environment color or local character. Generally the view is divided into three with a distant view, middle view and close view, and street is a part of middle view. Street can be experienced by close view and middle view by the width and scale of the street and the position of pedestrian.

### 3. EXAMPLE ANALYZING

#### 3.1 OUTLINE AND REASON TO CHOOSE THE PLACE

The range of the research is a main street, part of Jonglo1,2ga-dong, Jonglo-gu in an administration section, and this place is generally called “Insa-dong” including whole Gwanghoon-dong, Gongpyoung-dong, Gyunji-dong, Gyoungwoon-dong and part of Jonglo1ga in a legal section. This street is 600 meters from south to north, from South backyard in Jonglo to North backyard. This is the highest street in location, scale, moving population and so one.

Insa-Dong is a place where considered as well-preserved in aspect of cultural traits and is a special zone for tourism in Seoul. Insa-dong is a place where gets famous to the public by the event called ‘the street without car’ since 1997 and road of enquiries for history and culture which is completed in 2000. Insa-dong has been changed a lot even though it is a ‘road of enquiries for history and culture’ and ‘traditional’ image by this. Therefore it has been discussed a lot for Insa-dong about marketing and its identity. However, there is no research to analyze systemically the Insa-dong street in an aspect of the color.

Streetscape is constituted systemically by outfit of the building, facilities on the street, outside advertising, show-window and so on, so streetscape color should be analyzed in considering these factors. This area is a place for tourist and needs a continuous maintenance. It will provide a reasonable basic data for the future development by analyzing the view overall.

#### 3.2. ANALYZING STREETSCAPE COLOR METHOD OF THE PLACE

It is analyzed by dividing the streets with 14 sections such as <Figure 1> and <Figure 2>. Insa-dong street is from north to south, the standard of division is the cross point with the street from east to west. <Figure 1> is an elevation, <Figure 2> is a plan of the street.

Generally analyzing streetscape color passes the process to extract casting color, supporting color and highlight. However, this method is not proper as Insa-dong street is wide spatially, and there are various colors on elevation.



Figure 1: Elevation of Insa-dong Street

It will be dominant for the color of pedestrians and street trees with analyzing the pedestrian, in this case, casting color will be black from the pedestrian and supporting color will be the color of supporting color. However, it is a purpose of this research to check the color of artifacts, it is analyzed the color of elevation. Also it is analyzed by making a color scheme for each section for an efficient analyzing. There is another way to analyze the color distribution from a picture material, however, it will be a proper way to make a color scheme and analyze based on this scheme, as there are factors which is out of the range for the research such as a natural object.

There are the orders to make a color scheme. First, produce an elevation picture. Second, operate a mosaic on the picture with cell size 5 in Photoshop. Third, Use the mosaic picture for a standard color when produce a color scheme based on an elevation picture.

The purpose of this research is to check the color which is built artificially by analyzing the color of elevation. Therefore color of street tree and sky are ignored for color scheme, and it is also ignored the vehicles, people and things which only give a short term effect.

Moreover, a sidewalk is ignored as it is not proper for an elevation analyzing even though it has a huge influence on the color of the street. Therefore, the color scheme is only considered color of outfit, facilities on the street and outside advertising.

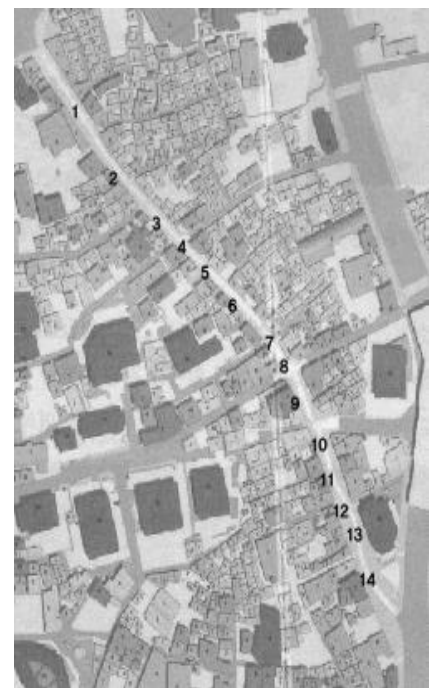


Figure 2: Plan View of Insa-dong Street




sections	Section 1
elevation picture	
mosaic picture	
color scheme	

Table 1: Color Spectrum of Section 1

sections	Section 2
elevation picture	
mosaic picture	
color scheme	

Table 2: Color Spectrum of Section 2

sections	Section 3
elevation picture	
mosaic picture	
color scheme	

Table 3: Color Spectrum of Section 3







sections	Section 5	Section 4
elevation picture		
mosaic picture		
color scheme		

Table 4: Color Spectrum of Section 4, 5



sections	Section 6
elevation picture	
mosaic picture	
color scheme	

Table 5: Color Spectrum of Section 6







sections	Section 8	Section 7
elevation picture		
mosaic picture		
color scheme		

Table 6: Color Spectrum of Section 7, 8

sections	Section 9
elevation picture	
mosaic picture	
color scheme	

Table 7: Color Spectrum of Section 9





sections	Section 11	Section 10
elevation picture		
mosaic picture		
color scheme		

Table 8: Color Spectrum of Section 10, 11


sections	Section 13	Section 12
elevation picture		
mosaic picture		
color scheme		

Table 9: Color Spectrum of Section 12, 13




sections	Section 14
elevation picture	
mosaic picture	
color scheme	

Table 10: Color Spectrum of Section 14

### 3.3. OVERALL ANALYZING ENVIRONMENT COLOR OF THE PLACE

14 set of color scheme are reorganized same as <Table 11> to analyze the color of streetscape by a color scheme.

The reorganized color scheme by a saturation presents as followed by. First, it is nearly half(47%) for achromatic color and low saturation color near to achromatic color in Insa-dong street. Second, high saturation color is 11% which is not proper for color of environment, and it is not proper for division of casting, supporting, highlighting color as the color is distributed equally. Third, middle saturation (high-middle saturation, low-middle saturation) color is from a brick or tree. Fourth, among the high and middle saturation, there are often found pink and light blue color which is not proper for traditional and cultural image. (it seems it is only 4 % for pink and light blue color in an overall view but in fact, it is even more than 30%.)

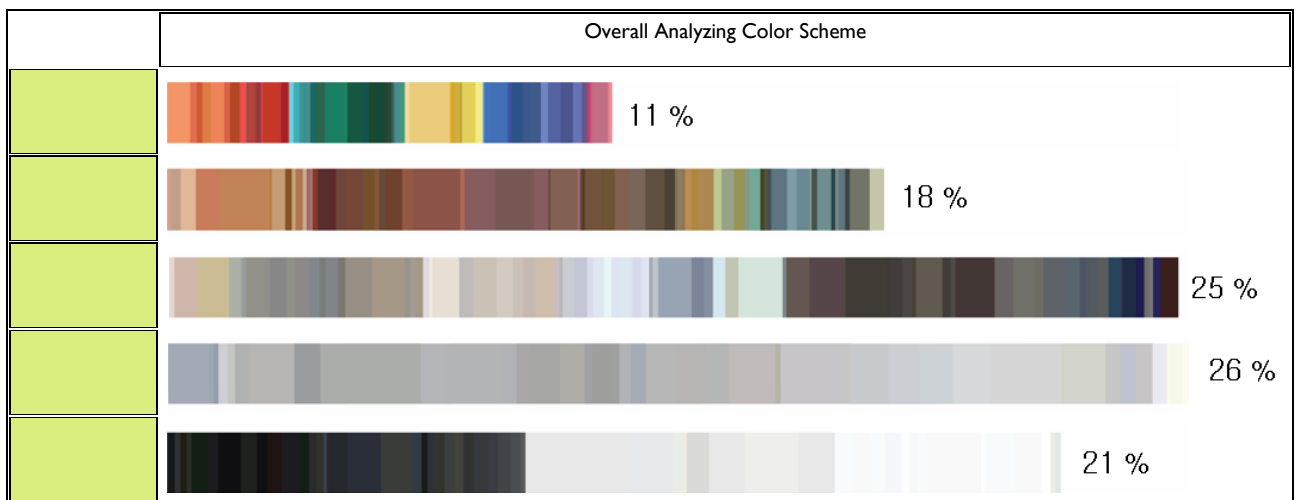


Table 11: Reorganized Color Spectrum

### 3.4. DETAILS FOR STREETSCAPE COLOR

It was available to extract the details of streetscape color by analyzing the elevation details on Insa-dong street. The details on the streetscape are divided into four with outfit of the building, outside advertising, and devices on the street and facilities on the street.

The biggest one is the outfit of the building with 66%. However, in a physical structure, there are lots of cases that something should be in a building outfit with outside advertising, there is a possibility building outfit has a larger proportion in fact, depends on how control the outside advertising on the window as building outfit with commercial is with outside advertising in this research.

Outside advertising are 27%, this is figure by an elevation analyzing which is quite high. However, the effect of outside advertising for pedestrians would be much bigger than the analyzed figure (27%). Outside advertising are focused on low floors(the first and second floor) which have an effect to pedestrians. Color of building outfit almost don't show its color because of the outside advertising on low floors on the street, so it is not a good way to judge the streetscape with figures even though building outfit is as twice as than outside advertising in an elevation analyzing.

The proportion of extra devices is quite small compared to previous two factors, but the thing is, this shows only on the first floor. Therefore, as outside advertising may effect on lower floors, extra devices should considered importantly more than its figure. Ease blind on the first floor is mostly with extra devices, it has a character of Insa-dong 'parallel construction with small shops'.

Facilities on the street are street light, sign and street furniture. As these are obviously public facilities, it is a very important facture to present the image of the street to pedestrians. However, it is almost nothing in elevation of the street and contributed by black and dark grey.



Figure 3: Reorganized Color Scheme by Detail Object

Overall Analyzing Color Scheme by Detail Object	
advertising	
extra devices	
building	

Table 12: Reorganized Color Scheme by Detail Object

### 3.5. THE EFFECT OF DETAILS TO STREETSCAPE

As stated on 3.4., there four factors mainly, building outfit and outside advertising are dominant visually. So the color scheme d per each section which explained in 3.2. is analyzed on each factors, the result of the effect to streetscape is on <Table 13>. Street facilities are ignored among these four factors as they are line type such as street light or sign so don't have a strong effect to color.

There are the results of analyzing <Table 13>. First, color of the high saturation is concentrated on outside advertising and extra devices. Second, outside advertising are with high brightness difference and color difference. Third, color of building outfit is with low saturation color nearly like an achromatic color and brown color from bricks and tiles. Fourth, color of the high saturation is concentrated on outside advertising and extra devices. Second, outside advertising are with high brightness difference and color difference.

Color Scheme by Detail Object	
elevation picture	
color scheme	
sections	14                      13                      12                      11
advertising	
extra devices	
building	
elevation picture	
color scheme	
sections	10                      9                      8
advertising	
extra devices	
building	

elevation picture				
color scheme				
sections	7	6	5	4
advertising				
extra devices				
building				
elevation picture				
color scheme				
sections	3	2	1	
advertising				
extra devices				
building				

Table 13: Reorganized Color Scheme by Detail Object



### 3.6. THE EFFECT OF OUTSIDE COMMERCIAL TO STREETScape COLOR

The fact that high saturation color, which is not a proper color as an environment, is 11% showed on 3.2. and it is concentrated on outside advertising and extra devices showed on 3.5. makes to think outside advertising are the reason to disturb the streetscape color.

Both outside advertising and extra devices are with high saturation color, outside advertising are the main reason which disturbs the visual confusion on Insa-dong street. Outside advertising take a lot of area and overuse the high saturation color with extra devices. However, outside advertising are more complicated more than extra devices visually as it includes letters. Moreover, extra devices are part of character, 'parallel construction with small shops' of Insa-dong. By contrast, outside advertising have a various shape and size, put a lot of colors in a tiny size so this causes the confusion.

Other problems from outside advertising are the sign of chain stores. The chain stores weaken the place ness of the city and lead to homogenization. As Insa-dong is a traditional place, it should be changed with respect for the Insa-dong rather than keep the signs. The value of homogenized image can be fully understood in a personal area, however, as it has a big effect to people, the homogenized image of the company should not be care more than a public benefit. Especially, there are convenience stores at the entrance of Insa-dong, where between South Backyard and North Backyard, it is not a good place with ordinary outside advertising.

### 3.7. PRE-CONCLUSION

In this research, streetscape color is analyzed based on Insa-dong street. There are summarized results from this research.

1) It is nearly half for achromatic color and low saturation color near to achromatic color in Insa-dong street, and high saturation color is 11% which is not proper color of environment. Moreover, it is not proper for division of casting, supporting, highlighting color as the color is distributed equally. There are often found pink and light blue color which is generally not proper for traditional and cultural image.

- 2) The details on the streetscape are divided into four with outfit of the building, outside advertising, and devices on the street and facilities on the street, also, building outfit and outside advertising are dominant visually.
- 3) Color of the high saturation is concentrated on outside advertising and extra devices, and outside advertising are with high brightness difference and color difference building outfit and outside advertising are dominant visually. And it does not get along with the other colors.
- 4) Even though outside advertising affect a lot to streetscape, it is the most improper factor at the moment. So it should be changed urgently.

#### 4. CONCLUSION

Place ness in the city is presented by a special street, the main street is the image of the city. Color is a very important factor in an aspect of experiencing the street, however, it has not been taken care systemically. It will be the first step to find, preserve and create the place ness by analyzing the situation at the moment.

In these circumstances, these are the conclusion about analyzing streetscape color in Insa-dong. Insa-dong is mainly with black from sidewalk and facilities and dark grey and this makes the casting color. However, in an elevation analyzing, it is not easy to divide casting, supporting, highlighting color clearly, and the color of outfit is mostly with brown and achromatic color. The most considerable feature from the elevation analyzing is the improper color of outside advertising. In the future the color should be considered in an overall view, and outside advertising should be taken care urgently.

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