

The Characteristics and Change of Colors on Fashion Collections in 1990s

Honey Kim* · Youngin Kim**

Master, Dept. of Clothing & Textiles, Yonsei University*

Professor, Dept. of Human Environment & Design, Yonsei University**

ABSTRACT

*The purpose of this study is to examine color characteristics and color changes of the fashion collections through 1990s, and to provide the efficient color information for color planning upon fashion themes. For this research, a total of 30,084 colors were collected from Paris, Milan, London, New York Collections in 1990s. Those colors were first measured by the Pantone Textile Color Specifier and COS Color System and spectrophotometer(color eye 580). These measured color values $L^*a^*b^*$ of CIE were converted into H V/C of Munsell System, and 12 tones of PCCS with 5 achromatic colors. The characteristics of collected colors were analyzed in general and by place, season and year.*

The results of the study are as follows : First, the hues of purple blue, yellow red, red, yellow and the tones of grayish, pale, white, black, dark grayish, dull, light grayish appeared mostly. Yellow was shown quite frequently in spring/summer while purple, purple blue, red and yellow red in fall/winter. White, pale, light, light grayish and light gray were shown more frequently in spring/summer while Black, dark grayish, grayish, dark gray and dark in fall/winter. Second, the characteristics of colors by 4 representative places were similar to the general characteristics of colors in 1990's. Third, There were distributed widely Red, Yellow Red, Yellow in the early 1990s, Green Yellow, Green, Blue Green in the mid of 1990s, and Purple Blue, Purple in the late of 1990s. The distribution range of chromatic colors showed wide in both of the early of 1990s and the mid of 1990s for a while, and achromatic colors of grayish, gray and black appeared mostly in the late of 1990s.

Key Words : fashion collection, trend color, 1990s

I. Introduction

Fashion forecaster has suggested trend color according to the more systematic process nowadays. The suggestion of trend color has been accomplished by amending under the conditions of the

each country, reviewing to the each textile association, and adapting to the collection of ready-to-wear.

Buyers from every country of world have visited the fashion collections of Paris, Milan, London and New York to see fashion show and also to get the information about ongoing trends and ideas every year. A traditional western fashion from the

past was referred as the art of luxury since it had taken the gorgeous style and rare materials on fashion garments. On the contrary, a modern fashion has narrowed the gap between high fashion and mass fashion.¹⁾ Most worldwide fashion collections have been involved in planning ready-to-wear so that we could get the useful information for our apparel industry from those collections.

In Korea, the internationalized attitude of consumer toward fashion has derived a global unification in such factors as color, fabric, quality, design, and brand image.²⁾ Many of famous imported brands introduced rapidly and various fashion media appeared in 1990s so that we could get the chance to learn advanced fashion trends. However, there are still a few competitive fashion brands in Korea. Since 1990s, Fashion industry has focused on the harmony of basic and trend colors. Trend color has been controlled upon the change of environment and consumer's lifestyle with adding new colors or changing color tones.

Therefore, this study aims to analyze the characteristic of colors and tones classified by season, year, and place based on the trend colors appeared on the fashion collections in 1990s, to examine its hierarchic trend of color, and to suggest useful color data for fashion merchandising.

II. Fashion Collection and Trend Color

A prêt-à-porter which means a ready-to-wear is the ready-made garment of high quality based on mass production. It came from the confection against the haute couture which has a limited production of tailoring. Recently, most designers of haute couture are involving to Prêt-à-porter. Analysts and journalists visit Paris to see haute couture col-

lections every season. New fashion designs presented by coutures effect on the fashion of world. Fashion collections are held in Milan, London, New York, Tokyo, Madrid, and so on. The major fashion collections are of Paris, a center of modes, Italy, a dynamic and growing city since 1960s, New York based on commercial applications, and London keeping harmony of uniqueness and tradition.³⁾

Trend color is divided into forecasted color and the other which most people experienced on in a certain time period.⁴⁾ Trend color forecasted by International Commission for Fashion and Textile Colours are presented in the exhibition of yarn and textile, and then consumer market lastly. In this study, we define the meaning of trend color as forecasted color on the fashion collections.

As the sensitive image getting its importance in recent fashion industry, lots of studies on trend color have been accomplished to reveal the effect of color on it. According to the research on practical color in domestic textile and fashion industry⁵⁾ which analyzed color data from domestic apparel brands from 1993 through 1996, the proportion of 2.5Y, 10YR, 7.5PB, and 5R were relatively high; the proportion of R, YR, Y, and PB was up to 83%; colors of low/high brightness and low saturation appeared mostly; R, YR, Y, PB with low saturation and high brightness appeared frequently in spring/summer while YR, R, Y, PB with low saturation and brightness appeared in fall/winter.

KIM et al.⁶⁾ analyzed that R, YR, PB, Y were distributed more than G, BG from the forecasted color on fashion forecasting sources of 1990s; R, PB, Y appeared in spring/summer while YR, R, PB appeared in fall/winter; g, d, sf tones were dominant showing middle saturation and brightness.

Kim et al.⁷⁾ compared the trend color on *Première Vision* issued from 1992 through 1998 with on a domestic forecasting source, Samsung trend book. As the result, R, YR, Y, PB with middle and low saturation such as sf, d, dk appeared frequently; middle/low saturated warm color and middle/high saturated cold color were dominant, especially warm color with dkg tone in spring/summer

and with dk tone in fall/winter.

III. Method of Study

For this study, the scope of time period limited from spring/summer of 1990 to fall/winter of 1999, and the spatial scope limited to fashion collections held in Paris, Milan, London, and New

<Table 1> Frequency distribution of colors collected by period

year	place season	Paris	Milan	New York	London	Total
'90	S/S	317	436	201	412	1366
	F/W	345	455	250	335	1385
	Total	662	891	451	747	2751
'91	S/S	246	350	213	462	1241
	F/W	1102	920	234	350	2606
	Total	1348	1270	447	782	3847
'92	S/S	412	267	179	266	1124
	F/W	1205	948	141	317	2611
	Total	1617	1215	320	583	3735
'93	S/S	439	317	276	460	1438
	F/W	470	338	199	370	1377
	Total	909	655	475	776	2815
'94	S/S	1019	788	224	341	2372
	F/W	575	518	252	317	1662
	Total	1594	1306	476	658	4034
'95	S/S	456	382	223	378	1439
	F/W	884	955	238	230	2307
	Total	1340	1337	461	608	3746
'96	S/S	260	182	174	216	832
	F/W	403	338	368	374	1483
	Total	663	520	542	590	2315
'97	S/S	282	293	296	247	1118
	F/W	443	663	317	234	1627
	Total	725	956	613	481	2745
'98	S/S	778	513	189	239	1719
	F/W	199	208	167	206	780
	Total	977	721	356	445	2499
'99	S/S	189	332	126	237	884
	F/W	110	272	196	135	713
	Total	299	604	322	372	1597
Total		10134	9445	4438	6042	30084

<Table 2> Distribution of achromatic colors appeared on fashion collections

색상	S/S	F/W	Total
W	2916	1819	4735
ltGy	107	120	227
mGy	156	598	454
dkGy	165	419	584
Bk	978	1859	2837
Total	4322	4515	8837

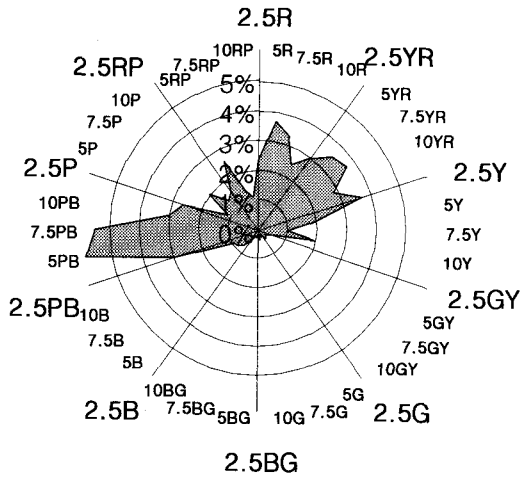
<Table 3> Distribution of chromatic colors appeared on fashion collections

Color	S/S	F/W	Total	Color	S/S	F/W	Total		
R	2.5R	323	379	652	BG	2.5BG	17	35	52
	5R	421	683	1104		5BG	22	49	71
	7.5R	332	663	995		7.5BG	32	31	63
	10R	302	437	739		10BG	20	56	76
YR	2.5YR	364	533	897	B	2.5B	47	81	128
	5YR	435	624	1059		5B	104	101	205
	7.5YR	486	622	1108		7.5B	115	136	251
	10YR	344	514	858		10B	124	150	274
Y	2.5Y	577	528	1105	PB	2.5PB	417	466	883
	5Y	303	267	570		5PB	729	1018	1767
	7.5Y	182	150	302		7.5PB	756	903	1659
	10Y	281	304	585		10PB	330	581	911
GY	2.5GY	81	50	130	P	2.5P	256	543	799
	5GY	48	36	84		5P	126	217	343
	7.5GY	51	40	91		7.5P	289	325	614
	10GY	65	50	115		10P	204	221	425
G	2.5G	24	27	51	RP	2.5RP	215	260	475
	5G	25	51	76		5RP	354	421	775
	7.5G	16	32	48		7.5RP	184	239	423
	10G	44	54	98		10RP	146	190	336

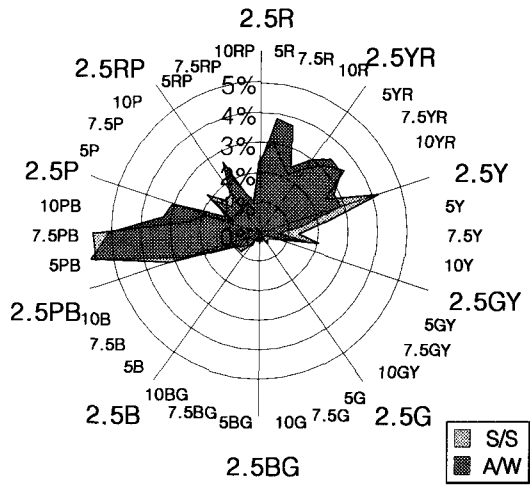
York. The source of image data was from fashion magazines such as *Collezioni Donna Prêt-à-Porter*⁸⁾. Pantone Textile Color Specifier made of half-flat paper, and COS-Color System were used to collect color data. These two color books have few compatible color so that more than 3,000 colors were available. Visually examined color data from the image of fashion collections were collected except

when there might be color differences owing to the influence of lighting or those were not enough to distinguish visually. Data from layered color on the skin for transparent fabrics and melange color for color-mixed fabrics were also collected considerably.

A total of 30,084 colors were collected as show on <Table 1>. Color data from Pantone and COS with visual examination were calibrated L*a*b* val-



<Fig. 1> 40 color distribution for trend colors in 1990s.



<Fig. 2> 40 color distribution for trend colors by season in 1990s.

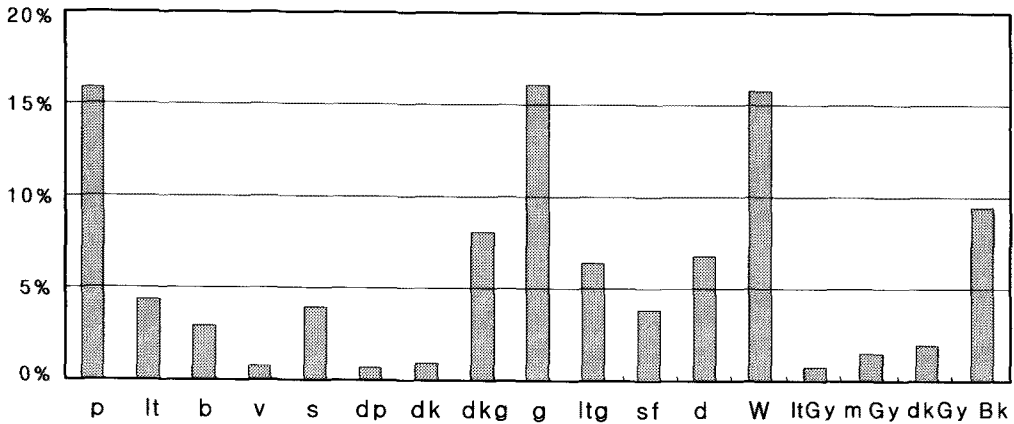
ues in a view of standard light C and standard observer's 2° by spectrophotometer, Color Eye 580, and converted into H V/C values of Munsell system. Chromatic colors were analyzed based on 40 colors from 10 colors of R(Red), YR(Yellow red), Y(Yellow), GY(Green yellow), G(Green), BG (Blue green), B(Blue), PB(Purple blue), P(Purple), RP(Red purple) of Munsell system. Color tones were analyzed with 12 tones of p(pale), ltg(light grayish), g(grayish), dkg(dark grayish), lt(light), sf (soft), d(dull), dk(dark), b(bright), s(strong), dp (deep), v(vivid). Achromatic colors were analyzed based on 5 colors of W(white), ltGy(light Gray), mGy(medium Gray), dkGy(dark Gray), Bk(black). Collected colors were constituted of 21,247 chromatic colors(70.6%) and 8,837 achromatic colors (29.4%) as shown on <Table 2> and <Table 3>.

IV. Characteristic of Color on Fashion Collection of 1990s

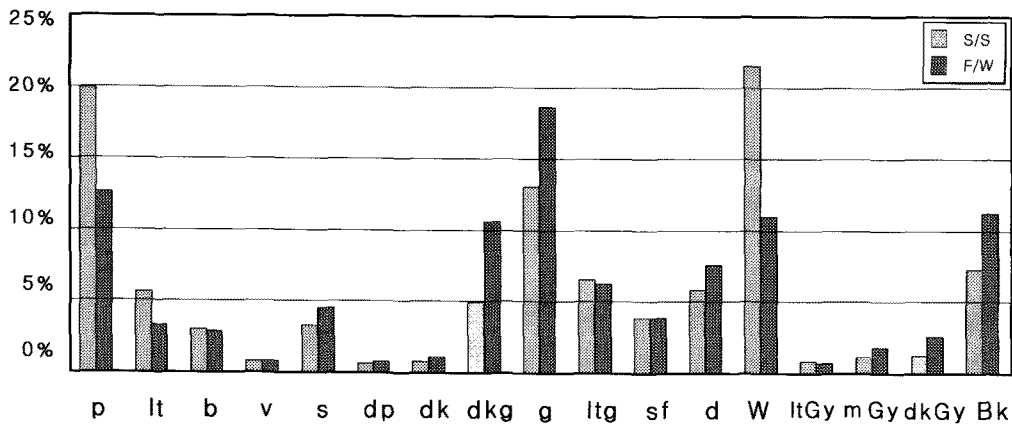
1. General characteristics of colors in 1990

1) Distribution of Colors

The proportion of PB, YR, R, Y were up to 50.7% on fashion collections in 1990s. On the contrary, Green colors such as G, BG were rarely shown. This results supported to Kim et al.⁹⁾ studying practical colors for domestic textile and fashion industries, and Kim et al.¹⁰⁾ studying forecasted color of 1990s based on fashion forecasting sources by theme. The frequency analysis showed that 5PB(5.9%), 7.5PB(5.5%), 7.5YR(3.7%), 2.5Y (3.7%), 5R(3.7%) were distributed mostly.<Fig. 1> Yellow colors were distributed intensively on 2.5Y of reddish yellow compared with PB, YR, R which were distributed widely, thus supported to the results of Kim et al.'s.¹¹⁾ For the difference of color distribution by season, Y appeared more in



<Fig. 3> Distribution of color tones in 1990s



<Fig. 4> Distribution of color tones by season in 1990s

spring/summer than fall/winter, and P, PB, R, YR appeared relatively more in fall/winter.

2) Distribution of Color Tones

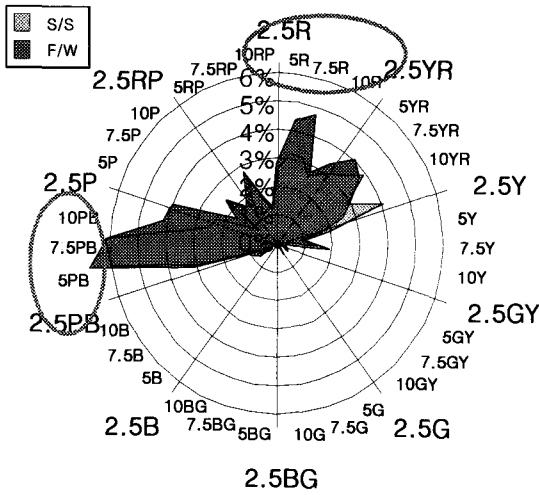
Color tones of g(16%) and p(15.9%) appeared mostly on the fashion collection of 1990s. W(15.7%), Bk(9.4%), dkg(8.0%), d(6.8%), ltg(6.4) were also dominant while dp(0.7%), v(0.8%), dk(0.9%) were rarely shown.<Fig. 3> Those implied that low saturated color and achromatic color were key colors in 1990s .

By season, low saturation of W, p, lt and high brightness in spring/summer, and low saturation and brightness of Bk, dkg, g in fall/winter were shown frequently.<Fig. 4> It showed that color tone might have made differences of seasonal distinction as seen of deep and dark tone in fall/winter and bright and light tone for spring/summer.

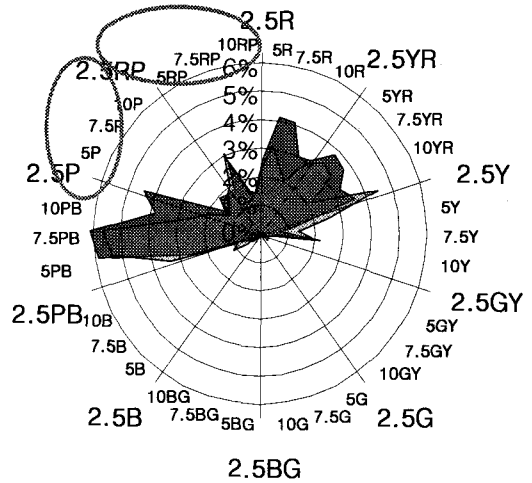
2. Color Analysis by Place

1) Distribution of Colors by place

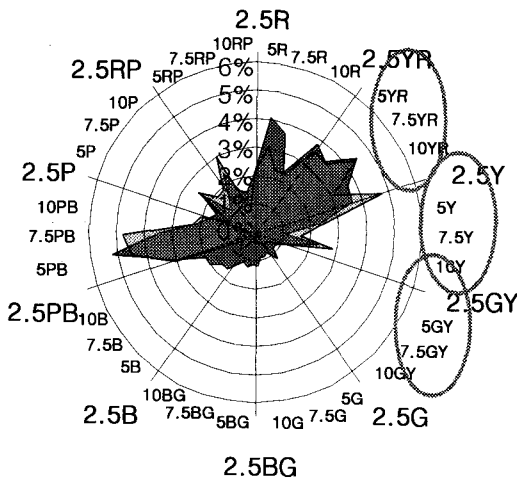
The color distribution of 4 major fashion collec



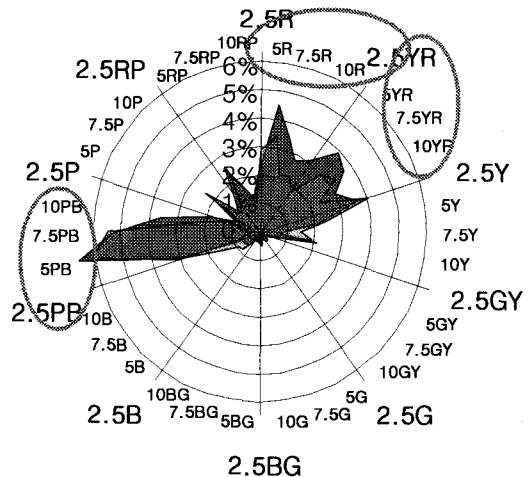
<Fig. 5> 40 color distribution by season on Paris Collection



<Fig. 6> 40 color distribution by season on Milan Collection



<Fig. 7> 40 color distribution by season on New York Collection



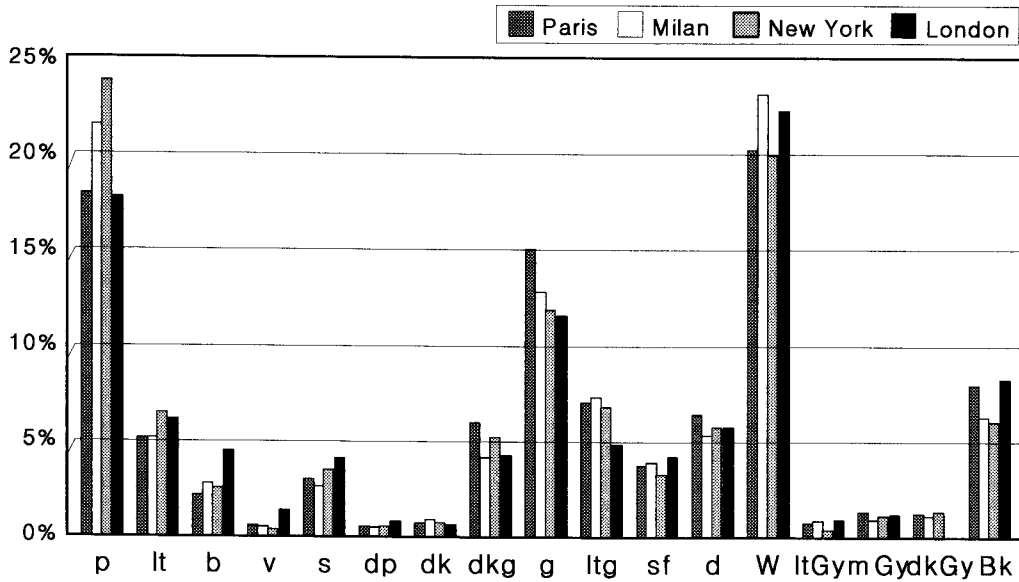
<Fig. 8> 40 color distribution by season on London Collection

tions were similar to the whole color distribution having characteristic differences by places in detail as shown on Fig. 5 thru Fig. 8. In Paris, PB, YR, Y appeared frequently regardless of season, and R, PB were dominant compared with other places. In Milan, RP for spring/summer, and P for fall/winter appeared mostly showing purple as a key color. In

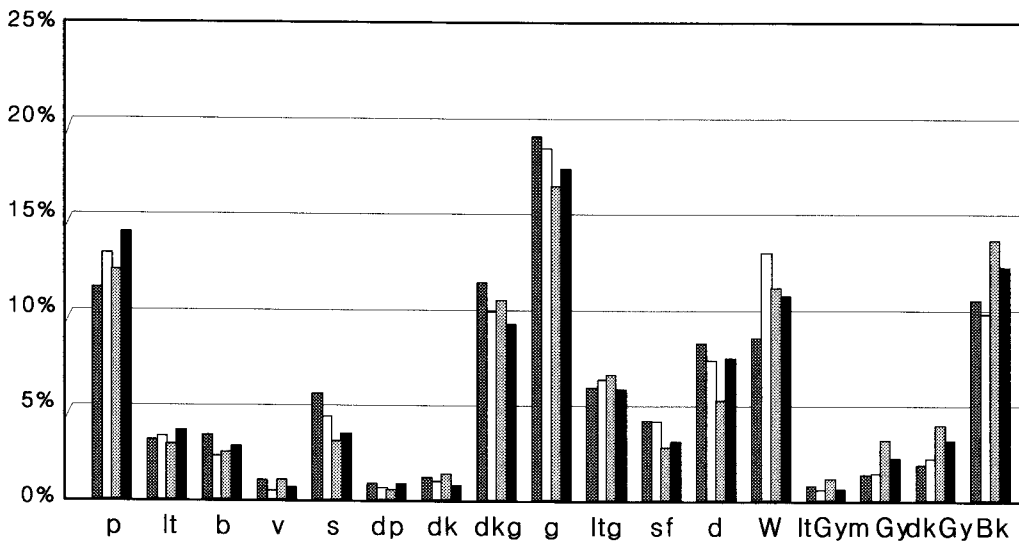
New York, YR, Y, GY appeared in both of spring/summer and fall/winter, and N, BG, G appeared in fall/winter. In London, PB, R, YR appeared frequently while P, RP were rarely shown.

2) Distribution of Color Tones by place

The distribution of color tones on each place



<Fig. 9> Distribution of color tones by place in 1990 spring/summer

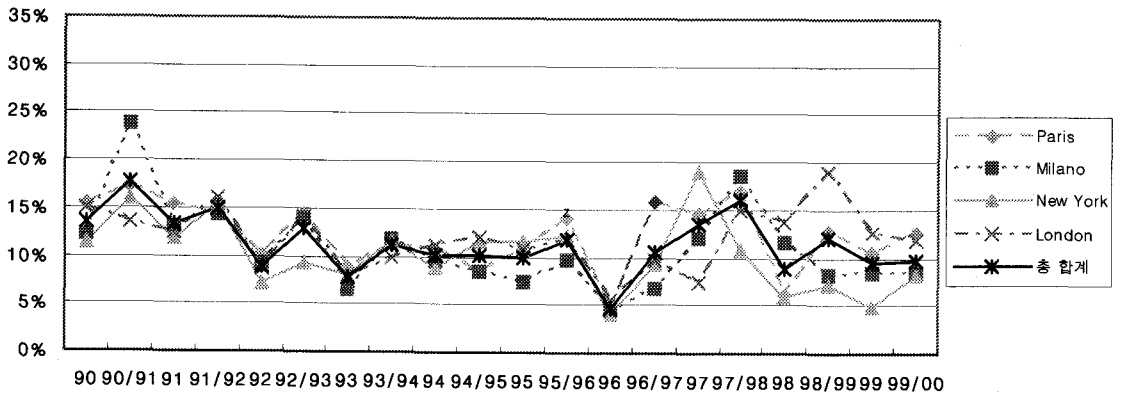


<Fig. 10> Distribution of color tones by place in 1990 fall/winter

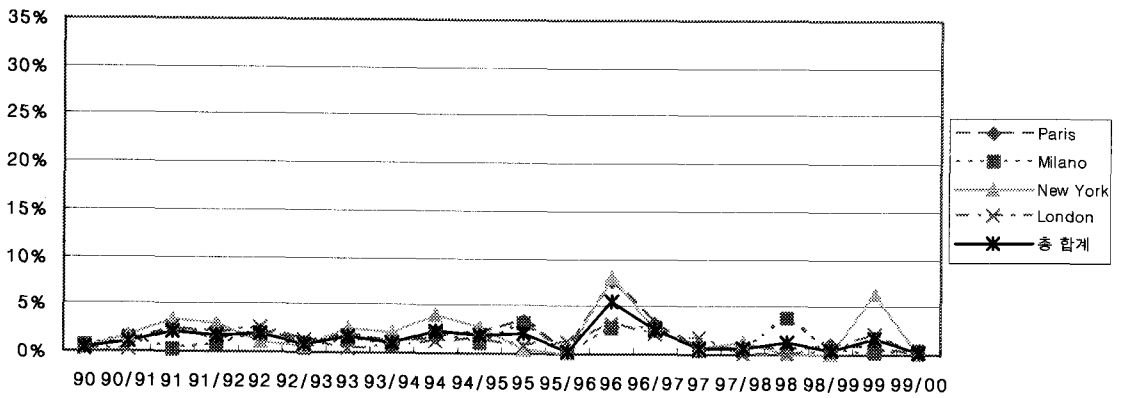
was similar to the distribution of whole color tones having also characteristic differences by places in detail as shown on <Fig. 9> and <Fig. 10>.

The color tones of g, dkg, d from Paris, and W from Milan appeared mostly regardless of

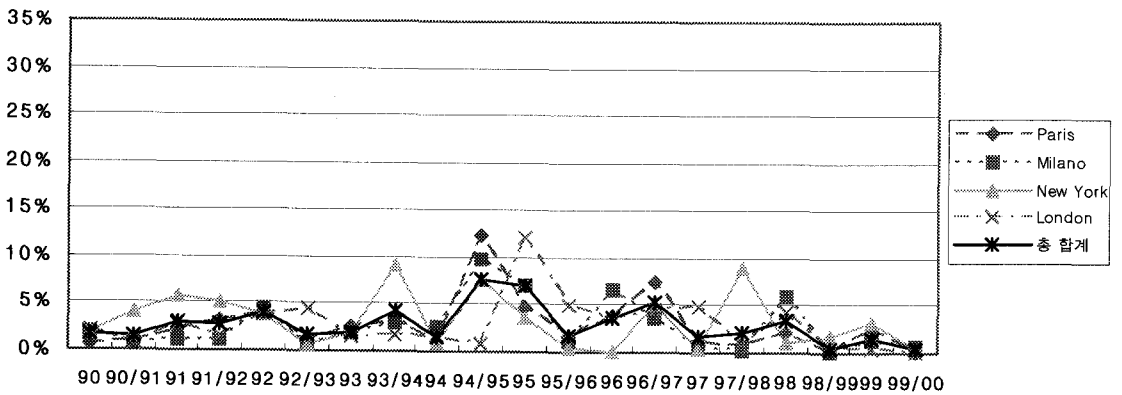
season. In New York, p for spring/summer, and achromatic colors of ltGy through Bk for fall/winter were frequently shown. In London, bright and strong tones such as b, v, s for spring/summer, and p for fall/winter appeared mostly.



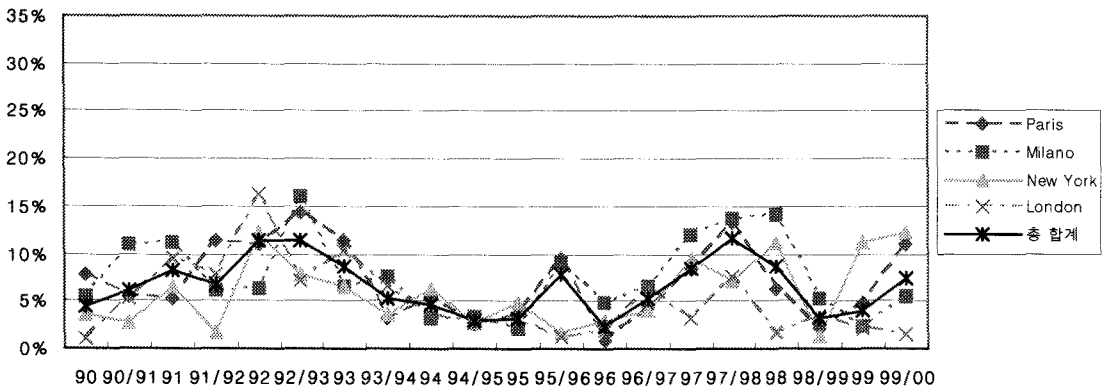
<Fig. 11> Distribution of R by place and time period



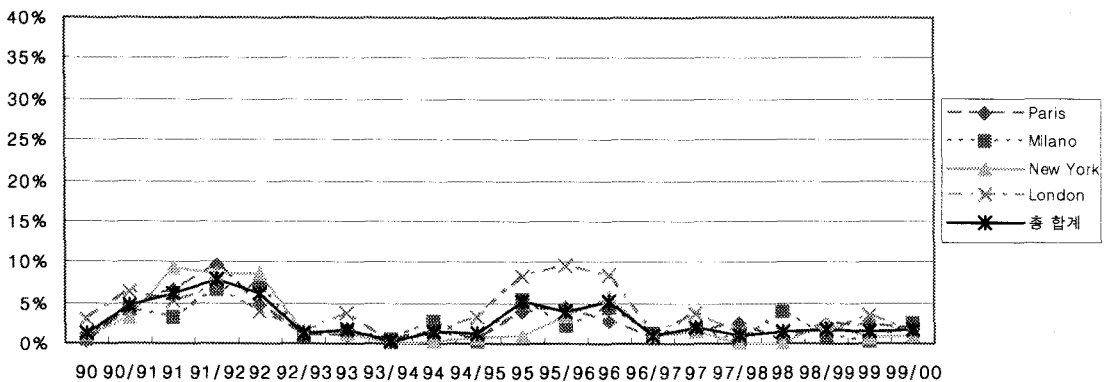
<Fig. 12> Distribution of GY by place and time period



<Fig. 13> Distribution of B by place and time period



<Fig. 14> Distribution of P by place and time period



<Fig. 15> Distribution of b tone by place and time period

Hence, the differences of color tones by place were determined by color not color tone.

4. Color Analysis by Time period

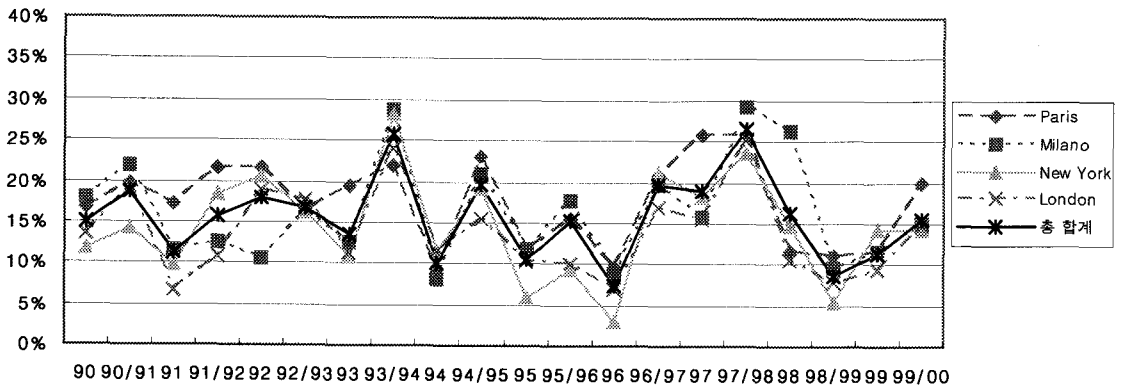
1) Trend of Color by Time period

The characteristic trend of colors by time period was analyzed as shown on Fig. 11 thru Fig. 14. R appeared mostly in spring/summer of 1990 and 1997. GY temporarily appeared in spring/summer of 1996. G, BG had a similar distribution to GY.

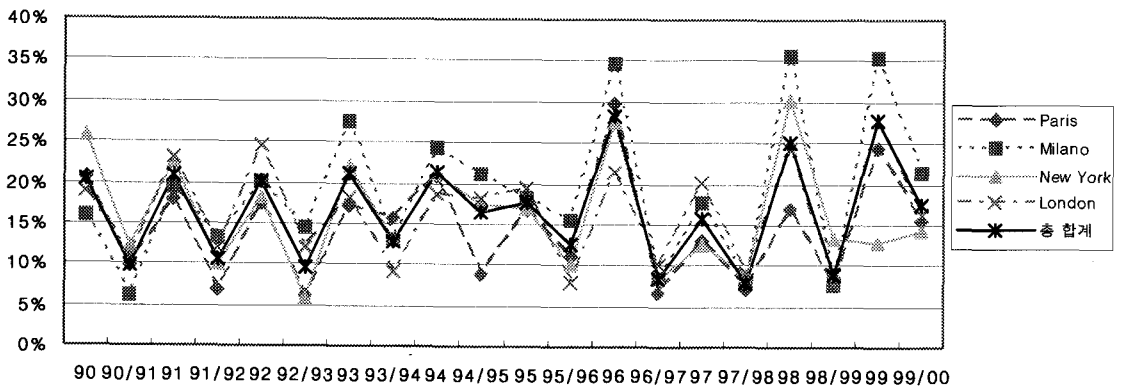
B was dominant in fall/winter of 1994 and 1995. P appeared frequently in 1992 and 1997, and RP followed the tendency of P as well.

2) Trend of Color Tone by Time period

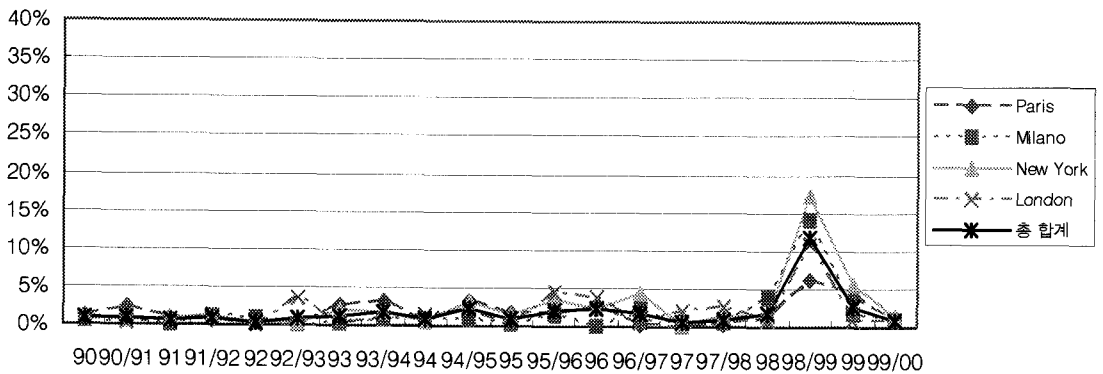
The characteristic trend of color tones and achromatic colors by time periods was analyzed as shown on <Fig. 15> through <Fig. 18>. Highly saturated b appeared mostly in 1991 and also appeared in the mid of 1990s. It had a similar tendency to b. g of low saturation which appeared in



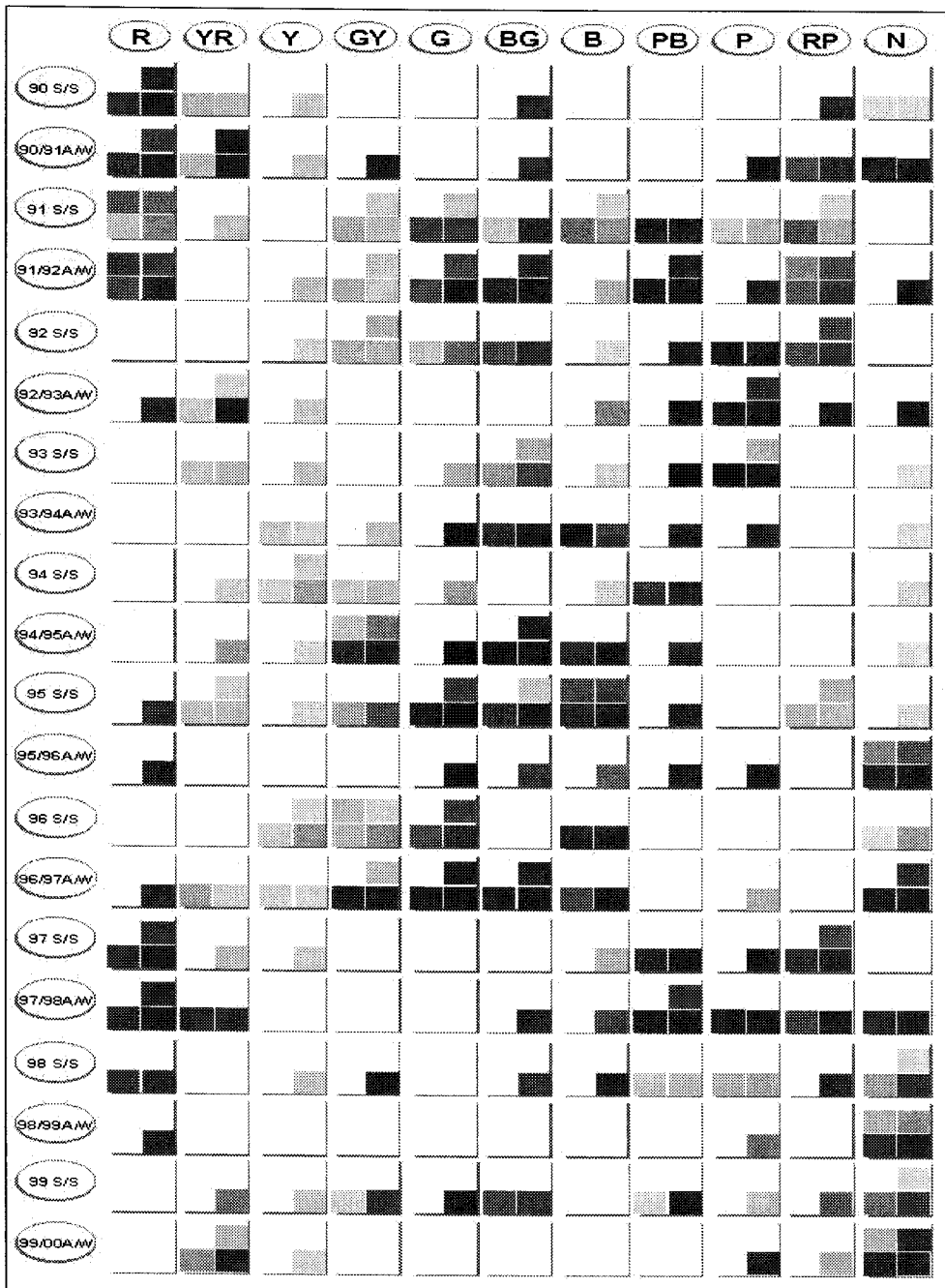
<Fig. 16> Distribution of g tone by place and time period



<Fig. 17> Distribution of W tone by place and time period



<Fig. 18> Distribution of mGy tone by place and time period



<Fig. 19> Representative colors on the fashion collections in 1990s.

1997 and disappeared rapidly in fall/winter of 1998/1999. Color tones of dkG, W appeared more

in spring/summer only except in 1997, and less in fall/winter. Achromatic colors of ltGY, mGy, Bk

got increased spontaneously in fall/winter of 1998/1999.

3. Sampling of Representative Colors by Place

The representative colors by place were selected based on the analysis of color characteristics by time periods and color trends. The color palette is as shown on <Fig. 19>. Colors of the highest frequency during three dominant time periods were selected. Three dominant time periods were chosen by when a specific color by place was shown mostly.

R, YR were key colors in the early of 1990s; a variety of colors were shown in 1991; green colors of GY, G, BG appeared in the mid of 1990s; R, PB, P RP increased in 1997; achromatic colors appeared more than before resulting dark and dull color images in the late of 1990s.

V. Conclusion

The results of this study are as follows:

First, Purple blue, Yellow red, Red, and Yellow appeared mostly while Green, Blue green were rarely shown. Warm colors were shown frequently in spring/summer and cold colors were more in fall/winter. Grayish, pale, white, black, dark grayish tones of low saturation appeared more while deep, vivid, dark tones were rarely shown. Color tones of high brightness in spring/summer and low brightness in fall/winter were shown frequently.

Second, the characteristic trend of colors by place was similar to the general color trends in 1990's. It also had characteristic differences by place in detail though. In Paris, R, PB with low than middle brightness appeared more. In Milan,

RP for spring/summer and P for fall/winter appeared mostly with W and quiet tones of ltg, sf. In New York, YR, Y, GY appeared frequently regardless of season, bright p for spring/summer and neutral tones of ltGy through Bk for fall/winter appeared dominantly. In London, P, RP rarely appeared and bright and strong tones of b, v, s were shown frequently.

Third, Red and yellow were key colors in the early 1990s, and Green Yellow, Green, Blue Green were dominant in the mid of 1990s. Red, Purple Blue, Purple, Red Purple increased quietly since 1997. For the color tone, colors of high saturation appeared more until the mid of 1990s, and colors of low saturation increased from 1997. Achromatic colors of ltGy, mGy, Bk increased rapidly in the late of 1990s while chromatic colors decreasing.

The academic significance of this study is on examination of characteristics and trend of colors on fashion collections in 1990s in a scientific method with quantitative analysis based on the color system. And practical significance is to suggest the color palette with color characteristics useful for fashion color planning.

This study was limited to colors on fashion collections. It will give more effective information for further precise forecasts if it continue analyzing relative social trends as well as color trends.

References

- 1) Lee, K. H. (2001). *21 century's modes*. Kyo-Hak, p. 204.
- 2) Moon, S. J., & Y, Y. K. (2001). *Consumers trend: 21 century*. Sigma press, p. 164.
- 3) Park, S. H. (1999). *The study of comparion of fashion trends of overseas collection and domestic collection in 1990s*. The graduate school of Seoul university, p. 32.
- 4) Kim, Y. I., Lee, H. J., Lee. Y. J. (1999). Comparison of the characteristics of domestic and international trend colors-based on data from Première vision and Samsung

- trend book. *Yonsei Journal of Human Ecology*, 13, p. 23.
- 5) KIM, Y. I., Ko, A. R., Shul, Y. G., Park, M. Y., Park, Y. S. (1997). *The Collection of Korea's Standard Colors Usable in the Textile and Fashion Industry*. Department of Industry and Resources, pp. 37-41.
 - 6) Kim, Y. I., Lee, H. S., Lee, H. J., Lee, Y. J. (1999). *The study of construction of fashion color database based on image and its practical use*. Department of Industry and Resources, pp. 31-33.
 - 7) Kim, Y. I., Lee, H. J., Lee, Y. J. *op. cit.*, p. 29.
 - 8) S/S 1990 -F/W 1999 Collection. *Collezioni Donna Prêt-à-Porter*. No. 44-71.
 - 9) Kim, Y. I., Lee, H. J., Lee, Y. J. *op. cit.*, p. 29.
 - 10) Kim, Y. I., Lee, H. S., Lee, H. J., Lee, Y. J. *op. cit.*, pp. 31-33.
 - 11) *Ibid.*, pp. 31-33.