

# The Relationship between Color Palettes and the Movie Character's Psychological State

The Case of the Movie, "Sympathy for Lady Vengeance"

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**Abstract:** The purpose of this study is to identify how color palettes correlate with a movie's main character. Along with the literature review on color psychology, association, and semiology, a case study on the movie "Sympathy for Lady Vengeance" was conducted. From the results of the case study, we suggested distinguishable color palette patterns which help movie producers express their main character's psychological state in more emotional and effective ways.

**Key words:** *Color Palettes, Color Psychology, Color Semiology, Movie Scenario.*

## 1. Introduction

In the movie industry, conveying movie characters' psychological states in delicate and sophisticate ways to audiences has been considered as one of the most critical aspects of movie success. Therefore, movie producers have focused on effectively expressing the changes of main characters' emotions and minds according to narrative structures in their movies. Meanwhile, color in movies can contribute to formulating audience emotional response to the movie. Although many scholars have done research on how to use screen colors in order to visualize movie stories in more effective ways, few studies have been done on the relationship between screen color design and movie scenario or audiences' reaction (Lee, 2006; Moon, 2006) [1,2]. In this vein, we focused on identifying how color palettes correlate with a main character's emotions in movies through analyzing "Sympathy for Lady Vengeance," a well-known Korean movie. This research intends to answer the following two research questions: (1) what is the relationship between color palettes and the main character's emotions? and (2) what is the relationship between color palettes and narrative structures of the movie?

## 2. Theoretical Background

Tracking color trends in movie can be an important part of understanding movie history because color is an effective method of expressing human psychology [3]. Until now, many studies on psychological aspects of color have been carried out. In 1995, Bryson Norman, a renowned color researcher, investigated "concrete

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association” and “abstract symbol” of eight chromatic colors and three achromatic colors [4]. Moon (2005) also suggested that human emotions are evoked by nine chromatic colors, which have three tones, and three achromatic colors [5]. Recently, a variety of color systems have been used in color psychology research. Among these color systems, the “Hue & Tone 120 System” and the “Color Image Scale” were developed by IRI Color Design Institute considering Korean’s cultural and emotional characteristics [6]: therefore, we used these systems in this research.

While referring to Norman and Moon’s color psychology theories as well as Barthes’s semiological approach [7], this research analyzed the main character’s psychological state in the case movie by identifying emotional meaning and mythological meaning (three levels) of the movie’s color palettes. Furthermore, the relationship between the color palettes and the movie scenario was also examined.

### **3. Case Study**

#### **3.1 Conducting the Case Study**

In order to achieve the aforementioned research objectives, a case study was performed with referring to various research methods for analyzing movie colors. The case study was conducted with the following five steps: (1) investigating the narrative structure of “Sympathy for Lady Vengeance”, (2) selecting 19 cuts which represent major changes in the movie’s story; (3) extracting color palettes (main, assort, and accent colors) from the representative frames of each cut using I.R.I Hue & Tone 120 System; (4) comparing the emotional meanings of the extracted color palettes with the main character’s psychological state; and (5) interpreting the mythological meanings of the extracted color palettes while considering the key scenario of the movie. Even though movies generally consist of introduction, development, turn, and conclusion [8], the scenario of the movie in this research was organized with the unique structures (viz. episode scene), viz. development(+introduction), turn(+introduction), and conclusion, in order to reveal the main character’s vengeance reason in the development and turn phases.

#### **3.2 Analyzing the Case Study**

We analyzed 19 cuts one by one from “Sympathy for Lady Vengeance.” In order to extract color palettes used in the two main frames of each cut and their emotional and mythological meaning, the frames were analyzed as shown in Table 1. In this analysis, the mythological meaning signifies the explanation of the main character’s psychological state related with the emotional meaning of the extracted colors. For example, the colors in frame #1 are comprised of achromatic colors (main color: 83%) and purple (accent color: 17%). So the main character’s gloomy vengefulness was expressed through achromatic colors, and the main character’s void and livid psychological state was expressed through purple. Proportion of the main, assort and accent colors determines the character’s major psychology: therefore, the striking contrast of the colors in terms of hue, tone, and area emphasized Geum-Ja’s impulsiveness in frames #1 and #2.

In addition, for each cut, we compared the extracted two kinds of color palettes with the related movie scenario that focus on the main character’s psychological changes. Table 2 shows the relationship between the color palettes and movie scenarios from No. 14 to No. 17. These cuts belong to the “turn” phase (particularly mixed

Table 1. The Analysis of No.15 Cut.

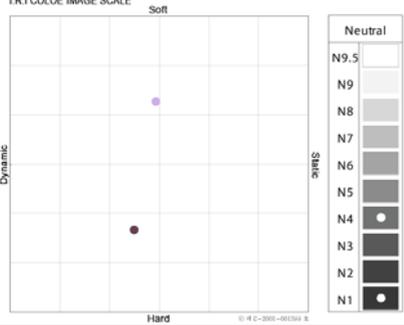
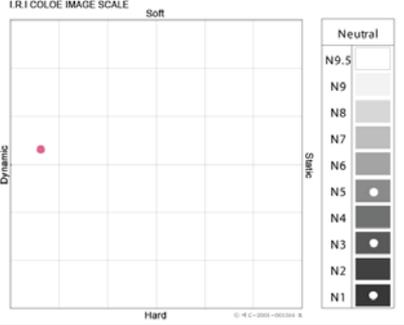
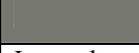
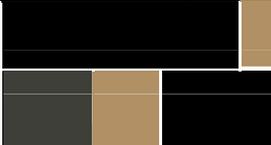
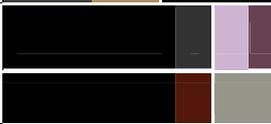
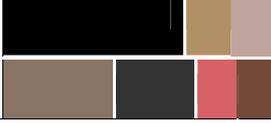
		Geum-Ja Lee catches Mr. Baek, and ties up him to school which was abandoned.			
Scenario		#1		#2	
Frame					
	Color Palettes	Base Color (83%) R0G0B0 C75M68Y67K90 R50G50B50 C70M63Y62K59 Accent Color (17%) R103G65B79 C52M74Y50K34 R207G180B210 C18M30Y4K0		Base Color (82%) R0G0B0 C75M68Y67K90 R82G23B9 C39M88Y86K63 Accent Color (18%) R119G121B112 C54M44Y52K13 R149G149B138 C44M35Y44K3	
Color Image scale					
	Emotional Meaning of Color	Signifier	Signified	Signifier	Signified
		desperate, decadent, horror, tension, heaviness, pallor		force, grief, heaviness, feel oppressed, gloom	
				horror, tension, doom, dark	
		horror, tension, doom, dark		bleak, desolation, obscurity, dark, passive, chilly	
Myth Meaning of Color	Level-1	Purple face of Geum-Ja, Lee; A scene that Geum-Ja, Lee eye tearing at a dark classroom.		In somber, disused and old classroom with dark red curtain, Geum-Ja Lee is pointing gun at Mr.Baek.	
	Level-2	Geum-Ja Lee was expressed tension and feel victimized because ruthless avengement action and intense animosity to Mr.Baek.		Expresses Geum-Ja Lee's anger and the reality that Mr. Baek is going to die, with movie's ambience which looks like the hell.	
	Level-3	When Geum-Ja Lee faced Mr. Baek, she could not control her anger because of her intense animosity to hard Mr. Baek. Then her anger promotes later group vengeance.			

Table 2: The relationship between the extracted color palettes with the related movie scenario for the turn phase

Scenario	Time	Cut No.	Main	Assort	Accent	Movie scenario, focusing on the main character's psychological changes.	Mythological meaning
Turn (+Introduction)	51'23"~99'03"	14				In preparatory phase of revenge, while Geum-Ja Lee fights against the killer hired by Mr. Baek, she could not control her anger because of the intense murder impulsion that was accumulated to Mr. Baek for a long time.	Ⓔ
		15				When the opportunity for revenge is finally comes, Geum-Ja Lee's mind was flooded with thoughts of revenge. Geum-Ja Lee's resentment to hard Mr. Baek was expressed.	
		16				While the group revenge progressed, Geum-Ja Lee displays a calm expression. She helped the injured parents succeed in gaining revenge.	
		17				After the group avengement was implemented, Geum-Ja Lee and the injured parents' psychology recovered temporary calmness, which expresses the injured parents console the soul of their children have died.	Ⓕ

with “introduction” phase) of the movie. This phase includes two mythological meanings: ㉔- Due to Geum-Ja Lee’s deep animosity towards Mr. Baek, she can not control her actions. When her revenge is carried out, Geum-Ja Lee seems but that she can not suppress the flames of animosity in her heart, and the cruel side of humanity is exposed in her, and ㉕- When Geum-Ja Lee and the victims’ parents have taken successfully gained revenge, the suppressed animosity in their hearts was released, and they recovered temporary calmness. So the movie scenario reflects human nature’s good and evil aspects.

Through analysis of the “turn” phase (No.14 cut to No.17 cut), we found a close relationship between color palettes and movie scenario. In the “turn” phase, the color use becomes simple, and low light and saturated tone color are frequently used in movie frames. In order to express the main character’s gloomy emotion change, achromatic colors (65.87%) and chromatic colors’ (28.06%) area contrast are strengthened (see Table 2). Therefore, we found that the movie producer designed color palates’ area and tone while considering the main character’s emotion and the movie scenario’s delivery effect. Like Table 2, the other phases of movie scenario (introduction, development, and conclusion) were analyzed, with the same result.

#### **4. Conclusions**

Movie producers can more effectively express a main character’s psychological and emotional states as well as the movie’s ideology by planning color palettes for the whole scenario at the beginning of the production process. In this vein, we conducted a case study of the movie “Sympathy for Lady Vengeance” by tracking the changes of its color palettes, and then suggested distinguishable color palette patterns which contribute to conveying main character’s psychological state and movie scenario more emotionally and accurately. The research results in this paper will be helpful for movie producers who have difficulty in using appropriate color palettes that can express main character’s psychological state and movie narrative in more touching and effective ways.

#### **5. References**

- [1] Lee, K. M. (2006) *A study on the color plan method of HDTV drama*, Dissertation of Master Degree, the Film and Digital Media Graduate School of Hongik University.
- [2] Moon, K. A. (2006) *A Study for Color Expression on the Opening Title Sequence of Domestic Movies*, Dissertation of Master Degree, the Graduate School of Dan Kook University.
- [3] Nowell-Smith, G. (1996) *The Oxford History of World Cinema*, Oxford University Press.
- [4] Norman, B. (1995) *Semiology and Visual Interpretation*, Vision & Language, pp 165-166.
- [5] Moon, E. B. (2005) *The Color’s Understanding and Practical Use*, Ahn Graphics, p 215.
- [6] I.R.I Color Design Institute. Available at <[http://www.iricolor.com/04\\_colorinfo/colorsystem.html](http://www.iricolor.com/04_colorinfo/colorsystem.html)>
- [7] Kim, G. Y. (1994) *What is Semiotics?*, Minumsa, pp 190-199.
- [8] Choi, Y. M. (2007) *Television Documentary Production Handbook*, Hanul, pp 148-156.