



The Use of Colors in Cinema
Impact of Colors on Audience's Mood.
Master's Thesis

Maha EDJARENE

Eskişehir 2022

THE USE OF COLORS IN CINEMA
IMPACT OF COLORS ON AUDIENCE'S MOOD

Maha EDJARENE

Master's thesis

Department of Cinema and Television

Supervisor: Prof. Dr. Erol Nezih ORHON

Eskişehir

Anadolu Univeristy

Graduate School of Social Sciences

June 2022

ÖZET

Sinemada Renklerin Kullanımı: Renklerin İzleyicinin Ruh Haline Etkisi.

Maha Edjarene

Sinema ve Televizyon Anabilim Dalı

Anadolu Üniversitesi, sosyal bilimleri Enstitüsü, Haziran 2022

Danışman: Prof. Dr. Erol Nezih ORHON

Sinemada renk estetik, sembolik ve anlatsal bir unsurdur. Bu amaçla, filme alınmasından post prodüksiyona kadar sinematografik görüntülerin üretimine bağlı araçlarımızla düşünülür, dönüştürülür, hatta manipüle edilir. Renklerin insan ruh hali üzerindeki etkisine hâkim olmak ve anlamak gerekir. Wes Anderson'ın filmleri, filmin olay örgüsünün anlatısını yürütebilecek unsurlar olarak temsil ve görsel dilin kullanımında ilgi çekici bir vaka çalışmasıdır. Filmleri, mimari temsillerle karşılaştırılabilir bir mantık kullanılarak inşa edilmiştir. Geometriler, perspektifler, dokular ve renkler, anlaşılabilir ve duyarlı arasında, kavram ile görüntü arasında aracılık yapabilen bir sinyal kodu oluşturmak için kullanılır. Bu tez, renklerin izleyicinin ruh halini nasıl etkilediğinin yanı sıra renk hakkında konuşma ve algılama şeklimiz üzerine bir yansıma sunuyor. Kullanılan renk paletlerinin hikâyenin anlatımına nasıl yardımcı olduğunu ve dolayısıyla izleyicilerin duygularını nasıl etkilediğini görmek için Wes Anderson'ın ünlü filmleri The Budapest Hotel 2014 ve Moonrise Kingdom 2012'nin bir analizi. Bu tez, ekranda gördüğümüz renkleri algılama şeklimizi sorgulamaktadır. Bu yaklaşımda renklerin tarihini, bilimsel temellerini ve renklerin psikolojisini bilmek projenin daha iyi anlaşılmasını sağlar. Anderson'ın filmleri için kullanılan ikili analiz kaydı, yalnızca diğer film yapımcılarının eserlerine değil, aynı zamanda diğer görsel anlatı türlerine de uygulanabilen genel bir analiz tekniğinin izi olabilir.

Anahtar Sözcükler: Renkler, İzleyicinin ruh hali, Wes Anderson, Görsel Dil, Duygular.

ABSTRACT

The Use of Colors in Cinema Impact of Colors on Audience's Mood

Maha EDJARENE

Department of Cinema and Television

Anadolu University, Graduate School of Social sciences, June 2022

Supervisor: Prof. Dr. Erol Nezih ORHON

Color in cinema is an aesthetic, symbolic and narrative element. For this purpose, it is thought out, transformed, even manipulated, through our tools linked to the production of cinematographic images, from filming to post-production. It is necessary to master and understand the influence of colors on the human mood. Wes Anderson's films are an intriguing case study in the use of representation and visual language as elements capable of executing the film plot's narrative. His films are built using a logic comparable to that of architectural representations. Geometries, perspectives, textures, and colors are used to create a code of signals capable of mediating between the comprehensible and the sensitive, between the concept and the image. This thesis offers a reflection on how colors impact the audience's mood, also on our way of perceiving, and talking about color. An analysis of Wes Anderson's famous films *The Budapest Hotel* 2014 and *Moonrise Kingdom* 2012 to see how the used color palettes helps in the narration of the story therefore impacting the feelings of the viewers. This thesis questions our way of perceiving colors that we see on screen. In this approach, knowing the history of colors, its scientific base, and the psychology of colors allows better understanding for the project. The twofold register of analysis utilized for Anderson's films might become a trace of a generic technique of analysis, applicable not just to other filmmakers' works, but also to other types of visual narrative.

Keywords: Colors, Audience's mood, Wes Anderson, The Visual Language, Feelings.

ACKNOWLEDGMENTS

To the memory of my grandmother Aisha and my grandfather Driss may god have their souls, To my dear mother Souad who has never stopped praying for me, supporting me and being the secret helper so that I can achieve my goal, to my dear dad Abdelouahed who supported and encouraged me during these years of study, may he find here the testimony of my deep gratitude, to my brother Mohamed Amine who was always been there for me, for his valuable advice throughout my studies, may God protect him and offer him luck and happiness, to my cousin, my aunt, and my friends for their love and encouragement, to all those I love and those who love me.

At the completion of this work, I would like to dedicate a few of these lines to express my gratitude to all those who surrounded me with help and support. My thanks go especially to Prof. Dr. Erol Nezih Orhon, for his supervision, his follow-up, and his guidelines. I am grateful to you for your advice and your availability as well as for your remarkable commitment. Also, to Prof. Dr. Onur Yumurtaci, for his constant availability and his natural disposition to provide me with assistance and advice and to the members of the jury for having agreed to evaluate and examine this thesis.

I want to express my gratitude to all the administrative and teaching staff, for having made me what I am proud to be today. It would be impossible for me not to offer my thanks and deep gratitude to my family for their support and encouragement during these long years.

.....

STATEMENT OF COMPLIANCE WITH ETHICAL PRINCIPLES AND RULES

27/06/2022

I hereby truthfully declare that this thesis is an original work prepared by me; that I have behaved in accordance with the scientific ethical principles and rules throughout the stages of preparation, data collection, analysis and presentation of my work; that I have cited the sources of all the data and information that could be obtained within the scope of this study, and included these sources in the references section; and that this study has been scanned for plagiarism with “scientific plagiarism detection program” used by Anadolu University, and that “it does not have any plagiarism” whatsoever. I also declare that, if a case contrary to my declaration is detected in my work at any time, I hereby express my consent to all the ethical and legal consequences that are involved

Maha EDJARENE

ETİK İLKE VE KURALLARA UYGUNLUK BEYANNAMESİ

27/06/2022

Bu tezin bana ait, özgün bir çalışma olduğunu; çalışmamın hazırlık, veri toplama, analiz ve bilgilerin sunumu olmak üzere tüm aşamalarında bilimsel etik ilke ve kurallara uygun davrandığımı; bu çalışma kapsamında elde edilen tüm veri ve bilgiler için kaynak gösterdiğimi ve bu kaynaklara kaynakçada yer verdiğimi; bu çalışmanın Anadolu Üniversitesi tarafından kullanılan “bilimsel intihal tespit programı”yla tarandığını ve hiçbir şekilde “intihal içermediğini” beyan ederim. Herhangi bir zamanda, çalışmamla ilgili yaptığım bu beyana aykırı bir durumun saptanması durumunda, ortaya çıkacak tüm ahlaki ve hukuki sonuçları kabul ettiğimi bildiririm.

Maha Edjarene

TABLE OF CONTENTS

	<u>Page</u>
TITLE	i
ÖZET	III
ABSTRACT	IV
ACKNOWLEDGMENTS.....	V
STATEMENT OF COMPLIANCE WITH ETHICAL PRINCIPLES AND RULES	VI
TABLE OF CONTENTS.....	VIII
TABLE OF FIGURES	X
TABLE OF TABLES	X
1- INTRODUCTION.....	1
1.1 PROBLEM.....	1
1.2 PURPOSE	4
1.3 LIMITATIONS.....	4
1.4 IMPORTANCE	4
1.5 HYPOTHESES	5
2- LITERATURE REVIEW.....	5
2.1 COMBINING ART AND SCIENCE	5
2.1.1 Color Perception and Memory: The Difference	11
2.1.2 Between Preconceptions and Resistance, Cinematic Colour.....	12
2.1.3 The Unavoidable Painting Model	14
2.1.4 Chemical Color in the Twentieth Century: A Cinematic Universe	16
2.1.5 The Relationship Between Color and Sound	17
2.2 LINKS BETWEEN COLORS AND EMOTIONS.....	18
2.3 HUMAN COLOR PREFERENCES	25

2.4 COLOR CHALLENGES IN RELATION TO BLACK AND WHITE.....	28
2.5 THE COLORS ACCORDING TO THE INTERNATIONAL COMMISSION ON ILLUMINATION.....	31
2.6 THE AUTEUR FILM THEORY – AUTEURISM.....	34
2.6.1 The Origins of The Auteur Film Theory	34
2.6.2 The Development of The Auteur Film Theory	36
3. WES ANDERSON'S PHILOSOPHY OF COLORS	38
3.1 WES ANDERSON BIOGRAPHY AND BACKGROUND	38
3.2 COLOR THEORY IN WES ANDERSON'S FILMS	40
3.3 VISUAL NARRATIVE IN WES ANDERSON'S FILMS	47
3.4 STORYTELLING AND COLOR: THE CREATION OF A CINEMATIC MOOD ..	48
3-METHODOLOGY.....	50
3.1 THEORETICAL FRAMEWORK	50
3.2 RELEVANCE OF THEORY TO THE STUDY.....	51
3.3 RESEARCH METHODS AND RESEARCH DESIGN.....	51
3.4 METHOD AND SOURCES OF DATA COLLECTION.....	52
3.5 TECHNIQUES FOR DATA ANALYSIS	52
3.6 POPULATION OF THE STUDY	52
4. FINDINGS AND DISCUSSION	54
4.1 FINDINGS	54
4.1.1 Color Analysis in The Grand Budapest hotel	54
4.1.2 Color Analysis in Moonrise Kingdom: The Features of Yellow and Blue.....	66
4.2 DISCUSSION	72
5. CONCLUSION	79
BIBLIOGRAPHY	81
CURRICULUM VITAE	

TABLE OF FIGURES

	<u>Page</u>
Figure 1: Difference between colors perception.....	6
Figure 2: Left and right side of human brain.....	8
Figure 3: The arrangement of representative emotions in a circle	23
Figure 4: The alteration of hue in Wes Anderson’s film The Budapest Hotel.....	43
Figure 5: Color palettes used by Anderson	44
Figure 6: The palette of color most used by Wes Anderson	44
Figure 7: Color contrast in The Budapest Hotel.....	45
Figure 8: Symbolism of colors in emotional scenes	46
Figure 9: Nathalie Kalmus on Color, From color consciousness 1935.....	55
Figure 10: A close up frame for the same character in the same position12	57
Figure 11: A close up of the young writer while he was sitting in front of Mr. Mustapha	58
Figure 12: Mr Gustave in prison clothes without any differences comparing to his inmates.....	63
Figure 13: The lobby of the hotel with cheerful colors.....	65
Figure 14: Yellow in Moonrise Kingdom	68
Figure 15: The dominance of Yellow in Moonrise Kingdom	68
Figure 16: The dark blue in the outfit of the social services in Moonrise Kingdom 2012	69
Figure 17: Dominance of dark blue in danger situations in Moonrise Kingdom 2012	70

TABLE OF TABLES

Table 1: Population of the study	53
---	----



1- INTRODUCTION

1.1 Problem

Visual representation is a communicative technique that has accompanied human being since their birth, as evidenced by instances of Paleolithic wall painting discovered in the Lascaux Caves. The language of pictures, in fact, enables the readers or the viewer to grasp the hidden meanings exclusively via the use of sight, the sense he has most developed and encountered, due to its features of conciseness, immediacy, and universality.

As Scott McCloud also contends, unlike writing, the visual code may be comprehended by a generic human who has not received a specialized formal education to decipher it. To be understood, the latter demands him to employ a particular vocabulary in order to decipher the symbols of its language (McCloud, 1994).

The importance of narratives in pictures is of a high priority, particularly in today's society, where the notion of information culture parallels that of visual culture (Manovich, 2006). Nevertheless, in recent years, visual media have experimented with and studied the narrative possibilities of pictures, whether static such as painting and photography or dynamic like video, video games and cinema. The link between image and narrative is especially important in the latter. However, the visual experience is the main mode of communication, so much so that it may achieve complete narrative autonomy, as seen by the first silent films.

The narrative is crucial since each film sequence has a matching one that, when combined with the others, contributes to the overall narrative. Color is without a doubt one of the most effective elements of art of visual language used in cinema since, in addition to assessing hues, atmospheres, and tempos of the narrative, it has big mental and emotional power, capable of conveying messages by utilizing sentimental and sensory factors of the viewer. Colors create the tone for melancholy narrative by exuding desperation or calamity. That is essentially what color theory in movies is. It is the idea of employing different hues to create different emotions (Ou, 2004). Color theory is used by filmmakers to bring scenes to life. It allows the audiences to share the experience with the characters and see the world through their eyes. So, if a script is the blueprint and

canvas of a tale, then color is what brings it to life. Color theory enables filmmakers to make the most of cinema as a visual medium.

This thesis focuses on color as one of the elements of film language. Color is an object that is uncertain, and difficult to define. In the archeology of knowledge, Michel Foucault wonders about the validity of certain “objects” designated by knowledge: “*with regard to these great families of statements which impose themselves in our habit, I had asked myself on what they could found their unit*” (Foucault, 1969). To a certain extent, one could consider color as one of these objects, an “object of discourse”, to use Foucault's words, around which much can be said without its very objectivity being called into question.

For its part, cinema make the viewers see colors as a sign of its progress, and a natural stage in its improvement. The study of color in cinema can be a good angle of attack, a point of entry, to tackle larger questions. Cinema participates like other arts in the history of color, but color cinema is not just a stage in the history of cinema.

There is two ways of apprehending color and which are possible for this thesis: color as a framework for understanding films, that is to say that it becomes here a means of analysis as well as an object of analysis. Or it can be discussed as a sign of certain trends, of certain transformations, in post-war Hollywood cinema.

Jacques Aumont on the analysis of color in cinema states that “*The absence of general and verifiable laws explains the almost total absence of theoretical reflection on color in the moving image. The only considerations sometimes proposed concern the symbolic or the expressive value of color. (...) These values being themselves very variable according to the cultures and the times, it is difficult to give a theory of them, and the aesthetics of the color in the cinema merges, practically, with the observation of personal styles or “gender effects”*” (Aumont, 2008)

In this thesis, it is the symbolic code as well as the expressive value attributed to each color that is of interest. Color plays a crucial role in the story. It offers us sensory impressions, but it's difficult to talk about, (Adams & Osgood, 1963) in their study about the meaning of colors states that “We all have different vocabularies, we identify different colors with different terms, and we are not sure we perceive the same hue”.

Several factors can contribute to the color of the film along the development chain of the image. But if the director carries the color concepts, they will be translated into reality by the cinematographer, the set designer, the costume designer, the editor and the

colorist. The workflow can be defined as the image production chain as explained from a technical standpoint.

In cinematography, there has been few studies in color area and color may be underappreciated considering how prevalent it is (Plutchik, 1980). This research emphasizes color science and its use in film, naming Vittorio Storaro as an influential colorist. On the other hand, (Higgins, 1998), (Millard, 2019), and (Cheng, Wu, & Yen, 2009), took a symbolic, psychological and aesthetic approach to the analysis of color in films. Ultimately those researches consider how science can give new creative tools to artists in a digital age, set against the history of color within analogue film techniques.

Viviani and Aymoz explain in their article *Color, Shape, and Movement Are Not Perceived Simultaneously* that color and form are virtually perceived simultaneously but movement is delayed by roughly 50 milliseconds. Because color is observed before movement, and cinema is simply moving color, (Bordwell & Thompson, 2012) contends that color is a spectacle as significant as narrative, which "has at its core in-frame movement."

Color is known to impact individuals in subtle ways, therefore using it to influence an audience has been used in cinema and many other disciplines, and color research continues to make new findings. It was recently discovered that certain colors, when used correctly, might improve memory. (Kaiser, 1984). However, in this thesis, color as an object of study and the feelings given to the viewers will be linked. This thesis is going to combine between color as an element used to add some aesthetic to films and color as an expressive element. This thesis questions the way colors impact our feelings and our mood as audience .

To explain the principles outlined above, this thesis, represent an answer to the question How the use of colors in cinema impact the audiences mood ? It starts by answering the question, "What is color in cinema?", The first section of this thesis is the literature review, which covers the historical context of the use of color in film, the meaning of color, the difference between color perception and memory, the relationship between color in film and paintings, the links between colors and sound and between colors and human emotions.

Finally, the last chapter is devoted to thesis's approach to discuss images, particularly their color palette. A color-mood analysis in Wes Anderson's films *The Budapest Hotel* and *Moonrise Kingdom* will take place to evaluate if the colors captured

during the shooting are appropriately rendered and if the photographs convey the intended feelings.

To complete this research, a meeting with professionals whose word crosses this thesis took place:

Céline Bozon, director of photography.

Sabine Lancelin, director of photography

Christine Szymkowiack, grader

1.2 Purpose

Nowadays, a film is no longer limited to dialogue and acting. Color is now an essential aspect of cinema, and it has enormous influence on how the viewer perceives the film and the characters. The purpose of this research is to uncover the underlying meaning of film that lies underneath a layer of color in today's cinema in general, and Hollywood cinema in particular. Through this understanding and analysis of films, and through this thesis it will be shown how colors impact audience's mood, starting by presenting characteristics of colors, their psychology, and the relation between colors and sound and between colors and emotions. Moreover, and through this thesis, a detailed definition of auteurism as a film theory will be presented as a framework of the study until arriving to the answer on how colors impact our mood as viewers by taking two films of Wes Anderson as an example.

1.3 Limitations

Since this study is a master's thesis, a color analysis of only two films will take place in its final chapter, while this topic can be discussed by analysing dozens of films. The film selected contains many aesthetically pleasing images, but in order to get the whole picture and produce a complete thesis, it will be important to examine as many films as possible.

1.4 Importance

Color is one of the most effective yet least understood and investigated components of cinematography. Color has the capacity to effect viewers consciously or unconsciously, from Alfred Hitchcock's dramatic black-and-white thriller *Psycho* (1960)

to Vittorio Storaro's symbolic hues in *Apocalypse Now* (1979). The significance of color palettes in films may be appreciated with a basic grasp of color psychology. The purpose of this research is to obtain a better understanding of how colors are utilized to impact audiences emotionally by developing a scientific understanding of how colors affect persons physiologically and what feelings each hue elicits.

1.5 Hypotheses

- There is a relation between colors and human emotions.
- The meaning of color is influenced by languages and cultural background of the viewer, so, if an image designer, a filmmaker, or a film director wants to use color symbolism to convey a particular message, he or she must be aware that the meaning of color varies across cultures.
- To present his or her Ideology or personal perception of the world, the film director use colors as tool to reach the audience's emotions.

2- LITERATURE REVIEW

2.1 Combining art and science

The method used here is to establish a scientific foundation, particularly in neurology and physiology, to better understand how color affects individuals and how universal the perceptual system is.

According to (Abramov, Gordon, & Chavarga, 2012), men require longer wavelengths to detect the same hue than women, "Women are better at distinguishing between colors...while men excel at observing fast-moving things and recognizing details from a distance) (Owen, 2012). According to (Lee & Joohyeon, 2006), there are two forms of color perception:

Biological responses and color memory (the learned and cultural response). In this section, these responses will be considered from the perspective of scientific evidence. Findings and explanations in the articles from The Sussex Color Group (a leading research group in the field of color science) was evaluated to make the way colors affect people's consciousness clear.

Finally, this chapter is build on these foundations by providing an overview of the science in the context of filmmaking. The point is to show how sensory information is

global and how it is influenced by factors such as linguistics, color memory, color consistency, color combinations, and even the cinematic experience.

According to College of Sussex neuroscientist Sam Berens, people see colors through a filter of language and memory, giving each person a different experience (Bernes, 2014). The language determines how colors are categorized, and this linguistic grouping system influences how the audience perceive and feel about colors. Berens also mentions that some hues can trigger memories that are activated by color perception (Bernes, 2014). This section will go into more detail about how important this is and why different elements affect color perception, resulting in no two people perceiving colors the same way. The study will explore what this means for filmmakers and image designers who, given this knowledge, may need to influence the emotions of a large audience rather than a particular culture.

Noncategorical color processing is linked to the brain, resulting in metric color sensitivity. This means that the right hemisphere is unable to distinguish colors within linguistic categories such as blue or green. The language areas of the left hemisphere, on the other hand, are connected to categorical color perception. (Bird, Horner, Franklin, & Berens, 2014) .

This allows the audience to perceive colors inside a linguistic categories, allowing the viewers to organize them and rapidly distinguish them from other categories, which has a tremendous impact on how people perceive an image. (Regier & Kay, 2009).

As a result, colors from various categories appear to be considerably different from colors from the same category, even though they are evenly spaced over the spectrum. Despite the fact that these four colors are evenly spaced by a hue angle of 26.37 degrees in Figure 1, the difference between G1 and the other colors (B1, B2, and B3) appears to be bigger due to the language differentiation between green and blue.

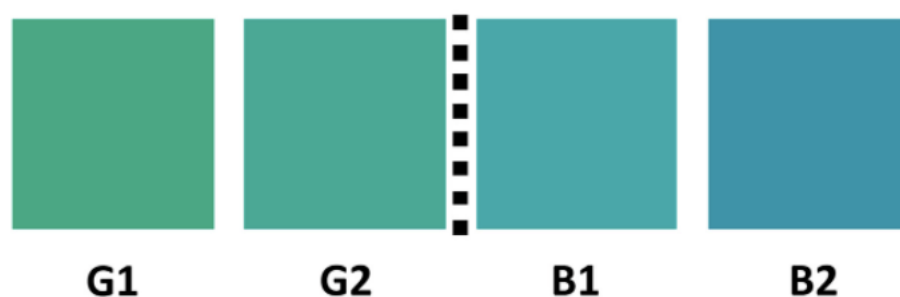


Figure 1: Difference between colors perception

Benjamin Lee Whorf's 'Whorfian theory' see (Regier & Kay, 2009) tries to explain this by claiming that color classifications, which are wholly formed by language, bend visual information in accordance with acquired color names. As a result, "languages with distinct naming schemes should create diverse sensory color spaces" (Berens D. J., 2014), implying that "color naming is governed by culture" (Osvaldo & Albertazzi, 2010), implying that color perception is not universal.

The location of the classes of varieties changes from language to language; hence, the location where one variation stops and another begins is always varied. In Papua New Guinea, local speakers of the Berinmo language consider blue and green to be the same thing since their language lacks separate words to express them. Thus, they do not distinguish between them, but have other unique variety classifications that English and numerous other dialects do not (BBC, Sci/Tech: When Blue is Green, 1999) (Regier & Kay, 2009).

The perspective, on the other hand, claims that color categories are physiologically hardwired, implying that color vision is global see (Regier & Kay, 2009). Because of the shifting correspondence between the two ideas, it has recently been noted that both explanations are somewhat correct. "Half of our sensory world may be viewed through the lens of our native language and the other half [with] less of a linguistic filter," according to (Regier & Kay, 2009) (p.1).

Our imagination is made up of left and right visual fields that are processed by the right and left hemispheres, which is known as contralateral mapping. In other words, the left visual field (LVF) is processed by the right hemisphere (which is also responsible for language and hence color categorization) while the right visual field (RVF) is handled by the left hemisphere (Regier & Kay, 2009). (Berens D. J., 2014). This means that people perceive colors differently depending on whether they see anything on the left or right side of our field of vision.

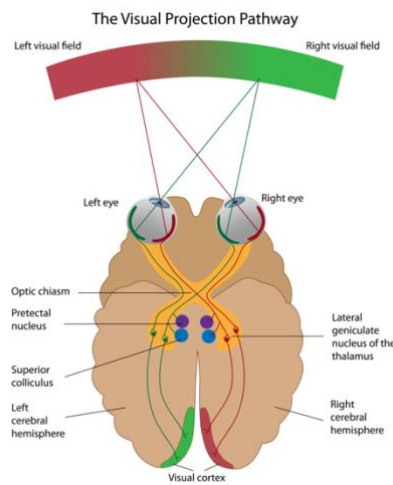


Figure 2: *Left and right side of human brain*

This has implications for filmmakers who need to know how their colors are interpreted differently in the universe. When filmmakers use a single color palette, such as blue, they need to be aware that it might not be interpreted as a single category of blue in a foreign language. Instead, it could be seen as two different color groupings or vice versa.

Many researchers have studied the effects of different lighting conditions on people's feelings (Radulescu, Christodoulou, Katerina, & Critchley, 2012) (Küller, 1986), and many researchers have studied the effects of different lighting conditions on people's feelings e.g (Küller, 1986) (Radulescu, Christodoulou, Katerina, & Critchley, 2012).

According to (Küller, 1986), not only is light converted into electrical impulses that affect various visual regions, but these impulses also go to hormonal and neural centers in the brain, indirectly altering the hormonal balance and psychological state of humans. For example, the pineal gland in the brain regulates a person's daytime form (sleep patterns) depending on how the gland responds to light and darkness.

In his article entitled Psychological and Physiological Effects of illumination and Color in the Interior Environment, Rikard Küller suggests that bright light, bright colors, and contrasts can cause increased reticular activation leading to psychological arousal and alertness. Long-wave such as red light can be more stimulating than medium-wave such as green and blue light. But when light flickers, even though it is invisible to the human eye, it can evoke strong reactions (Küller, 1986).

According to (Valdez & Mehrabian, 1994), colors with shorter wavelengths (blue and green) are less arousing than colors with longer wavelengths (red and yellow) and "arousal is a positive correlate of color saturation and brightness" According to (Cheng, Wu, & Yen, 2009), "Warm colors, especially red, are physically and emotionally stimulating, exciting, and distracting, while cool colors, especially blue, are calming, soothing, and tranquil" (p.327). Japanese train operators have installed blue lights on platforms to prevent suicide train disruptions. This seems to have contributed to a dramatic decrease in people jumping in front of trains (Matsubayashi, Yasuyuki, & Ueda, 2013).

This may be because blue light is more pleasant and less stimulating/exciting than warmer lighting (Valdez & Mehrabian, 1994), which could otherwise provide the energy needed to carry out a suicide plot. The use of blue streetlights has also been shown to lower crime (Grohol & John, 2008). This could be because blue is a peaceful, compassionate, and calming color that is also often associated with police presence and thus safety (Valdez & Mehrabian, 1994).

At the other end of the scale, (Attrill, Gresty, Hill, & Barton, 2008) found that red jerseys significantly increased the likelihood of English soccer players winning matches. (Guéguen & Jacob, 2012) found that male diners in restaurants tipped more to waiters dressed in red because red makes them appear more attractive. One scientific study suggests that red triggers arousal, which can lead to violence, according to (Bagchi & Cheema, 2013).

Their findings suggest that using red as a backdrop color encourages more aggressive steps in an auction, but using blue as a background color reduces steps even faster than grey. Bagchi and Cheema also show that red reduces proposals while blue enhances them in negotiations. This might be really valuable for cinematographers who need to understand how colors influence individuals in order to employ them in their work.

It may appear obvious that red leads individuals to get more agitated and excited, while blue leads people to become peaceful and more comfortable, but comprehending this science may assist filmmakers grasp, alter, and defend their artistic decisions in order to create more successful images.

Color is viewed differently by various individuals and is influenced by language, as already mentioned, which raises the question of how universal the human emotional reaction to color is. (Bellantoni, 2005) conducted a little experiment in which he asked art and film students from all around the world to generate emotive pictures.

The findings are quite equivalent: light, pale, blue, and peach colors were selected to represent tranquility, whereas dark red and opposing colors were used to represent fury. Scientific evidence backs this up: "every adult assigned yellow to happiness, blue to melancholy, and red to rage" in one study of (BBC, 2011) In marketing, businesses already use the neurological science of universal color perception. In (Aslam, 2006)'s article, *Are You Selling the Right Color?*, a number of brand and product marketing specialists describe how things operate.

Several research on colors have revealed that individuals in industrialized countries prefer blue to yellow colors (Valdez & Mehrabian, 1994) (Franklin, Grandison, & Taylor, 2012). It has been demonstrated that people prefer or despise colors to the extent that they are connected with liked or disliked items. For example, (Franklin, Grandison, & Taylor, 2012) argue that blue is preferred because color is connected with clear water, but green-yellow is disliked because it might be associated with feces and rotten food.

In another research entitled *Color Preferences Are Not Universal*, it is shown that color tastes are affected by culture, social, and environmental forces, rather than being universal or genetically driven as previously thought, by comparing British adult color preferences to those of a non-industrialized culture of the Himba people (Franklin, Grandison, & Taylor, 2012).

This disparity might be explained by the Himba people's proximity to natural materials, whereas industrialized civilizations are dominated by manufactured, high-color-saturated products. Some study has also been done on the impact of color combinations.

Individuals chose fractious color schemes over harmonious color combinations in general, but they detest harmonious color combinations much as they enjoy disharmonious color combinations (Ou, 2004).

Considering people's color tastes will provide cinematographers a better idea of how different cultures would perceive colors visually, which will eventually impact how much they like a film.

2.1.1 Color Perception and Memory: The Difference

There are three forms of color memory, according to (Henry, Cheung, & Westland, 2008): two types of long-term recall and one type of short-term storage. "In terms of users' favorite colors, long-term color memory appears to include a cognitive component, and it is also impacted by a person's purity of matching".

The book entitled *Color Correction Handbook: Professional Techniques for Video and Cinema* reminds out that memory colors are more concentrated than "actual measured saturation of the original subjects" and are not the same colors people experience (Hurkman, 2010). This backs with the findings of, who found that colors recalled are "far more saturated" and that color memory detracts in "lightness and brightness properties whereas hue also deviates but in a less predictable manner". Bodrogi and Tarczali published their findings in 1946 in the publication *Investigation of Human Color Memory*:

Brick was recalled as being redder than the item, sand as being more yellow, grass as being greener, dry grass as being greener, and pine trees as being greener. Except for brick, the lightness of memory colors was higher than that of item color perceptions in all situations. Cited in (Hurkman, 2010).

This begs the question: could perhaps cinematographers and colorists strive to recreate these memory colors if what we predict to see differs from real life? Does an Expert Use Memory Colors to Adjust Images? Does an Expert Use Memory Colors to Adjust Images? According to (Boust, Cittadini, & Ben Chouikha, 2004), viewers prefer visuals that employ memory colors over ones that use actual colors.

In a conference report entitled *The Twelfth Color Imaging Conference: Color Science and Engineering Systems, Technologies, Applications*, CIC also stated that image-making professionals adjust colors to match their own memory colors, especially for natural materials like skin, grass, and the sky, based on their findings (Boust, Cittadini, & Ben Chouikha, 2004).

2.1.2 Between Preconceptions and Resistance, Cinematic Colour

"The field of color covers an area shared between art and science, between physics and psychology, a field that measures the limits of the two cultures, blurring the clarity of their ideas," (Brusatin, 1999). In the film, where art and science, art and method, complement and prevent one other at the same time, this remark holds true a fortiori.

The material and mechanical limitations of its creation in the cinematographic picture render color in particular unrealistic. You might argue it is unexpected because it is invisible at first, in the sense that the color image can't be entirely predicted by the filmmakers, since it can't be seen before it's seen. It defies the interpretive processes that can be put on it in this way.

As a result, before delving into the aesthetics of color in the post war era, it's important to have a look at how it was implemented technically. Even if the chronology of color processes does not always correspond to aesthetic changes or portrayals of color's power, it remains the essential framework for the growth of its usage.

Even though attempts to colorize films have been made since the beginning of cinema (coloring, toning, and tinting), advanced methods, which will ultimately led to color cinema as it is known today, are only experienced from the mid-1930s onwards, once sound cinema has established itself and is on its way to globalisation.

These new procedures were dubbed natural color cinema, as opposed to primitive staining methods. This classification reveals an underlying option: it reflects a wish to adapt color to a realistic aesthetic, as was the case with sound, in order to make cinema a genuine reproduction of nature.

The roots of color cinematography may be traced back to this cliché. Color must enhance films, according to this portrayal, by strengthening their mimetic power in connection to reality. Even before the cinema, at the beginning of the photographic picture, black and white and the lack of colors felt surreal, and a "lack" seemed to exist.

According to Manlio Brusatin, the first black and white photography portraits were softened by hues that resembled natural tones because the models didn't want to be recognized in "the "ugly" character of black and white without coloring, mournful simulacrum of death." Color would thus be another move toward a cinema that is a true representation of nature, and it will be viewed in this light.

Color, on the other hand, does not offer the same challenges as sound right away. While speaking one knew after its emergence improved in terms of imitation with reality, as Jean-Loup Bourget points out, the arrival of the renowned hue "natural" would take time.

Several companies focused on additive synthesis until the 1940s, but this one obligated the superposition of many images taken with various lenses (fitted with selector screens associated with a color). As a result, these images showed a change in perspective and a gap between their particular fields, a flaw that led to the abolition of additive synthesis and the adoption of subtractive synthesis.

For practical considerations, Trichrome Technicolor won out over the other methods (it allowed shooting directly in color, instead of color reproduction at projection) (Millard, 2019). Despite being seen as more "realistic" than the bichrome, which did not allow for the reproduction of all colors, the trichrome Technicolor was first criticized since its colors were overly intense and harsh in comparison to the sensory norms of the time (Andrew D. , 1979).

Color stays a "supplement," something that is given to the picture and so cannot be incorporated into it, even though it is now received at the moment of shooting and not processed after development: it gives the public the impression of being artificially placed on the image. Sound's technical concerns are "external" to its processing, in the sense that they involve synchronization and the mobility of the recording devices.

The color itself cannot be caught directly by the camera, as it is. It must be "artificially" disassembled and then recomposed by numerous monochrome layers: either various films (additive synthesis) or several layers in the same film (subtractives).

The concept "natural colors," which stems from the fact that color is now taken during the shooting rather than being added to the film as in earlier processes, can only be unsuitable in these circumstances: all of the new methods that emerged in the 1930s – particularly the improvement of the trichrome Technicolor – can only provide equivalents of natural colors, which are themselves relative. Those are deceptions aimed at approaching the phenomena of color, its appearance (Valan, 2012).

2.1.3 The Unavoidable Painting Model

Color returns cinema to its particular, that of the picture: it cannot be absorbed into the "noble" framework of literature that was given to the cinema since it is deemed a "distraction," an inconvenience for the script's written story (Küller, 1986). Another type of art is then presented to him as a model: painting. But, having been limited to genre films and commercial cinema for the first time, people might speculate that this is what would paradoxically give cinematic color its independence, therefore stressing the originality of cinema and de facto removing it from the paradigm of visual art:

This creative partnership between the painter and the filmmaker never took shape, for a variety of reasons, including the fact that color did not initially exist in the "art" cinema, but rather in the "average" stage of cinema, which was based on different ideals and capacities.

Several directors, like Vincente Minnelli, would subsequently reference and take inspiration from the picture, but they would focus on capturing the cinematographic core of the hue (Higgins, 1998). According to J. Aumont, the fact that color has never been accurate, despite the ideology's desire for it to be a part of a specific photographic naturalism, caused its usage to be instantly likened to painting (Aumont, introduction à la couleur - Des discours aux images, 2020). This theory connects to preconceptions about the photographic picture's inferiority, as well as the romanticized image of the painter as having complete control over his color on its own:

"The photographic picture suffers from the significant disadvantage of remaining chemical rather than being transcendental, as painting is. (...) Furthermore, and this is a different part of the same argument, painting understands color because painters have studied its rules. That these laws aren't pictorial (...): it doesn't matter; they're there to feed the delusion of the "chemical" image's inferiority (as if painting weren't chemical)" (Aumont, introduction à la couleur - Des discours aux images, 2020)

Jean Mitry, in particular, draws this parallel with painting, arguing that the color in films must be as close to reality as possible. It is beneficial to examine his argument concerning the creative future of color films in order to move away from it. His point is not simple: he does not believe that color should be an exact reflection of color in reality at the cinema, but that it must nonetheless be a faithful reproduction of the perception of

color in reality, the vibrant "feel" of his keys, similar to what the impressionist painters achieved in painting. (Andrew J. D., 1975).

This article reflects a belief that a color is "successful" when it approaches the sense of color in reality: but this view is very subjective. In whatever form of reality replication, there is no way to ignore color and this is in contrast to popular belief about normal sight, in which color is never an amplifying input; any question of mimicry comes up against a "natural" conception of reality and its perception. Several color scholars such John Gage, Michel Pastoureau, among others have emphasized the unique and unusual aspect of color in daily life (Gage, 1999).

The eye proceeds to "correct for uneven, aggressive, surprising true colors" in its view of life, which the picture does not. As a result, reality is always duller than the photo-cinematographic picture. The seen truth is always more "natural" than imagined, and color vision in nature is not intuitive: like a painter or filmmaker, you must make an effort to see (Valdez & Mehrabian, 1994).

When confronted with this inner color resistance, the filmmaker's task is comparable to that of the painter: bringing forth the color of the world. this spike can be seen in what the cinematographic "heart" of color is dubbed a bit earlier. The artificiality of color in film must be considered in this context. The Eastmancolor is not, in and of itself, closer to the colors of reality than Technicolor: it is, above all, closer to the concept people have of it, or rather, to the way people are used to it, according to past knowledge conventions. The hue that is translated to the screen loses all of its "abnormality," and hence seems excessive:

" Having loyally recreated sight "in black and white," one approaches vision in colors with difficulty and perhaps intellectual opposition, whereas the optical instruments manufactured for vision (...) produce chromatic explosions, precisely when the colors are obvious as not adhering to reality. » (Bellantoni, 2005)

Green, the "natural" hue, astounds even more observers for these reasons: In *Vertigo*, Hitchcock uses this "modern" green, which appears unnatural and frightening. The neon glow that floods Judy's hotel room after she succumbs to Scottie's extortion and morphs into Madeleine is just as toxic and harsh as the wide swaths of grass Judy and Scottie cross.

2.1.4 Chemical Color in the Twentieth Century: A Cinematic Universe

The color is in-absorbed, thereby adding to our perception of reality; nonetheless, it is impossible to make it innocuous and undetected since its "signifier" (rather than symbolic) significance constantly exerts itself in totally unexpected ways. Color, according to Manlio Brusatin, is a "technical material of" objectification," the addition of a thin layer or of a tint given to the real, which coagulates on the real, due to its lack of unity.

Color in the movies isn't genuinely unrealistic, but it does startle since it must differ from what it is used to see and is thus shown as a color above all. In ordinary life, people are nearly surrounded exclusively by impure hues, Wittgenstein observed (Wittgenstein, 1950). It's even more astounding that the notion of "pure colors" was invented. (Wittgenstein, 1950). If the Impressionists are taken as an example, Jean Mitry's belief is shattered because, even if these artists discovered the "game of genuine colors," the hues they employed were no more real than those present at the cinema. (Andrew J. D., 1975).

Mitry subverts the concept of naturalness by envisioning a cinematic equivalent of impressionism. He is, nonetheless, a prisoner of this "equivalent" of the real but extremely relative (Andrew J. D., 1975). The Impressionists did not "succeed" in the way that he defines it; rather, they provided an approach to reality through their unique method of painting. Paint, to quote Jacques Aumont, is a chemical. (Valan, 2012). The impressionists' depiction of reality was no more "realistic" than color cinema's; they were essentially imposing "a new reality," which required the viewer to "look" at the universe he thought he (re) knew with evidence in a new way.

The films which are going to be discussed are films that break free from the aesthetic legitimacy of painting by inventing a purely cinematographic color (not the painter's nor the photographer's). Even though that is ironically obliged to accept the system of pigments, color matter, through parametric synthesis (although it would better be predestined to the additive synthesis of optics), it is nevertheless a color of light that moves, acts, in time and movement, a color susceptible to everlasting change.

Color in the cinema dissolves the distinction between light (considered as the domain of photographers) and color (regarded as the domain of artists); the cinema unmistakably demonstrates the impossibility of this sharing by confronting light and color and forcing them to collaborate.

Filmmakers must reconstruct the colors as one recognizes them, but within the technological limitations of cinema, by working with the color's "defects" (flat areas, artifice, etc.): to achieve this – and if the reference to painting is unavoidable – they must not try to film like painters, but rather paint like filmmakers.

Photographic color does not have the luxury of displaying all the complexities of color as they occur in real-life experiences; in painting, the impressionists and Fauves developed strategies for portraying a specific sense of color in all its complexity.

Furthermore, the use of color in modern art took time to establish itself, and it was just as capable of "disturbing"—notably with the fauvist movement, neo-impressionists, and nabis—as Technicolor (Millard, 2019). But, just as there isn't just one perspective, there isn't just one approach.

The look at reality in cinema is no longer the same as it was during the Impressionist period, and it does not always correspond to the same subjects. Plastic materials with a color included in the material itself or flat industrial hues will be the color of choice in the twentieth century.

2.1.5 The Relationship Between Color and Sound

According to (Zakia, 2007)) in the book *Perception and Imaging* It is commonly understood that music impacts sensory properties owing to a neurological phenomena known as synaesthesia; basically, a mingling of the perceptions in which experiences in one sensory modality can generate conscious perceptions in a completely other sensory system. However Because synaesthesia is an uncommon neurological disorder that affects around 4% of the population (Baron-Cohen, 2013), how might color impact sound for the rest of us? In an interview, Sam Berens says that tone-color synaesthesia is one of the most prevalent types of synaesthesia, in which hearing sounds produce a "hallucinated" sense of color.

Remarkably, research related with similar experiences seem to agree more than would be predicted by coincidence on which sounds map onto which specific colors, implying that there probably a hard-wired biological mapping between color and sound (Ward, Huckstep, & Tsakanikos, 2006).

Moreover, though such synaesthetic experiences happen for a small number of people, a new study found that when non-synaesthetes are asked to pick the best color for a certain tone, they agree on the mappings more than would be anticipated by chance.

High tones appear to be related with brilliant yellows, whereas low tones appear to be associated with dark blues (BBC, 2011). Professor Jamie Ward (University of Sussex psychologist) discovered that we are all somewhat synaesthetic (Garfield, 2006).

Non-synaesthetes created one color animation to complement the music, whereas synaesthetes created the other. The subjects overwhelmingly preferred the synaesthetic-created colors, implying that, whether we realize it or not, we are all synaesthetic to some level. Based on the information, it is reasonable to assume that the colors in the composition should correspond to the comparable sound colors in order to create a more harmonious scene.

When creating a more uncomfortable, maybe dramatic scenario, color-tone dissonance should be used. Because this science is not well known, it may explain why it is not extensively utilized in film. If applied in film, this might make films more emotionally effective by providing new strategies to impact an audience: color-tone discord may generate fear, while color-tone harmony may decrease anxiety.

Since this technology gets more well recognized, cinematographers and sound designers/composers may find themselves working more closely together as they become aware of how their own decisions influence the perspective of each other's works.

2.2 Links between Colors and Emotions

Color is an important indicator for identifying items. Color may also generate emotion and sentiments in the spectator. Colors' emotional meanings are important because products must display colors, and the sensations created by colors have an influence on daily life. Colors, for example, have a big impact on emotions and preferences in marketing; the colors of products positively or negatively affect viewers' perceptions of them, and colors contribute to product differentiation as well as brand and corporate image difference.

Several studies have been conducted to investigate emotional correlations with colors using various measurement methods and groups. (Wexner, 1954) looked at colors related with 11 different mood tones, such as energetic and soothing. (Schaie, 1961) used a sorting approach and a paired comparison method to assess the degree of color–mood correlations.

In their article entitled Colors and Mood-Tones, David Murray and Herdis Deabler investigated socioeconomic and regional disparities in color mood correlations

in a variety of groups like university students from two different areas, and neuropsychiatric patients discovered socioeconomic differences in color mood relationships (Murray & Deabler, 1957).

The authors of the the article entitled *The Colors of Anger, Envy, Fear, and Jealousy: A Cross-Cultural Study* investigated cross-cultural connections of colors with four emotions which are: anger, envy, fear, and jealousy (Hupka, Zaleski, & Otto, 1997). In another article entitled *Relationship between color and emotion: a study of college students* written in 2003, researched color–emotion correlations using objectively defined hues (Kaya & Epps, 2003) (Kaya & Epps, 2003). On the other hand, in the article entitled *The emotional connotations of color: A qualitative investigation*, Thomas Clarke and Alan Costall used a qualitative descriptive technique based on semi-structured interviews to analyze the emotional meanings of colors (Clarke & Costall, 2008).

Red is connected with fury and excitement, green with serenity and tranquillity, yellow with happiness and brightness, blue with calmness and comfort, and black and gray with melancholy, despondency, and despair. Although these correlations have been identified across various cultures, there have also been culture-specific associations observed. Blue, for example, is connected with depression in certain situations but not others, while white is associated with cleanliness and purity as well as emptiness, with these connotations varying between cultures.

Furthermore, (Hupka, Zaleski, & Otto, 1997) discovered that colors have fewer consistent correlations with envy and jealousy than with wrath and fear across cultures. Studies on color–emotion correlations in diverse cultural backgrounds, on the other hand, have discovered commonalities in color–emotion associations. Colors evoked comparable emotions in US college students, Tzeltal-speaking people in Chiapas, and Arawakan-speaking Machiguenga in Peru.

While it is uncertain if color–emotion linkages are culture-specific or universal across cultures, cross-cultural variances in color–emotion associations do not appear to be significant. Although there have been reports of sex differences in color preferences, Wexner reported no sex differences in color–emotion associations, and few studies have reported sex differences in color–emotion associations in adults with the exception of (Hupka, Zaleski, & Otto, 1997) who reported minor sex differences in color–emotion associations interacting with nationality).

In comparison, significant gender variations in color–emotion correlations in youngsters have been documented; for example, girls identified pink with happy more than males, but boys associated blue with happiness. These gender disparities might be ascribed to traditional connections of girls with pink and boys with blue, which could result in gender variations in color preferences, eventually leading to linkages of favored hues with happy feelings. Despite these gender variations, the general pattern of color–emotion connections for girls and boys was similar. In support of this conclusion, Lawler and Lawler found no gender differences in children's color–emotion correlations.

Color–emotion correlations have also been studied indirectly in different cultures using psychological assessments such as semantic-differential (SD) ratings. (Adams & Osgood, 1963) used SD measures to assess emotional meanings of colors which are also known as color emotions in Japanese and US college students and found similar results for both groups. Adams and Osgood used SD measures to assess the emotional meanings of colors in 23 groups of male high school students from 20 nations.

Furthermore, they evaluated numerous research on the affective meanings of colors conducted in various countries and discovered good reliability in efficacious definitions of colors across nations; for instance, red has high activity and potency, yellow and white have low potency, blue and green have high evaluation, and black has good efficacy and decreased activity. The article Study of Color emotion and Color preference. Part III: Color Preference Modeling investigated the emotive meanings of colors using a method like the SD approach, and they found commonalities between British and Chinese participants as well as slight variances across seven distinct geographical groups, the same article also investigated female and male reactions to color emotions and discovered comparable findings (Ou, 2004). Furthermore, few research on color SD evaluations have found gender variations. As a result, the gender difference in SD ratings for colors appears to be minor, if there at all.

Since certain emotional connotations with colors are universally noticed, there are significant cultural differences. This might imply that color–emotion correlations were developed through convention, which could represent the accumulation of shared experiences. Children undergo a variety of color experiences, and colors are related with the emotions they feel throughout those encounters.

As a result of these encounters, people establish color–emotion correlations. Because individuals who live nearby typically have common experiences, and because

people from the same culture have numerous opportunities to contact and communicate with one another, cultural conventions of color–emotion associations may be created via common experiences.

Numerous research back up this theory of personal experiences and societal norms. (Kaya & Epps, 2003), for example, found that college students in the United States identified yellow-green with disgust and sickness, most likely because it reminded them of vomit, and green with relaxation and comfort because to an underlying relationship with nature.

The article entitled Relationship between Color and Emotion: A Study of College Students demonstrated that additional color–emotion correlations might be explained by the emotional experiences that colors evoke. Nonetheless, this explanation does not explain the observed consistency in color–emotion connections between 3 and 4 year old children and adults since 3 year old children would not have had as many opportunities to acquire cultural standards or had as many similar experiences with others. Furthermore, the fact that some color–emotion connections are uniformly found across many cultures may not be entirely compatible with this idea (Kaya & Epps, 2003).

Colors may also directly create emotions via an underlying physiological process. Colors have been shown to generate consistent physiological reactions, with red and violet often increasing participants' arousal and blue and green decreasing it. However, these impacts were not always considerable. The effects of colors on human physiology appear to be significantly dependent on experimental settings.

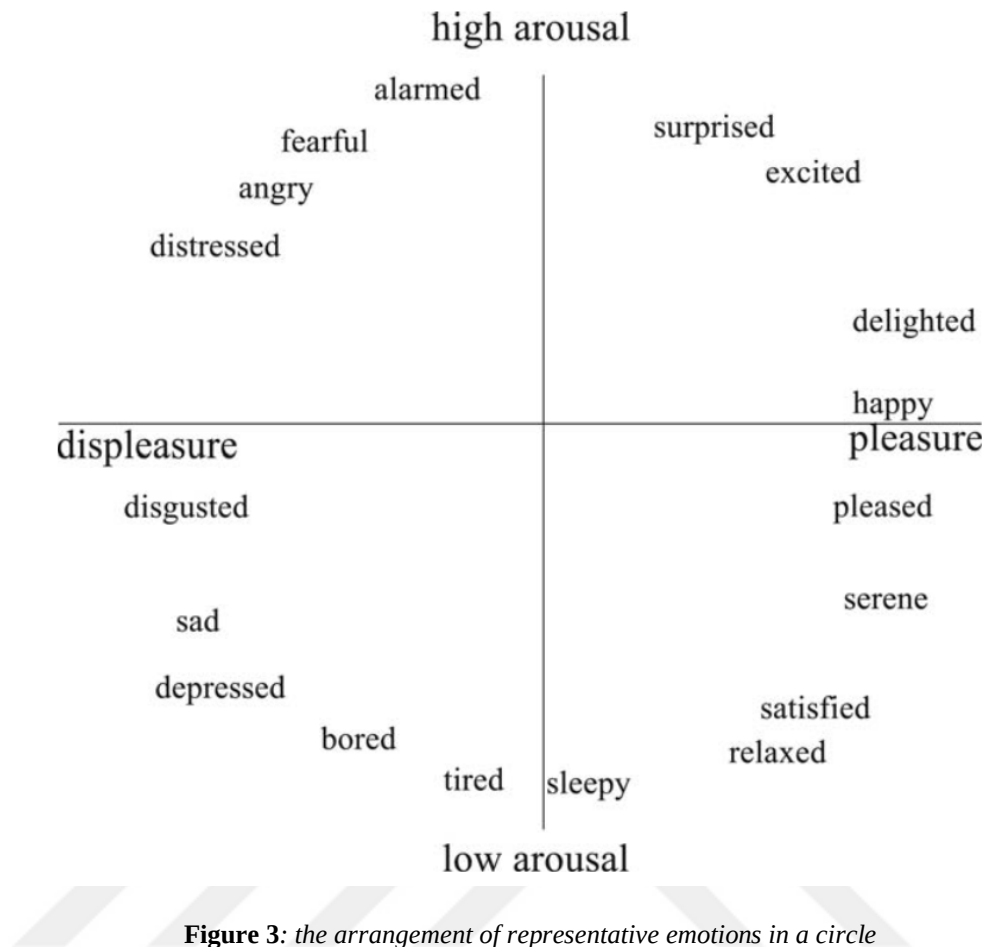
The article entitled The Development of an Emotion Model Based on Color Combinations has investigated the influence of colors on mood using psychological measures with or without physiological monitoring (Lee & Joohyeon, 2006). Warm colors like red and yellow increase anxiety more than cold ones such as blue, green. Blue, more than any other hue, promotes emotions of relaxation and tranquillity. In addition to the physiological research stated above, these data imply that warm colors are more stimulating than chilly hues. Some research, however, have revealed no significant effects of color on emotional states or moods, while others have discovered more complicated patterns of mood induction than the assertion that red is stimulating and blue is sedating (Lee & Joohyeon, 2006).

Other research suggests that saturation and brightness are more essential than hue for the emotional impact of colors. Although it is unclear if the psychological measures

employed in these research examined induced emotions or color–emotion connections, these findings support the idea that colors do have an impact on emotions (Bird, Horner, Franklin, & Berens, 2014).

However, the effects of colors on physiological processes or emotions may be the outcome rather than the cause of color–emotion connections; physiological impacts may be induced by color–emotion associations created by processes other than physiological ones. Arousal is increased by emotional connections of red with excitement or recall of red-related experiences. Color's physiological impacts may be cognitively mediated, according to (Kaiser, 1984).

In a two-dimensional environment, emotions are frequently depicted circularly. (Schaie, 1961), for example, examined mistakes in face expression assessment and discovered a two-dimensional space of facial expression characterized by two degrees of pleasantness and arousal. (Russell, 1980) also offered a circumplex model of emotion - affect that included scaling techniques such as multidimensional scaling. Emotions are also represented in a two-dimensional space by pleasantness and arousal axes in the model. Figure 3 depicts the arrangement of representative emotions in a circle. Other investigations discovered similar circular patterns of emotions in a two-dimensional area with modest changes.



Colors and sentiments can therefore be portrayed as a two-dimensional circle. We believe that emotions are tied to colors since the hue and emotion circles correspond. Evidence from psychophysics and cognitive psychology reveals that humans can easily match the degrees of entirely distinct variables, such as the severity of crimes and music (mass murder to fortissimo and accumulating unpaid parking tickets to pianissimo). The quick, intuitive, emotive, and instinctive thinking mode is thought to execute intensity matching across unrelated aspects. Given this human inclination, this form of matching between the circular ordering of colors and emotions is possible.

To explain color–mood relationships, attempts have been made to correlate a hue circle with a mood circle. (Ross, 1938) examined appropriate colors of illumination for theatrical plays and discovered that appropriate colors were connected to the mood of the plays; warm colors are appropriate for comedy and chilly colors for tragedy. He also matched Hevner's mood circle to the color circle. Similarly, (Odbert, 1942) used music–mood and color–mood correlations to try to match Hevner's mood circle with the hue circle. These studies did, however, have certain flaws.

Initially, Kate Henver's mood circle was based on music-induced mood and removed certain basic emotions such as wrath, terror, disappointment, and contempt, maybe because music cannot elicit such overwhelming sensations but can induce less intense sentiments. Long before the circumplex model of emotion, Hevner's mood circle was presented and garnered little attention. Second, rather of being conducted directly, the mood–color link was conducted indirectly through the mediation of music or drama. Third, advanced statistical methods failed to link colors to emotions.

In his article entitled *Emotion, a Psych evolutionary Synthesis*, Robert Plutchik offered another form of an emotion-theoretical circular model, driven by the parallel between the opponent–color theory and the circularity of emotions. He argued that there are eight fundamental emotions, each of which consists of four pairs of opposite feelings such as joy–sadness, trust–disgust, fear–anger, surprise–anticipate. Other emotions are combinations of main emotions, similar to colors that are not primary colors. Although he alluded to parallels between the color and emotion circles, he did not appear to suggest that his emotion circle corresponds to the color circle and did not provide empirical proof for it (Plutchik, 1980).

Yet, in the article *A dimensional approach to the circular ordering of the emotions* (Fromme & O'Brien, 1982) discovered some experimental data that somewhat supports the correlation between Plutchik's emotion circle and the hue circle, albeit they did not explicitly assess their consistency.

Colors are frequently used to depict emotions in interactive systems and the arts, generally in conjunction with animations and forms. The relationship between (Russell, 1980)'s or (Plutchik, 1980)'s emotion circle and the hue circle was assumed in such interactive systems, and the color that reflects an emotion was shown based on that correspondence. The correlation of the hue and emotion circles has been well accepted in information and communication technology, however there is no clear empirical proof to substantiate it.

In a biplot, the distance between a hue and an emotion approximately depicts the degree of relationship between them. If there is an underlying relationship between the hue and emotion circles, then these circles should appear in the biplot and overlap. If a separate principle mediates color–emotion association, the color and emotion configurations in the biplot will not match the hue and emotion circles.

2.3 Human Color Preferences

Color preference psychology has been researched for over a century, yet, contrary to common belief, little is known about the variables that influence color preference or its biological beginnings. The majority of previous color preference research has been phenomenological, with the goal of determining which colors people like rather than why they have preferences at all. Researchers have just lately begun to investigate the meaning of color choice in terms of its evolutionary roots and biological importance.

It's normal and usual to think of colors as abstract qualities that exist independently of any thing or surface: we can easily recall the colors green or red without picturing a leaf or strawberry. Similarly, we may imagine an actual material object – such as a piece of fabric or a face – being a different color, as if we could lift the surface color and modify it before reapplying it (J.Adams, 1987). One may argue that we humans have the ability to mentally repaint objects in new colors because we can do so literally, such as by using real paint or pigments, exposing our skin to the sun, or modifying photographs with modern graphics software.

It's possible that the capacity to abstract color emerged only after our evolutionary forefathers learned to control surface color. Color is a perceptual characteristic that exists both as an object attribute and as a mental entity - it is detachable from physical surfaces, regardless of these guesses. This fact is what drives the differences made in color science between different 'modes' of color - surface colors, related colors, and void colors (Beck, 1973). Color exists as an abstract characteristic as well as an object property, according to data from neuroscience.

Color is analyzed by specialised brain cells at early stages of visual processing, irrespective of shape, motion, and depth, according to popular wisdom. Recent data shows that this separation isn't total (Gegenfurtner & Kuper, 2003), but the mechanisms that combine color with these other visual properties to build neural representations of objects, as well as where these processes take place in the brain, are still unknown. Furthermore, there is evidence that brain representations of color exist even at very late stages of visual processing, irrespective of representations of other qualities.

Following lesions of the central visual pathways, (Critchley, 1965) observed many events in which colors appeared to 'release themselves from the limits of their objects' and radiate out into the surrounding area. (Murphey, Yashor, & Beauchamp, 2008) found that electrical stimulation of neurons in the ventral temporal cortex of a

conscious person generated non-localisable sensations of a "blue, purple tint, resembling aluminum foil as it burns." Neurons in a similar inferotemporal cortical region (TE) in closely related monkeys exhibit great selectivity for color but modest selectivity for form when electrophysiologically probed (Chatterjee, Field, Horwitz, & Conway, 2010).

These and other findings imply that, even at late stages of visual processing, certain clusters of neurons encode color in an abstract sense, unbound to a surface and unattached to an object. The dominant theories on the evolutionary origins of color choice revolve around this 'abstract-able' feature of color. Given the relevance of object color in survival-critical behavioural tasks like locating ripe food or attractive mates, we humans would have acquired preferences for colors that indicate helpful or desirable features of the items to which they are associated. That is, a preference for colored items will develop into a liking for the color itself.

The impulse to find edible crimson berries will grow into a general preference for reddish contrasts against a greenish backdrop. If colors and things were not distinct, this development of color choice from object preference would not be possible. Of fact, the constant, recurring need to pick favored items may have driven the separability of color out of a need for efficiency, reducing the process by selecting things based on a single visual feature rather than the complete complex of object qualities.

Several authors, including (Humphrey, 1971), (C.Hurlbert & Ling, 2007) and, most recently, (Palmer & Schloss, 2010), have advanced the claim that preference for colored items generates liking for color (2010). According to (Humphrey, 1971), in order to comprehend the emotional significance that individuals place on colors, one must first comprehend the significance of what colors communicate in nature. The potential of red to stimulate both good and negative emotions, according to Humphrey, resides in its widespread usage as a behavioural signal, suggesting edibility in berries but poisons in toadstools, sexual attraction in a monkey's bottom but menace in an open mouth.

'... since foodseeking has certainly influenced the development of trichromatic color vision, it is plausible to infer that it may have also influenced color choice,' (C.Hurlbert & Ling, 2007) conclude. The colors of more appealing meals may be instinctively favoured...' (C.Hurlbert & Ling, 2007). Individual color preferences may originate from emotional responses to specific items experienced over an individual's lifespan, according to (Palmer & Schloss, 2010), who shift the argument from a phylogeny to an ontogenetic period.

Their test of the 'ecological valence hypothesis' demonstrated a good correlation between average individual color preferences and average individual preferences for things linked with the same colors in a local community (Palmer & Schloss, 2010). Despite these arguments' commonsense appeal, it's vital to remember that neither the evolutionary nor the ontogenetic claims have been confirmed, and the amount to which preferences are hard-wired vs. individually adjustable is still an open subject.

Personal long lasting interactions may have a heavy impact on color preference (passions for football clubs may lead to enthusiasm for team colors, and local rivalries may result to revulsion for other colors, as Newcastle and Sunderland supporters are well aware), but these individual variations may be built on top of underlying universal preferences that remain relatively unaffected (Kaiser, 1984).

Furthermore, where universality exists, it is difficult to distinguish the origins of universality: common preference patterns across a population may indicate 'hard-wired' choices founded over an evolutionary timeframe, or individual, plastic preferences constructed through common exposure to common stimuli that evoke popular emotions – the pleasure evoked by a clear blue sky may be as common now as it was millennia ago, and any subsequent priority for blue may thus have evolved.

Despite the relevance of color's behavioral applications and the known sensory and physiological qualities of color vision, it is obvious and convincing to argue that preference for things with colors that communicate helpful or desirable properties should transfer to the colors themselves (Bellantoni, 2005). Thus it is critical to examine trends of human color choice through time to see if they fulfill the expectations of the primary hypothesis. Previous research on human color choice were indicative of universal trends, but were not systematic or controlled to confirm the idea. Recent research has shown both universality and uniqueness, as well as mutability across culture and age (Berens D. J., 2014) (Chatterjee, Field, Horwitz, & Conway, 2010).

2.4 Color Challenges in Relation to Black and White

As previously mentioned, our perception of color is influenced by our socio-cultural surroundings. The view described above through the eyes of the "collective body" develops significantly with the times. Beyond the basic fashion impacts that follow one other over time, technologies that grow and affect our everyday lives contribute to the narrative of color history. (Tanizaki, 2001) and his book *In Praise of Shadows* is a wonderful statement on this, on how people's perceptions of the hue of objects changed with the introduction of electric lighting in their houses.

The Writer of *In Praise of Shadows* emphasizes that an object has a captivating hue while observed in near darkness, but its allure fades when exposed to light (Tanizaki, 2001). The question is not whether this object's color is lovely or not, but under what lighting circumstances will it be sublimated. Picking a color is not about choosing the color of an object, but about matching the color of an object with the quality and amount of light that illuminates it. (Tanizaki, 2001) appreciates this hue observed in a dark setting because he witnesses a period when beauty was veiled in the dark.

As a result, the light that shows everything appears obscene and unsightly to him. Beauty now is not an inner plunged into darkness, as it was for the Japanese at the end of the nineteenth century. In the works of architect Zaha Hadid, beauty may be found in rooms with curved lines and lots of light (KEIMFARBEN). This is presently possible because to modern building processes and materials. However, due to the business and shifting styles, these curves are unlikely to be popular in the next years. The collective body's tastes vary and move continually, and film is no exception.

To discuss black and white and color in film, we must unavoidably connect our observations to camera technology, as well as this concept of preferences and socio-cultural references. Marie Lafont's thesis explores the usage of black and white in the context of color; we touch on it briefly here because it is part of the process of selecting color ranges for photographs (Lafont, 2008).

Because color techniques were still in their infancy at the time, most films were filmed in black and white. Color, on the other hand, was not banned from movies. On the one hand, the filmmaker might color the photograms one by one, much like a painter, but methods such as *Kinémacolor* (1906) swiftly arose (McKernan, 2017). However, due to the complexity and cost of the time's processes, the outcome of flashy color, and the

impact of black and white photography, most films were filmed in black and white until the 1960s (Deleuze, 2003).

Many films, such as *The Wizard of Oz* (Fleming, 1939), have been filmed in color to reflect a dream rather than an illusion of reality. The collective memory preferred black and white to mirror reality and did not support the colorful industries. The public was used to see colors in paintings, which were therefore the territory of the imagination, rather than in black and white photography, which reflected reality.

In the book entitled *La Chambre Claire*, the author states: "I always have the sensation that, in the same manner, in all photography, color is a coating given later on over the basic reality of black and white" (Barthes, 1980). Color is a hairpiece and make-up for me like the one with which corpses are painted. Because what counts to me is not the photograph's "alive," but the confidence that the photographed body comes to touch me with its own rays, rather than an added light." True beauty is black and white for Barthes, while colors are in the shadows for (Tanizaki, 2001).

The colors of the films, when black and white was the standard, are frequently honest and dazzling; when compared to black and white, they are like an anarchic outburst. In contrast to monochrome, Deleuze writes of color's absorbing power: "(...) from the outset of a whole cinema of color, Minnelli had made absorption the properly cinematographic force of this new dimension of cinema." (Deleuze, 2003) As a result, the dream plays a role for him: the dream is just an absorbing kind of color. Because it overflows, fascinates, and lends a surrealist depth to these people that we were accustomed to seeing in grey, the color could not represent the real but the dream and the amazing. It was vital to make this voyage in color to transport the viewer to another universe. *The Wizard of Oz* is the most obvious illustration of this: portions of reality are black and white, but the *Wizard of Oz's* universe is awash in a thousand colors (Fleming, 1939).

"The very rays of reality" were black and white. We knew we were somewhere else as soon as the color came, that the filmmaker was transporting us away from our regular lives (Dixon, 2015). Now that color is our reference, utilizing black and white will connote a different age or world. If reality is depicted in color in film, how is the fantastic now depicted? We must explore a means to divert our colored landmarks so that we may recognize a magnificent world that differs from the portrayal of reality by using more vivid or stylised colors.

Another problem with color mastery, mastering colors also entails being conscious of the age and socio-cultural conventions in which one works, because different colors and color associations convey different emotions. According to this, we may discuss the subtleties we want to bring to our colors with the director. To conjure reality, we must be mindful of our perception; the colors, if beautifully arranged, would appear to us to belong to a dream. Representing reality is both subjective (it depends on our observations of it) and a matter of dose in each work (Braga, 2011).

Each piece that makes up the frame is worked for this one; to provide the appearance of realism, these elements must be worked on without appearing overworked. Wes Anderson's most recent films, with their intricately crafted universes, belong to a realm of dreams or illustrated books, not our reality. Rushmore, the director's second picture, whose color spectrum is not as well mastered as in *Moonrise Kingdom*, appears much more realistic than the latter, which belongs to infantile fantasy (Anderson, 1998).

Color, among other things, contributes to the appearance of realism in film, which is the result of a balance between décor, light, and color. The smallest change can make sense and transport the spectator into a cinematographic genre (Cavell, 1979). This change can be modest, relying on tones that have significance for the collective memory, but it is sufficient to steer the image toward these shared references.

Color has influenced how genres in cinema have evolved and grown more specialized. As filmgoers, we situate ourselves in a realm that is either futuristic, gory, apocalyptic, sensual, or fantastic. Spike Jonze's film intitled *Her* depicts an imminent future with a subtle use of color and high-tech accessories (Jonze, 2013). He succeeds in imagining a future that is not implausible, but rather one with which we can connect. It is not necessary to investigate which color contributes to this impact because it is a combination of options that allow for the future environment.

Representing reality is not the same as accurately capturing it. Sabine Lancelin, the director of photography interviewed for this thesis, informs me about the challenge of dealing with the hues of our everyday life (Lancelin, 2022). We live in a world of incredibly bright and chaotic hues, which digital cameras capture with even greater saturation. If we catch them as they are, the pictures' objectives will be muddled and uneven, and we will not achieve a realistic impact. These colors, which stand out strongly once captured, provide a dilemma during calibration, as we will want to adjust the

saturation of this color without affecting the overall saturation of the image. These colors should be identified before the shot and worked on or modified accordingly (Lancelin, 2022).

Because our instruments interpret as soon as they record a picture, our experience of reality on a screen is not a "faithful" recording of our reality. To portray a genuine sense, it is vital to experiment with colors gently. (Lancelin, 2022) prefers to neutralize the hues of reality, bringing out just the colors that must identify the viewer for the goal of the storytelling in the image. A photograph that Sabine Lancelin loves and that exhibits reality is one with neutralized colors. It would be interesting for everyone to see what a realistic image looks like and how saturated the colors in this image are.

To seize color, you must understand how to employ both words and visual references, because words are required to begin the task and to establish the intents that the picture, and therefore the color, must carry. Following that, visual references are used to improve the color search, which is difficult to convey in words. When confronted with visuals, we judge if "it works or it does not work," and we strive to comprehend our impression. This section helped us better comprehend the socio-cultural concerns surrounding color and the relationship between color and cinematographic genres.

2.5 The Colors according to the International Commission on Illumination.

Before going further, it is necessary to assimilate what a color is according to the normalization made by a technical body, the CIE, created in 1931. Let us start from the three categories of colors: the colors of light (physics), the colors of objects (chemical colors) and the colors we see (perceived colors and physiological colors) (Abramov, Gordon, & Chavarga, 2012). The color of an object we see is the sum of the color of that object and the conditions of light in which we see the object.

Colored light was first physically described as a wavelength measured in nanometer (nm). At each length wave corresponds to a monochromatic color (ex: 540nm is a green). With this single dimension (an axis ranging from 380 to 780 nm) we describe only monochromatic colors (called also spectral), that is to say the colors more saturated: less saturated colors are missing, and polychromatic hues. white light is a mixture of several wavelengths, it is polychromatic light. In 1931 the CIE decided to illustrate the

set of visible colors created by the blending of monochromatic lights through *pointers* the x y axes chromaticity diagram (Block, 2021).

The spectral colors are placed on the curved line delimiting the diagram. The ends of this curve are connected by a straight line where the purple colors are placed; these colors have no wavelengths, they are a proportionate mixture of violet and red. In the heart of this form each point is a mixture of spectral colors that we can represent with a color spectrum.

To differentiate the colors of lights from those of objects, Michael I. Pointer drew the object color space within the color chart lights, it is called the Pointer's Gamut color space and it is drawn in white above. The colors that can be found on the surface of objects are less saturated. the fluorescent colors were not indicated since they are placed beyond the space of Pointer (Sève, Indergand, & Lanthony, 2007).

Back to our digital image. It is captured and recorded so as to contain the information necessary for color reproduction: the three red components, green, blue are used to describe the hues. The three components are the colors most saturation that can be obtained. Finally the luminosity is described, by the intensity signals light which are at the origin of the RGB layers of the digital image. (Gegenfurtner & Kuper, 2003) The primaries create a two-dimensional space, the amplitude of the electrical signals bring the third dimension. Images are saved in a color space, but it is wrong to say that the camera has a color space (Céline Bozon, 2022). The camera “sees” all the colors of reality, but is obliged to simplify³⁹ them in order to record them digitally.

Depending on their chemical composition, photosites react to different luminance levels (they are more or less "sensitive"), when they react they have a linear operation: the more light they receive, the greater the signal (Yumibe, 2012). When the photosites do not receive enough luminosity, they have by nature an electrical noise. When we get out of this noise, we decide the minimum of the signal, but the border to know where stops the noise, which will still be present in the picture anyway, is blurred (Valan, 2012).

The signal does never starts at quantization value 0 to leave this margin. Photosites reach saturation if they receive too much light, this is called sensor clipping. To save the image we must perform an analog-to-digital conversion (ADC), each electrical value is associated with a numerical code. Then you have to apply a quantization, i.e. reducing numerical values to whole numbers ranging from 0 to 255 for

8 bits, or from 0 to 65535 for 16 bits. This quantification makes it possible to translate the signal to reproduce it, this organize its image information (Valan, 2012)

You can apply the quantization linearly, the difference between two successive numerical values describes always the same difference in luminosity, but to more faithfully reproduce the operation from our view, some camera manufacturers prefer to apply a correction logarithmic: the difference between two successive numerical codes does not describe a difference of constant luminosity, but the greater of the two codes is systematically associated with a luminosity double that associated with the smallest (Millard, 2019).

Depending on the cameras, the log curve associated can have different equation and be a compromise between the log scale and the scale linear (Aumont, introduction à la couleur - Des discours aux images, 2020). From the moment the linear scale is not kept, to prefer an organization logarithmic of the values, we say that there was a "lin to log" conversion in the processing camera computers. This conversion has several advantages (Aumont, introduction à la couleur - Des discours aux images, 2020).

First the log does not describe the nuances to which we are insensitive. We gain space computing in the quantization values, which can be used to describe more difference in brightness. This means that we gain in image dynamics. The dynamics of a image is the number of different perceived light levels that can be recorded (Beck, 1973).

Where has for the eye many shades of gray between the whitest point and the blackest point, then the dynamic is great. We speak of dynamics for an image, it is a interpretation of reality, for a real subject we can speak of differences in brightness, contrast, but the shades will never be more or less numerous. If we say that a camera has a great dynamic is that. it is suggested that it can reproduce in an image a lot of shades of different luminosity with great contrast before "clipping" the whites and black people. (Beck, 1973)

Clipper means, for the highlights, that from a brightness value which is associated with a maximum quantization code, all values above will be equal to this same code, so there is no more nuance. This term can also be used for low lights. Light intensities that are too high or too low for the dynamic range of the camera (with given settings) will be recorded as not differentiated. The real is rich in different brightness levels, need to adjust the camera from so as to record what interests us, therefore to place the dynamics of the image to capture the brightnesses of our subject.

The eye and the camera show similarities in the analysis of colors and luminosities, the difference being that the camera must translate what it "sees" into code digital to allow the reproduction of the images thereafter on our screens and our spotlights. This difference leads to quality losses: need to compress the colors and to reduce the light signal to a range of limited digital codes (Berens S. C., 2014). Knowing how a camera works, we can analyze the scene with our eyes by knowing what the camera will or will not be able to reproduce. Céline Bozon observes that, even if the tools are evolving, making it possible to record lower luminosity and greater differences in light, to make an image is to make a choice (Berens S. C., 2014). It is necessary to decide at the shooting of the settings for whether we favor shadows or lights, this choice supports the narration and can be made thanks to the knowledge of our tools (Céline Bozon, 2022).

2.6 The Auteur film Theory – Auteurism

2.6.1 The Origins of The Auteur Film Theory

The auteur theory has its origins in existentialism and, by extension, phenomenology. Edmund Husserl's phenomenology tried to characterize occurrences properly and independently of preconceptions obtained from science or scientific investigation (Kockelmans).

Existentialism, recognized via Jean-Paul Sartre's writings, is "a profound philosophical study on the essence of existence and the absurdity of the human experience" (Gazetas, 2000). Although it was developed earlier to the twentieth century, existentialism rose to popularity in Europe during World War II, when many people felt alienated and angry with the condition of the world because of the war's economic, emotional, and cultural toll.

Alexandre Astruc, a French documentary filmmaker and writer, is credited with developing the auteurism in 1948. (Astruc directed a film about Sartre since he is a big Sartre devotee). Astruc developed the idea that the camera was analogous to the pen in his key essay entitled, "The Birth of the New Avant-Garde: La Camera-Style" (Levy, 2001). Astruc proposed that cinema be read like a book, and that each good film has all its aspects filtered via the director's *mise en scene*. As a result, the director should be seen as the film's primary creative force, or author, because he is not only "demonstrating or portraying a scenario but performing a genuine work of authoring" (Hillier, 1985).

In his essay "A Certain Tendency of French Cinema" written in 1954, François Truffaut wrote what we now call the auteur theory (Annette, 1989). In the essay, Truffaut expanded on Astruc's essay by relating it to individual filmmakers and railing against France's Tradition of Quality, in which most films stressed the literal rather than the visual and were thus primarily reliant on story (Neupert, 2007).

Truffaut's presentation of the idea in connection to specific directors working in the Hollywood studio system, such as Alfred Hitchcock, John Ford, and Howard Hawks, sparked controversy. So many other reviewers and serious cinema aficionados contended that the Hollywood studio system was only interested in releasing childish genre content, such as action films or thrillers, and that no individual perspective could be committed to such films (Levy, 2001).

Andrew Sarris, an American cinema critic, wrote *Notes on the Auteurism* in 1962, taking Truffaut's theory over the Atlantic and classifying filmmakers in order of significance, notably in terms of impact and visual style. Sarris was the first to use the label theory to what the French had previously referred to as a trend or policy in this article (Sarris, 1985). Sarris further expanded on the theory's initial notion, saying that a real author had technical competence, a distinguishable personality, and inner meaning (Sarris, 1985), all of which were to be pushed to their logical conclusion when characterizing filmmakers as auteurs. Sarris' paper sparked an immediate backlash, most notably from famed critic Pauline Kael.

Kael critiqued Sarris' writing in her 1963 article "Circles and Squares" (Kael, 516-529), her major issue being the concept of classifying and organizing directors, which even Sarris admits requires guts and a certain level of cultural boldness (Kael, 1963). However, Kael also criticized Sarris's reliance on directors having decent method, the theory's dismissive emotions to anyone except the director, and the assumption that a person operating in the studio system is more cinematic because he uses images instead of novelistic or textual content to enforce character in the film, because Kael asserts that content and form should support each other (Kael, 1963).

The auteurism was driven more into the spotlight as a result of Sarris and Kael's work. Because many of the French reviewers who helped develop the concept of the auteur theory were now actual filmmakers rather than merely critics, the two Americans found themselves on opposing sides of an ongoing theoretical discussion (Hodin).

2.6.2 The Development of The Auteur Film Theory

The auteurism has definitely evolved since its conception some fifty years ago, to the point that it is now part of our lexicon when discussing film and filmmaking. The concept is so established, in fact, that the MLA citation standards for cinema only need the director and performers to be cited (Trimmer, 2009). The auteurism emphasis on the position of the director has been exploited in a variety of ways, but the reasons for focusing on this, one of many occupations involved in the filmmaking process, have grown obfuscated and evolved through time.

The very first, and paradoxically, most damaging, alteration to the original notion was Andrew Sarris' interpretation of Truffaut's original piece entitled *Cheshire*, which transformed Truffaut's phrase from tendency or policy to a theory (Hillier, 1985). The concept of the auteur gained far more weight than it should have by becoming a theory: it was originally designed as a tool to reevaluate how and why we esteem specific films over other, as well as a technique of recognizing the path and impact of a director's entire body of work on later directors and producers (Levy, 2001).

Nevertheless, "then the whole notion became corrupted; it was changed into a religion of the author instead of a worship of the author's work, according to Jean-Luc Godard (Tirard, 2003). That is to say, the concept of the auteur theory became a weapon for championing certain filmmakers, rather than seeing each picture in isolation from the impact of the author's earlier work. For example, in the Cahiers top ten lists, the same directors, such as Jean-Luc Godard and Clint Eastwood, appear again. In instance, Godard was mentioned three times in 1967 Johnson (JOHNSON, 2003), implying that auteurism defend the works of filmmakers they admire, regardless of the quality of the individual piece at hand.

One of the bad aspects of the auteurism is that it is now used to characterize coming directors and producers or as a marketing strategy to attract people to watch the latest picture by a certain director. Many art house films, for example, are referred to as *A film by x director*, implying that you are familiar with their work, think it is of high quality, and want to see more. This is comparable to how advertising agencies sell movie stars, and it is far from the original concept of the auteurism, now, instead of being a critical tool for dissecting an artist's production, the auteurism can indeed be manipulated to sell film as a commodity, not as a work of art.

One of the auteur theory's good evolutions is that it is now often used to describe a director who plays several roles in the film's creation. Typically, this comes in the form of a director who also writes the script. "I think there is a true difference between filmmakers who write and those who don't," remarked director Pedro Almodovar (Tirard, 2003) It should be mentioned that Almodovar writes and directs his own films, but he also agrees with the Cahiers crowd that previous studio filmmakers "really managed to be the creators of their pictures and of their labor, in the widest possible meaning." (Tirard, 2003).

Aside from those who merely write and direct, the term auteur is now commonly given to directors and producers who do more. Woody Allen, for instance, writes, directs, and acts in his films; the Coen Brothers, who write, direct, and edit their films; and even Robert Rodriguez, who writes, directs, produces, edits, and composes. Since we can see, the auteur theory applies to individuals who work on several tasks on their films, as it allows them to leave more of their own perspective on the finished result.

One aspect of the auteur notion that hasn't altered is that it still relates to directors with unique artistic or philosophical substance. (Tirard, 2003) This is taken straight from Sartre's notion of authenticity, "where authors and movie makers certify their work in style" (Andrew D. , 1979), and explains why certain studio directors could be considered the authors of their films: even though they didn't write the work themselves, they used film grammatical rules to personalize the film's topic and produced a product that reflected their internal vision.

Alfred Hitchcock, represent a good livelihood directing studio thrillers, which he constructed with exceptional care and artistry. Hitchcock's most highly praised picture, *Vertigo*, for example, is about a guy who loses a love, finds new lady, and remakes her in the form of his grief.

Hitchcock successfully dismantled his own approach of utilizing his films to influence women in the picture. While not in the screenplay (written by Coppel and Taylor with considerable additions from Hitchcock based on a novel by Boileau and Narcejac), he utilized film language as a backdrop to make the picture personal. For example, Hitchcock cast Kim Novak in one of the major parts. His motivation for using it, as one might anticipate, was that she typified the types of women that appeared in all of Hitchcock's films: chilly, white, and in need of the assistance and support of a strong man. Hitchcock also use method to convey his arguments.

Vertigo was the very first movie to employ the opposite zoom technique, in which the photography expanded out as the camera body moved along a slider frame (Hitchcock, 1958). Hitchcock was able to replicate a character's inner emotional condition in a technological and simply filmic way by employing this approach. Because of its singular focus on the director, the auteur theory is increasingly being applied to vocations such as producer, actor, and even editor. Even in this reasoning, one seems to constantly require a singular entity on which to focus the film's attention, rather than viewing cinema as a necessary cooperation between a plethora of individuals executing distinct duties for a bigger objective.

3. Wes Anderson's philosophy of colors

3.1 Wes Anderson Biography and Background

Wesley Wales Anderson was born in Houston, Texas on May 1, 1969. Anderson grew up with his two brothers, Eric and Mel, but his parents split when he was eight years old. Anderson frequently misbehaved at school as a way of coping with the breakdown of his parents' marriage. His disobedience at school may have contributed to his mischievous and sarcastic humor in subsequent films. He eventually shifted his focus from mischief to creative pursuits.

Anderson directed films featuring himself and his siblings, which he shot on Super 8mm film. He read voraciously, acquiring a love of literature and became engrossed in narrative. He attended Houston's St. John's School, where he was recognized for his enormous and elaborate theater performances (Orgeron, 2007). Wes Anderson enrolled in philosophy classes at the University of Texas in Austin. He met Owen Wilson there, who has since been a writing collaborator or cast member in practically every film Anderson has done. Wes Anderson is well recognized for his eccentric and amusing films such as "The Royal Tenenbaums," "The Darjeeling Limited," "Fantastic Mr. Fox," and "The Grand Budapest Hotel."

Bottle Rocket was originally intended to be a psychological drama starring Owen Wilson and his two siblings Luke and Andrew, but it quickly became clear that the sphere of serious drama was not for them, and they started to concentrate more on humorous story lines, and thus the screenplay for Bottle Rocket became a difficult-to-categorize mix

of comedy, romance, and crime. Anderson and Owen Wilson moved on to work on their second picture, *Rushmore*, after finishing *Bottle Rocket* (Vreeland, 2015).

Rushmore was funded by Disney chairman Joe Roth, and the final version of the picture created significantly more pre-release anticipation than *Bottle Rocket*. Bill Murray was named best supporting actor by the New York and Los Angeles Critics Associations for his work as a nostalgic businessman who strikes up an odd bond with Max. Wes Anderson has a set of performers he like and selects to play his ludicrous and weird characters. Jason Schwartzman appears in seven different films.

Bill Murray makes an appearance six times and is frequently a prominent role with comedic speech. Both Owen Wilson and Warris Ahluwalia feature in five films. Willem Defoe, Jeff Goldblum, Tilda Swinton, Edward Norton, Luke Wilson, and Adrien Brody are some of the notable performers who have appeared in many of his films. Wes Anderson casts these actors because they are "imaginative, creative, honest, and open performers," according to Wes Anderson (Tirard, 2003). Whenever he takes on a fresh face to match a character, he often attempts to cast by the actors' "spirit" they put into a role. Another distinguishing feature of a Wes Anderson picture is its visuals.

Anderson like extended shots in which the camera moves from one character to the next. He also has a particular habit of focusing his shots. While most filmmakers adhere to the rule of thirds, Anderson deviates from it. He employs broad perspectives and centers the most of his pictures. This gives his films a two-dimensional vibe. You can also notice the margins of some of his images bowing or curving, giving it an odd and strange sense. Most of these shots will include actors who aren't speaking or moving, creating an uneasy and perhaps unpleasant comedy atmosphere. It's much more unpleasant and unpleasant since we're in these pictures for far too long. Anderson apparently does not do this on purpose as a "trademark," but rather because it seems natural to his scripts and stories. Anderson also uses exact color palettes in his films. Every scene in his works is precisely suited to the color pallet.

His films have a distinct and nostalgic flavor due to the use of pastel hues virtually constantly. These are the hues that Anderson fans and moviegoers have come to anticipate from his films. For this, each film seems like it belongs to the same environment. Colorists in his films apply hazy colors to his tight color pallet in post-production to get the analog feel we've grown to appreciate (Stockhausen, 2017). Wes Anderson, on the other hand, never uses CGI effects. Anderson is a big fan of stop motion animation and modeling. In

The Life Aquatic with Steve Zissou, he employs stop motion animation to depict the quaint and odd animals he depicts. In the critically praised Grand Budapest Hotel, he employs stop motion again, as well as models. Fantastic Mr. Fox was his first full-length animated feature created utilizing traditional stop-motion techniques (Stockhausen, 2017). He is also well-known for his unique musical tastes.

Every filmmaker strives to fit their soundtrack or musical selection to the mood or aesthetic of their film. Wes Anderson, with his own musical taste, shines at this. His music taste is so well-known that there are hundreds of playlists devoted to him on Spotify (Seitz, 2013). Over 22,000 people follow 'Wes Anderson' music. Wes Anderson uses amazing music in his films that complements the vintage mood. Since Moonrise Kingdom, he has shifted from employing fantastic music to music written by Alexandre Desplat. Alexandre Desplat composed the full score for the Grand Budapest Hotel (Ruzicka, 2012).

3.2 Color Theory in Wes Anderson's films

The production and scenery designers are clearly Anderson's most arduous endeavors. From the palatial hotel in The Grand Budapest Hotel (2014) to the unassumingly complex submarine in The Life Aquatic with Steve Zissou, his production design is clearly luxury (2004). Anderson starts a production with a certain color palette in mind, and they base their decisions on which colors function best in opposing the existence of these colors. During a debate, Stockhausen revealed the interesting details about the creation of The Grand Budapest Hotel: The funny thing is, we started with all this pink, and I feel this is true of any color—if you use it too much, you stop perceiving it because it's everywhere, and you start taking it for granted. So we noticed that we needed to add yellows and other colors to cut it down and make it more visible. (Ruscio, 2018)

According to research, viewers have poor color memory when it comes to short-term memory and digital media (Block, 2021). Anderson creates an immediate affinity with his films by highlighting distinct colors. Once you hear the title of an Anderson picture, certain hues come to mind: pink, purple, and red for The Grand Budapest Hotel, for example. This use of contrast and affinity, or similarity of tone, distinguishes his films. As previously stated, visual signals such as brightness, form, stereo-disparity, and color aid in distinguishing the observer (Gegenfurtner & Sharpe, 2000).

As previously said, color has a role in sensory appeals that alter emotional distance with the fascination of a narrative. (Yumibe, 2012) defines this as an educational impact, referencing Wallace Rimington's *ColorMusic*: "Color, like music, is both important for its own reasons and as an instructional influence." It can also stimulate the imagination and develop other mental faculties; it can provide pleasure and refreshment to the mind, as well as increase the responsiveness of the senses to which it appeals" (Yumibe, 2012). Anderson uses color in his set and production design to create a fantasy world unlike anything the audience has seen before.

In an interview with the BBC, Anderson said of his film *The Royal Tenenbaums*: "I am from Texas, but there were so many New York movies and novels that were among my favorites, and I didn't have a realistic understanding of what New York was like". "I chose to make an overblown rendition of that fictitious New York" (Mayshark, 2007).

This can be seen in the pastel-colored marine creatures in *The Life Aquatic*, Steve Zissou's film *The Life Aquatic* (2004). Anderson shows his viewers an apparently ideal environment of "dollhouse perfectionism" (Austerlitz, 2010) which contrasts with the sad tone of his subject.

When associating people with the circumstances in which they perpetuate their "type," this creates a certain apparent irony in his movie. Owen Wilson, a close friend and recurring player in the game of Wes Anderson movies, stated in a commentary (Mayshark, 2007) "It's an universe that Wes Anderson creates... a little fake, but I believe within that world the emotions and sentiments are extremely real."

Anderson is a gifted artist who can combine sound and pictures to take an audience to different dimensions. He is an "unrepentant hipster" who combines exuberant color in conjunction with melancholy topics, resulting in "whiplash juxtaposition" for the viewer (Austerlitz, 2010). The contrast between what you see on screen and what is happening amplifies this visual modality.

Anderson, like Truffaut, prefers to infuse somber material with comedic encounters. This is notably evident in the immature argument between Royal Tenenbaum (Gene Hackman) and his ex-suitor wife's (Danny Glover) husband, Henry Sherman, after Richie (Luke Wilson) attempts suicide. Anderson's characters frequently appear in numerous of his films.

At least two of his ten films include Bill Murray, Angelica Huston, Owen and Luke Wilson, Adrien Brody, Jason Schwartzman, and Tilda Swinton. Anderson grew up

in Texas and attended high school with the Wilson brothers, inspiring them to appear in and write for countless feature films and short films (Seitz, 2013).

His mother, like the character of Etheline Tenenbaum (Angelica Huston), was an archaeologist, and his father, like the character of Royal Tenenbaum (Gene Hackman) in *The Royal Tenenbaums*, was not particularly present after divorcing his mother (2001). According to the auteur theory, most of Anderson's work is a self-reflection of his youth (Mayshark, 2007).

According to (Mayshark, 2007), the filmmaker is obsessed with repeating motifs and interconnecting them throughout his works (p. 116). One such major topic is social structure, as well as familial systems and intergenerational ties and rivalries. Much of his work focuses on the interactions between parents and their children.

Anderson, according to (Mayshark, 2007), tends to represent a certain social niche of quirky affinity. These characters are young and precocious, but not, on the whole, ill-intentioned (p. 116). Problematic dads are also a recurring motif in Anderson's work, but moms play a smaller role (in fact, many have died as a precursor to his films).

This may be seen in *The Life Aquatic with Steve Gissau* (Bill Murray) and Steve Gissau (2004), *The Royal Tenenbaums*, and Herman Bloom (Bill Murray) in *Rushmore* (1998). "I despise my father and never wanted to be alone," Jissou said of his fatherhood to the illegitimate Ned.

It's interesting that all of these male characters wear red, as if to evoke some boyish domination. Zissou puts the documentary team in a red hat like him .



Figure 4: the alteration of hue in Wes Anderson's film *The Budapest Hotel*

In this case, red represents overcompensation for filmmaking anxiety. At Darjeeling Limited, he noticed that his three sons were looking for their mother at the funeral of their father, with whom they were not intimate. Only his red vintage car connects him to his son. The royal son, Chas Tenenbaum, played by Ben Stiller, wears a red Adidas tracksuit from adolescence to adulthood. When they meet his two sons, Ali and Maggot, they wear exactly the same suit.

Max, the son of Herman Bloom, who lives in Rushmore, wears a red hat to represent his prestigious prep school, which is anxious for his father's affection. Red seems to be a longing color, and there is a deep-seated problem in the father's territory. For these three fathers, they are the main cause of family conflict. More than most directors, Anderson uses costumes as an extension of his character (Mayshark, 2007).

Colors and costumes obscure the neurotic personality associated with his film. The low self-esteem of these three fathers made them somewhat exiled from their families. (Mayshark, 2007) states that their emotional maturity lags behind their perceived victory in society: Royal and Herman are wealthy businessmen. Zissou is a semi-professional marine documentary filmmaker. For her, red is a color of strength and safety, but it also evokes boyish enthusiasm. The red of the Darjeeling Express is the most vivid in her father's car. This is the most important item for the father.

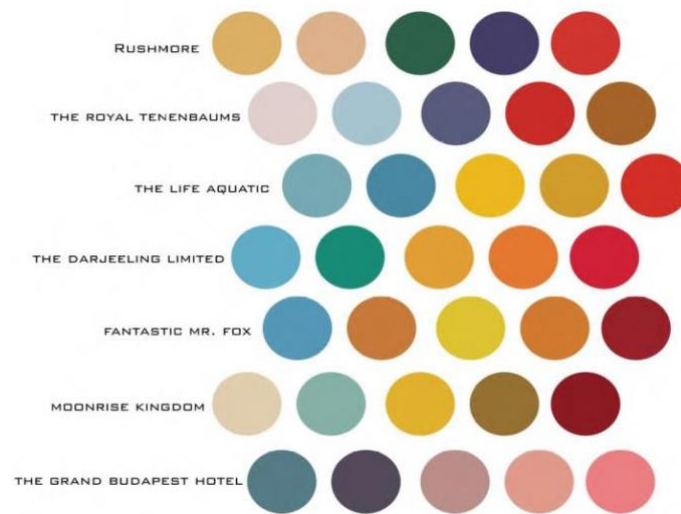


Figure 5: *color palettes used by Anderson*

After his death, his sons longed for and resented the car because of the emptiness that the car represented in their lives and because they could not give justice to the car's appreciation itself. This relapse of childish addiction is common in the theme of Anderson's work. Critics have accused his character of instilling a sense of restraint in the viewer in contrast to the luxurious environment, but neglecting to develop the character in the light of a great set design.

The Grand Budapest Hotel (2014): Mush Gustav (Ralph Fienne) is a sophisticated and elegant character who runs the best hotels in the fictional Republic of Zubrokka.

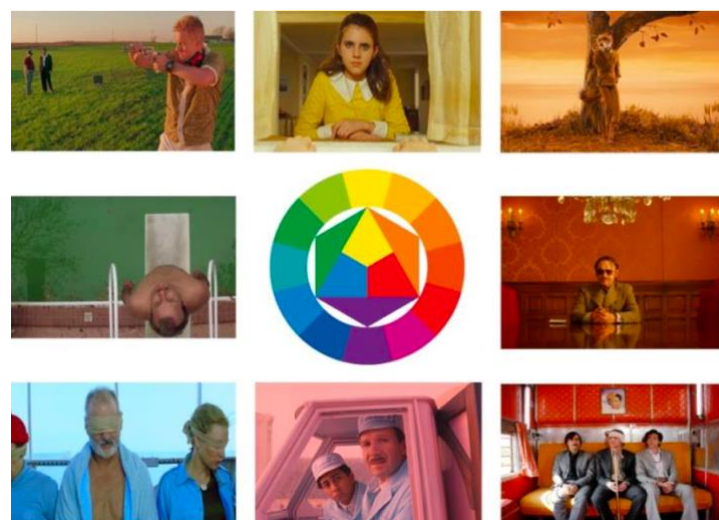


Figure 6: *The palette of color most used by Wes Anderson*

However, his films tend to focus on both short and long-term childhood (Orgeron, 2007) and the need to create a community in the face of family abandonment. In a secular community in Jamaica and Africa, Margo Tenenbaum and her mother go away from their families to find themselves. After years of training as a hotel concierge without a family, Mush Gustav finds comfort in Zero Mustafa, a boy in a familyless immigrant lobby who later becomes his best friend.

Anderson's work has always been centered on the concept of youth. At the Grand Budapest Hotel, M. Gustav is sleeping with an older woman as a boyish conquest of wealth. Moonrise Kingdom is a film that revolves around the concept of a lost youth and its rediscovery in young love.

The "Kingdom of the Moonrise" is the sanctuary that adolescents Sam and Susie are looking for. Yellow is often an optimistic color in Anderson's films, which is evident in the boy scout uniforms in this film. In many of his films, yellow is also symbolized as the color of peace. For example, in Fantastic Mr. Fox, the sky turns yellow when the fox is at his happiest. Steve Jissou's submarine is yellow and is one of the few things that make him happy until he finds the Yellow Sea creature he was looking.



Figure 7: Color contrast in *The Budapest Hotel*

With colors, you can create a mood that suits the story and the environment that the director wants to draw on the screen. Its lightness often contrasts with dark situations, so it creates its fairytale presence in Anderson's films. After Richie Tenenbaum committed suicide, the hospital room was bright and full of families.

Here, Anderson is playing with a focus on socially subordinate factors—in the dark, he presents us with a kind of childish optimism. When a young Indian dies on the Darjeeling Express, his funeral is backed by sparkling golden lights, sparkling white robes, and a bustling city. Socially, the three white protagonists stand out as rude Americans. He often uses white as a framework for social stability (Ruzicka, 2012).

This is also seen in the family structure of the Tenenbaum family. As seen in the scene with Royal at the dinner table, Anderson uses deeply saturated colors to bring out the character's white skin color. "Like The Royal Tenenbaum, the colors of the movie help emphasize and enhance the whiteness of the protagonist" (Ruzicka, 2012).



Figure 8: *Symbolism of colors in emotional scenes*

Anderson has a habit of using neutrals to emphasize the complexions of non-white people. Similarly, characters from *Shadow* typically depict society's second-class

citizens. Kumar Pallana, a recurring character in Anderson films, generally plays an elderly ethnic man who doesn't appear to grasp what's going on. In his films, he typically serves as a counterpoint to the unhappy older white gentlemen. In *The Royal Tenenbaums*, Pallana's character, Pagoda, exemplifies balance and unshakable courage for the befuddled royal.

3.3 Visual narrative in Wes Anderson's films

A research technique Wes Anderson is an American filmmaker, screenwriter, and film producer best known for paying close attention in each of his films to the definition of a specific and organized "aesthetic guideline" (Vreeland, 2015), capable of making itself immediately recognized to the audience.

Anderson's approach to filmic photography is similar to that of architectural representations. The combination of geometries and perspectives, as well as the care and interest in the composition of styles and colors, generates a code of symptoms and symptoms capable of mediating between the understandable world and the touchy one, transforming each concept into a photograph and each photograph into a story. Despite the fact that the images are in motion, the director's compositional choices give the spectator the impression that they are looking at a painting. The camera, in fact, located flawlessly and perpendicular to the scene, appears to transport slowly alongside an imaginary grid of vertical and horizontal lines, hence constructing the tale through an extended series of plans. When it's absolutely essential to take a spoil inside the montage, the camera, at the same time as converting its position, keeps its perpendicularity to the frame, giving the observer an ideal, symmetrical and best factor of view.

In particular, Anderson's fashion is outstanding through the function given to chromatic composition, which, cautiously crafted, confers a classy common sense on the visible compositions of every movie (Seitz, 2013). The balanced and best shaded compositions, but plenty of them. They'll appear as an ornamental whim, but they constitute a smart narrative device.

The interest in the lights, in the chromatic mixtures, and in the calibration of the tones will become for the director a detail to guide within the dedication of the general narrative atmosphere. The colors, moreover, are used for their emotional and symbolic components with the intention of stimulating the thoughts of the audience, developing unique impulses and emotions essential for the translation of the contents of the tale.

Color, according to Wassily Kandinsky's theory in "Concerning the Spiritual in Art," functions on two levels at the same time: the first is physical, based on the concrete visual sense derived from the observation of chromatic phenomena; the second is psychological, in which color, once processed by the brain, determines its role on the allegorical and perceptive level (Kandinsky, 2000).

Based on these considerations, it is intriguing to investigate the color of Anderson's films through this dual register of analysis: on the one hand, it will be investigated as a tool to support the narrative in which it is inserted; on the other hand, we will focus on its ability to elicit a series of emotional and symbolic relationships in the viewer.

3.4 Storytelling and color: The creation of a cinematic mood

In the movies of Wes Anderson, shadeation is one of the major factors within the implementation of the narrative. As set designer Adam Stockhausen explains, color is first studied to determine a preferred atmosphere, which is commonplace for all of his films, and then they are modeled at the individual narrative sequences, defining a specific palette for each of them (Vreeland, 2015). Anderson's filmic narrative is continually composed of specific, undefined, and enigmatic plots.

The characters do no longer especially belong to the types of protagonists or antagonists, due to the fact that each has dark and sensitive factors shown. The movie style is in no way nicely described, having comedies with nostalgic tones and dramas with bittersweet endings. This state of indecision is also communicated through shadeation: the chromatic picks, brightness, and calibration of sun sunglasses, in fact, contribute to the development of a stylized aesthetic (Seitz, 2013), aimed at telling an explicitly fictitious and intentionally synthetic story (Lee & Joohyeon, 2006).

At first, the color pallet is limited to three key colors, often pastel shades capable of producing an artificial and fairy-tale mood. The succession of scenes, then, corresponds to an increasing number of synthetic chromatic transformations: from pastel colors, smooth and dusty, we skip to described and saturated colors that, making each body more synthetic than the previous one, emphasize the story of a theatrical and surreal universe (Attenni, 2016).

In "The Grand Budapest Hotel," for example, the light tones with gray dominants of the early scenes are turned into strong and amazing oranges and browns as the story progresses, until the inclusion, in the last moments, of sun sunglasses in blue and violet.

The sensation of a dreamlike and undying world is likewise bolstered via the means of the connection between the chromatic picks of the filmic images and the characters of the costumes and units that, combined, generate unfashionable atmospheres characterized concurrently by means of nostalgic tenderness and jovial fun.

One thinks of the yellow/blue patina that permeates skies, homes, and garments in "Moonrise Kingdom", able to recall vintage family photographs, in addition to the orange/brown lens of "The Darjeeling Limited", able to capture growing oriental atmospheres inhabited via the means of antique characters.

The synchronic composition of all of the colors in the illustration unites the characters with their worlds, nearly as though they might best stay in that specific context. Furthermore, even when darker events occur, the colors remain vivid and brilliant, reminding the viewer that all they are seeing is an illustration of a fantasy. The impression of unreality is also transmitted by the lighting: the light, which is usually warm and gentle, emphasizes the specific hue contrasts. Even in diffused-light interiors, the location of the light sources, which is typically frontal to the scene, does not generate strong shadows, resulting in further flattening of the images. As a result, the color works to promote the director's message to the audience: by revealing the artifice, Anderson, in fact, makes the spectator aware that what he is witnessing is not an exact replication of reality but a fictitious drama set in a different universe (Austerlitz, 2010).

Despite the fact that the broad definition of chromatic characteristics is the same in all of Anderson's films, color has the ability to diversify each of his pictures. According to the filmmaker, every film requires a prominent hue that, when coupled with a certain palette, allows each tale to be distinguished from the others .

Because of this, only one or a few colors are employed in an overpowering manner, monopolizing the viewer's "projective foreground" (Yumibe, 2012). From "Isle of Dogs" to "Moonrise Kingdom," from "The Life Aquatic" to "Fantastic Mr. Fox," each picture presents itself as a vivid recollection reduced to a single hue, evocative of the microcosm it wishes to describe.

In this video, Stockhausen reveals the procedure of highlighting a single hue for the second time. When discussing pink, the dominating hue of "The Grand Budapest Hotel," he claims that if merely its tones had been employed, its existence would have

been erased from the observer's sight. He would lose sight of the colorful stimuli as he became acclimated to their distinctiveness (Vreeland, 2015).

As a result, the inclusion of colors like yellow and blue was required to "cut" the dominating hue and make it stand out more clearly (Grohol & John, 2008). Many studies suggest that when people reflect on digital media, they have limited recall of color (Block, 2021). Anderson decides to increase the intensity and saturation of the primary color in comparison to the secondary hues. As a result, the spectator might build an immediate link between color and cinema, turning the chromatic signal into a factor of distinction between the narrations.

3-Methodology

3.1 Theoretical framework

The theoretical framework of this thesis is the auteur theory, typically referred to as auteurism. This form of postmodern film has a consistent and distinct voice. Such films, made by a director, or creator, include messages that serve as societal critiques as seen through their eyes. Each scene of the film reflects how the director views it in the context of his or her own life. The auteur cinema or *Le cinema d'auteur* promotes the director's point of view as a means of expressing personal biases.

The filmmaker develops the film by altering the presentation of his or her knowledge so that the audience may grasp it in a certain way. Alexandre Astruc, a French filmmaker from the 1950s, was among the first to use this approach. He developed the term *le caméra-stylo*, which refers to the use of a camera as a pen in French, that is to say, it allows the author to draw his or her vision of the world. A film director uses films as a form of self-reflection in the same way that an author uses a pen to record his or her feelings (Orgeron, 2007).

As a result, the director's style becomes distinct and unmistakable, as is the case with Wes Anderson and his films. Anderson, like Astruc, he is an admirer and a big fan of Jean-Luc Godard and François Truffaut (Seitz, 2013), one of the pioneers of this style. According to this viewpoint, Anderson creates and directs films that are intimately related to his experiences, so employing color as a depiction of society via his unique lens.

3.2 Relevance of Theory to the Study

The auteur theory is relevant to this study because it talks about how a director reflect its own ideology through his or her film, in the case of Wes Anderson's films, not only the story is used to reflect the director's point view but also colors have an important role in telling the story and impact the audience mood, which I see it as a very important in getting the audience into the film mentally and more importantly emotionally.

Analysing Wes Anderson's film, *The Grand Budapest Hotel* is a means to focus on the importance of directors in forming all parts of a film, including how it looks, who plays specific roles, and how it concludes.

3.3 Research methods and Research Design

After determining the purpose of the study and the research questions, it was revealed that using content analysis as a method is most appropriate for this study under the descriptive research design.

Content analysis is the study of human communication through products such as texts, films, interviews or any other communication language (Bryman, 2016), in other words, content analysis is used to measure and analyse the existence, meaning and relationships of data or concepts contained in these communications by researchers.

According to Krippendorff, content analysis is a research technique for making repeatable and valid inferences from texts (or other meaningful items) to the context of their use (Krippendorff, 2004). Krippendorff sees that there is a fundamental distinction between explicit content and latent meaning; Explicit content explains the actual content (words, sentences or texts), while hidden meaning explains what an author intended.

The use of content analysis in this thesis has a lot of advantages ; First of all, this method can be used because it allows the use the material of any year, because content analysis allows the researcher to use a material from any period as long as it is available (Grinnell, 2005). Secondly, content analysis emerged as the most economical and time-efficient method of data collection in this case, as no travels or visits to any location to collect data are required.

Moreover, since a content analysis provides information about the content and message of the film rather than its meaning, It would be useful to include a mood analysis to link the emotional effects to films. Mood analysis is used to highlight how colors are

seen as a visual language which its elements capable of implementing the narrative underlying the film plot.

3.4 Method and Sources of Data Collection

For the content analysis, the method used to for the data collection involved a number of processes. The processes involved choosing the appropriate media that was used for data, selecting the categories which for this study was scenes with interesting color palette, and analysing mood given by those colors.

3.5 Techniques for Data Analysis

The first step was to pick two film witch their rate of popularity is high, the chosen films will be used for data and for this study it was two of. The most popular films by Wes Anderson; The Grand Budapest Hotel and Moonrise Kingdom. Then deriving the coding category: the category for this study was in the context of palettes of color. Followed by analysing every mood given my each color in order to understand what the director wants from the audience to feel. Data obtained from content analysis was analyzed using mood analysis of scenes.

3.6 Population of The Study

The general universe of this study, which aims to reveal how colors are used by film directors in order to present their own perspective of the world through cinema, and how they impact the audience mood , is colored films. On the other hand, the universe of this thesis consists of 8 films directed by Wes Anderson.

Table 1: *Population of the study*

FILM'S NAME	YEAR OF RELEASE
Bottle Rocket	1996
Rushmore	1998
The Royal Tenenbaums	2001
The Life Aquatic with Steve Zissou	2004
The Darjeeling Limited	2007
Fantastic Mr.Fox	2009
Moonrise Kingdom	2012
The Grand Budapest Hotel	2014

The films mentioned in the previous table discuss different subjects, but the common point between them is that they all have aesthetically impressing scenes that made their place in the memory of the audience. But since this study focuses on the use of color in cinema and how it impact the audience mood, I choose to make the analysis of The Grand Budapest Hotel for its vivid and insanely creative set designs that made from the fil a visual book in the most aesthetically-pleasing and organized way. and the 2nd film is Moonrise Kingdom since it has a special color pallet that help audience traveling back to history. I strongly believe that the chosen films present a good material allowing us to understand this relation between color and audience mood.

4. Findings and Discussion

4.1 Findings

4.1.1 Color Analysis in The Grand Budapest hotel

The Grand Budapest Hotel was directed by Wes Anderson and released in North America in 2014. It is exactly 20 years since the best year in cinema history, 1994, and twenty years ago in 1994, when it was dubbed the greatest year since the film industry's inception. That year saw the birth of the No. 1 film score in history, The Shawshank Redemption. Forrest Gump won the Academy Award for Best Picture that year; Leon the Professional, a great match between a simple uncle and a precocious Lori; Quentin Tarantino's Pulp Fiction, the animated film classic Lion King, and a succession of legendary flicks. Another legendary film, The Grand Budapest Hotel, was born twenty years later, in 2014.

The following analysis is based on content analysis and color mood analysis, the scenes of the film were analysed according to the color palette use in each one, this allows us to understand the emotions that the director wants the audiences to feel.

Since its debut, the film has received widespread acclaim and several international prizes, as well as an Oscar nomination for best picture of the year. The picture employs a variety of color tones and lenses, creating four distinct space-time zones, and color also influences the emotional representation of the story. It gives the characters and narrative greater depth and vividness, but for our average audience, this is more like a feast from the most basic visual communication.

From one layer to the next, The Grand Budapest Hotel recounts a wonderful narrative. It appears complicated that each chapter is linked. The audience was transported back to the fabled period of civilization through a series of dialogues between the writer who had lost his motivation for writing and Mr. Mustafa, the proprietor of the Budapest Hotel. It follows Gustav, the hotel lobby manager, and his third-class immigration doorman. Mustafa's unusual experiences give an odd and sad narrative to the viewers.

With the film's vocabulary, Wes Anderson creates a feeling of absurdity and makes people laugh. The film is set in 1960s Europe. Although the hotel is called the Budapest Hotel, the plot does not specify the location; rather, the audience may observe a variety of scenarios and places throughout the play.

The prototype Budapest Hotel is positioned in the center of Europe. Mr. Gustav, the hotel manager, became inadvertently entangled in the conflict over Mrs. D's family lineage, and in the context of the iconic picture Apple Boys, Gustav went through the trials of murder, love, friendship, jail break, war, and so on.

Mr. Gustav was eventually assassinated by fascist forces in order to rescue Mustafa and his fiancée Agatha, but even though the war was unavoidable, a glimmer of civilisation lingered in this horrible abattoir, and it was humanity. Gustav eventually entrusted his whole life savings to his small buddy, a doorman with a third-class immigration status.

The image skips to the end. Decades later, that year's doorman has become a famous rich man in Europe, owning property all throughout the continent. Mr. Mustafa still loves a location that is no longer lucrative, despite the fact that the Budapest hotel has long lost its previous brightness and its decor is old and outdated. Perhaps this is Mr. Moustafa's final link to the vanished world.

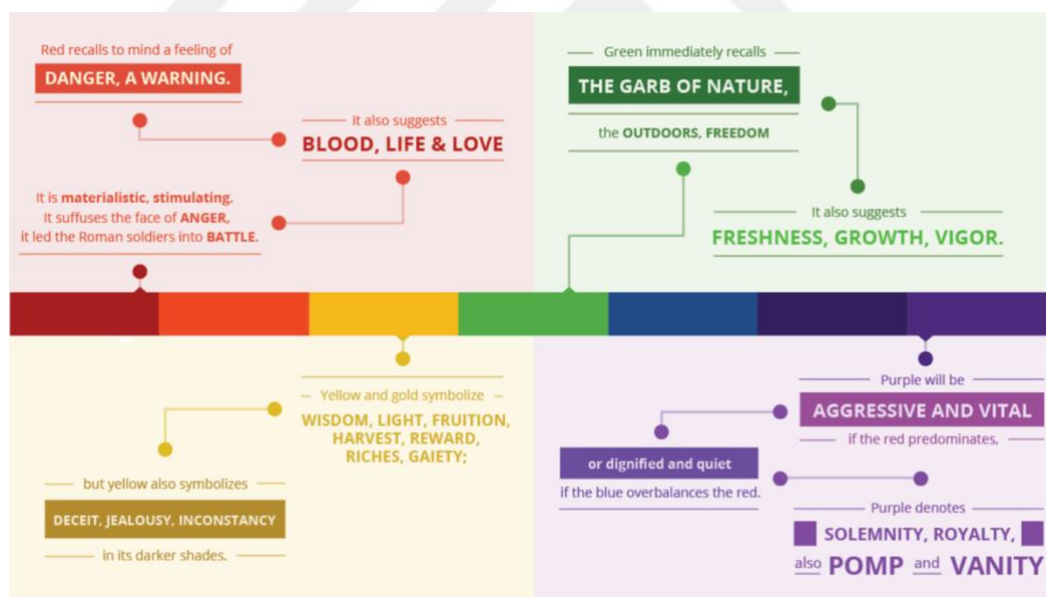


Figure 9: Nathalie Kalmus on Color, From *color consciousness* 1935.

Before getting into how color is employed, it is vital to understand what colors are typically used in the film to evoke different feelings from an audience and how that grows with hue and intensity. For starters, while red may be a statement of love, Anderson employs it as a message of danger or a warning in *The Grand Budapest Hotel* (2014).

The carpets at the hotel are all crimson, as is the lift, which both presage a murder and other. Purple is the most prominent and recognized color in the film, since the hotel workers are all shown wearing their purple Grand Budapest uniforms for the bulk of the film.

According to Kalmus, "purple signifies seriousness, monarchy, as well as grandeur and vanity." (Kalmus, 1935), which exactly fits the description of the motel. The hotel was quite busy in its heyday since it was noted for its high standards and wealthy clients. The concierge, M. Gustave, took satisfaction in his "ceremony and spectacular show," as defined by the dictionary.

(KALMUS, 1935) discusses numerous color theories in *Color Consciousness* (1935), one of which is color juxtaposition. One of the earliest instances of this was when initially seeing Mr. Moustafa. He is dressed in a dark blue suit jacket and a red shirt, and he is seated in a room with warm colors such as orange and yellow.

Following Kalmus' idea, these warm tones make the suit jacket stand out and make the clothes itself appear considerably darker in comparison. Kalmus (1935) Mr Moustafa's jacket is highlighted for the viewer since orange and blue are opposites on the color wheel, indicating him as a person of interest in the same manner that he has just been of interest to the Young Writer in the film.

This theme is carried on throughout the film when these two individuals meet for supper. The vast, mostly empty dining hall where they are sitting has yellow, pale walls and bright orange carpet, which contrasts with the clothing of the hotel's owner. As we discover more about Mr Moustafa, the lighting in the scenes is quite warm, making him stand out in the room. He begins to speak of his beloved Agatha much later in the film.

This same soft lighting gets considerably stronger as he does. As we witness Mr Moustafa start to grieve at the remembrance of his love, it soaks out the environment and even the Young Author. It has the same impact as complimentary colors in that it directs the viewer's attention to the most significant components of the picture.



Figure 10: *Mr. Moustafa dressed in a dark blue suit jacket and a red shirt, seated in a room with warm colors such as orange and yellow*

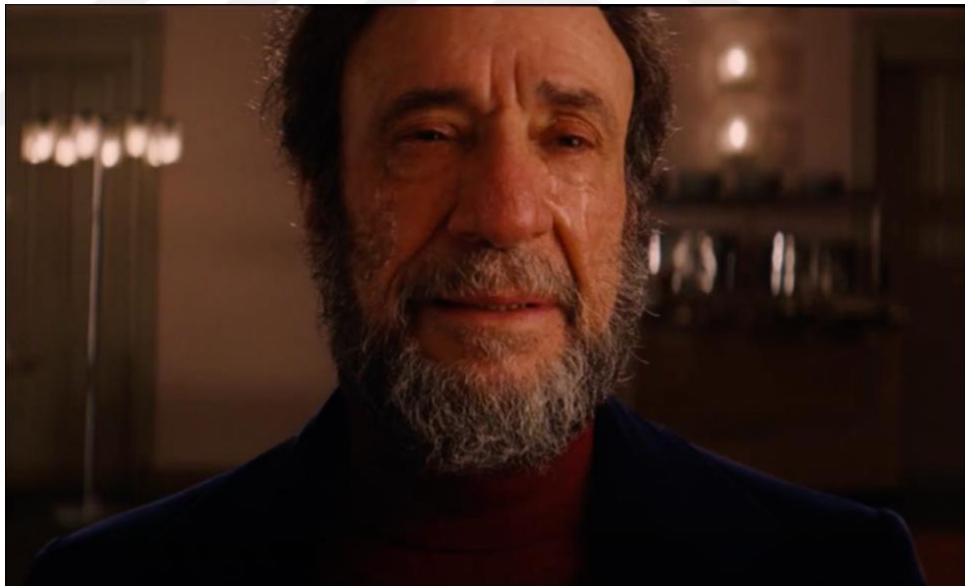


Figure 10: *A close up frame for the same character in the same position¹²*

Continuing on from counterpoint, color is extensively utilised in the film to emphasize significance and purpose. This is known as the "law of emphasis," and Kalmus explains that color should be used for a reason, not just because it can be used:

"In the early twocolor pictures, producers sometimes thought that because a process could reproduce color, they should flaunt vivid color constantly before the public's eye."

This frequently resulted in unnatural and terrible outcomes" (KALMUS, 1935). Anderson achieves this really effectively throughout the film because it is subtle, constant, and impactful.

The Young Writer is not of interest to the audience as they learn more about Mr Moustafa's life; in fact, he is much like a part of it. He is simply soaking in the stories and facts in astonishment, just like the audience. When seated across from Mr Moustafa at supper, the Young Author wears a trench coat, a pastel blouse, and a tie, all in neutral tones. In a close-up, his attire makes him blend into the surroundings rather than stick out.

"The law of emphasis states in part that nothing of relative unimportance in a picture shall be emphasized . . . Errors of this nature must be carefully avoided." (KALMUS, 1935).



Figure 11: A close up of the young writer while he was sitting in front of Mr. Mustapha

The tie and vest suit the background, and he fits in, following Kalmus' philosophy of emphasizing the significant: in this case it is Mr Moustafa.

Continuing forward in time, we encounter Monsieur Gustave, the hotel gatekeeper who takes great delight in and has dedicated his life to his profession and clients. He is first shown in a pastel pink hotel room before being greeted by numerous

hotel service members at the entrance. Everyone is dressed in royal purple uniforms that stand out against the pink walls while still fitting in with the black furnishings as they work together to arrange the space. M, on the other hand, has plenty of private space.

Gustave is at the center of the room, which helps show his authority as he issues commands to the crew. In the same scenario, he sits across from Madame D, a yellow-dressed old woman. This is a complimentary color to purple, rendering the picture visually appealing without detracting from what we know about the personalities and how they complement one another.



Figure 13: A large frame showing Mr. Gustave in the center of the room

Eventually in the scenario, the actors make their way to the elevator. The interior is brilliant red, makes the viewer impossible to ignore the hotel staff's vivid purple uniforms while swallowing up Madame D, who now wears a crimson coat.

This is the only time we see Madame D since she is slain shortly after and M. Gustave is blamed for her killing. Her getting lost in the backdrop of the screen is a method of gradually making the character less essential to the viewer since she must die in order for the tale to develop.

In contrary, because they are the only significant elements in this shot, a young Zero Moustafa (the new lobby boy at the time) and M. Gustave are extensively emphasized here, emphasizing their prominence throughout the duration of the movie.



Figure 14: *The interior of the elevator with the characters inside*

When analyzing the use of color, we keep in mind that a lack of it can be just as powerful as the use of it. When we perceive everything in life in color, an absence of color is unnatural for the human eye, according to Kalmus: "The mind works to replace the missing chromatic sensations, just as it strives to give the missing inflections to the actor's voice." The monotony of black, gray, and white in compared to color is well known. "Monotony is the enemy of interest," it is nearly a psychological principle. (KALMUS, 1935)

M. Gustave is threatened by her son Dmitri before being assaulted at the reading of Madame D's testament. This is how the viewer is presented to Dmitri, and it paints him in a negative light that never improves as the film unfolds. When we meet Dmitri and his sidekick/threatening muscle, Jopling, they are dressed in all black, while others are donning white shirts or accessories, which distinguishes them from the monotonous throng. This theme continues throughout the film, and while a film's adversary wearing all black is anticipated, Dmitri's lack of color in a film full of it reminds the spectator that he does not match with Mr Moustafa's plot or the hotel either.



Figure 15: Dimitri dressed in Black

The Grand Budapest Hotel and Madame D both are officially represented by Deputy Kovacs, who is murdered later in the film for refusing to corruptly assist Dmitri by failing to investigate the missing documents from Madame D's records.

Kovacs is killed at a museum while attempting to flee from being pursued. Kovacs tries to evade detection by moving through the shadows, and as the image darkens, the spectator gets the impression that the danger is coming in on the lawyer. The black creeping in on the edge of the picture is suggestive of Dmitri and Jopling's costumes, which is most likely intentional given that Jopling shoots Kovacs before he can flee.

Eventually in the film, whilst attempting to murder M. Gustave in order to inherit his late mother's riches, Dmitri passes through The Grand Budapest Hotel. His all-black attire stands out thanks to the light pink tones on the wall and the vivid scarlet of the elevator. The audience is made aware that he does not belong there, and his presence appears to disrupt the color palette we have gotten accustomed to within the hotel.

The police officers shown throughout the film all wear grey uniforms, so even when Zero and M. Gustave are stuck in a gunfight, Dmitri stands out as being out of place in the previously quiet and pleasant resort.



Figure 16 *Dimitri passes through The Grand Budapest Hotel with his black clothes*

Death appears to follow Jopling and Dmitri wherever they go, which is emphasized by the use of the color black throughout the film. The full black clothes contrast with the color of the hotel and its staff clothing, symbolizing how Dmitri and M. Gustave confront one other throughout the film.

According to Kalmus, *"the existence of color in our painting adds further emphasis to the neutrals, highlighting the severity of black, the gloominess of gray, and the purity of white."* (KALMUS, 1935). The usage of neutral color is sparse, which is why it serves such a purpose when it is employed.

The primary location employs a lack of color to create an affect on the viewer. M. Gustave is imprisoned for the murder of Madame D, which he did not commit, and spends time behind bars that is far more drab and boring than any time spent at the hotel. He changes from his vibrant purple clothing to the black and white stripes affiliated with inmates, and the viewer gets the impression that a portion of him is torn away with it.

While he behaves the same in prison and does not give up from anything, the audience is uneasy when they see the concierge without what they have come to anticipate when he is onscreen. The dreadful condition is communicated to the viewer through an evident imbalance and lack of strength.

As M. Gustave and his fellow inmates breakout from the jail, he is greeted by his devoted Lobby Boy Zero, and they must find a way back to the hotel to rescue the artwork

left to M. Gustave in Madame D's bequest. M. Gustave's closeness with Zero deepens at this moment, and the spectator sees them as partners.



Figure 12: *Mr Gustave in prison clothes without any differences comparing to his inmates*



Figure 18: *Mr Gustave in his vibrant purple jacket in hotel.*

This is reinforced by their apparel, as both are clothed in neutral colors that are a far distant from the royal purple that the audience is used to, indicating that they are very far from their positions at the hotel. Both men are unable to return to the hotel and must

run across farms of cotton to pass the time. This highlights the lack of color in the picture and how distant they are from the luxury of the hotel.

M. Gustave phones another hotel owner for assistance from The Society of the Crossed Keys, an organization made up of hotel owners from various European hotels, as he arrives at a phone booth. At this time, color begins to slowly return to the film. Individually hotel has its own consistent colors and a well-combined color scheme reminiscent of The Grand Budapest Hotel, which begins to make the audience feel hopeful since the various hotels are made to seem comfortable and familiar when they are each called upon.



Figure 19: *Colors getting back to the screen showing staff of 6 different hotels*

When our characters arrive to the hotel, the drama regains its entire color palette. The unexpected reappearance of the pastel pink decor and purple uniform is delightful until the hotel appears to be overrun by troops all clad in grey. They obstruct the inside view of The Grand Budapest and make the audience anxious by obstructing what we hope to see: the entrance in all its colorful grandeur.



Figure 13: *The lobby of the hotel with cheerful colors*

This film study has revealed a new way for emotionally influencing an audience. By using appropriate colors, a filmmaker may make an audience feel delighted, scared, or at peace, which Wes Anderson does brilliantly in this picture.

The hotel, on the other hand, appears to be the film's source of color. The colors on film grow more neutral as Zero and M. Gustave move away from The Grand Budapest Hotel.

The color of the hotel worsens over time, and the colours of the various decorations get deeper, yet Zero Moustafa recalls the pink décor and purple clothing when he first started working there, as if seeing the place through rose-coloured glasses in his old age. Natalie Kalmus' idea goes into great length on the origins and purposes of color in Hollywood. The many tactics I've outlined all have a role in this picture and appear to be still relevant to moviegoers today due to its emotional depth.

\

4.1.2 Color Analysis in Moonrise Kingdom: The Features of Yellow and Blue

Wes Anderson's seventh feature, *Moonrise Kingdom*, is directed by the two-time Academy Award nominee. *Moonrise Kingdom* is set in the summer of 1965 on an island near the coast of New England and follows the lives of two 12-year-olds who fall in love, make a secret vow, and run away together into the wilderness. A severe storm is developing off-shore as multiple agencies try to track them down – and the calm island population is being turned upside down in every manner.

Captain Sharp, played by Bruce Willis, is the local sheriff. Scout Master Ward is a Khaki Scout troop leader led by Edward Norton. Mr. and Mrs. Bishop, played by Bill Murray and Frances McDormand, are the little girl's parents. Tilda Swinton, Jason Schwartzman, and Bob Balaban round out the cast, which also features Jared Gilman and Kara Hayward as Sam and Suzy, the boy and girl.

In *Moonrise Kingdom*, like in many Wes Anderson films, the color palette plays an important role in producing significance and establishing concepts. In this analysis, the way the formal element of color, namely yellow, is employed as a theme throughout the film to convey connotations (mostly implicit) such as first love, hope, and innocence will be highlighted.

This will be accomplished through the use of particular, prominent examples of yellow being utilized to help depict a theme or message, such as the Old Chick Chaw Harvest Migration sign and Suzy's yellow luggage. I'll also discuss how the contrasting pattern of dark blue produces contrast within the meanings inspired by the color yellow.

Let's start with Suzy's yellow bag. Suzy carries a yellow luggage throughout the film, beginning with the first time she and Sam flee. This is significant since Suzy does not wear or own any yellow objects throughout this time period; for example, her costume consists of a pink outfit with blue eyeshadow.

Because the implicit meanings of color are contextual, yellow reflects Suzy's hope for her first love in this situation. Suzy is carrying her yellow bag everywhere and whenever Sam and Suzy are "on the run," indicating that she always has optimism for her relationship, even at moments of emergency, such as when they must flee for the 2nd attempt.

Additionally, according to *Film Art: An Introduction*, components such as color serve multiple functions. A second purpose of the yellow in this case might be viewed as depicting Suzy's love naivety. She carries the yellow luggage when she first encounters

Sam. She has no idea what to anticipate, but she is hopeful, and the luggage is a visual expression of that.

Suzy's inexperience, innocence, and naivety in terms of love are emphasized by the suitcase's yellow color. Furthermore, Sam and Suzy are "retracing the original route of the Old Chick Chaw Harvest Migration" in the film.

On the road, they come upon a sign with yellow lettering that says just that. In this aspect, the yellow writing aesthetically depicts Sam and Suzy's route to love while also underlining the concept of innocence. They walk this physical trip together while also traveling on an emotional path/journey symbolized by the Old Chick Chaw Harvest Migration. Although Sam is visibly confident in his ability to follow the physical road, both Sam and Suzy are quite naïve and innocent when it comes to their journey towards love, and the yellow writing reflects their innocence.

Furthermore, this connects to the theme of hope. When Sam and Suzy encounter this sign, it represents that they are on the right route, not only physically, but also emotionally, giving them and the audience hope for their path to love. This case is critical to the film's overall cohesion. Throughout the film, Sam and Suzy are on a trip together, and this sign connects to that and helps us as viewers recognize that it is a narrative about both a physical and emotional journey.



Figure 14: *Yellow in Moonrise Kingdom*



Figure 15: *The dominance of Yellow in Moonrise Kingdom*

Finally, dark blue is employed as an opposing theme to yellow, creating contrast between the concepts of love, innocence, and optimism. Wes Anderson uses a range of yellows throughout the film, but anytime Sam and Suzy experience a loss of hope for their relationship, the color dark blue appears.

The outfit of "Social Services" is one of the most notable instances of how dark blue is employed as an opposing motif. The unnamed Social Services worker is dressed in a complete dark blue suit, cape, and headpiece. Normally, this would denote authority,

which it does in this situation; nevertheless, the authority is mistaken, and is viewed as the enemy in this context.

On the other hand, particularly dark colors were utilized sparingly in the picture. It only employed strong blue contrast to convey threat, for example, in the bell tower scene where Sam and Suzy nearly committed suicide in the middle of a roaring rainstorm.



Figure 16: *The dark blue in the outfit of the social services in Moonrise Kingdom 2012*



Figure 17: Dominance of dark blue in danger situations in Moonrise Kingdom 2012

The suit's color depicts Social Services driving Suzy and Sam away and ruining their love and hope for love, therefore immediately contrasting yellow, which indicates these connotations.

Furthermore, dark blue adds significant to the film's universal abstract shape by relating to the motif of yellow by generating diversity within the repetition. (Bordwell & Thompson, 2012) discusses filmmakers not totally depending on repetition and providing changes in his work *Film Art: An Introduction* (such as dark blue).

On several times, directors employ variances to counter wants, like Wes Anderson did in *Moonrise Kingdom* with the usage of dark blue. According to Boardwell's definition of a motif as "any significant repeated element that contributes to the overall form" (Bordwell & Thompson, 2012), At his point, we can safely assume that the color yellow is used methodically as a theme throughout the film *Moonrise* to generate meanings and thus add value to the overall form.

Teenage love, optimism, and innocence are among the connotations. Suzy's yellow luggage symbolizes both her desire for her first love and her naiveté when it

comes to love. Furthermore, the Old Chick Chaw Harvest Migration symbol reflects Suzy and Sam's journey to love and expands on the concept of innocence.

Dark blue is also employed as a contrasting theme to generate contrasts within these meanings and the film. The most famous example is the Social Services women's attire, which portrays the devastation of Sam and Suzy's love and their desire for love.

Both instances of yellow being utilized as a theme and dark blue being used as a contrasting motif share the same connotations of love, optimism, and innocence. Wes Anderson's use of color as a theme enriches our understanding by creating a visual depiction of these newly generated meanings.

These visual depictions provide the picture a whimsical and fantasy-like atmosphere, yet the teenage love it depicts appears to be quite real. We as a culture tend to believe that adolescent love isn't as legitimate as adult love, yet this video makes us reconsider.

It's fascinating to see how Anderson uses two basic colors in *Moonrise Kingdom* to express the personality of the characters. The colors yellow and blue signify the beautiful and terrible. The scouts wear yellow headbands around their necks, whereas Social Services, the major enemy, wears a solid blue jacket. The inventive choice to allocate yellow to good-natured characters and blue to nasty ones is clever since it corresponds to how some of us view certain hues. Blue is commonly associated with serenity and tranquillity; however, it may also convey a message of lack of feeling or indifference. Anderson plays on the concept that too much blue might be unfriendly.

Yellow, on the other hand, is connected with happiness, according to studies, since it encourages the brain to release serotonin, which improves our mood. Because too much yellow might create eye strain, Anderson's choice to employ subdued yellow or mustard enhances the film. He is a filmmaker who understands how to use colors to his advantage, as well as how to direct the spectators' gaze and impact their moods.

"The color pallet of a film is the canvas on which the appearance of the picture is created," explains Stockhausen, one of *Moonrise Kingdom*'s production designers. "Color is undoubtedly the thing that impacts the audience the most, second only to music, and the selections of dark, light, brilliant, or pastel color schemes generate an unforgettable emotion in them." (Stockhausen, 2017). As a result, it is critical that we as filmmakers have control over how that experience is formed."

In order to better comprehend my love of the color treatment in Moonrise Kingdom, I read Andrew Fellows' article "Recovering Goodness, Beauty, and Truth." "The human imagination is capable of reading symbols, a phrase, an image, a gesture, a sound, a form, aa color?... These symbols lead to a greater reality beyond themselves; it is through them that reality becomes meaningful to us. We cannot have a personal experience of something until it is symbolically represented to us." (Recovering Goodness, Beauty and Truth).

4.2 Discussion

Color is a significant element in the visual language system of film and television works, as it may not only represent the core creative ambiance and mood of a film, but also depict feeling. It varies from regular cinema and television works in that the color representation performance is more free and open.

People's perception of color begins with the creatures in the objective world, and via the memory of the colors of the objective objects, the colors in the memory are applied to the art works through reclamation and mixing, to build a distinct aesthetic personality style. The aesthetic value of color visual effect is due to the incorporation of the author's personal sentiments, emotions, and thoughts, which makes the color difference more evident, more personal sensations and thoughts, but also greater connection with the viewer.

Color is not the sole method of expression in the art form of films, which concentrates on design, modeling, language, music, color, and narrative, but it plays a vital part in portraying the author's feeling and fundamental concept. Throughout history, animation has progressed from the black and white two-dimensional silent cinema era to the stereo sound three-dimensional color animation development process. Color is also significant in the audio-visual art of cinema.

It aids in the formation of characters, the expression of feelings, the creation of images, and the rendering of ambience in each perspective and shot, making each attempts to achieve the film work with the role of interactive screen feelings and emotional substitution, from all aspects of the film with the main thrust, to promote the plot's continued development. People in long-term social life accidentally developed an intuitive sensation of a certain hue; in actuality, color does not have emotions; yet, it may stimulate a certain mood or sublimate a certain emotion in a variety of contexts,

enabling color to gradually acquire emotional aspects. Green, for instance, is often affiliated with environment, giving people the feeling of vitality, youth, fullness, and equality, and is the most tranquil color in nature; red is often associated with blood and fire, can give people inspiration and strength; yellow is associated with paddy fields and the sun, signifying harvest and hope, giving a feeling of fullness, comfort, wealth, and lucidity; and black is the harshest color, evocative of night and Shadow, usually in a solemn.

The use of different hues may not only emphasize the author's creative aim, but also stimulate the audience's emotional resonance in color, making the characters in the animated picture richer in feeling and the emotion that the artist means to portray more clearly understood by the audience.

Color, which is widely available and used in people's daily lives, serves a crucial cognitive function. Color mixtures often have a great influence on people's vision, but they may also provide suggestions, generate emotional oscillations, and emotional resonance, making color the most direct and quick representation of the human eye's view of the objective world. Because the human eye is highly sensitive to color, particularly changing color, when an item enters the human eye in the form of moving or changing, people typically do not pay attention to the shape of the object itself, instead focusing unconsciously on the color.

Wes Anderson's films are more than just films; they have an instantly recognizable artistic style. Anderson is able to build his own universe by combining distinct characters, narratives, images, and genres. His most famous filmmaking element, though, is his use of color; not merely to generate visual harmony and intrigue, but also to express themes that are more profound than you may believe. Anderson employs vivid and harmonious color palettes to express societal institutions, character development, and the function of relationships.

Color, as a creative tool, has a strong influence on the viewer's emotions. As associations may be created between colors and moods, relationships, and thoughts, certain colors can elicit distinct psychological reactions. Similar colors can form connections between diverse items. An abundance of red may elicit thoughts of desire and excitement, whereas an abundance of green can soothe and relax, and an abundance of yellow can elicit feelings of pleasure and optimism.

Anderson, as a postmodern filmmaker, makes use of Auteurism, which is the making of cinema with a direct impact from the director's individual style. Every scene is displayed via a personal filter of the filmmaker's beliefs, experiences, and opinions, with visuals used as a kind of social critique to persuade viewers to perceive its material in a certain manner. Furthermore, Auteurism entails a director being active in all aspects of the film's development, such as scouting, staging, interior decorating, and sound design.

Anderson's effectiveness as a director is dependent on his use of color. Viewers of digital media frequently have poor color recall since there is very little distinctive visual harmony. However, even just reading the title of a Wes Anderson picture is enough to recall its main colors. The Grand Budapest Hotel's rich purple, scarlet, and pink. Moonrise Kingdom's distinct orange, yellow, and beige palette. Anderson's ability to become recognizable and easily recognised merely via his aesthetics is a big reason for his indie success.

"Anderson's color palettes are essential to his cinematic 'world-building.' His incredible attention to detail and eye for art direction provide the perfect place and tone for his characters to exist in – and for the audience to lose themselves in. They eventually acquire their own visual language, similar to how character themes are explored in film compositions, providing for an immersive visual experience whether or not the sound is on." (Céline Bozon, 2022)

Connections may be drawn between colors and moods, relationships and thoughts,' as previously stated. Red, for example, is used to signify masculinity, masculine adolescence, and parenthood, whereas yellow is believed to represent serenity and happiness.

In reference to Auteurism, Anderson's youth influences the production of his films. When his parents split when he was eight years old, he turned to art to cope. Many of the parent figures in his films are problematic, while the mother roles are sometimes not acknowledged at all.

Anderson's utilization color establishes a link between certain colors and topics that he wishes to investigate, reflecting his auteuristic filmmaking approach. In his own life, he struggled with puberty and his father, so it's no wonder that his characters do as well.

Anderson use color to explore mature issues in a playful and whimsical manner.

Any conflict between personalities or personal flaws are surrounded by vibrant colors and vivid hues. Anderson's art is distinguished by the creation of universes that mix childhood delight with adult realities. The cotton candy sky and bright yellow interiors stand in stark contrast to the empty and melancholy narratives and interpersonal relationships.

Anderson's distinct cinematographic aesthetic is another distinguishing feature of his work, contributing to his youthful examination of mature issues. Anderson's art frequently employs symmetrical and flat compositions. Everything in the scene is arranged in front of the camera, and it is never taken from an unusual perspective.

The bulk of the perspectives employed are 'point-of-view' shots, which adds to the audience's immersion in the film and its tale. The rule of thirds and long lenses, which make the lines as straight as possible, are used to embrace symmetry. Patterns give visual interest, with tracking views, overhead shots, and dramatic slow motion providing movement and depth to the overall mis-en-scene.

The mix of color and cinematography produces a realism comparable to a doll home, reflecting a realistic fairytale view on the world. It's both realistic and unreal, as if you're looking at the world through the eyes of a child. The juxtaposition of gloomy topics (loss of innocence, bereavement, and loss of parental direction) with colorful and fast-paced comedy is what distinguishes and endears Wes Anderson's work.

A particular mood plagues us during our teens, especially when we realize ourselves as little more than a collection of recollections from our previous days. We recall our washed-out recollections and are struck with a hazy but powerful desire that something be done to glue the pieces back together. With those bits, we tend to build our own cosmos and begin to color those washed out, half-remembered experiences.

Wes Anderson is the first name that comes to mind when thinking about the portrayal of the gone whole that haunts us. He is the master of the washed-out, milky style, which gives spectators the impression that they are strolling through a fading memory.

Wes Anderson's films willingly, even gleefully, admit the microscopic quality of the worlds he crafts in their set design and camerawork, as well as their use of stop-motion, maps, and, most crucially, distinct color palettes. When deciding on a color to

paint our walls, we must consider more than just how it appears; we must also consider the feelings or memories we connect with particular hues.

The color palette of a film establishes a setting for storytellers to generate tension and drama. Wes Anderson's imagined universes have such accurate coloration — the extremely specific pastel-hues that paint the skies, saturate the buildings, and outfit the characters making Anderson's microcosms almost dream-like. The hazy-hued lens through which we see the director's distinct universe has a vintage feel that drapes his pictures in nostalgia for a period that may have been.

Yellow is a color that appears in several of Wes Anderson's films. Though he uses a variety of colors, after binge watching Anderson, you can quickly identify this one. We don't see many movies with prominent yellow colors, but Anderson uses it on purpose to establish his own universe in which all of his characters appear natural yet from another dimension. Yellow is the hue of sunlight, youth, pleasure, and happiness in the Western world.

The hue is soothing, promotes cerebral activity, and increases muscle energy, increasing intellect and vitality. Yellow draws our attention and can represent honor and commitment. Colors have indisputable ability to alter our emotions, and Anderson is well aware of this. Because we all identify yellow with good memories, it might be the best wall color for our home. Not everyone, on the other hand, has a joyful childhood memory linked with it. When it comes to picking color paints, it all boils down to personal choice.

He is best known for his subdued pastel palette. The benefit of using a muted palette is that when more vivid colors are introduced, the audience's attention is immediately drawn to them, implying that a close-up picture is not required for the main point to show through.

"Anderson's color palettes are fundamental to his cinematic 'world-building,'" says artist and Wes Anderson fan Hamish Robertson. His incredible attention to detail and eye for art direction provide the perfect place and tone for his characters to exist in — and for the audience to lose themselves in. They eventually acquire their own visual language, similar to how character themes are explored in film compositions, providing for an immersive visual experience whether or not the sound is on."

Anderson's most renowned film using this subdued color palette is arguably *The Grand Budapest Hotel*, which plays with fading pinks and bleached yellows in an iconic

and visually beautiful way. The relaxing tones let the ludicrous scenario to unfold gradually, lending the narrative a pleasant, feel-good vibe. The Grand Budapest Hotel's subdued pink makes the hotel the main character in the film. Anderson utilized three distinct colors to depict three separate time-lines in this piece.

He chose olive green to symbolize the communism period, a faded but still strong olive green, much like communism itself. Clothes and accessories are depicted in various hues for symbolic purposes or to help actors/objects stand out in a scenario. Anderson described the hotel as looking like a "wedding cake." Pink and purple inspired the colors used in that scene in the film. This 'wedding cake' motif may easily create a joyful atmosphere in our dining room or living room.

Mendel's confectioner's pink-and-blue palette in The Grand Budapest Hotel is one of the greatest color combinations for our house paint. Pastel colors are grounded with calm, natural tones and strong angles to keep the dynamic from getting too precious. By using this palette on our bedroom walls, we can create a captivating blend of romantic antiques and contemporary shapes for a timeless style.

The characters wear purple outfits that represent the rich luxury of the hotel where they work while also allowing them to stand out against the crimson wall. Madame D. wears red, which causes her to vanish into the red wall, as she does later in the film. Wes Anderson and his crew used a monochromatic color palette in The Grand Budapest Hotel. Light pink fades towards darker purples. The end product preserves the desired color tone while allowing us to generate contrast within it.

So, if the color palette is entirely red, some hue and shade need to be added in order to have a monochromatic color scheme. Monochromatic color schemes use only one color, such as red, dark red, and pink. They have the ability to produce a pleasant, lulling, and peaceful atmosphere in our house.

The difference between the worlds of jail and hotel is best shown when Zero visits in his purple uniform, and even more so when Mendel's container is filled with roses. The pink colors of the candy box not only represent Agatha's purity, but also the hope of the outside world and the instruments of escape that the box provides. This remarkable color difference may offer a strong feeling of contrast to our wall decor.

Moonrise Kingdom is another one of Anderson's films that use color in a direct, distinct, and deliberate manner to elicit emotion and build a tone. This film is

notable for its simple, pastel color scheme. Anderson's use of warm, desaturated colors evokes longing for reliving our childhood.

The chromatic loudness has just been increased to its maximum. Filmmakers may now present a tale with greater exposure and depth, affecting audiences' moods and emotions merely by managing color. The value and beauty of color in cinema cannot be overstated. Directors and cinematographers intentionally include or avoid particular colors to enhance narratives while also boosting a film's overall quality and attractiveness. These colorful worlds captivate spectators and may influence a filmmaker's body of work, reinforcing their whole oeuvre by serving as a hallmark, like in Wes Anderson's films.

You don't have to enjoy Wes Anderson's movies to admire the way he operates the camera, composes scenes, and directs the performers. He creates strong, smart films that make full use of every area. Each of his recent films has been characterized as a visually stunning tour de force. This is due to his "unwavering attention to detail." He focuses our attention to what he wants, when he wants, and he is a master at using cinema to make each picture count.

Color, without a doubt, has the wonderful capacity to capture the audience's attention, predict information, and consciously and subliminally govern or impact emotion. While some directors employ real-life patterns and colors to create a unified universe, Anderson appears to construct his from the ground up. The many color palettes offered in Anderson's films assume various shapes, sizes, tints, and sharpness, and each palette manages to heighten the cinematic experience in his own unique way.

Everyone like how the colors in his films evoke memories in the same way that a perfume does. The golden streaks in Anderson's films may easily transport us back to a time when the grass was greener and the days were brighter.

5. Conclusion

The investigation of Wes Anderson's cinematographic imagery through this thesis provided an intriguing beginning point for understanding how color is a vital aspect of filmic storytelling. The special situation of the American director's films, which are capable of establishing a symbiotic link between aesthetics and plot, demonstrates the diverse communication possibilities of color. Hues, saturations, and tones enable the director's objectives and ideas to be made plain, varying the tone, rhythm, and storyline of each story.

The many color connections, capable of generating contrasts, harmonies, and varying chromatic weights, instead enhance the viewer's senses and sentiments in response to the narrative portrayed. Color is studied as a narrative component of the filmic environment as well as a narrative container of emotions and symbols. The twofold register of analysis utilized for Anderson's films might become a trace of a generic technique of analysis, applicable not just to other filmmakers' works, but also to other types of visual narrative.

Wes Anderson is a famous and often debated contemporary filmmaker. His use of cinematic language, in particular, is distinctive and highly criticized, as he employs iconic compositions and intricate colors to powerfully tell the narrative theme. This thesis sought to investigate and discover how Anderson employed iconic colors to express the entity. The entity is a sensation such as sadness, happiness, or depression. This signifies that color has been used to express the entity in Wes Anderson's films.

Color is significant in films because, like any three-dimensional character, it frequently has complicated and conflicting inharmonious features, even within a specific cultural perspective, adding complexity to cinema. Its meaning is modified in part by its surroundings. Yellow, for example, is connected with pleasure yet is widely loathed and can cause anxiety. Even within a single film, a single color might have several meanings.

Although color vision is not totally universal, ranging between languages, present culture- environment, males, females, and even personal experiences, commonalities remain within human perception since all normal people perceive color in the same way. However, because color symbolisation varies throughout cultures, if

an image creator chooses to employ color symbolisation to express a certain meaning, they must be conscious that their meaning will vary among cultures.

As seen in the case studies, all filmmakers, whether intentionally or subconsciously, employ color to influence the viewer's mood. Learning more about the intellectual, symbolic, and unconscious physiological responses will assist cinematographers in explaining why specific colors are chosen. What intuition may have selected without justifications may be justified by science. Perhaps this ever-expanding knowledge will influence how artists make artistic judgments.

Scientific study awakens us to our unconscious choices, and filmmakers are better prepared to clarify and justify their conclusions. Learning more about color science will ultimately provide cinematographers with the skills to craft more meaningful and emotionally impactful storytelling.

On the other hand, as noted throughout this thesis, Wes Anderson's films have their own unique frame compositions; for example, the frame in *The Grand Budapest Hotel* is symmetrical in a way that draws the audience in. As a result, it can be stated that *Mise-en-Scène* is also highly significant in story narration. To generate meaning, the film director must organize the things within the visual frame in a precise sequence of importance.

As with every other creative form, film has its own vocabulary of expression. To comprehend a cinema film, one must first learn the qualities of the vehicle. *Mise en scene* and picture editing are two fundamental cinematic methods. The French term *mise-en-scene*, which means "placing things on the stage," was initially used in the theater. This is an important phrase for organizing the objects in the camera's frame, and it includes acting, costume and make-up, décor, and space and lighting components. All of these elements work together to produce a cinematic atmosphere. In future studies, *Mise en scene* in Wes Anderson's films can be a good angle to discuss the Auteur film theory.

BIBLIOGRAPHY

- Abramov, Gordon, & Chavarga. (2012). Sex and vision II: color appearance of monochromatic lights. From <http://eds.a.ebscohost.com.ezproxy.leedsmet.ac.uk/eds/Citations/FullTextLinkClick?sid=06d707cd-fed8-42e2-9506-482def77a9eb@sessionmgr4003&vid=3&id=pdfFullText> [Accessed 30/04/2014]
- Adams, F. M., & Osgood, C. (1963). A Cross-Cultural Study of the Affective Meanings of Color. *Journal of Verbal Learning & Verbal Behavior*.
- Anderson, W. (Director). (1998). *Rushmore* [Motion Picture].
- Andrew, D. (1979). The Postwar Struggle for Color. *Cinema Journal*, 18(2), 41-52.
- Andrew, J. D. (1975). The Film Theory of Jean Mitry. *Cinema Journal*.
- Annette, I. (1989). *Francois Truffaut*. New York: Touchstone Books.
- Aslam, M. M. (2006). Are You Selling the Right Colour? A Cross-cultural Review of Colour as a Marketing Cue. *Journal of Marketing Communications*.
- Attenni, M. (2016). Digital Documentation: Villa Borghese. LNISA.
- Attrill, M., Gresty, K., Hill, R., & Barton, R. (2008). Red shirt colour is associated with long-term team success in English football. *Journal of Sports Sciences*.
- Aumont, J. (2008). *La Couleur en cinéma*. Paris: Armand Colin.
- Aumont, J. (2020). *introduction à la couleur - Des discours aux images*.
- Austerlitz, S. (2010). *Another Fine Mess A History of American Film Comedy*. Chicago Review Press.
- Baarthés, R. (1980). *La Chambre claire*. Paris: Cahiers du cinéma Gallimard.
- Bagchi, R., & Cheema, A. (2013). The Effect of Red Background Color on Willingness-to-Pay: The Moderating Role of Selling Mechanism. *Journal of Consumer Research*, 39(5), 947-960.
- Baron-Cohen. (2013). Hearing words and seeing colours: an experimental investigation of a case of synaesthesia.
- Barthes, R. (1980). *La Chambre Claire*. Paris.
- BBC. (1999). *Sci/Tech: When Blue is Green*. UK.
- BBC. (2011). *Do you see what I see?* .
- Beck, J. (1973). *The perception of surface color*. Cornell University Press.

Bellantoni, P. (2005). *If It's Purple, Someone's Gonna Die The Power of Color in Visual Storytelling*. Burlington, USA: Elsevier.

Berens, D. J. (2014). *THE ROLE OF COLOUR IN FILMS: INFLUENCING THE AUDIENCE'S MOOD*. Leeds: Leeds Metropolitan University.

Berens, S. C. (2014). Categorical encoding of color in the brain. *Proceedings of the National Academy of Sciences*.

Bernes, S. (2014, March). Categorical encoding of color in the brain. *Sussex Research Online*.

Bird, C. M., Horner, A., Franklin, A., & Berens, S. (2014). Categorical encoding of color in the brain. *Proceedings of the National Academy of Sciences of the United States of America*.

Block, B. (2021). *The Visual Story Creating the Visual Structure of Film, TV, and Digital Media*. Taylor & Francis Group.

Bordwell, D., & Thompson, K. (2012). *Film Art: An Introduction*.

Boust, C., Cittadini, F., & Ben Chouikha, M. (2004). Does an Expert Use memory Colors to Adjust Images? *he Twelfth Color Imaging Conference: Color Science and Engineering Systems, Technologies, Applications, CIC*. Scottsdale, Arizona.

Braga, M. H. (2011, January / June). Color in films: a critical overview. *Critica Cultural*, 6(1), 334 - 345. From Repositorio.ufrn.br:
https://repositorio.ufrn.br/bitstream/123456789/19307/1/Maria%20Helena%20Braga_%20Color%20in%20filmes.pdf

Brusatin, M. (1999). *History of colours*. Italy: champs arts.

Bryman, A. (2016). *Social Research Methods*. Oxford, United Kingdom : Oxford Univeristy Press.

C.Hurlbert, A., & Ling, Y. (2007). Biological components of sex differences in color preference. *Current Biology*, 17(16).

Cavell, S. (1979). *The World Viewed*. Enlarged Edition.

Céline Bozon, d. o. (2022). About the use of colours in Wes anderson's films. (M. Edjarene, Interviewer)

Chatterjee, S., Field, G. D., Horwitz, G., & Conway, B. (2010). Advances in Color Science: From Retina to Behavior. *Journal of Neuroscience*.

Cheng, F.-F., Wu, C.-S., & Yen, D. (2009). The effect of online store atmosphere on consumer's emotional responses – an experimental study of music and colour. *Behaviour & Information Technology*, 323-334.

Clarke, T., & Costall, A. (2008). The emotional connotations of color: A qualitative investigation. *Color Research & Application* .

Critchley, M. (1965). Article Navigation ACQUIRED ANOMALIES OF COLOUR PERCEPTION OF CENTRAL ORIGIN. *Brain*, 711 - 724.

Deleuze, G. (2003). *L'image-mouvement*. Paris: Les éditions de minuit.

Dixon, W. W. (2015). *Black and White Cinema: A Short History*. Rutgers University Press.

Fellows, A. (n.d.). *Recovering Goodness, Beauty and Truth*. Greatham UK: L'Abri Papers.

Fleming, V. (Director). (1939). *The Wizard of Oz* [Motion Picture].

Foucault, M. (1969). *The Archaeology of Knowledge*. Paris: Gallimard.

Franklin, A., Grandison, A., & Taylor, C. (2012). Color Preferences Are Not Universal. *Journal of Experimental Psychology: General*.

Fromme, D. K., & O'Brien, C. (1982). A dimensional approach to the circular ordering of the emotions. *Motivation and Emotion*.

Gage, J. (1999). *Color and Culture: Practice and Meaning from Antiquity to Abstraction*. University of California Press;.

Garfield, K. (2006). Are We All Synesthetes? Hear a painting, taste a symphony, and smell a color—is this what we do subconsciously? *Discover*.

Gazetas, A. (2000). *An Introduction to World Cinema*. New York: McFarland & Company.

Gegenfurtner, K. R., & Kuper, D. C. (2003). Color vision. *Annual Review of Neuroscience*, 181 - 206.

Gegenfurtner, K., & Sharpe, L. (2000). *Color Vision: From Genes to Perception*. Cambridge: Cambridge University Press. .

Godard, J.-L. (Director). (1960). *Breathless* [Motion Picture].

Grinnell, R. M. (2005). *Social Work Research and Evaluation: Quantitative and Qualitative Approaches*. Cengage Learning.

Grobar, M. (2015). *Deadline*. From Minding the details:
<https://deadline.com/results/#?q=Minding%20the%20details>

Grohol, & John, M. (2008). Can Blue-Colored Light Prevent Suicide? Scientific Advisory Board.

Guéguen, N., & Jacob, C. (2012). Clothing Color and Tipping: Gentlemen Patrons Give More Tips to Waitresses with Red Clothes. *Journal of Hospitality & Tourism Research* .

Henry, P. M., Cheung, V., & Westland, S. (2008). Accuracy of Cross-Media Colour Memory. International Colour Association (AIC) Conference. Leeds: Leeds, The Colour Group.

Hevner, K. (1936). Experimental Studies of the Elements of Expression in Music. *The American Journal of Psychology*.

Higgins, S. (1998). Color at the Center: Minnelli's Technicolor Style in "Meet Me in St. Louis". *Style*.

Hill, J., & Gibson, P. C. (2000). *Film Studies: Critical Approaches*. Oxford University Press.

Hillier, J. (1985). *Cahiers du Cinema: The 1950s: Neo-Realism, Hollywood, New Wave* . Cambridge, Massachusetts : Harvard University Press.

Hitchcock, A. (Director). (1958). *Vertigo* [Motion Picture].

Hodin, J. P. (n.d.). Art and Criticism: On the Problems of Living Art Criticism. *College Art Journal*, 15(1).

Humphrey, N. (1971). Colour and Brightness Preferences in Monkeys. *nature*, 615 - 617.

Hupka, R. B., Zaleski, Z., & Otto, J. (1997). The Colors of Anger, Envy, Fear, and Jealousy: A Cross-Cultural Study. *Sage Journals*, 8(2).

Hurkman, A. V. (2010). *Color Correction Handbook: Professional Techniques for Video and Cinema* . Peachpit Press.

J.Adams, R. (1987). An evaluation of color preference in early infancy. *Infant Behavior and Development*, 10(2), 143 - 150.

JOHNSON, E. C. (2003). From <https://www.mistdriven.com/>

Jonze, S. (Director). (2013). *Her* [Motion Picture].

Kael, P. (1963). Circles and Squares. *Film Quarterly*, 16(3).

Kaiser, P. K. (1984). Physiological response to color: A critical review. *Colour Research and Application*, 29 - 36.

KALMUS, N. M. (1935, August). Color Consciousness. *Journal of the Society of Motion Picture Engineers*, 139-147.

Kandinsky, W. (2000). *Concerning the Spiritual in Art*. Dover Publications.

Kaya, N., & Epps, H. (2003). Relationship between color and emotion: a study of college students. *College Student Journal*, 38(3).

KEIMFARBEN. (n.d.). Conservation and creation Zaha Hadid Architects. Retrieved April, 2022 from Neufert: https://neufert-cdn.archdaily.net/uploads/product_file/file/9674/KEIM_ZahaHadid.pdf

Kockelmans, J. J. (n.d.). *Edmund Husserl's Phenomenology*. 1994: Purdue University Press.

Krippendorff, K. (2004). *Content Analysis: An Introduction to Its Methodology*. USA: Sage Publications.

Küller, R. (1986). Physiological and psychological effects of illumination and colour in the interior environment. *Journal of Light & Visual Environment*.

Lafont, M. (2008). *Le noir et blanc, une fascination légitime ?*

Lancelin, S. (2022, April). About colours in cinema. (M. Edjarene, Interviewer)

Lee, Y.-J., & Joohyeon, L. (2006). The development of an emotion model based on color combinations. *International IJC*.

Levy, E. (2001). *Citizen Sarris, American Film Critic: Essays in Honor of Andrew Sarris*. Lanham, Maryland & London: The Scarecrow Press.

Manovich, L. (2006). *Post-media Aesthetics*. From <https://www.alice.id.tue.nl/references/manovich-2005.pdf>

Matsubayashi, T., Yasuyuki, S., & Ueda, M. (2013). Does the installation of blue lights on train platforms prevent suicide? A before-and-after observational study from Japan. *Journal of Affective Disorders*, 385-388.

Mayshark, J. F. (2007). *Post-Pop Cinema: The Search for Meaning in New American Film*. Praeger.

McCloud, S. (1994). *Understanding Comics: The Invisible Art*. William Morrow Paperbacks.

McKernan, L. (2017). *Kinemacolor*. London Film Festival. London: BFI Southbank, .

Millard, K. (2019, April 7). colour and film. From colour and film:
<https://colourandfilm.com/2019/04/07/the-colour-wars-colour-psychology-in-the-post-war-era-by-kathryn-millard/>

Murphey, D., Yoshor, D., & Beauchamp, M. S. (2008). Perception matches selectivity in the human anterior color center. *Current Biology*, 216 - 220.

Murray, D. C., & Deabler, H. (1957). Colors and Mood-Tones. *Journal of Applied Psychology*.

Neupert, R. (2007). *A History of the French New Wave Cinema* (Wisconsin Studies in Film). Madison: University of Wisconsin Press .

Odbert, H. S. (1942). Studies In Synesthetic Thinking: I. Musical and Verbal Associations of Color and Mood. *The journal of general psychology*.

Orgeron, D. (2007). La Camera-Crayola: Authorship Comes of Age in the Cinema of Wes Anderson. *Cinema Journal*.

Osvaldo, d. P., & Albertazzi, L. (2010). It is in the nature of the colours. *Seeing and Perceiving*, 39–73.

Ou, L.-c. (2004). A study of colour emotion and colour preference. Part III: Colour preference modeling. *Color Research and Application*.

Owen, J. (2012). Men and Women Really Do See Things Differently. From USA, National Geographic:
<http://news.nationalgeographic.com/news/2012/09/120907-men-women-see-differently-science-health-vision-sex/>

Palmer, S. E., & Schloss, K. B. (2010, April 26). An ecological valence theory of human color preference. *journal of the National Academy of Sciences (NAS)*.

Plutchik, R. (1980). *Emotion, a Psychoevolutionary Synthesis*. New York: Harper and Row.

Radulescu, E., Christodoulou, G., Katerina, M., & Critchley, H. (2012). Radulescu, E. et al. (2012). Simulated artificial illumination influences neural and behavioural correlates of presence in virtual environments: an fMRI study. Brighton, UK.

Regier, T., & Kay, P. (2009). Language, thought, and color: Whorf was half right. *Trends in Cognitive Sciences* .

Ross, R. (1938). *Studies in the psychology of the theater*. The Psychological Record.

- Ruscio, E. (2018). Talks. From Talk with Wes Anderson: <https://the-talks.com/interview/wes-anderson/>
- Russell, J. A. (1980). A Circumplex Model of Affect. *Journal of Personality and Social Psychology*.
- Ruzicka, D. (2012). Themes of privilege and whiteness in the films of Wes Anderson. *Quarterly Review of Film and Cinema*.
- Sarris, A. (1985). *The American Cinema*. Chicago: Da Capo Press,.
- Schaie, K. W. (1961). A Q-sort Study of Color-Mood Association. *Journal of Projective Techniques*.
- Seitz, M. Z. (2013). *THE WES ANDERSON COLLECTION*. New York.
- Sève, R., Indergand, M., & Lanthony, P. (2007). *Dictionnaire des termes de la couleur : glossaire interdisciplinaire des termes et expressions relatifs aux définitions et aux évaluations du domaine de la couleur*. Terra rossa.
- Stockhausen, A. (2017, November 18). Production Designer Adam Stockhausen on Building Wes Anderson's Worlds. (W. Tizard, Interviewer)
- Tanizaki, J. (2001). *In Praise of Shadows*. Vintage Classics.
- Tirard, L. (2003). *Moviemakers' Master Class: Private Lessons from the World's Foremost Director*. Faber & Faber.
- Trimmer, J. F. (2009). *A Guide to MLA Documentation*. Ball State University.
- Valan, F. (2012). The evolution of colour in design from the 1950s to today. *Journal of the International Colour Association*.
- Valdez, P., & Mehrabian, A. (1994). Effects of color on emotions. *Journal of Experimental Psychology*, 394-409.
- Vreeland, V. (2015). Color Theory and Social Structure in the Films of Wes Anderson. *Elon Journal of Undergraduate Research in Communications*.
- Ward, J., Huckstep, B., & Tsakanikos, E. (2006). Sound-Colour Synaesthesia: to What Extent Does it Use Cross-Modal Mechanisms Common to us All? Author links open overlay panel. *Cortex*, 42(2).
- Wexner, L. B. (1954). The degree to which colors (hues) are associated with mood-tones. *Journal of Applied Psychology*.
- Wittgenstein, L. (1950). *Remarks on Color*. Oxford.
- Yumibe, J. (2012). *Moving Color Early Film, Mass Culture, Modernism*. Rutgers University Press.

Zakia, R. D. (2007). Perception and Imaging. Morgan & Morgan





