

How modernist designers approach colour with the grammar of modern semioticians

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To my parents and family, I cannot thank you enough for all the support you have provided me, without you I would never have had this opportunity and for that I am forever grateful.

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Summary

This thesis establishes Modernist colour theory according to key faculty of the Bauhaus, before exploring colour semiotics within the work of Gunther Kress and Theo Van Leeuwen. The similarities and contrasts of these theories lead the paper into investigating the cultural and symbolic values of colour, and subsequently, what effect culture has on colour meaning. Looking at empirical and linguistic studies of colour, the paper discusses if absolute truths of colour can exist and the influences linguistics has on colour perception. Finally, by applying the findings through the analysis of selected Modernist paintings, this thesis aims to ascertain the influences of colour meaning and show the early Modernist approach to colour likens to that of semioticians.

Colour is life; for a world without colours appears to us dead
(Johannes Itten)

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Introduction

This thesis is a comparative study of modernist colour theory and modern semiotic theories of colour. In chapter one, modernist colour theory is explored through the writings of Josef Albers, Wassily Kandinsky, and Johannes Itten, all of whom were faculty of the Bauhaus. The chapter subsequently explores each artist's beliefs pertaining to colour and how each of their theories are related. Chapter two discusses the semiotics of colour referring to the work of Gunther Kress and Theo Van Leeuwen. With reference to the modernist theory discussed in chapter one, this chapter highlights similarities and differences between modernist and semiotic theories of colour.

Next, chapter three looks at empirical studies of colour, these studies aim to provide conclusive knowledge relating to colour and are subsequently compared with the talking points of chapter one and two. Chapter four delves into cultural and symbolic influences of colour meaning and the various connotations associated with them, using concepts put forward by Umberto Eco, Jean Baudrillard and Marshall Sahlins. Chapter five further focuses on the cultural influences of colour by investigating colour language with regards to existing studies on the language associated with colour, and in reference to the findings of chapter four. Finally, chapter six is an analysis of works by Kandinsky and Lissitzky, using the paintings as a means to express the findings of this thesis.

Ultimately, this thesis demonstrates that colour relies on external factors and associations in order to give it meaning because colour cannot exist on its own. Through the study of Modernist and semiotic colour theory, it establishes a basic understanding of both theories helps to relate the meaning of colour more effectively.

1. Modernist colour theory

The early twentieth century gave rise to the highly influential Bauhaus school of architecture and design, which was responsible for new approaches to design and visual communications including the use and reasoning of colours. Bauhaus was founded in 1919 in Weimar, Germany by Walter Gropius with the aim of creating a school to combine industry knowledge with traditional artistry (Bayer, et al., 1984, p. 12). To fulfil this goal, each student would be taught by two teachers in the same subject, 'an artist and a master craftsmen' (Bayer, et al., 1984, p. 12). Upon subsequent realisation of this idea, the institution moved to a larger facility in Dessau in 1925 designed by Gropius, where the Bauhaus gradually developed a new approach to functional design (Bayer, et al., 1984, p. 30).

Preeminent faculty of Bauhaus, Wassily Kandinsky, Josef Albers, and Johannes Itten, helped form the basis of Modernist colour theory through their work, writings, and teachings. Kandinsky, a Russian born painter and pioneer of abstraction joined the Bauhaus in 1923 primarily teaching a course concerning analytical drawing (Bayer, et al., 1984, p. 168). Albers, initially a student of the Bauhaus in 1923 in Weimar, later became a professor at Dessau, before continuing his faculty at Bauhaus Berlin until closure in 1933 (Bayer, et al., 1984, p. 218). Gropius hired Itten, a Swiss born artist, as the first faculty member of the Bauhaus in 1919. Itten consequently developed the preliminary course of admittance for the Bauhaus, although Itten eventually left the Bauhaus in 1923 due to a difference of opinion on how the courses should be run. Replaced by Moholy-Nagy, the fundamentals Itten taught continued to form the basis of preliminary teachings at the Bauhaus (Bayer, et al., 1984, p. 88). Modernist colour theory has foundations in investigations of the faculties, optical reception, and physics of colour perception. It examines the effects of contrast, timbre and the potential symbolism of perceived colour.

In *The Interaction of Colour* (1963), Josef Albers details a series of colour exercises and experiments. Albers states:

In visual perception a colour is almost never seen as it really is—as it physically is. This fact makes colour the most relative medium in art. In order to use colour effectively it is necessary to recognize that colour deceives continually.
(Albers, 2013, p. 1)

Albers is referring to the physical perception of a colour being highly dependent on a number of factors including brightness, lightness, contrast, and placement of colour (Albers, 2013, p. 34). Albers observes how a colour is rarely changed physically, but instead it is the viewer's perception that appears to change the colour (Albers, 2013, p. 1). Albers furthers this idea pertaining to colour perception with the following:

[...] even if that round red Coca-Cola sign with the white name in the middle is actually shown so that everyone focuses on the same red, each will receive the same projection on his retina, but no one can be sure whether each has the same perception.
(Albers, 2013, p. 3)

An individual's perception of a certain colour is therefore suggested to be unique, despite a general collective agreement of which colour they are observing. With this in mind, Albers noted that 'there is rarely agreement on colour intensity, this is, which among a number of reds is the reddest red' (Albers, 2013, p. 34).

Founded by Max Wertheimer, Kurt Koffka, and Wolfgang Köhler at the University of Frankfurt, Gestalt Psychology poses an interesting correlation with Modernist theory. Primarily, focusing on the notion that perception of an object resides in the relationship of the elements of an object and the ideas associated to it (Fancher & Rutherford, 2012). For instance, the 'squareness resides not in the particular lines, but in their relationship to each other' thus 'the human mind imposes an order of its own making on the objects of its perception.' (Fancher & Rutherford, 2012, p. 172 & 176). Perception of an object by the mind is influenced by the grouping of the object's elements and what this grouping signifies to the viewer. Therefore, suggesting a correlation with Albers, a viewer's perception of colour changes the colour opposed to the physical representation of the colour.

On the basis of this association, of interest to this study is an observation by Köhler in *Gestalt Psychology* (1970) concerning itself with the perception of colour:

One person may always report “red” where another person also says “red”. Still we know only that the first person has throughout a constant quality wherever and whenever the second person talks about red. We do not know that the first person has the same quality as is called red by the second person.

[...] in the case of direct experience two people always have two facts, in two different experiences

(Köhler, 1992, p. 13)

Although subjective and in the context of a thought experiment, Köhler suggests colour as an individually perceived phenomenon is a unique experience. This notion correlates to that of Albers’ writings, specifically Albers’ belief ‘no one can be sure whether each has the same perception.’ (Albers, 2013, p. 3). One extreme case of differences in colour perception are found in those with colour blindness. Those with colour blindness distinguish colours not according to hues but brightness, thus the colour blind individual may see green when others see red. Without concerning ourselves with the biological details of colour blindness, it is evident the colours a colour blind individual perceives can be considered different to those without colour blindness (Eco, 1985, p. 160). Therefore, in this case it is possible to ascertain colours are perceived differently between individuals when the distinctions of an individual’s hue boundaries differ. Subsequently, Albers’ statement in which each person receives the same projection on their retina, yet cannot be sure if their perception is the same, beckons the notion an individual cannot know how another experiences colour. Put simply, one cannot see with another person’s eye, nor can someone see another person’s projection of colour in their mind. The realisation of this notion gives support to Albers’ theory that it is the viewer’s perception of a colour that changes it as opposed to the colour itself. The subsequent connection between the physical and expressional values of colour becomes apparent as the perception of colours differs between individuals.

Johannes Itten explores this colour connection in his book *The Elements of Colour* (1970) which is a summary of the main ideas and writings of his seminal work

The Art of Colour (1962). He lays the foundations of his colour theory by first examining past artists such as Renaissance painter Matthias Grünewald, before exploring the relationships of colours and their impact (Itten, 1970). Itten describes colour as: '[...] forces, radiant energies that affect us positively or negatively, whether we are aware of it or not' (Itten, 1970, p. 12). This idea is found throughout Itten's writing to ground his theory of colour between scientific studies and expressional interpretation. Itten analyses 'colour aesthetics' into the following groupings, impression (visual), expression (emotional), and construction (symbolical) in order to realise the expressive values of colour. On the expressive potentialities of colours analysed through this framework, Itten details the representation of some colours as shapes and the subsequent meaning of this relationship:

The triangle assimilates all shapes of diagonal character, such as the rhombus [...] it is the symbol of thought, and among colours its weightless character is matched by lucid yellow [...] The incessantly moving circle corresponds among colour to transparent blue.

(Itten, 1970, p. 75 & 76)

Here the influence of Kandinsky is evident, who also associated colours with shapes, namely, yellow with the triangle, red with the square, and blue with the circle (Gage, 2006, p. 134). Kandinsky explores the association between colour and symbolism in his piece *Concerning the Spiritual in Art* (2008). Correlating the views held by Itten, on the psychological working of colour Kandinsky states 'colour awakes a corresponding physical sensation which undoubtedly works upon the soul' (Kandinsky, 2008, p. 59) and on the expressional value of colour; 'The power of profound meaning is found in blue [...] inclination of blue to depth is so strong that its inner appeal is stronger when its shade is deeper.' (Kandinsky, 2008, p. 83).

This chapter concludes with the consideration of colour theory of early Modernism, grounded in the optical perception and physics of colour. Modernists begin to elevate colour as a symbolic and expressional value through the perceived meaning of colours. The idea colour meanings and perception are not dependent solely on physical perception of colour, but rely on external associations and the relationships of forms. The following chapter examines the consideration of colour as

a semiotic mode, seeing how the values associated with colour semiotics echo that of Modernism and where the two ideas of colour meaning differ.

2. Colour as a semiotic mode

The advancements in colour theory, in part due to early Modernist theory, has led to the discussion whether colour can be considered a means for communication. This chapter focuses specifically on summarising the views of Gunther Kress and Theo Van Leeuwen and their discussion of colour as a semiotic mode. Subsequently, correlating their views to the Modernist colour theory discussed in chapter one and stating any differences where applicable.

Similar to Modernist colour theory, 'semantically, a single "system" has not developed' (Kress & Van Leeuwen, 2006, p. 228) for the consideration of colour as a semiotic mode. In *Reading Images: The Grammar of Visual Design* (2006), Kress and Van Leeuwen explore the communicative functions of colour and if they fulfil their application of Halliday's metafunctional semiotic theory. Kress and Van Leeuwen posit three metafunctions of Halliday's theory, ideational, interpersonal and textual in relation to colour as a semiotic mode. Ideational functions construct a representation of the world, while interpersonal functions enact or help to enact interactions characterised by specific social purposes and specific social relations, and textual functions rationalise communicative acts into events or text (Kress & Van Leeuwen, 2006). Considering that:

Colour clearly can be used to denote people, places and things as well as classes of people, places and things, and more general ideas.

(Kress & Van Leeuwen, 2006, p. 229)

Colour fulfils the first metafunctional requirement, the ideational function, as colour is commonly used to depict places, people, and ideas. There are many examples of this in everyday life, such as red denoting stop and green for go in a basic traffic light system. The second requirement, the interpersonal function, can be correlated to a study by Lacy which Kress and Van Leeuwen cite in their writing. The study finds that a Naval Correctional Centre applied pink to a room in order to relax aggressive individuals. The study went as far as to say this calming effect took place within fifteen minutes of the individual being in the pink room (Kress & Van Leeuwen, 2006,

p. 229). Although this can be subject to further study, within this example, colours of an environment directly influence the emotional response of individuals, forming the idea certain individuals may have an affective relationship to colour. Finally, the third and last requirement of Halliday's theory, the textual function, is applicable with regards to colour in many forms. Colour is used to create coherence and relay information as a communicative function to individuals. Kress and Van Leeuwen suggest the examples of advertisements using 'colour repetition to lend symbolic value to a product' such as 'when the blue on an advertised soap packet repeats that of a tranquil lake in the accompanying photograph.' (Kress & Van Leeuwen, 2002). Therefore, colour does not have intrinsic meaning, instead it relies on varying associations that function in contrast to each other to project meaning.

Consequently, Kress and Leeuwen conclude 'colour fulfils the three metafunctions simultaneously' (Kress & Van Leeuwen, 2006, p. 230). This application of Halliday's three semiotic metafunctions by Kress and Van Leeuwen shares some similarity with Itten's aforementioned comments concerning 'colour aesthetics'. Itten also theorised three functions to evaluate colours expressional value, and of which, two posit some correlation with Kress and Van Leeuwen's application of Halliday's functions. Itten puts forward the notions of the impression or visual aesthetic of a colour, meaning the physical visual representation of that colour, and the construction or symbolical aesthetic value of colour. Both these colour aesthetics, mirror the ideational function which is concerned with 'constructing representation of the world', in other words, representing the world as it appears pertaining to symbolic or cultural associations. Itten also acknowledges the expression or emotional aesthetic of a colour, specifically, invoking an emotional experience the use colours can suggest. Echoing the interpersonal function which focuses on helping to evoke interactions representing social relations. The third of Halliday's metafunctions according to Kress and Van Leeuwen, the textual function, is where the theories begin to differ. Itten does not necessarily address the idea put forward by Kress and Van Leeuwen that the elements of colour can be combined to 'help create coherence in texts' (Kress & Van Leeuwen, 2002, p. 349).

Whilst stating colour is able to fulfil the three metafunctions simultaneously, Kress and Van Leeuwen take care to note that they do not wish to infer this is always

the case for colours. They propose that 'colour does what people do with it' implying the metafunctional qualities of colour may change depending on its use and the mode to which it is applied (Kress & Van Leeuwen, 2002, p. 350). Within this framework, it is therefore acceptable to reason that colour retains semiotic value and can be considered a mode itself but the conditions of colour use vary this value:

maybe colour is a characteristic mode for the age of multimodality. It can combine freely with many other modes, in architecture, typography, product design, document design etc., but not exist on its own. It can survive only in a multimodal environment. (Kress & Van Leeuwen, 2006, p. 231)

Kress and Van Leeuwen suggest that colour is not one particular mode itself but instead is a 'characteristic mode' to be combined with other modes. When applied to other modes, colour intrinsically gives them more meaning whilst still projecting the meaning associated to the colour directly. This idea of colour as an 'isolated meta statement' likens to Kandinsky's idea that 'colour cannot stand alone; it cannot dispense with boundaries of some kind' (Kandinsky, 2008, p. 64). Like Kress and Van Leeuwen, Kandinsky believes colour to be something that relies on external factors in order to give it some form of meaning. That by itself, without the associations or secondary meanings, colour has no meaning.

A never-ending extent of red can only be seen in the mind; when the word red is heard, the colour is evoked without definite boundaries (Kandinsky, 2008, p. 64)

Kandinsky postures that only in our minds can colour exist without boundaries, although one can potentially question this idea, as the colour thought of in the mind without physical perception may actually be a reference to the idea of that colour. Thus, colour relies on boundaries and external factors to give it meaning and practical purpose. In Kress and Van Leeuwen's analysis, the external factors or 'boundaries' would be elements of the 'multimodal environment' (Kress & Van Leeuwen, 2002, p. 231). This notion is warranted due to the furthered digitalisation of the world, leading to the constant and continuous exposure to different medias.

Kress and Van Leeuwen revisited their work on colour semiotics with the paper 'Colour as a Semiotic Mode: note for a grammar of colour'. This paper explores the notion of features normally associated with colour such as saturation, hue, modulation, differentiation etc., can be considered as features of a grammar of colour.

The work of Malevich, Mondrian, Kandinsky and others was in many ways a first attempt to explore the possibility of a broader, more widely applicable 'language of colour', and hence of a 'grammar' that might be accepted beyond a specific smaller socio-cultural group

(Kress & Van Leeuwen, 2002, p. 348)

Kress and Van Leeuwen suggest through their work, Modernists attempt to create a universal 'language of colour' which transcends different languages and cultures. Regarding Kandinsky, one can postulate his notion of colours naturally complementing shapes, and in turn communicating the feeling evoked by the colour and or shape. He postures 'keen colours are suited to sharp forms (e.g. a yellow triangle), and soft, deep colours by round forms (e.g. a blue circle)'. (Kandinsky, 2008, p. 66). This particular 'language of colour' influenced how Itten also described certain colours, with his references of a 'lucid yellow' having a 'weightless character', representing thought and association to the triangle or all shapes of diagonal construct (Itten, 1970, p. 75). Despite these differences, the work produced by Modernists and their writings concerning colour laid the foundations for later semiotic discussions.

Kandinsky distinguished 'two affordances of colour, two sources for making the meaning of colour' (Kress & Van Leeuwen, 2002, p. 355), these distinctions form the basis of Kress and Leeuwen's own ideas regarding the affordances of colour. The first is the association or provenance of the colour, specifically where the colour has come from and where it has been used in history or culture. The second being 'the affordance of the distinctive features of colour', which Kress and Van Leeuwen distinguish as value, saturation, purity, modulation, differentiation, and hue of colour (Kress & Van Leeuwen, 2002, p. 355 – 357). They consider it:

a quality which is visual rather than acoustic, and is not systemized, as in phonology, as structural oppositions but as values on a range of scales. One such is the scale that runs from light to dark, another the scale that runs from saturated to desaturated, from high energy to low energy and so on.

(Kress & Van Leeuwen, 2002, p. 355)

They believe these features not only serve to 'distinguish different colours from each other, but also function as meaning potentials' (Kress & Van Leeuwen, 2002, p. 355). As detailed in chapter one, Albers claims that colour perception is affected by factors such as brightness and contrast, and an individual's perception. The perception based on these factors is what appears to change the value of the colour as opposed to the physical colour changing itself (Albers, 2013, p. 3). This notion correlates to the suggestion colour is a 'characteristic mode for the age of multimodality'. The characteristics of the colour being the values or 'grammar' associated to it. Whilst varying the application of these 'distinctive features' of a colour subsequently allows for the variation in the semiotic meaning and value of the colour.

This chapter gave an overview of colour as a semiotic mode with reference to Kress and Van Leeuwen's semiotic theory and visual grammar of colour. Highlighting both colour semiotics and Modernist theory believe colour relies on external factors and other elements to give it meaning. The variation of distinctive features of characteristics related to a colour can alter the meaning. Subsequently correlating with Albers' view factors of colour and perception change the value of colour. In the following chapter, empirical studies of colour will be examined in order to establish whether or not their results determine certainties with regards to colours and colour meanings.

3. Empirical colour studies

Empirical studies of colour often examine the use and impact that colour has on a subject under certain circumstances. In contrast to the Modernist and semiotic theories discussed previously in chapter one and chapter two, these studies attempt to arrive at an empirical certainty regarding colours with findings based on practical evidence and not purely theorisations.

'Words in Colour: Two Experimental Studies' (1968), by Lillian R. Hinds and William G. Dodds are two such studies. These studies look at colour as an 'added dimension' to help with the advancement of beginner level reading in primary school children and inner-city illiterate adults. Instead of the standard black and white typography, the letters of each word in this study are given an individual colour:

by presenting the words in the multi-colours which make up the whole word, stimulates the total recall of the coloured image as one recalls the graceful, swaying yellow daffodils. This is visual imagery recall. As opposed to the pure memory recall employed when one remembers a telephone number
(Hinds & Dodds, 1968, p. 45)

Using coloured words encourages 'visual recall' as opposed to relying solely on memory recall. This discovery signalled that 'word recognition and spelling skills were significantly higher' for both children and adults when learning to read with coloured words as opposed to traditional black and white text (Hinds & Dodds, 1968):

Colour serves as the initial visual cue to trigger the response in the mind of the viewer. [...] colour reinforces both his auditory and visual imageries.
(Hinds & Dodds, 1968, p. 45)

This study notes 'the added dimension of colour appears to simplify the decoding-encoding process' with reference to how the participants process the information. The notion that 'colour serves as the initial visual cue to trigger a response in the

mind of the viewer' allows us to extrapolate the influence colour has on one's perception of a subject.

In this case, colour encourages visual recall to the study's participants who are learning to read. Subsequently, with an understanding of this influence, it is acceptable to assume the perception of colour influences a wide range of subjects. Therefore, relating the reader's visual recall and colour as a 'visual trigger' to the earlier discussion of Modernist and semiotic theories of colour and how colour projects meaning. The perception of colour evokes a response from viewers, whether they are aware of it or not.

This idea of colour inducing visual recall or acting as a visual trigger can be associated to the aforementioned Coca-Cola example by Josef Albers (Albers, 2013, p. 3) in chapter one. If one was to think of Coca-Cola, although individuals perceive colours somewhat differently (Köhler, 1992), the colour red would be visually recalled due to its association with the brand.

Referring to the previously mentioned study used by Kress and Van Leeuwen in their paper describing the effects colour can have on an individual (Kress & Van Leeuwen, 2006), in the subjective terms of that experiment and without any inherent meaning proposed, the colour of the room evoked a response in their behaviour. Within the context of colour as a 'visual cue to trigger the response in the mind of the viewer' (Hinds & Dodds, 1968), the notion put forward in this case is individuals are associating the colour of their environment with preconceptions of what the colour means to them.

Another such study is 'Meaning-making with Colour in Multimodal Texts: an 11-year-old student's purposeful doing' (2012), undertaken by Sylvia Pantaleo. This qualitative study 'explored Grade 6 students visual meaning-making skills' with reference to multimodality (Pantaleo, 2012, p. 1). This study focuses on one student in particular, Anya, and the decisions she makes in her colour use and the reasons for which she chooses certain colours. The study shows:

Anya's explanations reveal how her previous experience with and knowledge of colours influenced her choice of colours. She associated colours with emotions, objects, and ideas. For example, Anya connected blue with calmness / water, green

with nature / environment, orange with energy and joy (her Dad), red with emotion and excitement and yellow with brightness and light.

(Pantaleo, 2012, p. 6)

In Anya's explanations of her colour use there exists direct links to Modernist theory and the semiotics of colour. Anya's associations of colours with emotions and ideas exhibit parallels to the symbolic and expressional values attributed to colour by the likes of Kandinsky and Itten. Here, Anya associates blue with suggest calmness whilst orange is associated to energy, two complementary colours used to contrast in meaning and visually. Each colour Anya chooses evokes it's own distinct feeling and characteristics according to her experience of that colour. Perhaps the clearest link to Modernist theory is the attribution of certain colours to people, ideas and objects in her drawings, such as orange for her Dad and joy, blue for her Mum, and water, and green for grass (Pantaleo, 2012, p. 5). This likens to Kandinsky's view that certain shapes have associations with colours such as yellow, red, and blue. However, the colours used by Anya are based on personal experience with her parents and the ideas she has developed based on these experiences. That is to say, another individual may not use the same colours to describe Anya's parents as she did. Subsequently showing Anya's colour associations to be subjective, unlike Kandinsky who claimed the associations of certain shapes with a particular colour were fixed.

Furthermore, Anya's use of colour not only satisfies Halliday's metafunctional requirements for a semiotic mode simultaneously according to Kress and Van Leeuwen (Kress & Van Leeuwen, 2006, p. 228), Itten's colour aesthetics are likewise realised. The depiction of the grass as green and blue with water showcases the ideational function and visual aesthetics of colour. Next, the emotions and moods Anya depicts using colours evokes the interpersonal function and the expressionist value of colour. Lastly, the combinations of colours used by Anya highlight a textual function, by communicating meaning with the viewer.

Consequently, this study mentions students 'read information about various cultural meanings associated with primary and secondary colours' (Pantaleo, 2012, p. 3). Offering each student an insight into how they are able to use colour to express further meaning in their work. Thus, exposure to existing cultural meanings

of colours may predispose how a colour is used.

Therefore, it is worthwhile noting although empirical studies on colour attempt to provide definite knowledge on the effects or meaning colours have, as mentioned in chapters one and two, perception of colour is subjective and meaning can vary depending on external factors. The question is raised whether or not the findings of each empirical study can be reliably reproduced since an individual's or culture's experience of colour may differ. To compensate for the cultural predisposition of colour, Sahlins suggests the meaning of colours must be explored 'from the cultural meaning of colour to the empirical test of discrimination, rather the other way around.' (Sahlins, 2000, p. 152). The following chapter will therefore look at the symbolic and cultural influences of colour and how these influences are able to alter the meaning and use of colour depending on circumstances.

4. Cultural values of colours

In this chapter, theorisations on the cultural and symbolic values of colour are explored with reference to Umberto Eco, Jean Baudrillard, and Marshall Sahlins. The chapter focuses on the cultural, symbolic, and expressional value of colour based on a viewer's perception and experience. According to authors such as Baudrillard and Eco, colour as a phenomenon exhibits no inherent meaning, and instead, attributes meaning by both historical and current cultural associations (Eco, 1985, p. 174). As a consequence, different cultures throughout the world associate different values to the same colours.

Edward Branigan states in 'The Articulation of Colour in a Filmic System' (2006):

[...] colour has neither an absolute perception base, nor an absolute meaning (emotional or intellectual): colour depends on relationships and comparisons. To say that colour has no intrinsic meaning however is not to say colour has no meaning. Colour, in fact, is preeminently a cultural phenomenon.
(Branigan, 2006, p. 170)

Here Branigan addresses the discrepancies present when considering the perception and meaning of colour. In contrast with Albers theory discussed in chapter one that 'no one can be sure whether each has the same perception' (Albers, 2013, p. 3), Branigan is more concerned with colour being predisposed to cultural circumstance. By conveying colour as a 'cultural phenomenon', Branigan believes the meaning of colour depends on the relationships and comparisons culturally associated to it.

Jean Baudrillard examines this view of colours in his book *The System of Objects* (1996), he writes:

[...] colours generally derive their significance from outside themselves; they are simply metaphors for fixed cultural meanings.
(Baudrillard, 1996, p. 31)

Again the notion put forward is that colour does not have fundamental meaning except that which is placed upon them by cultural associations. Baudrillard declares colour 'remains circumscribed by form' (Baudrillard, 1996, p. 30) noting colour is limited by the form in which it is presented by society. He goes on to proclaim that 'tradition confines colours to its own parochial meanings' and that 'the world of colours is opposed to the world of values' (Baudrillard, 1996, p. 31). Traditionally culture has assigned fixed meanings to colour, a notion in conflict with Baudrillard's understanding that in contemporary consumerist society, colour meaning is permutable. The meaning of colour changes depending on additional external elements, and circumstance of use.

Baudrillard discusses the idea of colour meaning as permutable within the context of interior design and home decoration as a setting for his theory. He describes 'colour as an atmospheric value', with atmosphere being a sign system for the individual elements of a room. He notes that 'the success of the whole occurs in the context of the constraints of abstraction and association' (Baudrillard, 1996, p. 40). The abstraction and association mentioned can be correlated to the symbolic values attributed to the colours in a home:

colour is no longer a way of emphasizing each object by setting it off from the décor; colours are now contrasting ranges of shades, their value has less and less to do with their sensory qualities, they are often dissociated from their form
(Baudrillard, 1996, p. 35)

The value of colours relies less on its visual impression or, as Baudrillard described, their 'sensory qualities'. This dissociation of form suggests colour has transcended physical perception to now inhabit its own space; one that answers 'to one imperative only – the gauging of atmosphere' (Baudrillard, 1996, p. 35). The shades and hues of colours used in a home contribute in realizing the individual's notions of what the colours signify and the atmosphere they wish to create.

Kress and Van Leeuwen also examine the value of colour within the context of interior design and home decoration:

The colours of a home above all express *character*, express the identity, the personal characteristics, and the values and interests of the home owner or owners (Kress & Van Leeuwen, 2002, p. 358)

According to Kress and Van Leeuwen, within the discourse of interior design, colours in the home represent traits of homeowners. They mention how the example of colour use in home decoration shows 'how colour semiosis can work', colour use is an extension of an individual's 'character and values' (Kress & Van Leeuwen, 2002, p. 359). This correlates to Baudrillard's view the atmosphere of a room is an extension of what an individual believes the colour to mean. In contrast with the thoughts of Kandinsky whom often associated primary colours to a particular meaning, such as the colour green, stating 'green is the most restful colour that exists' (Kandinsky, 2008, p. 84). Baudrillard, and Kress and Van Leeuwen would argue this correlation of green with the explicit association of being restful is, by nature, subject to change personally and culturally dependent on a number of factors, thus, cannot be fixed.

Umberto Eco considers the association of colour with cultural symbolism in 'How Culture Conditions the Colour We See' (1985). In this essay Eco explores how language and culture ultimately effect how colours are perceived and identified, using examples of colour use embedded with cultural symbolism to highlight his ideas. Eco goes on to quote Marshall Sahlins' observation, 'colour distinctions are naturally based, albeit that natural distinctions are culturally constituted?' (Sahlins, 2000, p. 152). The ability to distinguish between colours is in part based on our perception, and partly due to cultural connotations. Sahlins suggests that although these distinctions are perceived physically, or 'naturally based', they have already been influenced by external cultural associations. Therefore, the only way to solve these opposing considerations is to read 'from the cultural meaning of colour to the empirical test of discrimination, rather the other way around.' (Sahlins, 2000, p. 152). Following this, and understanding that as a semiotic device, colours pertain themselves to socio-cultural aspects of the human experience (Sahlins, 2000, p. 148).

Eco acknowledges that as humans 'we frequently use colours as semiotic

devices' (Eco, 1985, p. 173). One example Eco gives is the use of colour in national flags from around the world:

a socio-semiotic study of nation flags remarks that nation flags make use of only seven colours: red, blue, green, yellow, orange, black and white. [...] The colour of national flags are not colours: physical pigments, they are expressions correlated to cultural units and as such are strongly categorized.

(Eco, 1985, p. 173)

Similar to the observations from Baudrillard and then Kress and Van Leeuwen, that the colour of a home is based more on the attributed 'value' and not its 'sensory qualities'. Eco proposes the colours of a national flag are not perceived solely on the basis of their 'natural distinctions' but instead on their associative meanings. The cultural associations that determine meanings act as content systems used to categorize colours (Eco, 1985, p. 174). Eco likens the categorization of the seven colours of the rainbow, deemed a Western convention, with the trend of national flags tending to only use seven colours (Eco, 1985, p. 174). The categorization of the same seven colours across the two separate content sets demonstrates the notion that colour depends on relationships and comparisons. The same colours offer various associations to their cultural content systems, and subsequently different perceptions of what they mean.

The symbolic use of colour by nations on their national flags therefore translates well to the idea that colour is used as a content system for expressing cultural meanings. Eco lists some examples of similar colour use by the national flags of various nations that denote different meanings:

Red, for example, symbolizes bravery, blood and courage in many countries (Afghanistan, Austria, Italy, Bulgaria, Burundi, Chile, Ecuador etc.), but it also represents animals in Bolivia, faith in Ethiopia, soil in Dahomey. White, almost universally, stands for peace, hope and purity, but in Congo Kinshasa, hope is represented by blue which, for the majority of countries, stands for sky, sea and rivers.

(Eco, 1985, p. 174)

With this it is notable that colours can vary meaning, or value, based on the context of their use. Not only do the colours of national flags meanings vary depending on their cultural symbolism, the very association of certain colours with a country alters its connotation. To illustrate this point, Eco uses the example that the Swedish and Finnish national flags contain a similar shade of light blue whilst the Icelandic and Norwegian flags contain a similar shade of dark blue. Considering the Swedish flag contains a yellow cross on a light blue background, Eco notes that 'there is not a flag in the world with a yellow cross on a *dark blue* background' since 'everyone would recognize such a flag as the symbol of Sweden' (Eco, 1985, p. 173). Furthering the notion colour depends on other elements for meaning, that it cannot exist on its own, drawing parallels to Kress and Van Leeuwen's statement which deems colour as a 'characteristic mode'. Stating colour 'can survive only in a multimodal environment.' (Kress & Van Leeuwen, 2002, p. 351), and in this example the environment that offers colour meaning is both the cultural symbolism of national flags and the attachment of colour in representing a nation.

Another case which displays the cultural differences concerning the categorization of colours is the Hanunóo of the Philippines as put forward by Eco:

Hanunóo segmentation follows our basic English paradigm, only to a limited extent, since it involves black, white and grey in different ways. What is important for our present study is that the pertinentization of the spectrum depends on symbolic, i.e. cultural principles. Note that these cultural pertinentizations are produced because of practical purposes, according to the material needs of the Hanunóo community (Eco, 1985, p. 169)

This quote highlights how existing cultural principles and associated symbolism contribute as distinguishing factors for the segmentation and subsequent categorization of colours by a specific culture. As Köhler states in *Gestalt Psychology*:

When I see a green object, I can immediately tell the name of the colour. I also know that green is used as a signal on streets and as a symbol of hope. [...] I know that, as

an independently existent sensory fact, it has acquired secondary meanings, and I am quite willing to recognise the advantages which these acquired meanings present in practical life.

(Köhler, 1992, p. 139)

Köhler recognises the secondary meanings associated to colours are useful in order to communicate a meaning or message, in this case using green as a traffic signal or as a symbol of hope. Köhler states that although he knows these cases to be true, the origin of these meanings rely on the socio-cultural associations or 'secondary meanings' that have been given to the colour. Just as Köhler recognises the advantages of such cultural meanings in practical life, Eco ascertains the cultural associations to colour of the Hanunóo arise from the practicality of their use within the community. Referring back to Itten's third colour aesthetic, construction (symbolic), he uses the example:

In China, yellow, the most luminous colour, was reserved to the Emperor, the Son of Heaven, none other might wear a yellow garment; yellow was a symbol of supreme wisdom and enlightenment.

(Itten, 1970, p. 13)

This instance highlights the direct correlation between the symbolic associations yellow has in Chinese culture, as a 'symbol of supreme wisdom and enlightenment', with the consequential effect this had on practical life in their society; 'none other might wear a yellow garment'. Therefore, the examples from Köhler and Itten, and the colours of national flags, exhibit an understanding each culture develops its own associations, practices, and relationships pertaining to colour. Concurrently, supporting the notion of colour perception being based on individual experience and the notion that one's environment and, or culture influences perception. Again, the recursive issue of perception observed by Sahlins is encountered. Colour distinctions by a culture, which can to some extent be considered unique according to their world experience, are naturally based, however the ideas concerning natural distinctions are in turn influenced by the experiences of that culture (Sahlins, 2000, p. 152).

Therefore, the reasons which produce these influences and associations of

colour meanings can be examined, as these form the basis for the content systems and categorizations of colour use by cultures:

An examination of the history of the notion of “basic” colour-sets – often assimilated to the concept of the four elements, earth, air, fire, water, in Classical Antiquity and the Middle Ages – shows that they shared almost no common feature other than the desire to reduce the myriad of colour-sensations to a simple and orderly scheme (Gage, 1999, p. 29)

Here John Gage has put forward ‘colour-sets’, colour categories so to speak, from a historical point of view are often linked to the interpretation of the natural elements. In this framework, forming the basis for the suggestion of blue with water, green with earth, red with fire and so on. This ‘classical’ view of colour categorization and schemes is echoed by the modern concept of warm and cool colour sets. Typically, ‘Blue is always cold and red is always warm’ (Kandinsky, 2008, p. 88). The grouping of colours into sets distinguished by names such as ‘warm’ or ‘cool’ allow for a person to associate secondary meanings already established by the physical sensations of warm and cool to the corresponding colours. Considering the concept that red is a warm colour, Kandinsky acknowledges ‘[...] in itself it has no suggestion of warmth or cold, such attributes having to be imagined for it afterwards’ (Kandinsky, 2008, p. 64). In other words, the colour red does not allude to being warm or cool itself, but the natural and culturally conceived ideas of red allows for this attribute to be acquired. Sahlins remarks that ‘*for any given culture* the choice of colour meanings will not appear arbitrary but conditioned or motivated’ (Sahlins, 2000, p. 159).

With reference to the both the four elements and warm or cool colour sets, the meanings given to individual colours, and groups of colours, are based on existing perceptions. These perceptions usually find their origins in natural experiences such as the representation of the world (earth, air, fire, water), or the sensation of feeling warm or cool. Indeed, this is evident in the previously discussed study from chapter three, ‘Meaning-making with Colour in Multimodal Texts’ concerning, in which Anya uses the colour green to denote grass and blue to denote water or the idea of calmness. These colours do not suggest these meanings themselves but have the

meanings attributed to them due to perception or experience.

The cultural context and use of a colour coupled with the system in which it is presented can alter its value. This relates back to Baudrillard's idea of 'atmospheric value' where he states 'cultural connotations at the level of objects is what I am calling atmosphere' (Baudrillard, 1996, p. 40). Colours dissociating from their form, becoming abstractions and associations correlates to colour and colour sets being considered cultural units (Eco, 1985). A notion which exhibits the 'meaning potentials' of Kress and Van Leeuwen's suggested grammar of colour. That although multiple associations can be attributed to the same colour, it is the 'distinctive features' of the colour which allow for different meanings and perception.

Over the course of this chapter the notion established is the idea of colour having no intrinsic meaning, and instead colour meaning relies on cultural and external associations. Culture influences the meanings associated to colour, and these cultural influences are in turn shaped by an individual's or culture's natural experience of a colour. The following chapter will explore this connection with more focus on the role colour language subsequently plays in forming the meanings and perception of colour.

5. Linguistic values of colour

The previous chapter demonstrated the meaning of colour depends on the culture in which it is presented, consequently, each culture has its own colour language. This chapter will focus on the influence language has on colour and how this affects an individual's perception of colour. Studies have shown 'speakers of different languages do evaluate perceptual distinctions differently' (Athanasopoulos, et al., 2010, p. 9), supporting the notion language influences the discrimination and categorisation of colours (Athanasopoulos, et al., 2010).

The Sapir-Whorf hypothesis suggests 'a language determines or greatly influences the modes of thoughts and behavior characteristics of the culture in which it is spoken' (Hasan, et al., 2011). Although the hypothesis is widely discredited now, it can be demonstrated to some extent language does influence our perception. A simple example of this principle is the use of feminine and masculine nouns in a language such as French. Due to this language construct, French speakers may consider an object as being male or female whilst an English speaker would consider the object to have no gender. Therefore, suggesting the language associated to colours can influence how an individual subsequently perceives colour to a certain extent.

Referring to the previously explored example of national flags and their cultural colour symbolism, Eco suggests 'verbal language has shaped our average sensitivity' with regards to the categorisation of colours (Eco, 1985, p. 174). The identification of colours heavily relies upon the language available for association. When considering the 'verbal language' of colour, there is a 'marked discrepancy' in the large amount of 'perceivable colours and the handful of names we use to identify them' (Gage, 1999, p. 262). According to Gage, the 'radical imbalance between sensation and language means the experience of colour will be very largely associational.', he suggests this discrepancy encourages 'representations' of colour to be 'more concerned with ideas about colours' rather than the perception of colours themselves (Gage, 1999, p. 27). Thus, the naming of colours, or the associated language of colour, presents itself as simply an identification or verbalisation of the ideas pertaining to colour. Therefore, it is reasonable to suggest colour-language is

both a content set, and expression set much like the colours of national flags or the use of colours in a room to create atmosphere. Since language does not posit a word for every single hue of perceivable colour, the names attributed to colour are merely categories for perceivable groups of hues. For example, in the English language, *blue* covers a wide spectrum of varying hues, which despite containing perceivably different colours, are all classified as *blue*.

The study 'Russian blues reveal effects of language on colour discrimination' (2007), conducted by John Winawer et al. explores the idea of linguistic colour categories influencing colour perception (Winawer, et al., 2007). It focuses on the fact that the Russian language has a distinction of light blues (*goluboy*) and dark blues (*sinii*) compared to the English language with only one (*blue*). Participants were asked to distinguish, out of a triad of squares, which of the bottom blue squares matched the top blue square in hue. The results of this study found that:

Russian speakers were faster to discriminate two colours if they fell into different linguistic categories in Russian (one *sinii* and the other *goluboy*) than if the two colours were from the same category (both *sinii* or both *goluboy*).
(Winawer, et al., 2007, p. 7780)

Due to the additional categorisations of the colour blue the Russian language has, Russian speaking participants performed better when distinguishing two shades which fell into either classification of *sinii* or *goluboy*. However, if the two colours were from the same category of colour, they did not perform as well. The latter finding poses similarity to the performance of the English speakers who, due to having only one name for all shades presented (*blue*), 'did not show any a category advantage in any condition' (Winawer, et al., 2007, p. 7780). Consequently, the study puts forward the notion:

if two colours are called by the same name in a language, speakers of that language will judge the two colours to be more similar and will be more likely to confuse them in memory compared with people whose language assigns different names to the two colours
(Winawer, et al., 2007, p. 7780)

The Russian speakers being accustomed to having two names for specific shades of blue, as opposed to one, performed better at making distinctions between the colours. Thus supporting the notion 'categories in language can affect performance of basic perceptual colour discrimination tasks.' (Winawer, et al., 2007, p. 7780).

In a similar study to the Russian blues, Athanaspoulos et al. examines the influence of Japanese blues on colour perception in bilingual individuals. One particular aim of the study was to determine if 'linguistic categories affect the way speakers of different languages evaluate objectively similar perceptual constructs' (Athanaspoulos, et al., 2010, p. 14). Similar to Russian, Japanese has two distinctions between lighter (*mizuiro*) and darker shades of blues (*ao*) (Athanaspoulos, et al., 2010). By looking at a non-Indo-European language in this study it presents the thought that the linguistic influence of perception is not exclusive to Western languages. Echoing the results of the Russian blues study, this study ultimately found that 'Japanese monolinguals show categorical perception at the *ao/mizuiro* boundary whereas English speakers do not.' (Athanaspoulos, et al., 2010, p. 16). As before with the results of the Russian blues study, due to the two distinct categorisations of the colour blue which Japanese speakers have, they are able to distinguish shades where traditional English speakers cannot.

The Japanese blues study notes the possibility of living within a certain country or culture may encourage the use of certain 'linguistic categories' that influences cognition (Athanaspoulos, et al., 2010). In this scenario, cognitive ability includes the perception of colour and or socio-cultural ideas pertaining to colour. Consequently, the idea presents itself 'that language is the mechanism that assists the influence of culture on cognition, acting as an intermediary between them' (Athanaspoulos, et al., 2010, p. 15), suggesting language is an instrument in assisting cultural influence on the perception of colours.

A study researching the semantic relationship of colour in different cultures discusses how each language has its own set of basic colour terms, noting these terms do not universally apply meaning to the same colour space (Hasan, et al., 2011). The study posits, as before mentioned, that the meaning of colour varies accordingly based on 'certain universal human experiences' and is one of the

reasons why certain colour terms 'appear to have different semantic meanings' (Hasan, et al., 2011, p. 206 – 207). The study in particular looks at Arabic and English culture, and in doing so commented most of the extended meanings associated to colours in these languages were similar (Hasan, et al., 2011). Supporting the theory of universal human experiences being one basis for colour meaning. One difference they found however, were the meanings associated with the colour red. Though in Arabic red still conjures the ideas of love, passion, anger, and blood as English does. The colour red in Arabic is also used for a person who is to be executed as a representation of their punishment or end of life. On the contrary, 'in the English language, red has extended its meaning to a positive meaning such as Santa Claus.' (Hasan, et al., 2011, p. 211). With regards to the polarity of these meanings it is evident how associations from different cultures can affect the meaning of colour. However, it is also worth noting – as previously mentioned in this essay – colour is given its meaning based on the context in which it is perceived. The fact that red has some negative connotations in Arabic culture does not mean that this negativity is associated to the colour each time it is referenced or seen. It merely suggests that due to different socio-cultural experiences, the same colours in one culture may construe positivity, whilst portraying the opposite in a separate culture.

Gage acknowledges the semantic differentiation of the same colours in non-European languages, where he notes that in certain instances 'white has been assimilated to black'. The 'semantic polarity of positive and negative which has usually been regarded as axiomatic' for the idea of white meaning positive and black being negative 'does not apply' (Gage, 1999, p. 30).

Another example of polarity in colour meaning highlighting language and culture developing influence based on that cultures experience is the following from Johannes Itten:

When the Chinese wear white on occasions of mourning, this signifies an escorting of the departed into the kingdom of purity and of heaven. The white colour is not an expression of personal grief; it is worn by the way of assisting the dead to a state of perfection. (Itten, 1970, p. 13)

In comparison to the traditional Western values of white and black, the association of mourning is with the colour black and signifies grief, whereas white can be traditionally used for baptisms. Although the white in Chinese culture is used for mourning, it does not signify grief as the use of black does at a funeral in Western culture. Though the notions of heaven are also commonly associated with white in Western cultures. The example of white at baptisms symbolising the washing away of sins and again, of purity, is similar to the view of white symbolising purity in Chinese culture. Although the context of colour use differs, the ideas associated to the colour remain similar.

Considering the prior discussions concerning the cultural and linguistic influence on colour perception and meaning, it is notable that both factors cohesively or separately influence the perception of colour. The discussions have given support to Gage's observation of the discrepancies between visible colour and the language used to describe them. Observing more interest in the ideas surrounding colours than the colour itself or language or colours (Gage, 1999, p. 27). Indeed, this is an observation hinted at by some of the Modernists, referring to Itten's description 'colours are forces that affect us positively or negatively, even without knowing' (Itten, 1970, p. 12). Alternatively, according to Kandinsky, 'colour awakes a corresponding physical sensation working upon the soul' (Kandinsky, 2008, p. 59). Both Modernists alluding to the discussion earlier in the dissertation concerning colour perception is based on human experiences, observations, and cultural or symbolic associations. Kress and Van Leeuwen in saying 'colour does what people do with it' (Kress & Van Leeuwen, 2002, p. 350), links into the discussed notion different cultures and languages experience colour in separate ways and this is what forms colour meanings.

The findings of these studies highlight the language which is available does indeed influence colour perception to a certain extent, despite the discrepancy between the amount of perceivable colours. Thus, echoing Eco's earlier statements that verbal language has shaped societies view of colours. An idea which is supported considering the results of the previous linguistic studies and examples of cultural influence mentioned in chapter four, such as the Hanunóo of the Philippines.

The premise of these studies aligns with the recommendation of Sahlins from chapter four, where he posits studies should apply cultural meaning to empirical tests and not the other way round (Sahlins, 2000, p. 152). By doing so, this accounts for any existing cultural predisposition towards colour perception. For example, in the case of the Russian and Japanese blues studies, it is the acknowledgment Russian and Japanese speakers have two categories and words for the colour blue whilst English has one. Thus, contrasting the approach towards colours by the studies analysed in chapter three, where empirical certainty was attempted in order to ascertain conclusive knowledge relating to colour. This chapter therefore reveals language associated to colour influences the perception of colour and cultures perceive colours differently according to the language available. The next chapter will analyse a selection of Modernist paintings within the context of the findings from this chapter and the previous chapters of this thesis.

6. Analysis

In previous chapters it was shown the meaning of colour relies on the perception of colour, the variation of cultural associations, and the colour language available. In this chapter, these ideas will be discussed within the context of Modernist paintings, applications of these themes therefore allows for a comparative analysis of Modernist and semiotic colour theory. The paintings that will be analysed are *Composition VII* (1913), *Composition VIII* (1923), *Composition X* (1939), by Kandinsky, and *Beat the Whites with the Red Wedge* (1920) by El Lissitzky. Consequently, showing the findings of this paper that colour relies on multiple factors, including perception, external elements or form, and culture in order to elicit meaning.



Figure 1: *Composition VII*, Kandinsky, 1911

Composition VII (1911), displays an attempt by Kandinsky to portray colour without form, an abstract painting where colour itself is used to evoke the emotions of a viewer as opposed to objects or symbols projecting their meaning on colour. Analysis of writings, studies and pictures Kandinsky produced for the research of this

painting, Kandinsky was suggesting the realisation of the themes of 'Deluge, Last Judgement, Resurrection and Paradise' (Tate Modern, 2017). Painted the same year as Kandinsky published *Concerning the Spiritual in Art*, the colours used by Kandinsky attempt to show the emotions he attributed with them. The brighter and more luminous colours represented by sharper shapes and the softer, deeper colours represented by round forms (Kandinsky, 2008, p. 66). Subsequently, showing the initial steps towards Kandinsky applying his theories of colour detailed in *Concerning the Spiritual in Art* onto the canvas. With the aim of developing a non-verbal language of colour in which colour elicits emotions and feelings.

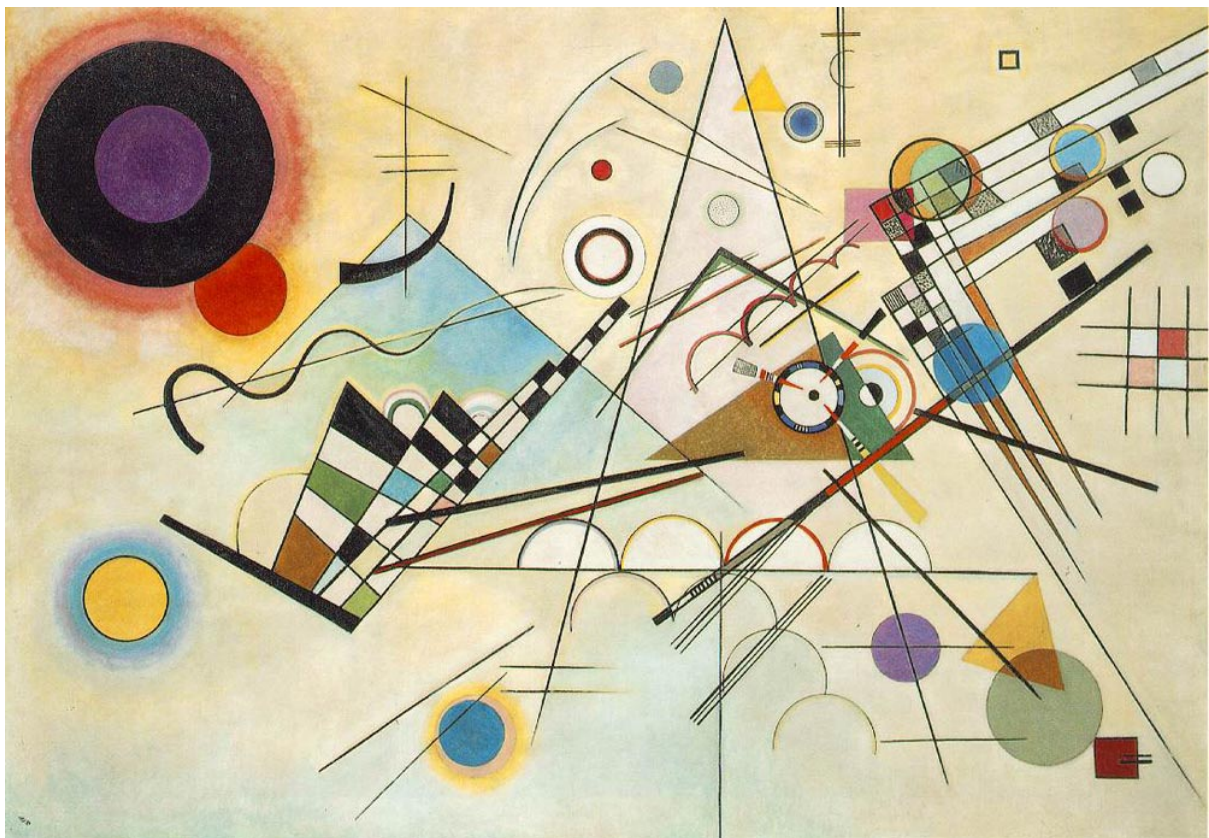


Figure 2: *Composition VIII*, Kandinsky, 1923

In *Composition VIII* (1923), the strong association of elementary shapes with colour by Kandinsky is present, specifically the use of circles, triangles, and squares. The strong forms and lines used in this piece allows us to suspect the influence the Bauhaus had on Kandinsky, a teacher at the school during the creation of this painting (Bayer, et al., 1984). The painting shows the clear depictions of colour-shape associations Kandinsky often mentioned in his writings. Namely, the yellow

triangle, red square, and blue circle. The use of complementary colours in these shapes is also visible, at once a blue circle with yellow halo and conversely, a yellow circle with blue halo. Compared to the previous composition, the colours used here are more intermittent and suggestive based on the shapes to which they are associated. Colour takes more forms, and appears softer and flatter than its predecessor. Perhaps suggesting a progression from a non-verbal language of colour purely relying on the colours themselves, to one which relies on the close relationship of shapes and form.

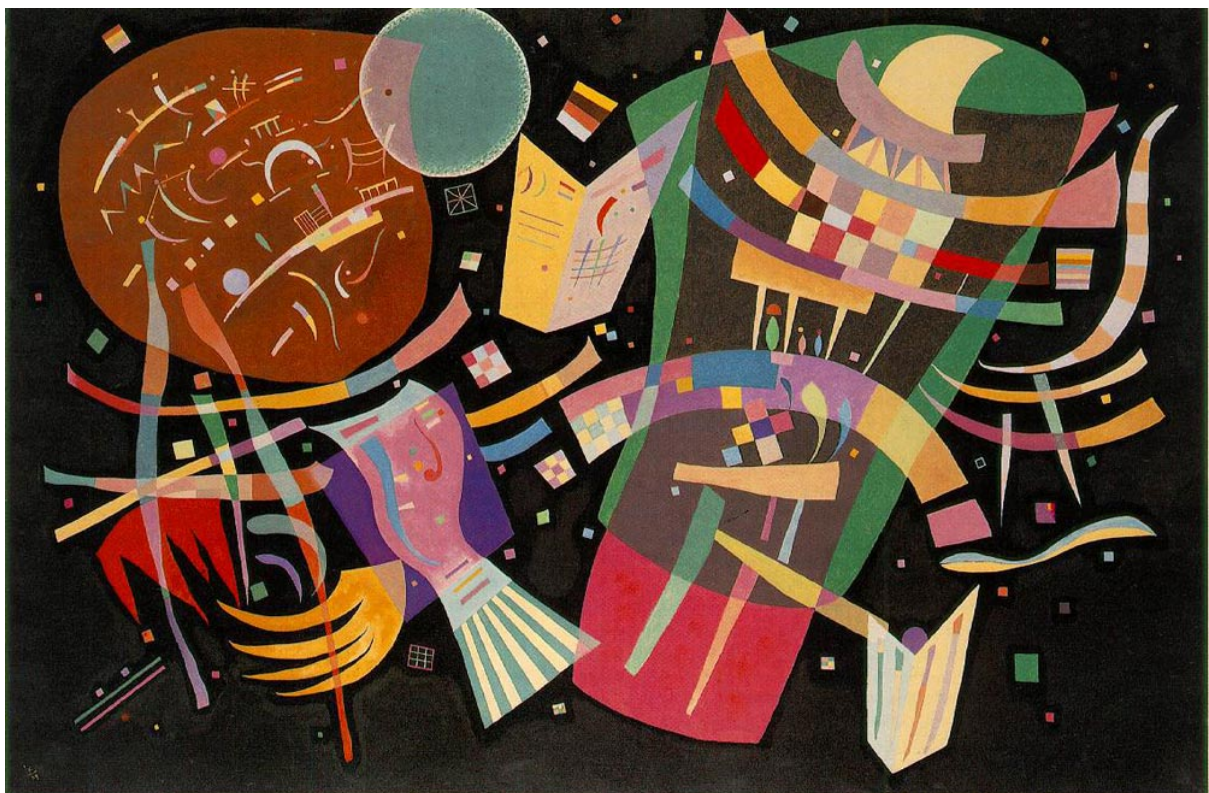


Figure 3: *Composition X*, Kandinsky, 1939

The final painting of Kandinsky which will be analysed is *Composition X* (1939). The prominent use of black in the background differs not only from the previous paintings analysed in this chapter, but also to many of Kandinsky's other works as he had a known aversion to the colour (Tate Modern, 2017). There are still semblances of the geometric colour-shapes and forms, like those found in *Composition VII*, present in *Composition VIII* (1923), however generally speaking the form and shapes are now more abstract. Painted in his later life, as the last composition Kandinsky created, the use of black as a solid background which frames

every other element suggests the symbolism of death and the end of life. Warranting the symbolic association of black to death, Kandinsky notes in *Concerning the Spiritual in Art*, 'Black is something burnt out [...] something motionless like a corpse.' (Kandinsky, 2008, p. 85). Similar to *Composition VIII*, the colours used appear flat though they are bolder and more solid now, contrasting deeply with the black background.

Over the course of these three paintings, the development of ideas associated to colour meaning, and of colour and shape is shown. Kandinsky first attempts at creating a visual language using only colour, before including form, is apparent in the progression of the selected paintings.

Moving beyond Kandinsky and his own colour theory, Kress and Van Leeuwen's 'grammar of colour' can be applied to these paintings. By doing so, the relationship Kandinsky was attempting to elicit between the paintings and viewer is further understood. The variances in Kandinsky's use of colour correlates with the scales listed by Kress and Van Leeuwen in their grammar, specifically value, saturation, purity, differentiation and hue.

First, consider the scale of value; 'the scale of maximally light (white) to maximally dark (black)' (Kress & Van Leeuwen, 2002, p. 355). Kress and Van Leeuwen note that 'in the lives of all human beings light and dark are fundamental experiences', each culture has developed symbolic connotations of colour associated to this experience (Kress & Van Leeuwen, 2002, p. 356). In *Composition VII*, under the suggestion of the themes 'Deluge, Last Judgement, Resurrection and Paradise' (Tate Modern, 2017) the stark use of black is interjected between areas of colour. One can read this as the omens of life's end (Deluge, Last Judgement), surrounded by bold colour signifying 'Resurrection and Paradise'.

In *Composition VIII*, black is sparsely used bar the strong use in the upper left corner in a large circle containing a smaller blue circle. The use of black in conjunction with blue is significant here due to Kandinsky's conceptual ideas of the colour blue. Noting it is the typical heavenly colour but also when blue 'sinks almost to black, it echoes a grief that is hardly human' (Kandinsky, 2008, p. 83). Without too much conjecture on the author's part, the presence of these colours together may hint towards the ever present symbolism of black in cultures. Finally, with

Composition X there is perhaps the most obvious correlation of the value scale and Kandinsky's use of the black. A solid black background and appearing motionless in comparison to the boldly coloured shapes suggesting movement and life. In all of these paintings Kress and Van Leeuwen's notion of cultural experience and symbolism associated to colour are evident in Kandinsky's portrayal of black. Supporting the discussion throughout the dissertation, of the cultural, linguistic and perceptual influences pertaining to the meaning of a specific colour.

The combination of other scales in Kandinsky's work is also apparent helping to evoke particular meaning from a colour or form. He combines the modulation of flat colour with high saturation, especially in *Composition X* and to a lesser extent *Composition VIII*, conveying movement, boldness and an abstract concept of positivity. As Kress and Van Leeuwen put forward, flat colour 'expresses colour as an essential quality of things' (Kress & Van Leeuwen, 2002). One could argue the use of flat colour from Kandinsky highlights his notions concerning 'essential quality' of each colour. A flat blue according to Kandinsky best symbolises its heavenly and restful nature, working in conjunction with the idea of the 'Purity' scale. Colours with single names are 'perceived as pure' whilst composite names denote mixed colours (Kress & Van Leeuwen, 2002), something implemented to real effect in *Composition VII*, and *Composition X*. Pure colours being less visible in *Composition VII* where the colours Kandinsky uses seem to blend, modulate and differentiate more, objectifying the juxtaposition of chaos and tranquillity his themes present.

Throughout the comparison of Kandinsky's colour use with Kress and Van Leeuwen's grammar of colour, the cross-over in theories concerning colour are evident. The cultural and linguistic influences exhibited by both Kandinsky and Kress and Van Leeuwen's theories can be seen. They both adhere to the notion colour cannot exist on it's own, it needs to exist within some form of environment in order to convey meaning. Despite any projected meanings, the environment and subsequent meaning of the colour is still subject to perception, culture, linguistics and the viewer.



Figure 4: *Beat the Whites with the Red Wedge*, Lissitzky, 1920

The final analysis is of *Beat the Whites with the Red Wedge* (1920) by Russian modernist, Lissitzky. The painting was created in support of the Bolshevik Revolution, which began in 1917, and subsequently there are direct symbolical associations pertaining to colour and form. In contrast to the previously analysed work by Kandinsky, and especially *Composition VII*, the colours in this painting are given strict definitions. The 'Red Wedge' is an explicit symbolical representation of the Red Army, triangular in shape it immediately elicits sharp and piercing connotations. The white circle is therefore symbolically representative of the White Guard, who were opposed to the revolution, and as a softer shape suggests it is the lesser of the two forces.

Furthermore, considering the traditionally symbolic values associated to white and black discussed in chapters four and five, it is possible the contrast of these colours alludes to the ideological differences of the two rival parties. The red wedge being surrounded by a white background can be interpreted as symbolism for the

Red Army's ideology being the correct and purer ideology. Whilst, the white circle enclosed by a black background lends itself to the notion the White Guard's ideology is flawed and with the subsequent piercing of this circle, the ideology is destined to fail or perish. The latter likening to the connotations created by the use of a solid black background in *Composition X*, by Kandinsky. Thus, the Red Army is symbolical represented piercing not just the defences of the White Guards, but also of Leninism overcoming Tsarist ideologies.

Beat the Whites with the Red Wedge is therefore a good example of colour relying on the associations of other elements for meaning. The precise meanings given to colour in this painting correlate to the previous discussion of cultural influence of colour in chapter four and five. The strong associations showcase the notion from Eco that colours act as a content system for expressing cultural meanings (Eco, 1985). Echoing the earlier observation of Sahlins when he states colour meanings used by a given culture are 'not arbitrary, but conditioned or motivated' (Sahlins, 2000, p. 159). In this case, the conditioned or motivated meanings are the pre-existing associations of the colours red and white to the Red Army and White Guards.

The colour meanings are a symbolic reflection of Russian society at that time, receiving their meaning from external influences. Thus, realising the sentiments of Baudrillard in chapter four when stating 'the success of the whole occurs in the context of the constraints of abstraction and association' (Baudrillard, 1996, p. 40). The context of this painting, the 'whole', is the Red Army defeating the White Guard and the constraints give rise to the abstraction of these armies as their respective shapes. The subsequent association of colour to these abstractions relating to symbolic representation deems the painting successful.

Although this painting has fixed meanings and association of colour in comparison to Kandinsky, it still realises the findings of this thesis, the context of the painting and its cultural influences give the colour used its meaning. Therefore, once again relaying the notion colour relies on perception, culture, and relationships with elements such as form to convey meaning. As Karl Gerstner eloquently said 'The form is the body of the colour. The colour is the soul of the form' (Gerstner, 1986), and in the work of Kandinsky and Lissitzky there exists the realisation of this ethos.

Conclusion

The first chapter of this thesis establishes the grounds of Modernist colour theory, exploring the meaning and perception of colour according to Albers, Itten and Kandinsky. Concluding with the idea Modernists associate symbolical and expressional values to colours. Chapter two discusses colour as a semiotic mode according to the writings of Kress and Van Leeuwen. Ultimately conveying colour as a semiotic mode depends on the numerous characteristics of the colour and the environment to which the colour is applied. Following this, chapter three examines empirical studies of colour, which attempted to ascertain absolute certainties regarding colour. Referring to previous chapters, chapter three concludes as colour perception is subjective and highly dependent on various factors, it is difficult to establish fixed truths associated to colour meaning.

Chapter four investigates the cultural and symbolic associations of colour and their influence on colour meaning and perception. Using concepts from authors such as Eco and Baudrillard, chapter four determines colour does not have intrinsic meaning but relies on natural and cultural experiences of colour. Focusing further on the external cultural influences, chapter five takes a closer look at the language associated to colour and how this influences perception. By delving into studies pertaining to colour language, chapter five determines language does to a certain extent influence colour perception, and contribute to cultural associations of colour. Finally, chapter six discusses the findings of the previous chapters by analysing a selection of paintings by, Kandinsky and Lissitzky. The analysis provides contrasting examples of the influences and perception of colour meaning.

Over the course of this thesis, by examining Modernist and semiotic theory of colour, and empirical and linguistic studies, the notion of colour having no intrinsic meaning and instead relying on perception and culture is supported. The applications of these findings through the analysis of Modernist paintings demonstrates how all of the factors discussed play a role in the attribution of meaning to colour. Both concluding colour relies on the context of its application, relationship to form, variation of cultural and symbolic associations, the characteristics of a colour, and individual perception in order to elicit meaning.

Ultimately showing how the Modernist approach to colour likens to the grammar of modern semioticians.

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