

Working with Color in Dreams

by Robert J. Hoss, MS

PART #3 DREAM COLOR CONTENTS

• SECTION 8	DO WE DREAM IN COLOR	1
• SECTION 9	THEORIES: THE SIGNIFICANCE OF COLOR	3
• SECTION 10	DREAM COLOR STUDIES AND RESEARCH	5
• SECTION 11	THE COLOR QUESTIONNAIRE	26
• REFERENCES		34

INTRODUCTION

What does it mean to dream in color? It is curious that there has been little research done with color in dreams – not so much whether we dream in color, that is well researched, but what the individual colors represent. A search for the answer to this question led me to over a decade of research into the significance of color in dreams. I found color psychology research and literature (Lüscher, 1971, 1979; Birren, 1961, 1978; Brown, 1974; Ertel, 1973; Goldstein, 1942; Riley, 1995; Sutton & Whelan, 2004) to show that the human brain, limbic and autonomic nervous system responds physiologically and emotionally to various color illuminations – subliminally and in a fairly predictable manner likely due to evolutionary influences. Working in sessions with individual dreamers and personal databases and tools (such as Gestalt role-play) that reveal the emotional associations within a dream image, I was able to demonstrate that the same color to emotional associations appear to carry over into the dream state (Hoss, 1999, 2004, 2005, 2010). A number of the same color to emotional processing centers remain active in waking and REM sleep so this made sense. Working with very large dream databases I was further able to establish physiological and emotional response to influence dream color (Hoss, 2010).

In essence I discovered that dream color is a symbol (or imagery fragment) just like any other symbol, that combines/*condenses* with dream imagery to add additional “meaning” to the composite dream image (Hoss, 1999). That “meaning”, although influenced by culture and personal experience, is for the most part emotional and based on our collective human subliminal response to individual colors. Color “paints our dreams with emotion” (quote from Reader’s Digest, 2006).

The research also resulted in my development of the Color Questionnaire (Tables 7 and 8) which consolidates much of the common color to emotional human response information, in statements designed to trigger a person’s own emotional associations with a color. It is useful for research and dreamwork.

SECTION 8 DO WE DREAM IN COLOR

Every night for a hundred years the angel of dreams came to the town and splashed the walls with bright colors that stayed until the first light of day – Brian Andreas

One of the surprising facts about dreaming is that most dreams appear to contain color even though we rarely recall the color upon awakening. The myth that dreams are in black and white was perpetuated a

decade or so prior to the discovery of REM in the early '50s, after which research methodology changed and dispelled that viewpoint (Hoss, Valli, Gongloff, 2019, Vol.2). The myth was fed by a number of speculative factors including the effect of the transition from black and white to color media and even a perception that color was more dominant in the dreams of those with mental illness. The confounding factor at the time was that, prior to the understanding of REM sleep, most reports were largely spontaneous or anecdotal, or collected by survey (well after the fact when color and other imagery fade quickly with memory).

Color recall, just as with any dream content, seems to be a function of memory and our attention to color as we report the dream, both of which seem to diminish rapidly after waking. In a laboratory setting, however, when subjects are awakened during a REM stage of sleep, color is mentioned spontaneously in as much as 46% of dream reports, and if the subject is asked explicitly about color, the percentage of color recall increased to about 80% to 97.3%. (Schredl, 2008). For example, in one study Bob Van de Castle (1994) reports that distinct color was reported in 70% of the cases and vague color in another 13%. All of this suggests that dreams naturally contain color just as they do all other fictive senses, and the recall of color is influenced by attention to color, memory and other dream to waking recall factors. This is suggested by the fact that color recall drops to about 11% to 29% in spontaneous dream reports (those remembered upon awaking and written down some time thereafter).

Working with Color in Dreams

Color, like other sensory modalities in dreams, can be treated as any other *element* or symbol in a dream. Color represents associations that combine with the other parts of a dream image in order to complete the full “meaning” of that image. As the studies described in this document suggest, color relates to emotion – different colors representing different emotional associations. Therefore, color might combine with a dream image to provide an emotional charge or essence to that image. We learned earlier that dream imagery can be formed as a picture-metaphor representation of the dreamer’s feelings, emotional memories, and conceptualizations – the whole image being a condensation of elements that represent fragments of linked associations. Color is one of those fragments, an important one that can provide the emotional information necessary to complete the “meaning” of that dream image. Working on a dream image, without paying attention to the color, would leave out a great deal of important information.

If you don’t pay attention to the color of your dream imagery when you awaken, or don’t record the colors as part of your dream narrative, the recall for color diminishes rapidly. So, as you wake, close your eyes and go back over the dream story and try to pay attention to the colors – particularly any that stand out. Then open your eyes and record the dream and the colors.

Whatever the mechanism for color recall, the lack of ability to recall all of the colors can be somewhat of a blessing when working with color in dreams. It is possible that, as Robert Van de Castle stated, we tend to recall color that contains the more significant emotional content. This is supported in principle by Hartmann’s (2011) contention that emotional content increases the intensity of a dream image. If this is the case, then the colors that remain dominant in your dream report might be those that are the most revealing when working on the dream.

So, what about the situation in which you recall a dream, or most of your dreams, in full color? When the whole dream is in color focus on the colors that stood out or choose the color of a dream image where the color can be optional. For example, if you dream of green grass and blue sky, those particular colors may reveal little of importance since those are the colors that may simply be due to wake-to-dreaming continuity (Schredl, 2003), colors commonly associated with those images in waking life. Instead pick something like a red car (which could just as easily have been blue or any other color). If there is a dream image you are

curious about and intend to work on, focus on its color if any. That way, you can gain two perspectives on the dream image – metaphoric and *role-play* associations plus color associations.

SECTION 9 THEORIES: THE SIGNIFICANCE OF COLOR

Early Thought – “Psychological Primaries”

Unfortunately, the specifics of color in dreams is an area that has been given little attention in psychological research or literature. The work of Jung, as well as that of Perls, contained some discussion on color as it related to what were considered the four “psychological primaries,” a color grouping of red, yellow, blue and green. Their notion was that these were the four colors that our mind considered “primary,” or distinct from any color combination. Jung (1972, 1973) and Perls (1974) regarded the presence of a balanced pattern of these four colors in a dream as an evolving state of completion within the personality. Jung also referred to a symbolic significance of black and white; with blackness representing the *unconscious* realm, and white or light representing consciousness or new material emerging into consciousness – and the pairing of the two related to integration of *conscious* and *unconscious* material. Although as you will see, the recognition of this four color pattern plus the pairing of black and white, is indeed significant in studying dream color, the assignment Jung in particular gave to the “primaries” in terms of meaning is quite elusive.

Jung associated the “primaries” with what he called the four orienting functions of consciousness: feeling (red), intuition (yellow), thinking (blue) and sensation (green). Although the pairing of black and appeared to hold quite true from an *archetypal* sense as I worked with dreams, the assignments Jung gave to the four “primaries” did not seem to correlate at all with the personal and emotional associations being revealed from dreamwork – in particular his assignment of yellow and blue to intuition and thinking. Jung related blue to water which is a common association in the waking world but the relation to thought is inconsistent because at times he also related water to the *unconscious* and emotion in dreams - which is more aligned with intuition than to thought. In the waking world blue is associated with air as well which Jung assigns to yellow. These may have some alchemical relationship – or perhaps a relationship of convenience to the four personality functions - but do not appear useful for dreamwork.

As did Jung and Perls and Lüscher identified the four-color “primaries” as a basis for his “four-color personality” theory. But as opposed to Jung and Perls, Lüscher relates to his four fundamental colors to fundamental emotional factors. I have found that these do tend to relate a bit more consistently (as will be discussed later) with a dreamer’s associations when exploring the underlying emotional content in a colored dream image:

- Blue = *contentment*: Feeling of belonging, the inner connection and the relationship to one’s partner. "How I feel towards a person that is close to me"
- Green = *self-respect*: Inner control of willpower and the capacity to enjoy. "The way I want to be"
- Red = *self-confidence*: Activity, drive and the reaction to challenges. "How I react to challenges"
- Yellow: *development*: Attitude of anticipation, attitude towards future development and towards new encounters. "What I expect for the future"

Color Psychology

The field of color psychology and the research therein has helped us understand the common human emotional response to color. Those studies, although finding some application as a psychological testing tool (Lüscher, 1971), perhaps had their greater impact in the field of advertising, packaging, food, clothing, and decorating, when it was discovered how color subliminally influences our moods and appetites (Sutton & Whelan, 2004). While the research was all performed in the waking state, the mechanisms for color to emotional association remain largely active in REM sleep and thus those associations may continue into the dream state. If that is the case the findings can perhaps provide information regarding possible emotional states pictured in dream imagery.

Color Psychology Research

Early studies on the human response to color by researchers such as Goldstein (1942), Birren (1961, 1978, 1988), Ertel (1973), Brown (1974), Lüscher (1971, 1979), Riley (1995) and Sutton & Whelan (2004) provided evidence that suggested exposure to color illumination in the waking state results in fairly predictable physiological and emotional responses.

Birren (1961) and Lüscher (1971) both cited studies where color was shown to evoke a physiological response in the autonomic nervous system. Brown (1974) determined that our brain responds directly to color in a similar manner, as does our nervous system. Goldstein (1942) found that red stimulation corresponds with the experience of being disrupted, thrown out, attracted to the outer world, and being incited to activity, aggression, excitation and emotionally determined action. Goldstein concluded that the color green corresponds with withdrawal from the outer world and retreat to one's own center, to a condition of meditation and exact fulfillment of the task. All of this happens below our threshold of awareness.

Henner Ertel (1973) conducted a 3-year study on room color and its effect on learning with children. He found that yellow, yellow-green, orange and light blue increased learning while white, black and brown caused a decrease in learning; and orange improved social behavior. Boyatzis and Varghese (1994) at the Department of Child Development, California State University studied children's emotional associations with colors. Sixty children (30 girls, 30 boys) from 5 to 6 years old, were shown nine different colors, one at a time and in a random order. For each color, children were asked, "How does (the color) make you feel?" All were able to verbally express an emotional response to each color that demonstrated distinct color-emotion associations. Children had positive reactions to bright colors (e.g., pink, blue, red) and negative emotions for dark colors (e.g., brown, black, gray). Children's emotional reactions to bright colors became increasingly positive with age, and girls in particular showed a preference for brighter colors and a dislike for darker colors. Boys were more likely than girls were to have positive emotional associations with dark colors.

Color response has also been used in the development of some early personality testing tools. The Rorschach test, for example, uses associative scoring based on the various ways that a subject names or projects colors, on color and monochrome test cards. Dr. Max Lüscher, Professor of Psychology at the University of Basel, created the *Color Test* (Lüscher, 1971) referred to earlier. It is a psychological testing tool that associates color with a person's emotional state or response to their environment. The full Lüscher test is based on making 43 choices, from seventy-three different colors, of twenty-five different hues and shades. It was first based on work by Hering, who established a link between responses in the eye-brain system to color contrast. As mentioned above, Lüscher made a distinction between the *objective* (physiological and instinctive) and the *functional* meaning of color (whether we are drawn to it, indifferent toward it or find it distasteful). To Lüscher, a person's choice of color, in a particular circumstance, was based on both psychological preference and physiological need.

While the Lüscher Test is not used that much today, it was widely used in the 1950's and 60's in psychology, and even in industry (where it was often used as a screening tool for job applicants). *Lüscher Color Test* (1971) contains a listing of over 140 clinical investigations and papers supporting the test, primarily across populations on the European continent. As a personality test it may not compare as favorably with others such as the MMPI (Minnesota Multiphasic Personality Inventory) but it is not so much a personality test as a test of emotional state, and in that context I find it to compare favorably to the emotional responses from *role-play* when working with dreams.

Might this Extend to Dreams?

All of the research findings, observations, literature searches and discussion above suggests that emotion, along with its physiological correlates, is likely the dominant factor (although not the only factor) associated with dream color. It is generally known that emotion evokes a physiological response and visa-versa in the waking state – but are they linked in the dream state? A connection between physiological response and emotion in the dream state was made by Hobson and McCarley (1977) who suggested that the emotional intensity of dreams is reflected in the dreamer's respiratory rate, heart rate and skin potential.

Aside from the physiological response there may be a direct neurological lineage between centers processing emotion and those processing color in both the waking and dream state. Areas of the brain known as the fusiform and lingual gyri which processes the color sense, along with the angular gyrus which is involved in higher processing of colors (Ramachandran, 2011). The lingual gyri is believed to play an important role in vision, visual attention and dreaming. It was found that if the fusiform and lingual gyri area is destroyed, color disappears from perception in waking life, from dreams and even from memory (Edelman and Tononi 2000; Damasio 1999). This research suggests that this same area of the brain produces color for all states of consciousness, both waking and dreaming. Also, a linkage between lingual gyrus activation and areas involved in emotional processing (the hippocampal regions and amygdala) was observed (Cho, 2012), suggesting a possible linkage between color and emotion both in the waking and dream state. Lingual gyrus activation was observed when subjects were tasked with verbalizing or viewing high-emotion words or images in contrast to neutral-emotion words and images (Kehoe, 2012). That the brain processes color to emotional associations similarly in the dream state as it does in the waking state, is the hypothesis on which much of my research with dream color below is based.

SECTION 10 DREAM COLOR STUDIES AND RESEARCH

Literature and Dream Database Research

I began an exploration in the late '90s into the significance of various colors and informally published a number of the studies in 1994, 1999, 2004, 2005. In 2010 I published a more comprehensive study (Hoss, 2010) in the *International Journal of Dream Research* in part using the UCSC dreambank database plus other personal databases and journals (a total of 38,064 dreams). For the Journal I researched five possible hypotheses: 1) recall of specific dream colors reflects our waking visual experience; 2) recall of specific dream colors reflects personal color preference; 3) recall of dream color is influenced by the neurobiology of color perception; 4) recall of specific dream colors is influenced by *archetypal* manifestations; 5) if specific dream colors reflect specific emotional states. Separately, in this document, I also explore cultural influence. I will discuss the findings below, but I concluded, from the observed data,

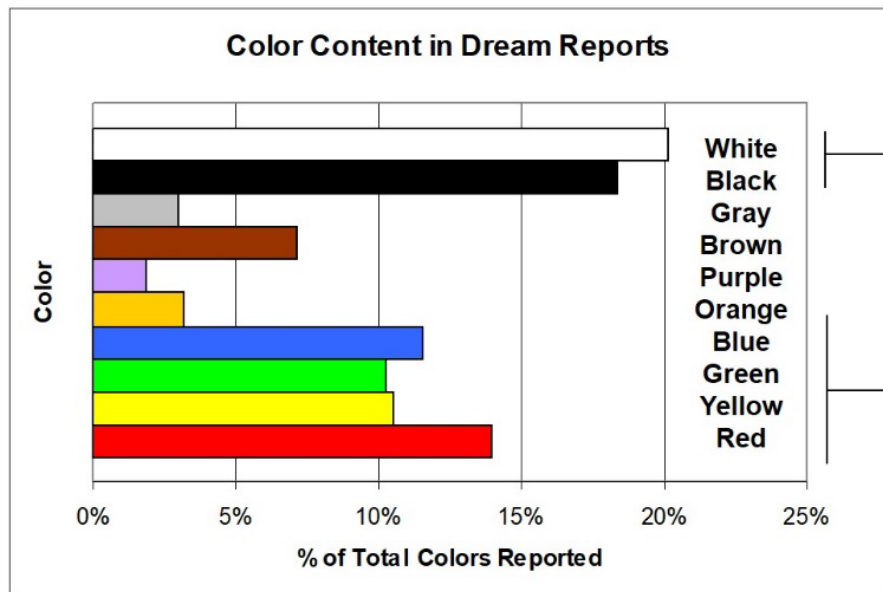
that the specific colors recalled from a dream is not dominated by the waking visual experience nor by personal preferences or beliefs, but rather aligns (as a large sample average) with neurological mechanisms involved in color perception, and individually with the human emotional response to color.

The Dominant Dream Color Pattern

When I compiled the dream colors recalled (6,237 colors) from 15,245 dream reports collected from the UCSC dreambank database (Domhoff, n.d.), a dominant pattern emerged (figure 1) surprisingly similar to the pattern based on the psychological primaries discussed by Jung, Perls and Lüscher. The database represents a broad (but primarily US and European) base of dreamers, including various genders, ages and professions as well as the 890 reports representing the Hall and Van de Castle norms. A similar study done on a database of roughly 8,000 dreams from 5 dreamers, collected in a separate database by myself and Curtiss Hoffman, PhD (2004) resulted in an almost identical result (within a few percentage points).

This “dominant pattern” consists of a pairing of black and white (named as colors) appearing with approximately equal frequency, followed by a grouping of the “primary” hues red, yellow, green and blue (with red appearing about 50% more frequently than the others). This grouping is followed by brown which often appears twice as frequently as the lesser colors. Although this pattern appears fairly consistent when averaged across databases and journal samples, a wider variation appeared when looking at the dream records collected for each individual. The results studies on individuals (discussed below) suggest that there may be a common factor influencing dream color creation or recall on average, which is in turn influenced by other emotional or personality factors at an individual level.

Figure 1 – Color Recall from 15,000 Dream Reports



Is there an Archetypal Significance?

The groupings noted by the vertical lines in figure 1 also illustrate an interesting relationship to the *archetypal* significance that Jung gave to this pattern. Jung contends that the integration of the *unconscious* and *conscious* is one of the most basic processes taking place in dreams, and that it is often symbolized by a pairing or pattern of black and white. It is interesting that the most dominant colors reported in dreams, by a ratio of two to one, were a balanced occurrence of black and white. The next most dominant colors reported in dreams, by a factor of four or five over lesser colors, were the nearly equivalent grouping of red, yellow, blue and green. As noted earlier, Jung, Perls and Lüscher contended, that this grouping of “primaries” had a symbolic relationship to a balance of the four primary qualities in the personality. If that be true, then one might expect this four-color pattern to be dominant in dream reports when averaged across a large population.

In the dreambank database search, the pairing of black and white appeared in 5.9% of the color counts and the recall of a four-color pattern (or the motif of 3 out of 4 which Jung considered as pending integration) in about 3.1% of the color counts. Although these don't sound like a large percentage, they are about 3 to 5 times greater than reports of flying and falling in dreams for example. Some dreams, but less than 0.5%, contained all four colors. Jung also attributed an important significance to the next most reported color brown (at about 7% occurrence) as it relates to our collective origins “Mother earth” and the wood of the *great tree* which he indicated symbolized the process of *individuation*.

Does Dream Color Mirror Waking Life?

The *continuity hypothesis* (Schredl, 2003) contends that dream imagery (which would include color) is a reflection of waking life experience. Although dream color is indeed observed to reflect the norms of waking perception (grass is typically green and the sky is usually blue, for example), when the color of an image can be anything (color of a hat for example) or when a certain color dominates the dream, it raises a question. An investigation by Roffwarg et al. (1978), using colored goggles worn during the day, resulted in the goggle color being present in the subject's dreams, however the effect dominated only the early sleep stages and “all but disappeared after the third REM stage” suggesting that other factors affect the color reported in dreams.

When the more common color patterns from waking life were investigated I found that they did not match the dominant color pattern in figure 1 as reported across a large database of dreams. Various literature searches (Hoss, 2010) resulted in the more general experience or “natural” scene to be a dominance of blue, green and brown to tan tones with variations of gray or backdrops composed of blues, yellows, and grays.

So although waking color experience might effect common *element* coloration (grass is usually green) it may have little to do with the dominant colors recalled from a dream. On the other hand, if dream color represents emotion, the continuity hypothesis may indeed hold for waking emotional experiences that carry over into the dream – which are in turn represented by dream color. This will be discussed further below.

Does Dream Color Reflect Your “Favorite Colors”?

Three general population studies on “most favored color” were reviewed (Hurlbert, 2007; Hallock, 2007; Cheskin, 2004). All studies indicated blue to be the universal favorite. Hallock found blue chosen 42% of the time followed by green, purple, red and black. Market researchers at Cheskin Research, conducted a survey of 13,000 residents of 17 countries that also found people are most likely to choose blue as their favorite color, with blue, purple, green, red and black being at the top in most countries. This pattern of

color preference (blue followed by green, purple, red and black) does not compare with the “dominant pattern” of colors recalled from dreams (black and white followed by red, blue, yellow and green).

Is Dream Color Influenced by Color Perception?

The “dominant pattern” aligns with the neurobiology of color perception. Perception of the full color spectrum can be created from only three primary colors, red, green and blue. Our eyes also have three color receptors (3 types of cones) with peak sensitivities near the color wavelengths of yellow-red, green and blue-violet. However, the opponent-process theory of color perception (Schiffman, 1976) contends that the eye-brain system processes this three-color information from the eye in a more complex process of four colors plus black and white, based on hue cancellation between three opponent channels: red versus green, blue versus yellow, and black versus white. This has given rise to the “Natural Color System” (NCS) which describes the organization of the color sensations as perceived at the upper brain level, based on these six elementary colors. Because these six colors match those of the “dominant pattern” from the dream color content analysis, it suggests that the colors in our dreams on average (when averaged across the population) may be influenced at the most basic level by the neurological mechanisms responsible for color perception.

Our Physiological Response to Color

The response of the eye itself may determine much about our instinctive association with color. A study of the physical structure of the eye has led some scientists to believe that blue and yellow color vision evolved first - these colors are sensed at the extremes of the retinal structure near the more primitive receptors (Schiffman, 1976). We exhibit the highest visual acuity for yellow illumination, and the lowest for deep blue (making it difficult for the eye to focus) (Ferree and Rand, 1929). Yellow illumination thus makes activity more possible, whereas blue illumination makes it less so. As a function of our optical receptors alone, the human instinctual association with yellow would lean more toward outward activity, and with blue toward the more passive or limited physical activity.

Furthermore, the human physiological response to color can be tested. Colors have an observed effect on the various parts of the autonomic nervous system, an effect which takes place below our threshold of awareness. Blue has been observed to have a calming effect on the parasympathetic branch that regulates automatic, involuntary functions such as heartbeat, breathing, and digestion (Lüscher, 1971). The color red has been observed to have the affect of exciting the sympathetic branch, and causing certain processes such as heartbeat and breathing to speed up (Lüscher, 1971). The experiments of Barbara Brown (1974), which were designed to understand the associations between color and brain wave activity, supported these findings. She determined that the brain’s electrical response to red is one of alerting and arousal, whereas the response to blue is that of relaxation.

Does Dream Color Reflect Emotion?

As noted in the previous section on Color Psychology, early studies on the human response to color by researchers provided significant evidence that exposure to color illumination in the waking state results in fairly predictable physiological and emotional responses. An emotional basis to dream color is also suggested by the neurological studies noted above – the linkage between color processing centers (lingual gyrus) and the emotional processing centers (hippocampus and amygdala). The amygdala, as part of an attention mechanism, places an emotional “tag” on every stimulus (which would include color) that we come in contact with and therefore plays a role in creating meaningful associations between color and emotion, associations that would likely be retained in the dream state as well. This would suggest that specific emotions might influence the specific colors assigned to a dream image, and likely the colors most recalled from the dream. Attention to content was found to be a factor in color recall in the Schredl studies,

so it is likely that attention to dream content, as influenced by intense emotions in the dream, may be a key factor in which colors are recalled. Murzyn (2008) also found that color dreams were likely to be recalled more than colorless ones, emotional intensity being a possible factor there as well.

I therefore hypothesized that color is a symbol like any other dream image, that *condenses* with other images to provide an emotional identity to that dream image – and furthermore that specific dream colors reflect specific emotions.

My first approach at demonstrating this was to use Gestalt *role-play* to reveal the emotional content (associations) within a dream image, then compare the response to the color to emotional associations found in the color psychology research and literature. One of the principle tools I used in determining color-to-emotional associations was the eight-color version of the Lüscher *Color Test*. It was a tool developed to establish a profile of a person's present emotional state based on preference in selecting colors in sequence (more on this tool will be discussed later). I found the *Color Test* to basically agree with other color research and color psychology literature and it appeared to be the only widely used test tool that related color to the human waking emotional response. It also appeared to be well supported with clinical papers, so I decided to proceed with it on the premise that it represents a reasonable characterization of the human waking emotional response to color.

I used the scripted 6 question *role-play* technique that I derived from Gestalt Therapy, which had proven effective in revealing emotional associations pictured by a dream image. This technique was also appropriate because of the standardized scripting. I compared the *role-play* response for a colored image with the 8 color Lüscher *Color Test* associations. The relationship was then confirmed with the dreamer as to how it related to an associated waking life situation.

The result was good agreement between *role-play* statements, the Color Test and the dream-related waking life experiences (Hoss, 1999). I later created a version of the Color Questionnaire to aid that research, listing statements from the Lüscher *Color Test* as expressions which the subject could choose from that best fit how they felt in waking life situation at the time of the dream. For or example when asked to *role-play* a woman in a red hat the dreamer stated, "I want to go out and have fun." The *Color Test* statement for red (and the one the dreamer said best related to their waking life situation) was, "I want to live life to its fullest." A few more examples from this investigation are given in the following sections.

I then expanded the research to explore whether emotional events in a person's life might be reflected in the colors they more frequently recall in their dreams. The research involved exploring the recall frequency of colors each year from a long-term journal of dreams over a period of eleven (11) years containing 4,791 dream reports containing color. (Hoss & Hoffman, 2004). The results were that two periods of extreme emotional stress (unknown to the researcher but subsequently confirmed by the subject) could be identified from the color profile within the journal. The results of this study are also described later in this document.

A third series of tests were performed to determine if the frequency profile of dream color over a long period of time might reflect the dreamer's personality. It would make sense that the emotions that a person most often reacts to in their waking life, their emotional personality, would relate to the colors they most often deal with, pay attention to and thus recall from their dreams. It involved four long-term journaling subjects and over 8,000 dream reports. The results, also described later, suggested that the dream colors a person most often recalls is influenced to a degree by their personality.

Overall these pilot tests support the notion that **color in dreams relates to emotion** – and that the color most frequently called from a person's dreams might relate to emotional situations in the dreamer's life that the dream is dealing with, and over the longer term to the dreamer's personality. More research is needed in order to be conclusive, but all of the studies so far suggest that color indeed relates to emotion and that

the color-to-emotional associations in dreams does not change from the waking state to the dream state – the relationship is similar.

Is there also a Cultural Influence?

I did not attempt to do an in-depth study of cultural factors but surveyed the literature to obtain a number of cultural associations in order to determine whether there was a) agreement cross-culturally on associations with color and b) any agreement between those cultural factors and the emotional and physiological associations discussed above.

Objective versus Functional Associations

Lüscher (1971) made a distinction between what he called the *objective* response to color, our physiological and basic instinctive emotional response, and the *functional* associations with color, or our attitudes and personal associations with a color. Our *objective* or instinctive response to a stimulus such as color occurs in a different part of the brain and nervous system than does our learned, personal and cultural associations. Objectively our associations with color may be linked to our evolution (or have an *archetypal* association as Jung contended). Our evolutionary associations with red for example may have been the emotional charge that action and hunting (fire, blood) provide, or the emotional alert that certain things are poisonous. On the other hand blue, related to sky and calm refreshing water, may have evolved as a calming emotion and dark blue perhaps preparation for sleep. Our *functional* associations on the other hand are our personal association based on experience and thus attitude. Color can evoke *functional* associations as well; our personal response to emotions or memories that a color brings to mind.

The *functional* associations are influenced by cultural factors. Using red as an example, the energy stimulated by red may be associated with outgoing action or even anger in the West, whereas in China that same energy may be associated with “good luck”. The history of a color within a culture, as well as the mythology of that culture, can affect our associations with it. Sutton and Whelan (2004) point out that colors such as purple and white are commonly associated with wealth, not for any physiological reason, but because these colors during much of our history were so difficult to create or maintain, that only the most wealthy could afford them.

Perhaps the most striking cultural influence lies in the naming of color. Research by Debi Roberson, PhD, of the University of Essex (in Adelson, 2005) found that while humans establish a continuum of color terminology the same way around the world (in keeping with the structure of our visual system), the specific names we call these colors are learned relative to language and culture. Certain cultures name colors and color groups very differently than others. For example, Roberson studied the Himba tribe in northern Namibia in Africa that uses only five terms for colors, whereas the English language uses at least 11 basic color terms, plus many more for shades and mixtures. She found that the Himba use one word “serandu” to describe what English speakers call red, orange and pink. They likewise group dark colors such as dark blue, dark green, dark brown, dark purple, dark red and black into one group, using the word “zoozu.” She also found that the link between color memory and color language increases as the cultural names for the colors are learned, strongly suggesting that color names are learned and not innate. This language factor does not necessarily affect our *objective* (instinctive and physiological) response to color, but it definitely would affect our personal or “functional” associations with the names we give colors.

The motif of four color “primaries,” spoken of by Jung, does seem to appear in many cultures in relation to primary elements or cardinal direction. The specific colors that each culture adopts as “primaries” as well as the number of “primaries” varies by culture, however. Jewish historian Josephus associates white with

earth, purple with water, red with fire and yellow with air. Leonardo da Vinci associated yellow with earth, green with water, red with fire, and blue with air. Birren (1988) indicates that the mythology: in Tibet describes north as yellow, south as blue, east as white and west as red; in China, north is associated with black, south with red, east with green and west with white; and one Navajo Indian fable considered white (day) to be east, yellow (twilight) to be west, black (night) to be north and blue (dawn) to be south. The alchemical process, symbolically related to human transformation by Jung (1971), is a four-stage metal purification and coloring process involving the colors black, white, yellow and red. In Chinese lore, they recognized five elements, with yellow relating to earth, black to water, red to fire, green to wood and white to metal (Birren, 1988).

Cultural influences tend to be learned and thus a more cognitive function. Learned associations can indeed influence the personal “meaning” of a color appearing in a dream – much as any memory fragment or personal belief can appear metaphorically in a dream. Speech metaphors are culturally derived as well and those that relate to color, such as “green with envy” for example, might also influence the personal color associations in dreams. Therefore, although emotion is the more likely influence, a good practice when doing dreamwork is to explore cultural associations and influence as well.

Literature Search: Objective vs. Functional Associations

Table 1 lists a multitude of associations with color found in literature. For the most part, the color categories in the table were based on relatively basic hues. Associations can change as the brightness, or the tint and shade is altered as discussed by Sutton and Whelan (2004). Note that there is little agreement among the *functional* associations (cultural or pop-culture) however fairly common agreement on the *objective* responses (emotional and physiological) - those found in laboratory studies, color psychology research and literature including the Lüscher associations. This suggests that indeed culture can have an influence on our associations with color, but not necessarily a common association, rather one that is more learned and localized. It is the psychological and physiological associations including emotion that have a more common relationship, as might be expected having emerged from a more evolutionary basis.

Table 1
Cultural and Psychological Associations with Color

Color	Source	Response and/or Associations
Red	Psychological & Emotional (Lüscher, '71)	An energy expending physiological condition. Desire in all forms including sexual drive as well as intensity of experience and a fullness of life. Represents force of will. Is outwardly focused, active, aggressive, autonomous, competitive, operative. Driven to win and succeed. Its affective aspects are: excitability, domination.
	Emotional response (Goldstein, '42)	Disruption, thrown out and attracted to outer world, activity, aggression, excitation and emotionally determined action.
	Psychological (Sutton, '04)	Power, excitement, speed, joy, danger, passion, attracts attention, feelings of warmth. Crimson and Burgundy reds feel rich, regal, strong, exclusive.
	Physiological (Lüscher'71; Brown'74)	Stimulating effect, increases blood pressure, heartbeat, respiration. Excites sympathetic branch of autonomic nervous system.
	Sensory (Lüscher'71)	Sensory Perception = Appetite
	Jung ('72,'73)	Feeling function of the personality; Affectivity, Passion
	Nature (continuity)	Blood associated with aggression and anger; twilight.
	Cultural (various)	Christian = Charity, Martyrdom, Hell, Blood of Christ; Cabala = strength; Judaism = love and sacrifice, sin and salvation, fire; Lakota = East; Chinese = fire; Cherokee = success, triumph (Birren '88). Chinese = good luck (Sutton '04)
	Chakra	Base (Brennan '87).or Root = principles of survival, earth energy, drives. (Eden, '98)
	Aura (Brennan '87)	Passion, strong feelings, anger.
Orange	Psychological (Sutton, '04)	Friendly and outgoing, energizing, vital, adventurous, appetizing, warm, exotic, creative, enthusiastic, active, playful and maybe a bit irresponsible.
	Physiological (Sutton, '04)	High visibility (use on warning signs); encourages oxygen intake to the brain; stimulates the appetite.
	Learning (Ertel, '73)	Improves social behavior. Increased learning ability with children.
	Nature (continuity)	Sunset. Campfire for social gathering. Fall harvest. Clay pottery.
	Chakra	Sacral (Brennan '87). or reproductive system. Creativity (Eden, '98)
	Aura (Brennan '87)	Red-Orange: Ambition, sexual passion.
Yellow	Psychological & Emotional (Lüscher, '71)	Cheerful, happy, stimulating and spontaneous. Directed toward the future, new experiences, the developing. Hope and a desire to escape from existing difficulties. Expectancy and projection of the outcome. Outwardly focused, active, projective, heteronymous, expanding, aspiring, investigative. Its affective aspects: variability, expectancy, originality, exhilaration. Change, a loosening or relaxation, uninhibited expansiveness, spontaneous enjoyment of action.
	Psychological (Sutton, '04)	Joy, optimism, vitality, moving, warmth; most noticeable color (packaging and signs); overexposure can be unsettling; pale hues best for socializing.
	Physiological	Increases blood pressure, respiration rate but in a less stable way than red (Lüscher, '71). Highest visual acuity (Ferree, '29). Alerting and arousal (Brown, '74)
	Learning	Yellow and yellow-green increased learning ability with children (Ertel, '73) Stimulates clear thinking, black font on yellow aids memory retention (Sutton, '04).
	Sensory (Lüscher '71)	Sensory Perception = Piquancy
	Jung ('72)	Intuition function of the Personality (one of four)
	Nature (continuity)	Daytime, sun and daylight, outward activity.
	Cultural	Christian (yellow or gold) = power and glory, gates of heaven; Judaism = air; Chinese = Earth; Lakota = South (Birren, '88). Relates to prosperity and power in some cultures (Sutton, '04).
	Chakra	Solar Plexus, Power (Eden, '98)
	Aura (Brennan '87)	Yellow = Intellect; Gold = connectedness to God, love and service.

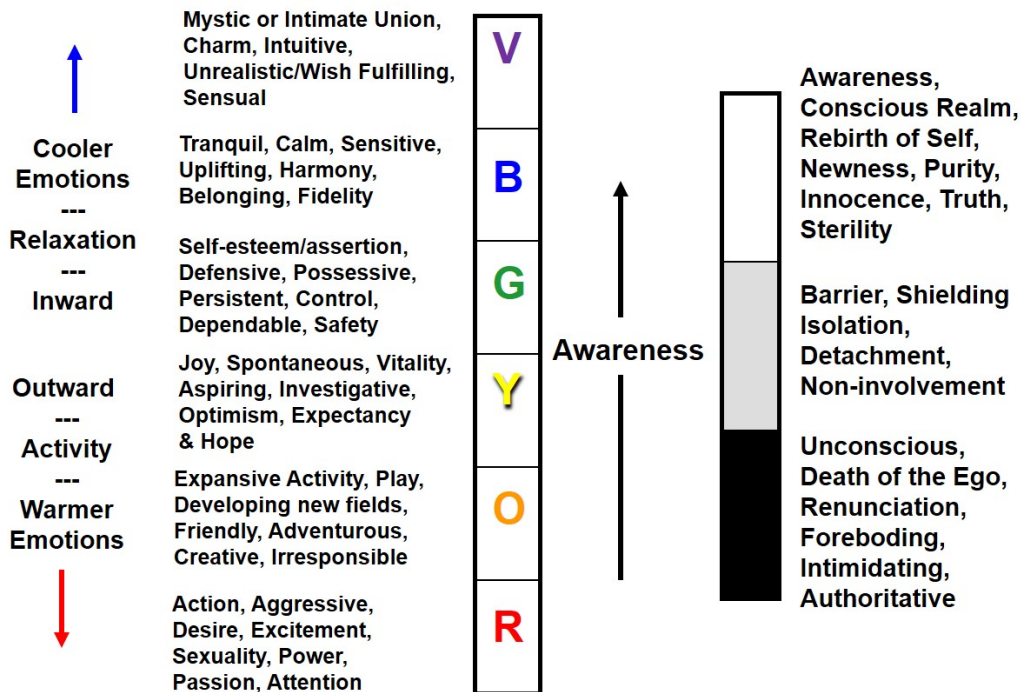
Color	Source	Response and/or Associations
Green	Psychological & Emotional Lüscher ('71)	Will in operation. Concentric, autonomous, passive, defensive, retentive, possessive, immutable. Tenacity, firmness, constancy, pride, logic, control, persistence, tension, ambition. It's affective aspects are: persistence, self-assertion, obstinacy, self-esteem. A high value is placed on self and increasing self-value by: self-assertion, holding on to an idealized picture of self, or acknowledgment by others of one's wealth or superiority. Wants one's own opinions to prevail. A need for recognition and prestige. A quest for better conditions such as health.
	Emotional Response (Goldstein, '42)	Withdrawal from the outer world, retreat to one's own center, condition of meditation and exact fulfillment of the task.
	Psychological (Sutton, '04)	If a vibrant green it can relate to nature, life, youthful energy. Darker green relates more to stability, growth, economic status and success. Dependability. Green as a global symbol for safety (GO = green light).
	Sensory (Lüscher '71)	Sensory Perception = Astringency
	Jung ('72)	Sensation. Growth as it may be associated with the natural self.
	Nature (continuity)	Spring, life. The security of food and an alive environment. Dark green as associated with maturity (Sutton, '04).
	Cultural (Birren, '88)	Christian = faith, immortality, eternal life, contemplation; Cabala = victory; Chinese = health & family.
	Chakra	Heart (Brennan '87), Love (Eden, '98)
	Aura (Brennan '87)	Healing, healer, nurturer
Blue	Psychological & Emotional Lüscher ('71)	Complete calm, contentment, fulfillment, depth of feeling, meditative awareness. Unification and a sense of belonging or loyalty. Concentric, passive, incorporative, heteronymous, sensitive, perceptive, unifying. Affective aspects = tranquility, contentment, tenderness, love and affection. Increased emotional sensitivity.
	Psychological (Sutton, '04)	Best liked color, positive and uplifting, peaceful. Navy blue – loyalty, trustworthy, fidelity, integrity. Space appears larger.
	Physiological	Blood pressure, heart rate, breathing reduced. Calming effect on parasympathetic branch of autonomic nervous system (Lüscher '71). Lowest visual acuity, hard for eye to focus in blue illumination (Ferree, '29). Brain response is relaxation (Brown, '74). Productivity increases (Sutton, '04).
	Learning (Ertel, '73)	Light blue environment increased learning ability.
	Sensory	Sensory Perception = Sweetness (Lüscher '71, Sutton, '04)
	Jung ('73)	Thinking function of the personality; "Lapis, the Philosophers stone"
	Nature (various)	Color of sky, realm of the gods to early people, the ethereal, air and thus spirit; Clear water, thus calm and a source of life.
	Cultural	Christian = spirit, love of divine works, piety, hope, sincerity, peace, heaven, the Virgin Mary, serene conscience; Lakota = west; Cabala = mercy; Judaism = the Lord's hue; Cherokee = tribulation & defeat. (Birren, '88). Opulence in some cultures, protection in others (Sutton, '04)
	Chakra Aura (Brennan '87)	Throat (Brennan '87). Expression and colors of aqua and turquoise (Eden, '98) Sensitivity, teacher
Violet	Psychological & Emotional Lüscher ('71)	Identification, mystic union, sensitive intimacy leading to fusion between subject and object. A magical or wish-fulfilling state. A desire to fascinate, charm and delight others. Intimate, erotic, intuitive and sensitive understanding. Unrealistic.
	Psychological (Sutton, '04)	Power, class, passion, sensuality, luxury, higher-ranking. Deeper plum - spiritual, mysterious, magic, noble. Lavender – romantic, nostalgic.
	Learning (Sutton, '04)	Not conducive to performance since it encourages daydreaming.
	Cultural (Birren, '88)	Christian = suffering, endurance & repentance; Cabala = foundation; Judaism = Lord's divine splendor and dignity.
	Chakra	Indigo = Head chakra (Brennan '87). Third eye = <i>transcendence</i> (Eden, '98). Violet = Crown chakra (Brennan '87) and unity (Eden, '98)
	Aura (Brennan '87)	Purple = deeper connection with spirit; Lavender = spirit;

Color	Source	Response and/or Associations
Brown	Psychological & Emotional Lüscher ('71)	Sensation related to the body and the senses. Relates to physical ease and sensuous contentment. Physical discomfort and disease. Importance placed on "roots," on home, and the company of one's own kind and security of the family.
	Psychological (Sutton, '04)	Comfort, warm, home, natural. It grounds us. Approachable, reliable, sincere, hardworking. Lacks authority. A rugged <i>masculine</i> quality.
	Jung ('73)	A Nature symbol relating to our instinctive origins.
	Learning (Ertel, '73)	Brown room caused decrease in learning ability.
	Nature (various)	Earth and Trees = dwelling place (family) and our physical origin.
Gray	Psychological (Sutton, '04)	Neutral, non-involvement. Dignified and conservative authority, wisdom, maturity. Lacks warmth, solemn, gloomy. Discourage lively conversation. Metallic gray or silver – speed, motion, technical advancement.
	Nature (various)	Color of fog – inability to see, detachment from the environment.
	Cultural (Birren, '88)	Christian-blend divine light of creation + darkness of sin/death; Cabala=wisdom.
Black	Psychological & Emotional Lüscher ('71)	Nothingness, extinction, renunciation, ultimate surrender, relinquishment. Compensation of an extreme nature. A protest against existing conditions. Nothing is as it should be. Revolt against fate.
	Psychological (Sutton, '04)	Authoritative, foreboding, intimidating, aggressive, mysterious, seductive. Conservative, dignified, solemn, formal. Death. Increases perception of weight and depth.
	Learning (Ertel, '73)	Caused decrease in learning.
	Jung ('73)	The <i>unconscious</i> ; dark primal or <i>Shadow</i> self. Death of the <i>ego</i> .
	Nature (various)	Dark, night, depths of the earth, fear of the unseen, sleep, death
	Cultural (various)	Christian = death and regeneration; Cabala = understanding; Chinese = water; Cherokee = night, death; Lakota = west (Birren, '88). Symbol of grief (Sutton, '04).
	Aura (Brennan '87)	Absence of light, profound forgetting, thwarted ambition, disease
	White	Psychological & Emotion Lüscher ('71)
White	Psychological (Sutton, '04)	Purity, innocence, peace, goodness, truth, simplicity, sterility, safety; cooler associations; a subdued or calming effect in some combinations (Sutton, '04). Bright light and white (often mixed with other colors) appears during periods of heightened self-awareness & psycho-spiritual transformation (Hamilton,'05).
	Jung ('73)	Light – awareness & consciousness. White = God-like & divine.
	Nature (various)	Daytime, ability to see, thus awareness. Ice and snow, thus cool.
	Cultural (Birren, '88 & various)	Christian = chastity, innocence, purity; Cabala = the Crown.; Lakota = North; Judaism = purity, joy and victory; Cherokee = peace and happiness. International call for truce (Sutton '04). Death: India, China and Japan (Sutton, '04)
	Aura (Brennan '87)	Truth
	Chakra	White associates with Crown chakra in some systems.
	Pink	Psychological (Sutton, '04)
Physiological		Aids digestion, tranquilizing, slows heart beat (Sutton, '04)
Aura (Brennan '87)		Rose color - love
Gold & Silver	Archetypal (Jung, '72, '73)	Gold: Associations include the divine, the sun, value, the <i>masculine</i> , <i>conscious</i> ; (may exhibit some of the emotional themes of yellow). Silver: Associations include the moon, mercury (quicksilver), the <i>feminine</i> , the <i>unconscious</i> (may exhibit some of the themes of gray and white).
	Transformation (Hamilton, '05)	Gold & Silver = Often appears in dreams as an integration of opposites during psycho-spiritual transformation.

Objective Associations vs. Color Alignment

Figure 2 provides a rough orientation between emotion and color that might be suggested by aligning some of the more *objective* (emotional, psychological and physiological) associations from table 1 adjacent to the chromatic and achromatic color spectrums. Note that as we move from the red toward the blue end of the spectrum we move from what we typically associate with the “warmer” emotions to the “cooler” emotions. Also, as we move from black to white, we move from non-awareness and unconsciousness to awareness and renewal, with gray seeming to be the barrier or separation state.

Figure 2 – Objective Emotion and Color Alignment

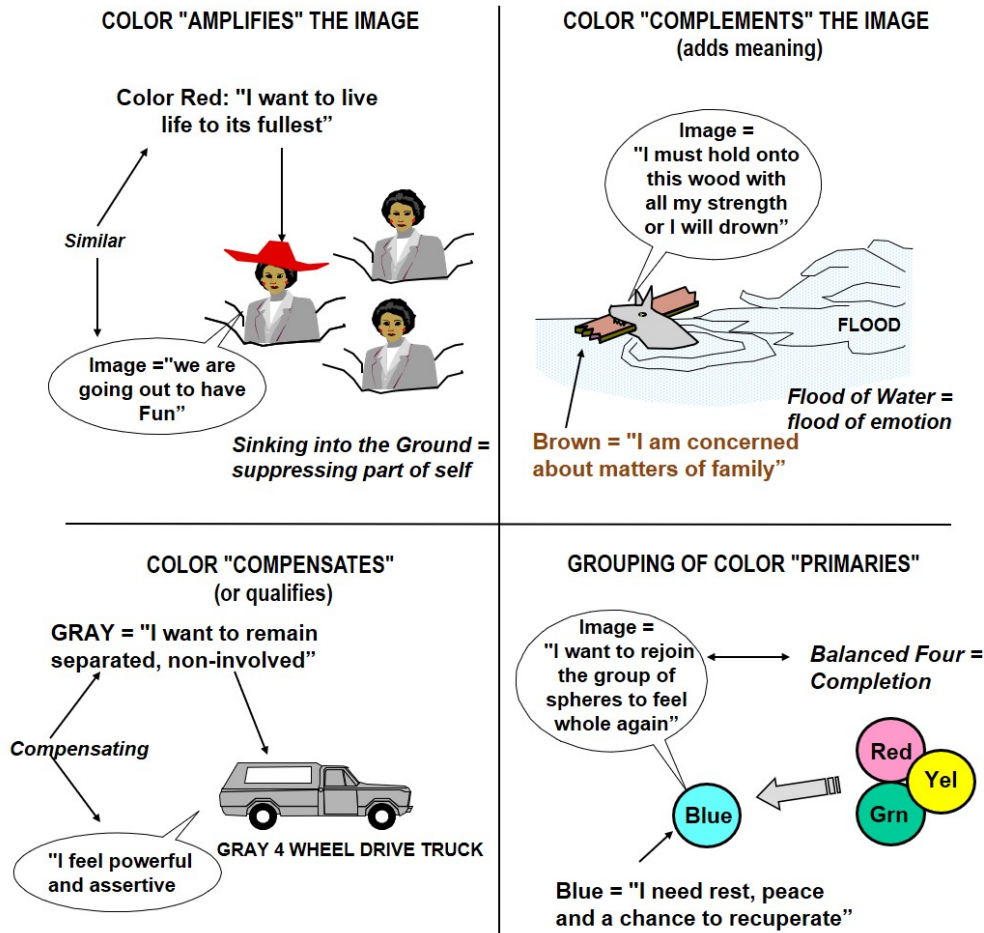


Color Paints Our Dreams with Emotion

How Might Color Combine with Dream Imagery?

When an image in a dream is a certain color, it can be treated as a *condensation* of two symbols, one being the color and the other being the image. For example, a red hat would be more expressive of energy and vibrancy than a colorless hat. In my research I found a good agreement between: a) the emotional expressions of the dreamer when *role-playing* a colored dream image; b) the statements in the *Color Test* and c) the waking life emotional situation reported by the dreamer (Hoss, 1999). A few examples from this investigation are given in the next section. They support the notion that color in dreams relates to emotions contained within the colored dream image and further provides some interesting insight into how colors combine with dream imagery to present a fuller meaning to the composite dream image. I found that the *condensation* of color and imagery appears to occur in at least four primary ways as illustrated in figure 3:

Figure 3
How Color Combines with Imagery



- 1) **Amplifies:** Often, the color associations and role-play statements are nearly alike. In this case, the content within the color appears to "amplify" the content within the image. Perhaps the color and the image are stimulated by the similar emotions.
- 2) **Complements:** Frequently the color associations add new information to the associations within the dream image. Color completes the story and thus "complements" the content within image. Perhaps the dream color and the dream image are stimulated by separate but associated emotional memories.
- 3) **Compensates:** At times, the color associations reveal a hidden meaning within the image that is not revealed in the image work alone. The color might reveal a rejection of something that the dreamer associates with the image. The color may reveal how the dreamer reacts or feels toward the situation represented by the image. Perhaps the image is stimulated by one set of associations, and the color is stimulated by an emotional reaction to those associations. In this case, color may be performing an important *compensating* function in the dream – much like other imagery combinations where the dream image itself contains the *impasse* or *compensating* element.
- 4) **Color as a Symbol:** Sometimes colors appear alone, without a specific object attachment. For example, it may appear as the grouping of color "primaries," or as part of the dream setting. Here it may be setting the emotional tone for the dream scene.

Color “Amplifies” the Image

If the color of an image, and the image itself, emerge in the dream from the same emotional stimuli, then their associations should be similar. In this case, the emotional associations from the color tables would match the statements and feelings expressed during *role-play* of the dream image.

Case 1a - “woman in red hat” (illustrated in the top left panel of figure 3)

Dream: *“In the dream I was one of three women and was wearing a red hat. We were going into town, walking along a road, when suddenly we sank into the ground.”*

Personal Content within the Dream Image: *Role-play* of the woman in the red hat revealed: *“we’re just going out for the evening to have fun,” - “I feel vibrant.”* The body language of the dreamer at this point was revealing as well. She became suddenly lively and animated as she “became” the woman wearing the red hat.

Emotional Content within the Color: When the dreamer reviewed the Lüscher associations for red, the one she responded most to was: *“Intense vital and animated, taking delight in action. Desire to live life to the fullest.”*

Confirmation - Waking Situation: In this case, both statements supported the same emotional state, that of being animated and going out to have fun and living life to the fullest. Thus, the color and the image appeared to support or “amplify” each other. As the dreamer reviewed these statements, she indicated that this is a way she had not felt for a very long time, as she had suppressed her social life and desires in order to take care of a personal situation. Note that the action in the dream of sinking into the ground, or disappearing below, is a common metaphor or motif for suppression.

Color “Complements” the Image to Reveal the Whole Story

Sometimes the color and the image complement each other and must be understood together to provide a complete understanding of the dream image. The *role-play* imagery work might reveal one set of emotional associations or conflicts, while the color work might reveal a different but related set of associations. A check against the waking life situation usually makes the complementary relationship or correlation obvious. One example is the continuation of the dream in case 1a.

Case 1b - “holding onto brown wood” (illustrated in the top right panel of figure 3)

The Dream in 1a continued: *“Later a flood came by. I tried to save my dog which was in the water, but he would not let go of a piece of wood held tight in his teeth. The only color was the brown wood.”*

Personal Content within a Dream Image: *Role-play* of the dog with the wood revealed: *“I must hold on to this wood with all my strength or I will drown.”*

Emotional Content within the Color: In this case I used the color association table 7. The statement for brown that the dreamer most resonated with was the Jungian contribution: *“Concern about matters of family, home, or one’s roots”*.

Confirmation - Waking Life Situation: The dreamer revealed that in her situation she was indeed suppressing her own needs, due to trying to support a family member who was in trouble. She feared that if she “let go”, had fun and did not “hold on tight” to this family member, that person would leave her and she would “drown in a flood” of emotions. Here the color brown added the missing element, that of the concern for a family member at the core of the conflict. It seems that her dog (her motherly instinct?) was holding on tight to this family member (brown). The fear of letting go and drowning in emotion was contained within the dog, but the object of the struggle, the concern for a family member, was contained within the color.

Case 2a - “brown fish”

Dream: *“I dreamed it had rained so hard that a pond overflowed, and brown fish were floundering on shore. I was trying to get the fish back in the pond.”*

Personal Content within the Dream Image: *Role-play on the brown fish revealed: “I feel I am out of my element.”*

Emotional Content within the Color: The Lüscher statement for brown that the dreamer most resonated with was: *“seeking freedom from problems and a secure state of physical comfort in which to relax and recover.”*

Confirmation - Waking Situation: I asked the dreamer about the feelings of “*being out of her element.*” She revealed that at work she had mixed feelings about a recent promotion. She felt that she was being asked to do too many things (too much rain) with which she was unfamiliar (out of her element). She felt a need to reestablish a more familiar, comfortable state where she felt secure (similar to her association with brown). The *role-play* identified her fear of being out of her element (a need to put the fish back in the water), and the color further establishes her reaction to that fear, of wanting to reestablish that familiar sense of security where she could relax.

Color “Compensates”

Sometimes, the dreamer’s associations with the image and with the color reveal a meaningful contrast. The nature of that contrast can vary. Sometimes, associations with the image and associations with the color reveal a meaningful conflict – the words relate to opposing fears, desires or myths, that in turn relate to a conflict the dreamer is struggling with in waking life. Sometimes the color performs a *compensating* function. In this case, the dreamer’s associations with the color can reveal hidden feelings or reactions to the emotional memories within the dream image. The color essentially “paints” the image with the dreamer’s emotional response to it. I find this to be particularly true of gray, which is a color of shielding and non-involvement. Gray can often “paint over” a dream image to reveal how the dreamer is shielding themselves from the associations or emotions within.

Case 3 - “gray trucks”

(illustrated in the left lower quadrant of figure 3)

This dream illustrates how gray can “paint over” a dream image, to shield the dreamer from a behavioral style within the image that they are afraid to exhibit.

Dream: *“I am looking down on a sandy beach area where there are three gray 4-wheel drive trucks.”*

Personal Content within the Image: During *role-play* of the trucks, the dreamer became animated, appeared to enjoy the role, and made statements about feeling powerful and assertive.

Content within the Color: Lüscher relates gray to a barrier or “*wanting to remain shielded or separated from the situation or associated feelings.*”

Confirmation with Waking Life: After observing the animated response, I assumed the dreamer really enjoyed expressing the assertive side of herself, but when I asked what she liked about being gray trucks, she surprisingly answered: “*Nothing - I don't like being that way, people wouldn't like me, I would drive them away.*” Here was a case where the truck image represented the characteristics of assertiveness and power (that she seemed to enjoy experiencing), but the gray indicated a conflict with behaving in that manner. She felt a need to shield herself from that behavior, for fear it would “drive others away” (also an interesting metaphor for the function of a truck). Here the dream appeared to be “painting over” the dreamer’s powerful assertive side with a mood of noninvolvement, in order to avoid expressing that side of herself.

Color as a Symbol in Itself

Color Patterns (Conflict and Integration)

Sometimes color appears by itself, unattached to any other imagery, to set an emotional tone or represent an emotional memory. Color can appear as a color pattern or form (as in the “maze” dream), a color shape (sphere, box, square or such), or as color illumination or background. Two-color patterns or combinations will often appear by themselves, or as part of a dream image, in order to represent an integration or conflict regarding the emotions represented by each color. When working with color combinations, use the statements in table 7 for each color to explore whether they represent a personal conflict between two emotional states. Then use table 8 to explore as possible path to resolution or integration of the two colors.

Case 4 - “red/blue instrument”

Dream: “*I am looking all over a large facility for a work associate, who had been very uncooperative with me in waking life. I want to find him and convince him to work with me as a team player. I enter a building where I sit down on a pile of some unidentifiable shapes in the corner painted red and blue. I am confronted by four members of a band and am offered the choice of an instrument to play. I finally pick one, but then wake from the dream.*”

Emotional Content within the Color – Lüscher: The two colors represented in the background of this dream were red and blue. The initial step was to explore these colors as a possible set of conflicting emotions, using table 7. The association for red with which the dreamer connected was: “*desire to win, succeed, achieve.*” His association with blue on the other hand was: “*needing a relationship free from contention where he can trust and be trusted; a need for harmony.*” The dreamer confirmed that this was a conflict related to a work situation. I then tried table 8 for the color pair red and blue (which was derived from the Lüscher test-scoring procedure for color pairs) to determine if it represented a possible integration or path to resolving the two sides of the conflict. The statement the dreamer connected with was: “*I seek harmony and cooperation with my associates for our mutual benefit.*”

Confirmation with Waking Life: The dreamer stated the dream seemed to be a replay of the conflict he found himself in the day before. He needed to “succeed and achieve” a management assignment he was responsible for, but this required him to find a way to convince his co-workers - particularly the one that appeared in the dream - to work with him in harmony as a team. He said that the color associations he

picked were exactly how he felt about the situation. The resolution to the conflict indeed was to “*seek harmony and cooperation with my associates for our mutual benefit.*” The metaphor of “choosing an instrument,” he related to his attempt to choose a means by which he could convince his coworkers to “play in harmony.”

The Psychological “Primaries”

As discussed earlier, the grouping of Red, Yellow, Blue and Green (that Jung, Perls and Lüscher called the psychological “primaries”) often appears in dreams, representing a pattern for completion, balance, solution and closure. When working with the “primaries,” look for the appearance of the four colors (or three out of the four) in some sort of geometric grouping. Generally, there is little work to do with a geometric color grouping, other than to note its presence, unless one of the colors is active or missing. Work on the missing or active color as if it is the key to understanding what is required for closure or balance, or that which is disturbing the balance.

Case 5 - “blue sphere” (lower right panel of figure 3)

In this dream, the four colors appeared in balance at first, but then one of the four colors (blue) becomes activated.

Dream: “*I dreamed of a blue sphere which was part of a group of four spheres colored red, yellow, blue and green that formed the dial on a pay-phone. The blue sphere separated and landed on my finger like a “magic” ring that I perceived would give me the ability to solve all my problems.*”

Personal Content within the Dream Image: Although a sphere is a collective image, we attempted the *role-play* anyway. As the blue sphere the dreamer stated: “*I am a blue sphere, part of group of spheres, and I just want to rejoin the group to feel whole again.*” As suspected, the sphere expressed a desire for unification, which Jung attributes to this grouping of the four “primaries.”

Emotional Content within the Color: The dreamer’s association with blue from table 7 was: “*I need rest, peace and a chance to recuperate.*”

Confirmation with Waking Life: The dream occurred on the first day of a much-needed vacation, and the dreamer stated that he was upset about things in his life and indeed needed rest, peace and a chance to recuperate. Assuming that Jung is correct about the four “primaries,” the four colored spheres together would represent a state of stability and balance. Thus, the separation of blue from that grouping would represent what was needed by the dreamer to reestablish balance - the need for rest. Interesting Lüscher (1971) considered the grouping of red, yellow and green the “work group” (the ability to maintain optimum effectiveness over a period of time) - blue on the other hand being associated with peace and contentment. The dreamer’s vacation or removing himself from work was indeed the magic ring.

Case 6 - “blue man/red man”

This case, from a group session at the IASD conference in Leiden (Hoss, 1994), illustrates an appearance of only three of the “primaries” in a group, with one color active and one color missing. In this example, I worked on both the most active color and the missing color, to see whether there was a connection. Blue was the most active color and red was missing.

Dream: “*I dreamed that 2 other men and I, all dressed in green and yellow, were being chased by a blue man*”.

Emotion within the Image: *Role-play* on the blue man revealed: “*I want to belong*” and “*my purpose is to keep us united.*”

Emotional Content within the Color: The statement in table 7 with which the dreamer connected was: “*I need a peaceful state of harmony and a sense of belonging.*” He related the green and yellow pair, on the other hand (table 8), to: “*I want to impress others and be popular and admired*” but also the potential path to resolution: “*I am trying to establish a better relationship with others.*”

Confirmation with Waking Life: The dreamer indicated that these statements described feelings which dominated his waking life behavior. He holds back from expressing himself “in order to bridge the gap between himself and others” because he “wants to belong, to be popular and admired.” The statement “keeping us united” also seemed to relate to the principle of the “four primaries” which was to bring all parts of self together.

Further Work on the Missing Color: Speculating that “redness” was the element needed for balance, I asked that he *role-play* a man dressed in red. As the red man, he suddenly became more animated, assertive, vital, and expressed a feeling of “*being alive again.*” This correlated with the Lüscher associations for red of: “*intense, vital, animated, a desire to live life to the fullest.*” These were feelings that he admitted were missing in his life. He was reluctant to express them because he feared rejection, and that he would scare his friends away. As a result of the dreamwork, he recognized the need to let the red man side of self come forth. People in the group, who observed the session, reinforced how much they liked seeing him as the red man. An interesting footnote was that he appeared at the IASD costume dream ball that evening, dressed completely in red, swinging a red wooden sword, definitely “feeling alive” again.

Some Pilot Studies

If the color of a dream image indeed relates to emotion, then it seems that the more dominant colors, or those most recalled from a person’s dreams, might relate in some way to the various emotional influences in that person’s life: their emotional state due to emotionally impactful waking events and their emotional personality. I therefore performed a couple of studies to determine if there was any indication of this relationship. I used the Lüscher Color Test associations to create the color to emotional profiles since it was designed for such an evaluation. Note that although a large population of dream samples were used, the number of subjects was small, the results based on self-scoring and the studies performed without a randomized control group. However the results were promising thus worthy of further research.

Do Life’s Events Effect Dream Color?

If the color of a dream image reflects waking life emotions, then it would follow that the dream colors would change as the emotional events in the dreamer’s life changes. Dr. Curtiss Hoffman joined me in the an investigation of this theory as he had maintained a long-term journal of his dreams over a period of eleven (11) years in a computer database (which was able to sort on color) containing 4,791 dream reports, that contained color. (Hoss & Hoffman, 2004). In order to understand the emotional state reflected in the dreams at any point in time, I used the Lüscher *Color Test* (8 color version) which derives an emotional profile based on a subject’s selection of color in a sequence from highest preference to lowest preference. I used a hypothetical assumption that the dream color profile (highest to lowest frequency of a dream color recalled at a point in time) might relate to the emotional state of the dreamer at that time, as measured by the *Color Test*. I derived a color profile by measuring the relative recall frequency of one color over another then applied the *Color Test* to it as if it were a profile of color preferences.

The Color Test is administered by pairing the colors top to bottom with Lüscher “function” designators (+, x, =, -) as follows: + as desired objectives or behavior; x as the existing situation or behavior; = as characteristics under restraint; and – as rejected or suppressed characteristics or behavior. This generated roughly 12 to 20 statements relating to emotional state. A [bracket] was placed at the end of each statement to place a grade. Curt was then sent the profile and asked to self-grade the statements against what he perceived as his emotional state during the period being tested: [+] = yes it fits, [0] = sometimes or partial fit or fits but not exactly as worded, [-] = does not fit as a statement or theme. The scores were then assigned values (+ = 1, 0 = .5 and - = 0), tallied and normalized to determine relative correlation.

Before doing the scoring, however, Dr. Hoffman had challenged me to find the period of extreme emotional turmoil he had gone through during this 11-year period. He did not say anything more about it. To determine this, I derived a baseline color and emotional profile by applying the color test to the average color profile over the entire 11-year period (figure 4). I then derived an emotional profile for each year. See figure 5.

Some emotional profiles were close to the baseline (period 3) or gave no indication of stress (period 1). The emotional profile during period 2 however indicated extreme emotional stress, summarized on figure 5 as: “exaggerated emotional intensity and opposition, self-esteem and relationship issues.” He indicated that year (1998) to be the exact year of the related emotional event. When given the 10 statement *Color Test* based profile, he rated it as 80% accurate as worded and 100% if statements are included that were coded to fit as the theme but not entirely as worded.

**Figure 4 Baseline Color Profile
for Hoffman dream database over 11-year period**

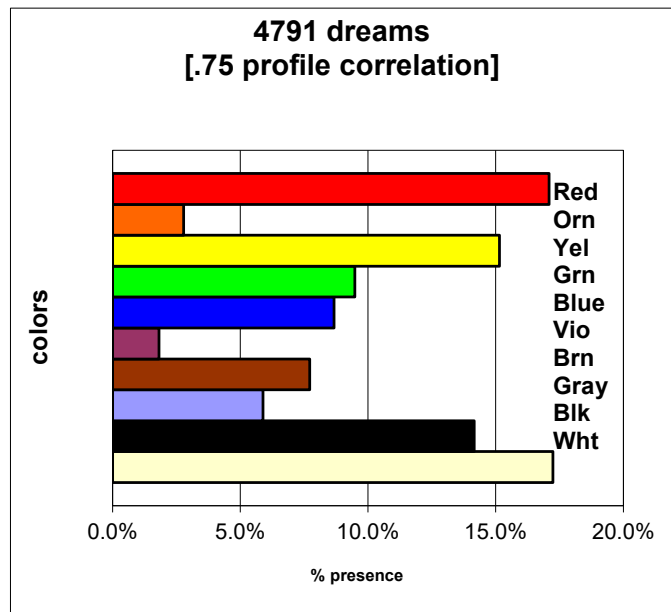
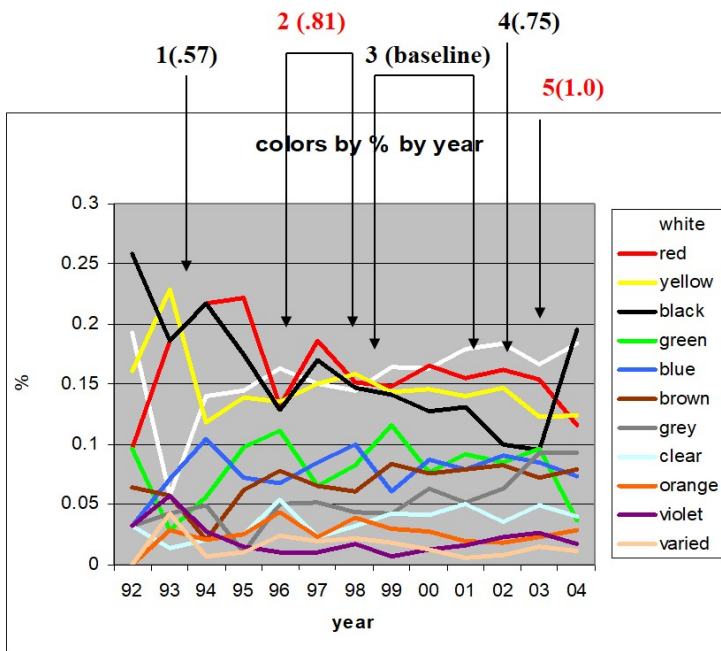


Figure 5 Dream Color and Emotional Profiles highlighting two emotional events in an 11-year period



Lüscher Profiles

- 1 – uneventful period
- 2 – **Crisis period**: Profile = exaggerated emotional intensity and opposition (note Red/Blk pair) self-esteem and relationship issues (blue/green reversal)
- 3 – Profile = same as baseline, an uneventful average period
- 4 – Profile = worn out emotionally or physically
- 5 **Crisis** – disappointment, determination and stressful relationships

The details of the 1998 (period 2) profile statements and scoring of each is as follows; provided to illustrate how different dream color frequency profiles relate to very different emotional profiles:

- 8 Color Profile: +Yel/+Red; xBlack/xBlue; =Green/=Brown; -Grey/ -Violet
- Emotional Profile (score underlined): Critical about the existing conditions [Yes]; which you feel are disorganized or not clear cut [Yes]; Seeking a solution to clarify the situation [Yes]; Need for a wider sphere of influence [Yes]; Makes him restless [Yes] and driven by desires and hopes [Yes]; May have spread yourself too thin [Yes]; Needs peace and quiet [Yes]; May need a faithful partner who can provide special consideration and affection [fits but not as worded]; Feels he cannot do much about his existing problems and difficulties and that he must make the best of things as they are [fits but not as worded].

In addition, the *Color Test* had identified a second emotional event (period 5) he had not mentioned happening during the 11 years summarized in the figure as: “disappointment, determination and stressful relationships.” He indicated that such an even had just happened over that last year and when provided the detailed profile he rated it as 100% accurate as worded.

The details of the 2003 (period 5) profile statements and scoring of each is as follows:

- 8 Color Profile: +Red/+Yel; xGreen/xBlack; =Grey/=Blue; -Brown/-Violet
- Emotional Profile: Pursues his objectives and his self-interests with stubborn determination [Yes]; Refuses to compromise or make concessions [Yes]; Relationships do not measure up to your expectations [Yes] leading to disappointment [Yes]; Has mental reservations about the situation [Yes] and remains emotionally isolated [Yes]; Stress arises from instability in some set of relationships (colleagues, business, personal) [Yes]; Watchful control over your relationships because you need to know where you stand [Yes]; Strives to align with others who can assist in your growth [Yes]

The other periods were described by the dreamer as “not having a lot going on” the dream color profile was somewhat constant and closely matched (75% on average) the dreamer’s baseline profile. That the two crisis periods could be accurately identified by the dream color alone provided a promising indication that the colors we recall from our dreams might indeed be influenced by emotional events in our lives.

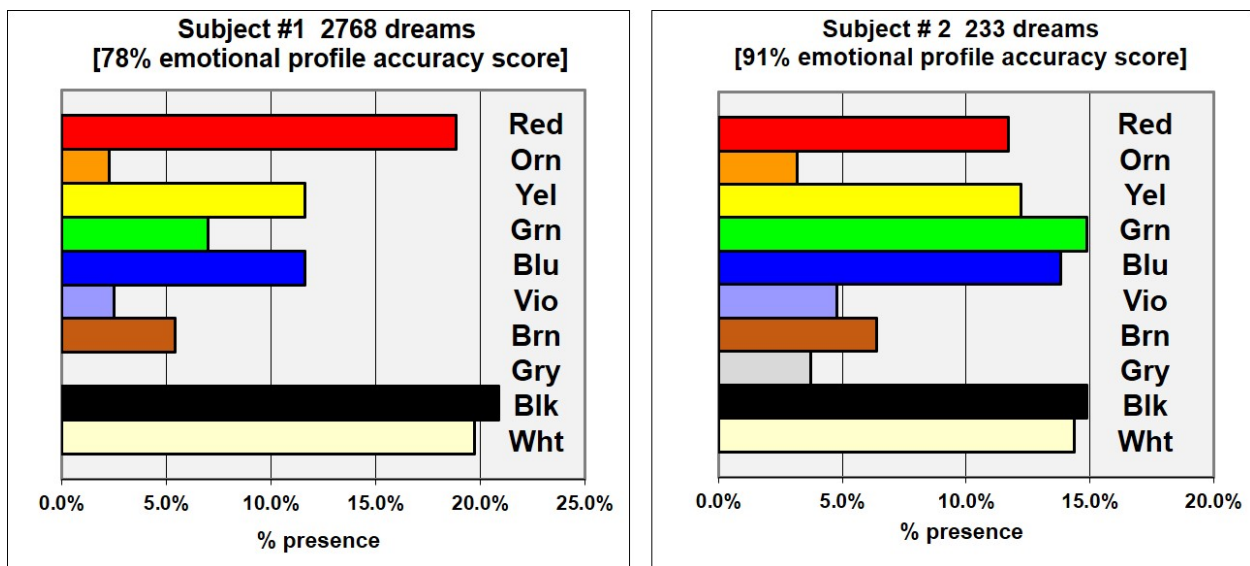
Does Dream Color Reflect Personality?

If the color of a dream image relates to emotional content then extending this reasoning further, might the frequency of colors recalled over a lifetime (or long period of time) correlate to key emotional traits in the dreamer’s personality? Dr. Curtiss Hoffman again joined me in the investigation of these questions with his own database. He was also was part of a long-term journaling group from which we could obtain at least three other dreamers’ samples of color recall over long periods. In all we collected color frequency samples from roughly 8000 dreams.

For each subject, the recall frequency of each of eight colors was computed over those years. The sum total of all reports for an individual were used to create a baseline personality profile as shown in figures 5 and 6. Color names from the dream reports were grouped to correlate with the eight colors in the Lüscher *Color Test* we used. Where a color was named as a combination of multiple colors (tan, mauve, blue-green, teal, etc.) it was eliminated from this initial study rather than artificially forcing it into a specific color category.

These were then ranked to create a color profile for that dreamer (most frequent color recalled to least frequent color). A Lüscher emotional profile was then performed on the color profile for each subject using the same methodology as in the prior study. The resulting emotional profile was given back to each subject (including Dr. Hoffman) for self-grading using the same methodology as above, to determine how accurately the resultant profile described their personality (or at least their perception of their personality).

**Figure 6 Color Profiles for two out of the 4 dreamers
In the ‘dream color versus personality’ study.**



As seen in figures 4 (Dr. Hoffman's profile) and figure 6 (two of the other three) the color profiles and Lüscher turned out to be very different for each subject which would be expected if color relates to personality and thus personality differences. The Lüscher personality profiles (roughly 10 to 12 statements each) were derived from these color profiles and given to the subjects for rating as to how well they fit the subjects perception of their personality. Dr Hoffman and two of the subjects who completed the study graded their profile results, derived purely from their dream colors, as 75% accurate, 78% accurate and 91% accurate respectively. More research is recommended, but the results suggest that our personality indeed might influence the colors we recall most in our dreams. It would make sense that our personality would influence the emotional conditions which we are most sensitive to, and thus our dream colors would reflect those emotional conditions.

To illustrate how the different colors relate to the personality profile statements that were self-rated as accurate (as the subject perceived their personality), below are the Color Test derived profiles of each of the above subjects:

Figure 6a: 2768 dreams from long-term journal, rated as 78% accurate: +Red/+Blue, xYellow/xGreen, =Brown/=Purple, Orange (-Red/-Yellow). Strives for a life rich in activity and experience and for a close bond offering sexual or emotional fulfillment. Hopes to obtain an improved position and greater prestige, so that I can gain something I desire or more of the things I have had to do without [fits if worded differently]. Egocentric at times and therefore quick to take offense. Able to obtain physical satisfaction from sexual activity but tends to hold aloof emotionally. Eager to make a good impression. I feel the right to anything I might hope for, but helpless or distressed when circumstances go against me. I find the possibility of failure most upsetting. Sometimes I see myself as a victim.

Figure 6b: 233 dreams over 4 recent years, rated as 91% accurate: Green + Blue, Yellow x Red, Black = Brown, Purple – Gray. I want to make a favorable impression on others and to be recognized. I have a need to feel appreciated and admired. At times I can be a bit sensitive or may become hurt if I do not receive adequate acknowledgement. I tend to be active, outgoing and often restless. I may feel frustrated when events develop too slowly along the desired direction. When circumstances are such, I have the capability to compromise and forgo certain pleasures for the time being. At times I may feel that life has more to offer. Regarding relationships, I maintain an attitude of critical appraisal and am not swept off my feet unless the other is shown to be genuine and have integrity. I keep a watchful control over emotional relationships until I know where I stand. I have a concern at times that I might be prevented from achieving the things I want and therefore may strive for others to recognize my right to some of those things.

Conclusions

While self-scoring adds a subjective variable to the study, the results were fairly positive suggesting the possibility that the colors that more frequently populate our dreams, or at least that we most recall from our dreams, may be influenced by the emotional makeup of our personality. Further research is needed to confirm this, including using personality testing tools such as the MMPI to actually determine personality characteristics and the use of a control group with a randomized set of statements that they compare to their dream color profile.

SECTION 1 1

THE COLOR QUESTIONNAIRE

The questionnaire was created from color-to-emotion associations derived from the Lüscher Color Test (1971) augmented in places by other color psychology studies and literature noted above. It also in places (as noted) includes some basic archetypal associations that Jung attributed to colors like black, white and brown. The table does not represent the “meaning” of a color and should NOT be used that way; the meaning of a color is personal for each individual. It is intended only as an enhancement to personal dreamwork by providing emotional statements or themes which might trigger your own personal associations with a feeling or situation in your waking life. Table 7 is intended to be used with individual colors and Table 8 with color mixtures.

Single Colors and Mixtures

In table 1 the statements within each color represent an emotional theme that encompasses both the positive and negative aspects of a color association – both a sense of being filled with or feeling that emotion as well as needing that feeling or condition. Red, for example, can relate to feeling energetic as well as a need for more energy. The statements also contain some basic *archetypal* associations that Jung attributed to colors like black, white and brown. Jung related black and white to *unconscious* and *conscious* material for example, and brown (the beautiful natural wood shades) to our natural “roots” for example. These have an evolutionary basis and I have frequently observed these particular colors in dreams to relate to the dreamer’s personal situation much as Jung did.

Note that the colors in table 7 are more pure hues. As colors mix or blend with black and white and become darker or lighter, associations will change (Sutton & Whelan, 2004) which is one reason the questionnaire can only be used as a starting point to explore your own associations. Also what of mixed hues such as blue-green or perhaps rust (a reddish-brown) or such? For these try the dual color tables 8. Table 8 is a result of applying the same approach I used in creating the single-color table 7, but principally used Lüscher color pair themes as a reference. It is intended to test for an association when the color in question is a mixture of two hues. I don’t feel it is as refined or validated as table 7, but it tends to work so well in case after case I included it in the document. The use of table 8 for a color mixture is discussed below for a greenish-brown color in the “*Change Purse*” example. Another example is this “*Rusty Car*” dream (from Part 1 The Science of Dreaming tab). The dreamer was offered a teaching position in an area of expertise he had abandoned many years before. He felt it would be too difficult to resurrect his talents, so he initially decided to turn the position down the next day. In his dream that night his “rusty” talents and lack of motivation appeared as a “rusty” car with a dead driver inside: *I am wandering through a red sandy desert and see an old rusty car. I look inside and find the driver is not moving. I give him up for dead. My unknown companion from behind says “the man is just asleep” and urges me to wake the man.* His emotional conflict and state of mind was reflected in the rust color of the car. If we look at rust as a reddish-brown combination one of the statements in table 8 reads: “I am choosing comfort and security over ambition and prestige at this point” which was exactly what the dreamer had decided to do (to turn down a prestigious teaching position because he felt insecure and uncomfortable about resurrecting his “rusty” talents).

Pastels

Pastels are a mixing a primary color with white and thus might relate to the influence of whiteness on that emotional state. White can represent the feelings of “newness” and therefore when mixing with another

color might represent an emergence or re-emergence of the emotion associated with the color. Hamilton (2005) observed that color combinations with white increased as higher states of self-awareness were achieved during a transformation experience. Sutton and Whelan (2004) discuss the mixture of white with colors as related to a coolness or peacefulness, and associate many of the color combinations with white as a “cooling” of the color (and thus emotion) with which it mixes, making it less intense and more pleasant and friendly.

The “newness” or “rebirth” experience is illustrated in the following dream: *“I dreamed I was dressed in pink.”* The dreamer looked through table 7 at the emotional themes associated with the color red and identified with the *“I feel assertive, forceful”* statement – but then indicated that, *“Asserting myself is totally new to me, and emerging feeling and way of acting that I am only beginning to understand how to deal with.”* The mixture of newness (white) with the assertiveness (red) related to an emergence or rebirth of what had been a repressed assertive part of self.

Color Pairs - Conflict and Integration

When working with dream images that contain a color pair, I have often found that the pair represents a conflict between the two emotional states associated with the two colors. This was illustrated earlier in Case 4 (the “blue/red instrument”). It is also apparent in the following dream: *“I dreamed of a round gas station sign that was orange, with the number 76 in blue letters.”* Although this is a commercial sign, the dreamer related it to a trip to Nepal in 1976 and stated that she was indeed conflicted between a *“desire to do more and expand her interests and activities”* (orange from table 7) and her *“need for more gas”* or *“needing rest, peace and a chance to recuperate”* (blue from table 7). Therefore, explore the nature of the conflict using table 7.

Similar emotional statements related to the conflict might be revealed when using the dual color table 8. On the other hand, the pairing of two opposing images can relate to a path to integration or the desired state of resolution, according to Carl Jung (see Part #2 The Psychology of Dreaming tab). This might be extended to the pairing of two opposing colors as well. So, when using the color pair table 8, look at the statements that you connect with as also possibly relating to a potential path to, or desired state of, resolution (the integration of the two colors or two conflicting emotions).

This *“Change Purse”* dream illustrates the use of both tables for color pairs and mixtures and the fact that the nature of the emotional conflict can be pictured, and thus revealed, in a dream by the colors alone. *“My associate in the dream was a slightly rounded but rectangular shaped zippered change purse, red on the top-side and a green-brown color on the under-side. I kept flip-flopping it over in my hands, trying to decide which side and color I liked best.”* In this case, the dream presented the two sides as an indecision or conflict between the emotions represented by the red side and the emotions represented by the green-brown mixture on the underside. Using table 7, the dreamer connected with the red statement: *“I want to win, succeed and achieve.”* When he reviewed the color mixture for greenish-brown in table 8, he connected with the statement: *“I want to overcome difficulties and establish myself, even though I am tired and feel too much is being asked of me.”* His conflict was between pursuing a goal of “winning,” in what he saw as an upcoming “battle” with his colleagues, and the desire to “not to take on too much,” which, in this case, would be the result of winning.

Proper Use of the Questionnaire

The statements do NOT represent the “meaning” of a dream color and should not be used as a dictionary of color meaning. It does not work that way. They contain emotional themes reportedly associated with color as found in various studies. The statements are designed to trigger your own personal associations

with a situation the dream might be dealing with so **use it as a questionnaire**, as you read the statements ask yourself “does this sound like a way I have felt recently?”

When you use the table, you may find that only one or two statements within a color cell relate to your specific situation, whereas the others do not. This is exactly how it was designed. The statements are variations around an emotional theme found to be associated with that color. The statements are also designed to provide a spectrum of emotions, from being “filled with the emotion,” to needing more of that emotional stimulus.

Your own particular situation would naturally be limited to just a few statements and may not be described exactly as worded. You may also find that none of the statements trigger an association. That is possible since the statements were derived from the set of associations, from the research and literature, and are limited to basic color hues. So, don’t depend totally on the tables for answers. They are intended only as an aid to trigger your own associations. If the tables do not trigger associations, then you may want to try freely associating, i.e. “what feelings surface as I envision being bathed in that color”.

When working with the tables, pick the statement(s) that really stands out, that provides the greatest “aha” or connection with your waking life situation. Then set aside the table and use your own words to describe your situation and relate it to the dream story.

- 1) **Select the colored dream images to work on:** Work on the color of an image you have been working with in a dream and/or the color(s) that you feel most drawn to or that stand out. It is best to work with something that is not a commonly colored object (like green grass), unless it stands out. It is best to work with a colored image that could be any color (such as a red hat, a blue car, an orange dress). Also look for color pairing which might represent a conflict between emotions or an eventual integrated state of emotional resolution. Look for a grouping of the 4 primary colors - red, yellow, blue and green (or if one color seems to be most active in the group of 4 or is obviously missing from the group, work on that color).
- 2) **Pick the color** in table 7 that best matches the color of the dream image, or for a color mixture try table 8. Don’t worry if there is not a perfect match. The tables are not intended to reveal the “meaning” “of the color. They are only intended to trigger your own associations from the emotional themes represented.
 - **Single Color:** use table 7 to select the closest matching color or table 8 if it is a color mixture. (example: rust as reddish-brown, blue-green, etc. – first match the dominant hue in the mix with the colors in the rows, then match the secondary color in the columns).
 - **Color Pair:** Explore the possibility that the two colors might represent conflicting emotions by using table 7 on each color separately or 8 on the pair – or – use 8 to explore the possibility that the pairing might represent an integration, a path to or eventual state of resolution. Pick the row with the dominant color, then select the secondary color from the column, and read the statements at the intersection of the two.
- 3) **Read each statement as a question** (or better yet have someone else read them while you listen) **asking yourself:** “Does this statement relate to a way I have felt recently or describe a situation in my waking life?” For color pairs, read both colors in 7 (or try 8) to explore whether the two colors might represent two conflicted emotions or see if the statements in 8 might represent a possible resolution scenario (integration of colors or conflicted emotions).
- 4) **Relate to Life:** Pick the one or two statement(s) that create the strongest “aha” response or “connection,” that best relate to a waking life situation or conflict. Describe the situation, and the feelings at the time, in your own words. How does this add to your understanding of the situation the dream is dealing with?

Table 7 SINGLE COLOR EMOTIONAL THEMES

(Statements are NOT the “meaning” of color but are to trigger Your Own Personal Associations)

COLOR	ASSOCIATED EMOTIONAL THEMES
RED	1) I feel intense, vital or animated. 2) I feel transformed. 3) I feel assertive, forceful. 4) I feel creative. 5) I want to live life to its fullest. 6) I want to win, succeed, achieve. 7) I feel sexy or have strong sexual urges. 8) I have a driving desire. 9) I am feeling anxious. 10) I need something to make me feel alive again. 11) I need to be more assertive and forceful. 12) I need to get out and enjoy myself. 13) <i>If it appears as blood or inflammation - it could metaphorically or literally relate to sickness or injury.</i>
ORANGE	1) I want to expand my interests and develop new activities. 2) I want a wider sphere of influence. 3) I feel friendly and welcoming. 4) I want more contact with others. 5) I feel enthusiastic, outgoing and adventurous. 6) I am driven by desires and hopes toward the new, undiscovered and satisfying. 7) I feel driven but need to overcome my doubts or fear of failure. 8) I must avoid spreading myself too thin.
YELLOW	1) I feel a sense of joy and optimism. 2) I feel alert. 3) I am seeking a solution that will open up new and better possibilities and allow my hopes to be fulfilled. 4) I feel the new direction I am taking will bring happiness in my future. 5) I am hopeful. 6) I need to find a way out of this circumstance or relationship. 7) I need a change. 8) My actions may be compensating for something. 9) I may be acting compulsively.
GREEN	1) I need to establish myself, my self-esteem, my independence. 2) I want recognition. 3) I need to increase the certainty of my own value and status, through acknowledgment by others of my achievements or my possessions. 4) Hard work and drive will gain me recognition and self esteem. 5) My opinion must prevail. 6) I must hold on to this view in order to maintain my self-esteem. 7) I want what I am due. 8) I must maintain control of the events. 9) Things must not change. 10) Detail and logic are important here. 11) I need to increase my sense of security. 12) I need more money to feel secure. 13) I need healing or better health.
BLUE	1) I feel tranquil, peaceful and content. 2) I feel a sense of harmony. 3) I feel a meditative awareness or unity. 4) I feel a sense of belonging. 5) I need to feel I belong. 6) I need rest, peace or a chance to recuperate. 7) I need a relationship free from contention where I can trust and be trusted. 8) I need a peaceful state of harmony offering contentment and a sense of belonging.
VIOLET	1) I like to win others over with my charm. 2) I feel an identification, an almost "mystic" union with someone or something. 3) I have a deep intuitive understanding of the situation. 4) I feel a sense of intimacy. 5) The feeling is erotic. 6) I seek a magical state where wishes are fulfilled. 7) I yearn for a "magical" relationship of romance and tenderness. 8) I seek to identify with something or someone. 9) I need intimacy. 10) I engage in fantasy at times when I am feeling insecure.

Table 7 SINGLE COLOR EMOTIONAL THEMES
(continued)

COLOR	ASSOCIATED EMOTIONAL THEMES
BROWN	1) I seek a secure state where I can be physically comfortable and relax or recover. 2) I am uneasy and insecure in the existing situation. 3) I need a more affectionate environment. 4) I need a situation imposing less physical strain. 5) I want to satisfy the physical senses (food, luxury, sex). 6) <i>Natural wood brown (Jung)</i> : a) I am concerned about matters of family, home, or my "roots". b) I am concerned with a son or daughter. c) I'm searching for my true self or natural state of being. 7) <i>Dirty Brown or greenish-brown might relate to a physical problem or illness?</i>
GRAY (free of color)	1) I want to shield myself from those feelings. 2) I feel emotionally distant, only an observer. 3) It is as if I am standing aside, watching myself mechanically go through the motions. 4) I want to remain uncommitted, non- involved, shielded or separated from the situation. 5) I do not want to make a decision that will require my emotional involvement. 6) I have put up with too much and now wish to avoid any further emotional stimulation. 7) I am trying to escape an anxious situation. 8) I am compensating for something.
BLACK (negation of color)	1) I am anxious and don't know why. 2) I am fearful of or intimidated by the situation. 3) I have been dealt an unacceptable blow. 4) Nothing is as it should be. 5) I refuse to allow it/them to influence my point of view. 6) I can't accept the situation and don't wish to be convinced otherwise. 7) I feel the need for extreme action, perhaps in revolt against or to compensate for the situation. <i>Jung: The unconscious realm. Moving into darkness = giving in or going within (initial phase of transformation); or perhaps suppression? Beautiful shiny black = a positive view of the unconscious from which a new self emerges.</i>
WHITE	1) This is a new experience. 2) I'm aware of new feelings. 3) I'm experiencing a new beginning, a reawakening, a transformation. 4) I have a new outlook, a new awareness. 5) I feel pure and/or innocent. 6) I feel open and accepting. 7) I feel unprepared. 8) I feel alone, isolated. 9) It feels cold or sterile.
PASTEL (color + white)	White transforms the emotion associated with the color it mixes with. It can represent a newness, unfamiliarity with, innocence regarding, or renewal of that emotion; or a subdued coolness, calming and pacification of the emotion. White mixed with red (pink) for example might transform passion into romance or pacify the "red" emotions into nurturing and the discouraging of aggression.
PINK	1) I feel romantic or loving toward someone or something; 2) I am feeling very sensitive about something; 3) I feel nurturing and /or gentle and soothing; 4) I am feeling compassionate; 5) I am avoiding aggression or want to calm my aggressive feelings; 6) I need romance; 7) I need nurturing; 8) I need something to calm me down; 9) dealing with this feeling of assertiveness is new to me; 10) the driving energy I feel is new to me.
COLOR GROUPS (Jung)	Red/Yel/Blu/Grn – A grouping of the 4 "primaries" can represent a state of completion or balance. An active or missing color may be associated with an emotional element missing from the dreamer's life that is needed for closure. Black & White (patterns) - Forces of unification, an integration of <i>conscious</i> (white) and <i>unconscious</i> (black) from which a greater self emerges; a unity of opposites; an internal change may be taking place. Gold & Silver - Integration of <i>masculine & feminine</i> attributes or <i>conscious & unconscious</i> forces respectively.

Table 8 COLOR PAIR - EMOTIONAL THEMES
(Statements are designed only to Trigger Personal Associations)

Color	Red	Yellow	Green	Blue
Red	I feel Intense, full of energy. I want to win and succeed. I feel driven by desire. I want to live life to its fullest. I want my will to prevail. I feel sexy or sexual urges.	I feel enthusiastic, outgoing and active. I want contact with others. I want to expand my interests and develop new activities. I want to overcome my doubts.	I am purposeful and controlling in pursuing my goals. I don't allow myself to be deflected. I want to overcome obstacles & achieve recognition from success.	I feel emotionally fulfilled. I want a relationship that provides emotional and/or sexual fulfillment. If I follow this course of action, I will achieve harmony.
Yellow	I want a wider sphere of influence. I am driven by desire and hope for something new and satisfying. I like the new and undiscovered. I am seeking new fields of interest.	I need a change that will give me some relief. I am hopeful in my search for a solution that will bring happiness. I am interested in things that are new and developing.	I am ambitious. I want to prove myself and gain appreciation and recognition. I stay alert to opportunities that would allow greater freedom and bring recognition.	I feel emotionally dependent. I need affection and understanding. I am helping the group in hopes that I might be treated with warmth and understanding.
Green	I want to succeed to a position of authority and prestige. I want to overcome opposition and to make my own decisions. I don't want to depend on others. I want to be in control.	I am ambitious. I want appreciation and recognition. I want to impress others and be popular and admired. I am trying to establish a better relationship with others.	I need to establish myself, my self-esteem or my independence. I want recognition. I need security. I want my opinion to prevail. I need to control the events. Logic, detail & order are important.	I want to make a favorable impression and be admired and appreciated. I can be easily hurt if I am not noticed. I want to be proven right. I am a bit precise and can be bossy at times.
Blue	I seek harmony and cooperation with associates for our mutual benefit. I need emotional fulfillment. I seek an affectionate, intimate relationship of mutual trust.	I am emotionally dependent. I am enthusiastic. I seek a happy, affectionate, fulfilling relationship. I am helpful and willing to adapt in order to gain affection.	I need peace and freedom from stress and conflict. I'm proceeding cautiously so as to control the situation. I am sensitive and exacting and can be fussy.	I need peace, harmony, and a sense of belonging. I need to rest, relax and recuperate. I am sensitive and have deep feelings. I feel content.
Violet	I can get preoccupied with exciting, erotic, stimulating things. I want to be seen as exciting. I want to have a charming, impressive influence on others.	I thirst for adventure. My future must be exciting, stimulating and interesting. I want to be well liked and charming. I am over-imaginative and given to fantasy and daydreaming.	I use charm and clever tactics to influence or gain recognition, but I don't want to accept the responsibility of a close relationship. I want to be considered someone special.	Aesthetic or erotic things attract me. I seek a sympathetic relationship and a situation of ideal harmony. I feel a need to identify with something in an idealized way.

**Table 8 COLOR PAIR - EMOTIONAL THEMES
(continued)**

Color	Violet	Brown	Gray	Black
Red	I need stimulation. I desire fascinating and stimulating things. I like erotic or aesthetic things. I am acting so as to fascinate and charm others.	I am taking it easy and being a bit self-indulgent, gratifying my senses. I am choosing comfort and security over ambition and prestige at this point.	I am acting impulsively with little concern for the consequences. I don't want anything to get in the way of my having fun, which I hope will shield me from my problems.	I am living intensely to make up for what I have missed, and to escape from my burdens. My desires are exaggerated, and I tend to over-dramatize.
Yellow	I love fantasy. I want a fantasy adventure. I express my hopes through my imagination and fantasies. I want to be admired for my charm. I find myself often daydreaming.	I want security and comfort. I seek a solution that will bring physical comfort and free me from fear and insecurity. I need relief from despair and a chance to recover.	I am stuck in indecision and lack of resolution. I want to commit to a solution but can't determine what to commit to. I escape the problem through vague illusionary hopes.	I am in crisis. I made a decision and I am sticking to it. There is no middle ground so I find myself making abrupt decisions and changes in order to find a solution.
Green	I am using clever tactics and a pleasant manner to win over others, but in a way that avoids commitment and responsibility. I keep a close watch on how others react in order to maintain control and measure my success.	I need physical comfort, security, recognition and fewer problems. I want to overcome difficulties and establish myself, even though I'm tired and feel I'm being asked to do too much.	I am defending my self-esteem, prestige or status. I want to impress others. I want to establish myself and make an impact despite unfavorable circumstances or a lack of appreciation.	I am closed to attempts by others to influence me. I want to prove that I am strong, superior and above all that, that it doesn't affect me. I can be a bit obstinate or self-righteous.
Blue	Beauty and taste is important in this situation. I consider peace and fulfillment to be achievable through beauty, aesthetic pursuits, or an ideal relationship.	I need to overcome my physical condition and to be treated with a lot of special care, in a conflict-free environment. I fear separation and the resulting emptiness and solitude.	I need a release from stress and a period of peace and tranquility which will give me a chance to recuperate.	I have an urgent need for peace and a chance to rest. I need to be lovingly understood. I feel I am treated with a lack of consideration. I want others to comply with my requests.
Violet	I want to identify or form a "mystic union" with something or someone. I want an intimate, romantic relationship - a magical wish-fulfilling state. I try to charm others to gain their support.	I am stimulated by sensual pleasures and luxurious surroundings.	I am sensitive to my environment, and want to protect it against any disturbing influence. I want to be understood with sensitivity and compassion. I need to protect myself against conflict and stress.	I have a compelling desire to unite or blend with something / someone I identify with. I want the bond to be sensually fulfilling but not to conflict with my convictions.

**Table 8 COLOR PAIR EMOTIONAL THEMES
(continued)**

Color	Red	Yellow	Green	Blue
Brown	I am being a bit self-indulgent. I need to satisfy my sensual desires or physical appetites.	I need total security. At this point I prefer physical relief over achievement of future goals. I am settling for a less active, problem-free existence with minimal demands.	I need physical relief & comfort. I am trying to maintain self-control so as to handle existing difficulties. I need a relaxed environment in order to recover and feel secure.	I desire a state of physical comfort with no conflict. I need to feel secure and fear loneliness and separation. I need to be handled gently.
Gray	I may seem cautious but I demand a lot out of life and want to impress others. I hide my intentions so that I won't be involved in, or committed to, the consequences of my actions.	I am looking for a way out of this intolerable situation, but feel there may be no solution. I can't even decide what to hope for, out of fear that a decision would mean commitment to a course of action.	I am in a hostile situation and am being cautious in order to protect my interests. I avoid getting too close with others who might undermine me. I hide my intentions so as not to stir opposition.	I am exhausted by conflict and need protection from it and time to recover in a peaceful environment. I will find peace if I can remain uncommitted.
Black	I have exaggerated desires. My extreme dramatic behavior is driven by desire or revolt. Pent up emotions threaten to release in a passionate and impulsive way.	I need to escape from this crisis which may require extreme action and desperate measures. I am behaving recklessly and making abrupt headstrong decisions.	I defy restrictions or opposition. I refuse to be swayed from my point of view. I must not waiver if I am to prove myself righteous or independent.	I am in revolt against some situation which has devastated me, and I just want to be left in peace.

Color	Violet	Brown	Gray	Black
Brown	I feel sensuous. I want to be surrounded by luxury, and physical comforts - things which give bodily pleasure.	I want a secure and problem free situation in which to physically relax and recover. I want physical comfort. I want relief from a physical problem.	I am exhausted and my body is in need of rest, protection from distress, and a chance to recover. I desire to be secure and problem free.	I feel purposeless. I experienced a bitter disappointment and am rejecting all except physical pleasure. I need to forget/recover in a problem free state.
Gray	I am fascinated with something and want to identify with it but not openly. I am exploring it tentatively and cautiously so that I won't be discovered or overly committed.	I am exhausted. I need to shield myself from anything exhausting or tiring. I want physical comfort, security and freedom from disturbances.	I have put up with too much & am shielding myself from further feelings, stimulation or involvement. I remain uncommitted and uninvolved.	I want to remain separated and totally uninvolved. I feel betrayed and treated in an undeserving manner. I am in revolt against a situation that is disrespectful to me.
Black	I have a compelling desire to identify or blend with something / someone but I want the bond to be a perfect fit, without concession or compromise.	I set an idealistic goal that resulted in bitter disappointment and am revolting against it in self-disgust. I want to forget it all and recover in a problem free environment.	I want to remain totally isolated and non-involved. The situation is offensive or hopeless and I want nothing to do with it. I want to shield myself from the influence or irritation.	It feels mysterious, frightening, oppressive. This situation is over-demanding & offensive. Nothing is as it should be. I refuse to allow anything to influence my point of view.

REFERENCES – PART #3 COLOR IN DREAMS

- Adelson, R. (2005). Hues and Views, *APA Monitor on Psychology*, Feb 2005, pp. 26-29
- Birren, F., (1961). *Color Psychology and Color Therapy*, University Books, Inc. New Hyde Park, N.Y.
- Birren, F. (1978) *Color and Human Response*, John Wiley & Sons Inc, New York
- Birren, F. (1988). *The Symbolism of Color*, 1988, Citadel Press
- Boyatzis, C., Varghese R. (1994) Children's emotional associations with colors. *J Genet Psychol.* 1994 Mar;155(1):77-85.
- Brown, B. (1974). *New Mind New Body*, New York, Harper & Row
- Brennan, B. (1987). *Hands of Light*, Bantam New Age Books *Dream Language* 273
- Cheskin Research, (2004) *MSI-ITM, CMCD's Visual Symbols Library. The Global Market Bias Research Series*: www.cheskin.com/cms/files/i/articles/9_report-2004_Global_Color.pdf.
- Cho, S., Metcalfe, A., Young, C., et al. (2012). Hippocampal-Prefrontal Engagement and Dynamic Causal Interactions in the Maturation of Children's Fact Retrieval. *Journal of Cognitive Neuroscience*, 24(9), 1849-1866.
- Damasio, A.R. (1999) How the Brain Creates Mind, *Scientific American*, December 1999
- Domhoff, G.W. (n.d.). dreambank.net, a database of over 30,000 dream reports with access provided to the author for the purposes of content analysis, courtesy of G. William Domhoff, PhD
- Edelman G. and Giulio Tononi, G. (2000). *a Universe of Consciousness: How Matter Becomes Imagination*, New York: Basic Books, 2000,
- Eden, D. with Feinstein, D. (1998). *Energy Medicine*, Tarcher/Penguin Putnam
- Ertel, H. (1973). *Time Magazine*, 17 Sept 1973
- Ferree C. E., Rand G. (1929). Lighting and the Hygiene of the Eye. *Archives of Ophthalmology*, July 1929
- Goldstein, K. (1942). Some Experimental Observations on the Influence of Color on the Function of the Organism. *Occupational Therapy and Rehabilitation*, June 1942
- Hallock, J. (2007). *Color Assignment*, Trinity University.
- Hamilton, N. (2005). The Role of Dreams in the Study of Human Transformation, presented at the 22nd Annual Conference of the International Association for the Study of Dreams, June 2005, Berkeley, CA. Also refer to N. Hamilton and D. Hiles (2000). *Retreats, Dreams: New Transpersonal Research, 2000 B.A.C. Research Conference*
- Hartmann, E. (2011). *The Nature and Functions of Dreaming* New York, NY: Oxford University Press
- Hobson, J., Mc Carley, R., Wyzinski, P. (1977). The brain as a dreams state generator: An activation-synthesis hypothesis of the dream process. *American Journal of Psychiatry*, 134,1335-48
- Hoss, R. (1999). The Appearance of Color in Dreams. *Dream Time*, a Publication of the Association for the Study of Dreams, volume 16, Number 4, page 10
- Hoss, R., Hoffman, C. (2004). Significance of Color Recall in Dreams, Presented at the 21st Annual Conference of the International Association for the Study of Dreams, in Copenhagen, June 2004
- Hoss, R. (2005). The Significance of Color in Dreams. *DreamTime*, a publication of the International Association for the Study of Dreams, Vol. 22, Number 1, Spring 2005
- Hoss, R. (2010). Content analysis on the potential significance of color in dreams: A preliminary investigation. *International Journal of Dream Research*, 3(1), 80-90.
- Hoss, R., Valli, K, Gongloff, R (eds.) (2019). *Dreams: Understanding the Biology, Psychology and Culture, ABC-CLIO*
- Hurlbert, A. C., Ling, Y. (2007). Biological components of sex differences in color preference. *Current Biology*
- Jung, C. G. (1971). Dream Symbolism in Relation to Alchemy. Part 11 of *The Portable Jung*, Edited by Joseph Campbell, The Viking Press, N.Y.
- Jung, C. G. (1972). *Mandala Symbolism*, Princeton University Press
- Jung, C. G. (1973). *Man and His Symbols*, Dell Publishing Co. NY, NY

- Kehoe, E., Toomey, J., Balsters, J., Bokde, A. (2012). Healthy aging is associated with increased neural processing of positive valence but attenuated processing of emotional arousal: an fMRI study. *Neurobiol Aging*. doi: 10.1016/j.neurobiolaging.2012.07.006
- Lüscher, M. (1971). *The Luscher Color Test*, edited by Ian A. Scott, New York, Pocket Books
- Lüscher, M. (1979) *The 4-Color Person*, Pocketbooks, Simon Schuster.
- Murzyn, E., (2008). Do we only dream in colour? A comparison of reported dream colour in younger and older adults with different experiences of black and white media. *Consciousness and Cognition*, 17, 1228-1237.
- Perls, F. (1974). *Gestalt Therapy Verbatim*, Bantam Books, Real People Press, pp. 27-76
- Ramachandran, V. (2011). *The Tell-Tale Brain*. 500 Fifth Avenue, New York, NY 10110: W. W. Norton & Company, Inc.
- Roffwarg, H., Muzio, J., Dement, W., (1966). *Science* 29 Apr 1966: Vol. 152, Issue 3722, pp. 604-619
- Readers Digest (2006). What Your Dreams Really Mean. *Readers Digest*, Feb 2006, p.97
- Riley C. (1995). *Color Codes*, University Press of New England
- Schiffman, H. (1976). *Sensation and Perception: an Integrated Approach*, John Wiley & Sons, New York, pp. 216-220
- Schredl, M., Hofmann, F. (2003). Continuity between waking activities and dream activities. *Conscious Cognition*, 12(2), 298–308.
- Schredl, M., Fuchedzhiea, A., Hämig, H., & Schindele, V. (2008). Do we think dreams are in black and white due to memory problems? *Dreaming*, 18, 175–180.
- Sutton, T., Whelan, B. (2004). *The Complete Color Harmony*, Rockport Publishers Inc.: Gloucester, Massachusetts
- Van de Castle, R. L. (1994). *Our Dreaming Mind*, Ballantine Books, New York