One of the most fascinating tools to work with in decoration is the element of colour. In spite of it being relatively in expensive, it can do wonders. When choosing colours for any establishment it needs to be remembered that there are certain architectural and psychological aspects of colour. Colour can make rooms look larger or smaller, warmer or cooler. It can make bad architectural features seem to fade into the walls, can help in creating a center of interest, and make the room seem unified. Colour affects moods and attitudes. They can be depressing, irritating, disturbing, restful, soothing, stimulating or exciting.

Learning and understanding a few basic guidelines may gain the appreciation and use of colour. Color scheming is an interesting mixture of art and science. Most people will at sometime have and prepare a colour scheme for either business or home. Materials, labor and overheads are expensive, so it is important to be confident in the use of colour, texture and design.

What is colour?

To scientists it is reflected light which when viewed through prism breaks into visible spectrum. Colour is the impression received by the mind from certain stimulations of the retina. The colours that we see all around us are either imparted to surfaces by dyes or pigments, or are the natural colours of the objects. The surface of any object absorbs all the spectral colours in the light rays that strike it, except the colour we see. This colour is reflected back to our eyes. Surfaces that reflect all the colours in the light rays appear white, whereas surfaces that absorb all the colour of the light appear black. Hence technically black and white are not colours as they are not components of light. But no interior decorator can do without them.

Properties or qualities of colour –

Saturation is the purity of the hue. The colors on the wheel are considered to be in their purest form. As the colors move towards the center, as shown in the graphic at right, they are considered desaturated where no hue dominates.

VALUE – The lightness or darkness of colour is called <u>value or tone</u>. All the colours in the colour wheel can be lightened and darkened by adding white or black to it respectively. Lightening of colour is called <u>tint</u> and darkening is called <u>shade</u>.

Using of dark colour against light or vice-versa is called <u>contrast</u>. Contrast is the juxtaposition of dissimilar elements. Combining shade and tint of the same colour too can create contrast. Colour contrast is necessary for good colour distribution, but if the contrast is sharp, the lightness and darkness will emphasize and exaggerate each other. We see many contrasts around us in nature every day, a white sheep against the green grassy paddock, a luminous orange buoy bobbing

about on the blue green sea, a black jagged rock jutting out of a snow covered hill. These are contrasts in color and tone, as well as pattern and texture. A smooth stone pavers set into a green lawn, a brick wall with ivy growing up and over it.

Tone can be used to alter proportions of a room like color. The deeper the tone of color the less light can be reflected from it and this causes the color to appear closer than it really is. The lighter the tone the more light reflection and the color will appear further away. When using a monochromatic scheme, it is essential to vary the tones of the color or the scheme will appear boring and uninteresting, as there is no sense of depth or balance.

Tints seem to increase the size of an object while shades seem to decrease it. So, dark colours would be poor choice for the background of a small room while it would be appropriate as clothing for large people. Tints suggest distance while shades suggest nearness. Hence dark values are used for floorings as they give the room an impression of stability. Black has the power to unify colours and bring harmony into an arrangement where number of bright colours has been used. Where lighter values are used, beautiful effects can be created by keeping the general colour value light and for dark or medium background, general value should also be the same. But the use of close colours if carried out to the extreme can result in monotony. Objects contrasting against the value of the background become silhouetted and call attention. Therefore, very beautiful objects can be placed against a contrasting background while not so beautiful objects should be placed against background matching its own colour.

INTENSITY – The brightness or dullness of colour is called <u>intensity</u>. It is also called <u>chroma or saturation</u>. In other words intensity or chroma describes the distance of the colour from gray or neutrality. A bright colour is said to be at its full intensity and may be described as strong, rich, forceful, brilliant, vivid and sharp. When the intensity is offensive, it may be called gaudy, garish or flashy. A colour that is not bright is said to be toned down, subdued, softened, dull weak or drab. Intensity of any colour can be reduced by mixing gray to it, or by mixing the colour that is directly opposite to it in the colour wheel (it's complimentary colour). Background colours should be somewhat gray or neutralized, as softer intensities are much easier on the eye and are much easier to live with. Pleasant effects can be created by contrasting a few small objects in vivid colours in lesser ratio against this gray background. These decorative items can be moved around for variety. Colour may be emphasized in the following ways: –

1. Placing it next to its complement colour. Warm and cool colours when placed side by side intensify and complement each other.

2. By combining the colour with a neutral colour. Black or white emphasizes all the colours.
3. By repeating near it a large amount of the same hue but in a lower intensity. E.g. Light bright green can be made to look emphatic by surrounding it with dull green.

Colour can be made to appear less intense in the following ways: –
1. By combining a large amount of a very bright colour with a dull colour. These must be of the same hue.
2. By combining it with a very dull colour, about the same value but a slightly different hue. E.g. Strong yellowish tone in woodwork can be subdued by painting the walls a pinkish tone.

HUE – Hue is the term used to indicate the name of the colour, such as red, blue, etc. Though the terms 'colour' and 'hue' can be used interchangeably, 'colour' is a more general term. Hue is used more specifically for identification of certain colours.

Warm and cool hues – Warmth and coolness are attributed to colours because of their association with objects that are warm or cool. Yellow and red seem to warm us as they are the colours of sun and fire. Blue and green suggest coolness due to their association with sky and earth. Warm and cool colours are strangers to each other but have great harmony amongst them. Warm colours are more cheerful and stimulating while cool ones are restful and relaxing.

Advancing and receding hues – Warm hues seem to advance and cool ones to recede. In interior decoration advancing warm colour makes a room seems smaller, whereas cool, pale colours makes the walls appear to recede and apparently enlarges the room. Intense colours advances more that gray ones. Using a pale cool wall and ceiling color creates the maximum illusion of space. If you add a pale wall-to-wall carpet, you create a greater sense of space again, even more so if the skirting is painted to match the carpet. Walls covered in warm dark colors seem closer and create a cozier atmosphere.

Heaviness or lightness – According to psychologists all hues have apparent weight – heavy or light. Blue and purple are the lightest and red and yellow heaviest, with green a little less heavy. When heavy colours are grayed they tend to become light. In interior decoration heavy colours belong to the lower part of the room. Hence desired colours for carpets and floorings are based on red, green or brown. Heavy colours are appropriate for heavy furniture and light ones for smaller furniture. Color changes the apparent size of objects. The colors that look heavy also look

small. Red seems to appear the heaviest, followed by orange, blue and green (all of which have a similar weight), then yellow and finally white.

<u>Texture</u> of the surface also plays an important part in the use of colour. This is the visual or tactile surface characteristic of something, be it fabric, timber carpet or glass. Tactile means that it is perceptible by the sense of touch. Every surface has a texture. There are two types of texture – rough and smooth – and through using texture; we can create quite different effects. It is important to balance color with texture and pattern to provide a harmonious environment. Combining rough and smooth textures and using these to contrast with each other creates balance. Rough surfaces reflect light in tiny accents and through little shadows that have the effect of dulling the intensity of colour. A smooth and shining surface gives a harsh and glorifying effect. A fabric with a rough weave would appear to be duller than a smooth fabric of the same colour. When using texture you have to be very aware of the absorption/reflection of light altering the quality of color. Smooth textured surfaces reflect light and rough textured surfaces tend to absorb it. The planning of lighting is always important but especially when using texture as too bright a direct light will flatten out texture and cast little shadow, losing the surface definition. A more indirect lighting scheme will emphasize even subtle textures, and is far more effective.

<u>Colour balance</u> – No matter what your color preferences are, bold or subtle, balance is the most important secret in achieving your desired effect. It is also the most difficult to describe as it comes down to how your eye perceives the space. We have learnt from pattern and texture about scale and proportion; these are major factors in balance. What we are ideally trying to create is a harmonious space and this is achieved because we feel comfortable because we can enter the space and not feel over or under whelmed by what we see. By selecting two or three colors and distributing them around the room in different weights they seem to flow through the room. A one off color will stand out and be the centre of attention, as it does not relate to anything else in the room. If you imagine a room with four walls, if you then painted each wall a different color, there would be no balance. If you painted two opposing walls the same color you have created a balance, or even one wall a different color to the others. But the first example doesn't let your eyes rest, and makes you feel uneasy, it does not create a pleasing balance. Once colors and fabrics are selected you can move them around to get the balance correct.

<u>Pattern</u> – Size, scale and proportion should be taken into consideration with pattern. A single patterned item can be the focal point of a room that has no special architectural features to highlight, i.e. by using a monochromatic textural scheme

of creams, using linens, leathers, rattan chairs, suede walls, simply place a woven woolen rug of geometric design using beiges, creams and a huge dollop of red in the central square in the center of the room with the furniture surrounding it to create a feature/focal point of the room to great effect.

Red, Yellow, Green and Blue are regarded as the focal colors of mankind. They are colors that we all first learn to associate with when we are young.

The **value** of a hue is determined by adding white to create a tint, black to create a shade or gray to create a tone

Colour theory or systems –

Though various systems have been devised for working with colours, the two famous and most easily understood systems are –

- The Munsell system
- The Prang system

THE MUNSELL SYSTEM

The munsell colour-order system describes and catalogs colour in terms of the three visual attributes – hue, chroma and value. These attributes are arranged into orderly scales of equal visual steps. The value scale begins with white at the top, proceeding to high light, light, lowlight, middle, high dark, dark, low dark, black. There are no primary colours but there are five principle hues – red, yellow, green, blue and purple. Spaced between the principle hues are five intermediate hues – yellow red, green yellow, blue green, purple blue and red purple.

THE PRANG SYSTEM

Colour wheel is a spectrum of all colours. It has three <u>primary or fundamental colours</u> – Red, Blue and Yellow. They are so called because they can be mixed so as to form all the other colours, but which cannot themselves be made by mixing any other colour.

Combinations of any two primary colours give rise to <u>secondary colours</u> – Orange, Green and Purple.

Mixing of primary and secondary colours, which lie next to, each other in the colour wheel give <u>tertiary or intermediate colours</u>.

There are many variations of each colour that appear on the colour wheel. The six colours – yellow, green, blue, purple, red and orange are called <u>standard colours</u>. A combination of tertiary colours with either its constituent primary or secondary colour gives <u>quaternary colour</u>.

All the colours on the left side (from yellow green to violet red) of the wheel are cool and all those in the right side are warm.

We use the color wheel as a tool to show the different color relationships and combinations that are possible. The color wheel is just a tool. It is a very useful tool and a good way to learn, but as with any artistic professional, experimentation and being innovative can be very rewarding. By understanding what you achieve with the color combinations from the color wheel, you can push the boundaries to create something quite original and daring.

Colour schemes – Any colour can be combined with pleasing results if we are conscious of intensity and value.

1. MONOCHROMATIC COLOUR SCHEME **–** This is the scheme in which only one colour is used, but it may vary in both value and intensity. This colour scheme can become monotonous, but is safe and sometimes highly successful. Many value of one hue are attractive, e.g. red-brown, dusty-pink, stale-blue, lime, etc.

2. COMPLEMENTARY COLOUR SCHEME – Colours that are exactly opposite to each other in the colour wheel are used in this scheme. When they are mixed together, they will produce grey. Using this combination enhances each color creating a strong sense of visual movement when the colors are side by side. It is stimulating and well-balanced colour plan, but always one colour must be dominant. E.g. yellow and purple, green and red, etc. neutrals can be added to enhance the colour scheme.

- A. Split complementary – select one hue and combine it with the colours that are on either side of its complement. This provides three colours to work with. By varying their intensities and values you can work out interesting combinations. E.g. orange with blue-green and blue-violet.

- **B. Double or Dual complementary** – There will be two sets of complementary colours to work with. Use more of one and tiny amounts of other in a brilliant form in a small area as an accent. E.g. orange yellow with blue and blue-purple.

3. ANALOGOUS COLOUR SCHEME – Here colours next to each other in the colour wheel is used. It is harmonious as it contains a portion of the same colour, but can become 'too hot' or 'too cold' unless carefully planned. It can be extended to combine colours within one-fourth of the colour wheel but only one primary colour should be included. E.g. yellow-green, yellow, yellow-orange.

4. TRIAD COLOUR SCHEME **–** This type of scheme combines the three equidistant colours in the colour wheel, which occur at points of an equidistant triangle placed anywhere. Colours should be subdued to attain harmony. E.g. yellow, blue, red; yellow-green, blue-purple, red-orange.

5. TETRAD COLOUR SCHEME – This type of scheme combines the four equidistant colours in the colour wheel, which occur at points of an equidistant quatangle placed anywhere.

OTHER COLOUR SCHEMES –

Primary – It is the simplest or most basic color schemes. The pure hues of red yellow and blue are used. They are often used for children's play equipment and surrounding environments.

Neutral – Hues that have been neutralized by adding their compliments are used. The addition of black and white expands the neutral palette.

Clash – Select one color, and then use one color from either side of its complementary. This provides a clash color scheme that has an assertive aggressive effect.

PSYCHOLOGICAL EFFECT OF COLOUR

In any colour scheme for any purpose one colour should dominate in quantity, usually another colour should be secondary in quantity, and if third colour is used, it should be least in quantity. The smaller area of colour the brighter it may be.

There is no reason to have every colour scheme fit into one of these classical types. One may use a colour scheme based on the hues, tints, shades and intensities within one painting. Many designers start with a pleasing motif in a large patterned fabric and select colours that will work with that.

There are cool colours (violets, blues, and greens) and warm colours (reds, yellows, oranges). The former group is quite conducive to quite and relaxation while the warm colours is stimulating and encourage activity. Rooms getting less of sunlight

should have light warm colours while those getting enough sunlight should have cooler darker colours.

Light colours make a room seem larger while dark colours tend to compact the room. Hot, full intensity colours come forward, cooler less intense colours recede. Dark walls should be opposite widows as light that hits it will brighten and enhance their dusky colours. Walls in which windows are inset receive little natural light, so should be painted or covered in grayer tint.

Dark colour creates the illusion of lower ceilings, as do pattern wall coverings. It is usually best to avoid any patterns on the ceiling, except perhaps in a small vestibule, if the pattern is simple.

If two walls are to be painted and two patterned, the two adjoining walls should be painted the same colour, and the other two adjoining walls should be patterned. Alternating them will break up the space and give a choppy effect. Where there are single intensely bright wall, the other three walls should be as neutral as possible and all in the same shade or tint.

When choosing a colour scheme, it is necessary to consider the type of building and customers or clients using it. The character of the building and the features it already has is also important. For instance the amount of light coming into the room will affect the colour and patterns you choose. The disadvantageous features should be considered fro camouflaging or compensation.

It may seem that the size and shape of the room are there to stay once the building has been completed, however effective use of colour and pattern can change the apparent dimensions: –

1. <u>To give height to the room</u> – Remove or camouflage any horizontals. Use striped wallpaper or one with a vertical pattern. It can also be painted in stripes of tint and shade of the same colour. A pale ceiling and a light coloured carpet will make the floor and ceiling recede. The furniture should be low and of non-dominant pattern.

2. <u>To reduce the height if the room</u> – Paint the ceiling down about 6 inches on to the walls, with fairly deep colour. Avoid very dark colour, as this will make the ceiling disappear. The carpet and ceiling should match there by drawing the ceiling and floor together.

3. <u>To increase the size of the room</u> – Pale cool colours will give the illusion of space. Keep the walls uncluttered with dado, picture rail, paint or paper cupboard doors to match the wall and use matching curtains (if they are the same pattern as that of wallpaper, it will add continuity). Heavily patterned paper should be avoided. Hard and glossy texture creates an

illusion of space. E.g. mirrors. Slate, marble, ceramic, chrome, glass, etc. splashes of rough texture and warm pinks and gold will take the edge off any coldness.

4. <u>To reduce the size of the room</u> – Break up the wall with pictures and pick out any architectural features, or add borders. Create a focal point in the room that will attract the eye to it, and away from the vastness of the room. Rugs will break up the floor area. Large furniture can be accommodated and folding doors or partitions or full-length curtains may divide the room.

5. <u>To create a warm atmosphere in a dull dark room</u> – Rooms that do not receive enough sunlight (mostly north-facing rooms), or basements, need warming up. Using warm pinks and yellows can do this. They should not be used indiscriminatingly or in too intense shades. Bare brick terracotta, rush and Hessian are natural textures that add to the feeling of warmth. A light painted wall outside a basement window will add some reflected light. Drapes can hide an unsightly view and add light to the room.

6. <u>To reduce the length of a long narrow room</u> – Have the end walls painted a darker shade than the rest of the room. Shelves along these walls will add width to the room and tend to reduce the length of it. Light walls and vertical patterns or stripes along these sidewalls will help with optical illusion of reducing the length.

7. <u>For more spacious look</u> – The more an area is broken up with contrasts of colour, the smaller the area will appear. A monochromatic harmony in a small area will make it look larger. But to prevent monochromatic form becoming dull one must vary value and intensity of the chosen colour.

Factors in colour scheme for a room –
- The room: size, shape, exposure (amount of natural light coming into the room).
- The mood required to be created
- The style
- Personal preference
- Use of the room
- Furnishings in the room
- Current fashion.

General suggestions for making colour schemes –
1. Definite schemes are recommended (the four conventional ones)
2. Safe schemes consists of tints and shades on one colour

3. Easy scheme consists of white or off-white with one or two clear colours.
4. Three colours with variation in their hue are sufficient for any scheme.
5. Scheme should be definitely dark or light
6. Either warm or cool colours should pre-dominate.
7. Neutralized colours are generally best for large areas.
8. More definite colour is suitable for medium areas.
9. One or two bright colours, sometimes complimentary to the dominant colour are often used in small area for accents.
10. If scheme lacks sparkle, a brilliant contrasting colour or white may be added.
11. Equal areas of different colours are monotonous.
12. Every colour scheme should have a dominating colour and a secondary colour.

Practical aspects of colour –

It is best to keep in mind a few practical aspects of colour planning. In anticipation of th possibility that a colour scheme may be changed, it is wise to see that upholstered pieces be of colours that lend themselves to a variety of colour combinations. Walls can be refinished and upholstered pieces can be slip covered but a floor covering is not as easy to change. In a area of heavy traffic, the problem of maintenance should be considered. A very light or a very dark colour on the floor will shoe footprints and soil marks readily than the medium values. Upholstered furniture that will receive hard wear should have textures and colour that will not be soiled easily. Decide on colours for the largest areas – the floors, wall and ceiling; as these dominate about two-thirds of the room area. Most neutral colours in light value should be employed in these areas. E.g. if green is the dominant colour, use light dull green on walls and high light neutral green on the ceiling. The floor may be predominantly green, and yellow figures may be added in upholstery fabrics. Floor and walls are big areas that can be unified if they are done in relating colours. Next decide on distribution of colours in furniture, draperies and accessories. In a well-decorated room accessories should be noticeable. Colours chosen may be brighter than background colours or its complement.

Cool colors like blue and green do just that–cool and soothe your mind, body and spirit. It's no wonder we flock to the ocean and mountains to rejuvenate our senses. These hues are best used in rooms where you want serenity to prevail Warm colors like red, orange and yellow give off an energy and intensity unmatched by their cooler cousins. Use these hues in rooms where you anticipate

(and want!) activity and stimulation, like a kitchen, child's playroom or exercise space.

Using colours in rooms

Always choose one color to start your scheme. That color can come from an existing piece of artwork, a rug, existing upholstery fabric, or a silk flower arrangement. If you are decorating from plans or blue prints then it is often best to start planning color from the floor up.

Decide what type of look and or color scheme you want. Then start "layering" your color using your selected color scheme, start with the largest areas, floor, walls and ceiling.

Slowly bring in other large pieces, furniture, chairs, etc. Remember to balance the room. Do not group all the same color in one area. "Sprinkle" it so that it is easy on your eye.

Using patterns is often a hurdle for some people so they just don't bother, and the color scheme lacks interest. We need to make our schemes look alive by using either pattern and or texture. For more help with these areas pattern and texture. Think in three dimensions when you plan your color, dark curtains will enclose a room, and a similar tone to the walls will keep the space looking open. For example, a dark color for the floor will essentially "ground" your scheme. To create a cosy intimate feeling use warm dark colors. Pale fresh and cool colors will open up a room, and it will feel cool. A dark colored ceiling will lower the height of a room, and the opposite if you use white. Color can be used to reshape your room, for example, you have a rectangular room, you can make it look more like a square if you paint the two shortest walls a darker color than the longer walls, this will make them appear to advance, and make the room feel more balanced.

Test your color scheme – get "test" or "sample" pots of paint and paint large pieces of card or board. Put them in your room or order a large sample of wallpaper or large piece of fabric. Leave these items in the area that you wish to decorate and look at how they change at different times of the day, due to different lighting situations. The will look dramatically different; this is when you need to decide when the room will be used the most and what color looks best in that light!

Ensure that the room or area that you are working in coordinates or is in harmony with the rest of the house. There is nothing worse than a disjointed color scheme with rooms' colored haphazardly; it is very unsettling for a designer, an just plain unsettling for the general population!

If you are looking to choose colors that are in vogue now, your local paint store will be able to help, paint companies keep on top of fashion colors

and produce ranges of colors to suit, but if you don't have any luck there then try the fabric stores, they have new ranges of colors for every season. The other place is of course up to date home and garden or interior decorating magazines.

Make sure the room has enough light to do your color scheme justice. A very poorly lit room will never look go no matter what you do. Lighting is the interior designer and decorators secret weapon.