Basics of Design and Graphics

[BA(JMC) – 105]

Unit – 1

[Introduction to Design and Graphics]

by

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What is Graphic Design?

❖ Graphic Designing is present in majorly all fields whether printed (Hard copy) or digital (online medium).
❖ Graphic Design is a form of:
  ○ Visual Communication
  ○ Illustration
  ○ Typography
  ○ Photographs
❖ Graphic Design helps in solving a problem.
❖ With Graphic Design, we can communicate effectively with minimal elements.
❖ A good design is always transparent and easy to understand.

Few examples of Graphic Design

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Design Definitions-

❑ Design is a language through which the designer communicates his/her intended message. A design message aims at transferring meaning from one mind to another.
❑ Design is the activity of creation, as opposed to the product of creation. Good design contains visibility, good conceptual model, balanced elements and feedback,

• The word graphic is derived from a Greek word '*graphiko*' which means to write.
• Graphics are the visual presentations on some surface, such as a wall, canvas, computer screen or on a paper.
• It is used for branding, informing, to illustrate or to entertain.
• The most basic use of graphic designing is to disseminate the intended message and enhance its importance.
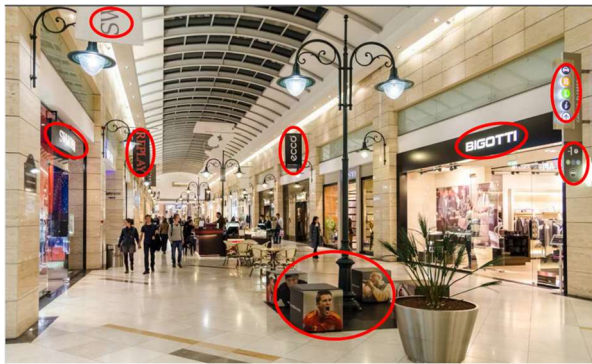
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- The earliest graphic communication is known to us are the cave paintings.
- Road signs are also a perfect example of Graphic Design or Visual Communication.

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Graphic Design Careers

- **Advertising Designer**
  - An Advertising designer is probably the most well known and common form of design career as it **entails print media** ranging from **brochures to magazines** as well as digital design and **social media design**.
    - ✓ Examples of what you will be able to do as an advertising designer are: Magazines and Newspapers, Brochure design, Email newsletters, Social media graphics, Infographics.

- **Environmental Designer**
  - Environmental designers would consider **architecture** and the environment to make spaces and places more attractive and efficient for people to move around in. It entails aspect and **knowledge of architecture, interior design, industrial design and landscaping.**

Graphic Design Careers

✓ Examples include: Exhibition and Event spaces, Mural artwork, Signage (which nowadays can also be digital), Office branding, Stadium and concert branding.

- **Publication Designer**
  - Some of these design careers tend to overlap when it comes to skill. Like an advertising designer, publication designers focus on publications like magazines and newspapers. This domain has seen a paradigm shift in the recent times as it focuses on digital approach of e-publications and digital magazines.
    - ✓ Examples include Books, E books or e publications, Magazines, Newspapers, Catalogues, Menus

Graphic Design Careers

- **Motion Designer**
  - A motion designer takes design elements and creates the illusion of movement with these elements. A very popular program to create these movements are Adobe After Effects. You however need to understand and learn the basics of design first before learning this program.

- **Corporate Designer**
  - A company's brand needs to communicate effectively and quickly. A corporate designer's role is to aid the company in creating a successful brand that communicates successfully to its target audience.
    - ✓ Examples include Logo design, Business card design, Letterhead design, Stationery

Graphic Design Careers

- **Web Designer**
  - A web designer not only needs to be able to create an effective website but will also need to understand how to make this website appealing. Coding lies at the backend of being a web designer.

  - The skills needed for this type of career would obviously need to be able to understand web coding but on top of that, Web designers will also make use of Adobe Illustrator, Photoshop along with web designing software like Adobe Dreamweaver or even web-based applications like Wordpress.

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Graphic Design Careers

- **Packaging Designer**
  - Packaging designers not only need to look at the aesthetics of packaging but will also need to understand which material is best to use of the given package. Walking through a grocery store, you will realize that almost every item is in some sort of package.
  - The skills needed for this type of career would be the use of Adobe Illustrator, Photoshop and perhaps also some InDesign.

Label, Box and Packaging Product Design

Graphic Design Tips

- **Too many Typefaces**
  - Use only two typefaces
  - One interesting, related typeface for headings
  - The second typeface should be transparent

- **Don't be scared of white spaces**
  - Don't fill ALL the empty spaces.
  - Make your empty spaces part of your design.
  - Make use of the empty spaces to create emphasis.

Graphic Design Tips

- **Warped Photos**
  - Don't warp your images!
  - Use the SHIFT key to avoid distortion

- **Pixelation**
  - Avoid using low quality images
  - Use an alternative high quality image instead.
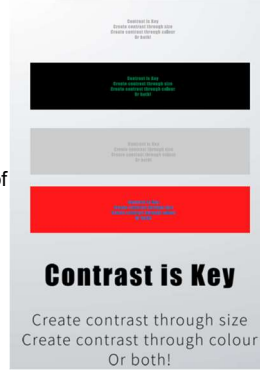 - Use free stock image websites like - Freepik, pixabay or pexels

Graphic Design Tips

- **Contrast is the key**
  - Create contrast through size
  - Create contrast through color
  - You can use the combination of both also.

Contrast is Key

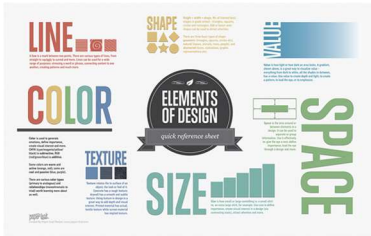Create contrast through size
Create contrast through colour
Or both!

Elements of Design

The elements and principles of designing act as the building blocks of your design. This helps in building a good foundation of the design.
Let's take an example of the building project -

MATERIAL = ELEMENTS | TEAM = PRINCIPLES

There are seven elements of Graphic Designing:

Line

➔ **LINE**

- Line is the primary element of designing.
- Line can be seen as the connection between two points.
- Line can be straight, curved, dotted, dashed and slanted.
- The size of the lines may very, it may be thick or thin.
- Combination of different lines can be used to create texture and patterns.
- A line creates division and hierarchy within your design, helping direct the user's eye toward specific information or a specific focal point.
- The type of lines used will even evoke different emotions and convey different meanings.

Line

- <u>Lines</u> can also create subliminal languages in your design.
- Diagonal lines are dynamic and will be mostly used to convey motion, agility and strength.
- A thin, horizontal line will convey a sense of elegance and sophistication. It will probably be used with a more formal approach.
- The same can be said about thin vertical lines, but unlike horizontal lines that resembles calmness, vertical lines would much rather convey a message of success and excellence.
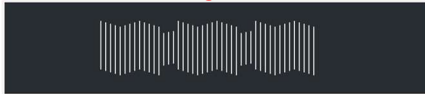
Line

Few designs with Line element

Line

Shape

➔ **SHAPE**

Shape can be defined as a closed form of line. Shape can also be referred to as form. We have three kinds of shapes, organic, inorganic and abstract.

❖ **Geometric shapes**

➢ Probably the most commonly used, the geometric shapes come first to our minds. Circles, squares, triangles, pentagons, hexagons, or octagons are instantly recognizable.

➢ They are so familiar to us because we started seeing and drawing them since we were kids. In kindergarten, we learned shapes through play before we learned about letters, so it's only natural to feel acquainted and drawn to something we're used to.

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Shape

❖ **Geometric shapes**
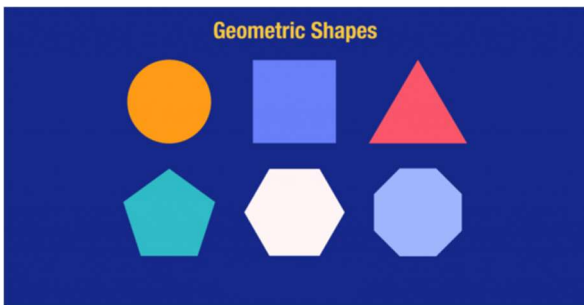

Geometric Shapes

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Shape

❖ **Organic Shapes**
➢ Opposite to geometric shapes, these are asymmetrical, or imperfect but necessary and comforting shapes encountered in nature.
➢ Everything that was created naturally can fall into this category, such as leaves, rocks, or clouds. Rarely, these shapes can be human-made, like ink blobs.

❖ **Abstract Shapes**
➢ These illustrate organic forms or everyday objects, even though they are not an exact representation. For example, a stick figure is an abstract shape depicting a person, or typographic glyphs can illustrate letters.
➢ Symbols that you see and use in your everyday life, such as mobile app icons, can be placed in this category.
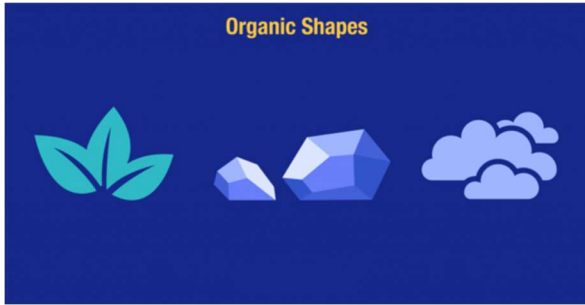
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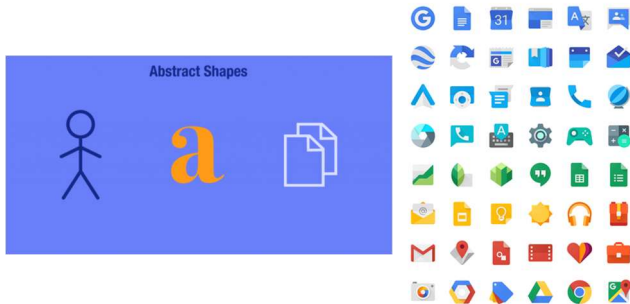
Shape

❖ **Organic shapes**

Shape

❖ **Abstract shapes**

Shape

- A circle, resembles eternity, grace, resembles a sense of power and protection.
- A rectangle or square conveys a message of stability, honesty, and order.
- A triangle on the other hand can have different meanings depending on the direction it points. A triangle can even be an arrow and create a sense of direction. If a triangle however points downwards, it creates a sense of tension, alertness and aggression.
- Designers use shapes to express different ideas, create the notion of movement, offer texture and depth to an image, suggest a mood or emotion, or emphasize an area of interest.
- Most of the time, the designs will get paired with a color. The combination of shapes and colors are various and hold different meanings and moods.
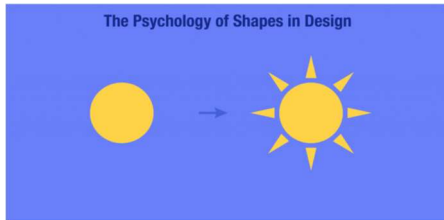
Shape

- Specific shapes and colors already have meaning in our minds. This usually applies to the familiar shapes which have associations with objects encountered in nature
- So, when we see an object reduced to a combination of color and shape—let's say a yellow circle, symbolizing the sun—we'll instantly recognize it.

The Psychology of Shapes in Design

Space

- Space is the area we use to design, it is resembled by the empty areas on your design, which we refer to as white or negative space. Note that we refer to it as white space, since it resembles the white of a page.
- Space can be defined as **positive and negative**.
- The elements that actually fill your page like images and text are referred to as positive space. The closer elements like images and text are to each other on a design, the more difficult it is for your viewer to make sense of.
- Space also helps to guide your viewer and will make a piece more legible and comfortable to read.
- Space is essential for legibility as well as aesthetics. It thus allows your design to breathe and provides your viewer with a visual rest.

Space

Tips for Using Space in Your Designs

- The use of space is particularly important when your design contains many of the other elements of design.
- Larger page margins will give a page a more 'upmarket' look and make it easier to follow.
- Carefully consider the placement of imagery that contains people so they have space to gaze or look into.
- To tie objects or elements together, only use small amounts of space between or around them.
- You can highlight an object (making it a focal point) by using large amounts of space around it.
- Don't be afraid of space. There's no need to fill up every area on a page. Remember, space gives the eyes a place to rest!

Space

When used correctly, negative space plays a pivotal role in the success of your design. It has the ability to:

- **Enhance readability** — A larger white space ensures your text doesn't have to compete with other design elements.

- **Simplify your design** — White space breaks your design into chunks so that you do not overwhelm your reader's eye.

- **Complete an image** — Humans naturally see closed shapes. Therefore, when a shape or element is incomplete, the white space can help your reader unconsciously fill the gaps.

- **Add a sense of luxury** — "Less is more" can create a sense of sophistication in your design.

Space

Size & Scale

- The next element is size, also known as scale or mass.
- Size is relative with regards to other elements and the proximity of those elements.
- It is important in that it draws attention to larger elements on a page and thus plays a significant role when it comes to creating emphasis as well as hierarchy.
- It also aids in making less important elements on a page to not be emphasized.
- Clever use of scale can produce depth, feelings of tension and movement within a design.

Size & Scale

- We can generate scale within a design by making size relationships between elements.
- For example, if two circles of the same size were placed on a page there would be no size relationship – neither would be large or small.
- However, if one circle was a third of the size of the other, we would describe one as being big and the other as small.
- This is called scale of reference.
- It is impossible to determine the relative size of an object if there is no scale of reference.

Size & Scale

Few Examples

This is a perfect example of using a scale of reference to indicate an objects size. We are all familiar with the size of a car, so this acts as the reference object. Furthermore, it's sizing relative to the design space and the typographical elements (mega) adds depth, which in turn conveys the message of a mega factory.

Size & Scale

Few Examples

In this example the baseball field acts as the reference object. Without it, the baby would not appear to be super sized.

Size & Scale

Few Examples

Again another great use of scale of reference. We all know how big our hand is, so this helps to convey the message of how small the car actually is.

Texture

- Texture can have many forms. It can be experienced through touch or it can be visually simulated to portray meaning.
- Texture does not need to be tactile (experienced through touch) but can be implied or visual too. Texture is created by simply repeating shapes or lines in a continuous manner to form a texture.
- Depending on the project at hand, texture can be used in different ways. For example, when creating a logo however, keep texture to a minimum as it makes your logo difficult to view and resize.
- The power of texture is the ability to associate it with how a design looks or feels, which in turn, enables us to evoke senses or feelings relevant to the topic. For example, a shiny surface would portray metal and hardness; a furry surface would portray some kind of animal and a sense of softness.

Texture

Tactile or Actual Texture

- Tactile or actual texture is experienced through touch—it's the real thing. For example, if you were to pick up a piece of old wood and run you finger across it, the surface would be rough and give you a sense of its age.
- Obviously, when it comes to designing printed products, we are limited to the surfaces on which we can print on.
- Therefore, actual textures are quite limited and may only consists of subtle changes in the stocks surface. As a result, the most common method of adding texture to a 2D design is by simulating it.

Texture

Visual or Simulated Texture

- Visual or simulated textures are achieved by placing an image of the texture onto a design, giving it a 3D appearance.
- Visual textures can also be achieved by repeating shapes to form patterns or by repeating letters and words across a design. The possibilities are endless, it comes down to the creativity of the designer.

Tips for Using Texture:

- As with the other elements of design, make sure you consider the underlying meaning of the texture to ensure it suits the topic
- Explore the different kinds of substrates (printing surfaces) that can be used to add texture to your design. There are many different variations of paper/cards which have textures such as linen or recycled.

Texture

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- Embellishments such as embossing and foil stamping; varnishes and/or spot varnishes are a great way to add texture.
- Adding texture to a 2D design can be expensive using some of the techniques outlined above. It's best to check with a printing company to see what is possible and how much it costs to ensure your client doesn't get a nasty surprise!

Texture

Few Examples

Texture

Few Examples

Value

- **Value** is one of those elements that is used in conjunction with many of the other design elements such as shape, line and colour.

- Value simply refers to how light or dark design elements appears. White is the lightest value, while black is the darkest. All other colors have value and sit within the range of light to dark. For example, yellow has a relative light value and purple has a relative dark value.

- The values of a color are often visualized in a gradient, which displays a series of variations on one hue, arranged from the lightest to the darkest.

- Artists can use the various values of color to create the illusion of mass and volume in their work.

Value

- If you are making use of value and there is no color present in your artwork, it is important to have a lot of contrast between these shades of grey in order to create emphasis – the use of only one color with a different values, is known as a monochromatic color scheme.

- Value can be used to accomplish multiple purposes within a design.

- Variations in value enable the creation of contrast. A shape with a light value (such as white) sitting on a background with a dark value (such as black) would result in high contrast as the shape would be highlighted or made the focal point.

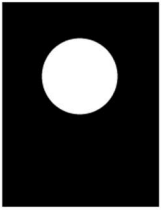- Furthermore, a design such as this would be referred to as high contrast.

Value

- However, if the shape was colored using a darker value (such as grey), the contrast would be reduced.

- As a result, designs such as this which have a limited range of dark values are referred to as low key, while designs with a limited range of light values are referred to as high key.

Value

A LIGHT VALUE ON A DARK VALUE CREATES HIGH CONTRAST

A LIMITED RANGE OF DARK VALUES IS CONSIDERD LOW KEY

A LIMITED RANGE OF LIGHT VALUES IS CONSIDERD HIGH KEY

Value

- This example uses very dark values with mostly low contrast and would be considered as low key. Take note the only area of high contrast are the robots eyes and these sit forward in the design while the remaining elements recede which in turn adds depth. Additionally, the overall dark value evokes feelings of gloom or menace.
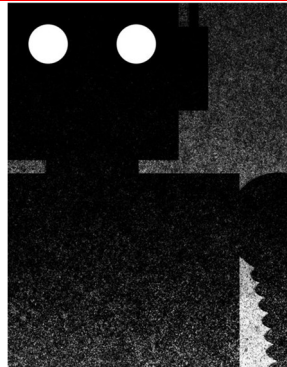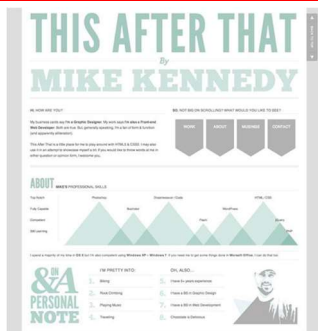
Value

- **This site uses very light values, has limited contrast and would be considered as high key.** The low value contrast has resulted in limited depth and elements appear to sit back. The overall mood is one of calm or peaceful which can be attributed to the light values.

Value

- **This packaging design is a great example of using both dark and light values to create contrast, depth and mood.** The light value colors used for the ice-cream flavor names evoke a mood of fun and happiness which is very appropriate to the topic.

Color

- Color can be used with any of the other elements of design and with clever use, can create mood, meaning and uniformity.
- It is probably one of the most powerful elements a designer can make use of to convey a message, thus understanding it is crucial.
- It not only involves the visual aspect but also a psychological aspect, When it comes to color, the actual tone and value can also change the mood, and
- Color can also mean different things in different cultures.
- Colors also helps in creating contrast, A design with a good contrast always enhances the overall feel of the design.
- Color has the ability to group and organize elements together, it creates impact and also evokes emotion.

Color

Good Contrast	Bad Contrast	Good Contrast
Bad Contrast	Good Contrast	Bad Contrast
Good Contrast	Bad Contrast	Good Contrast

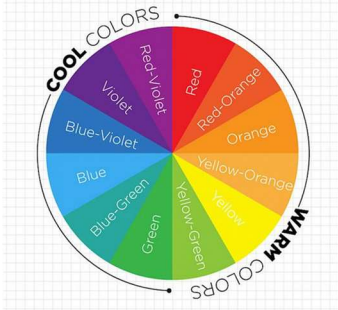## Color

Color Wheel

- The color wheel consists of twelve colors. If divided in half, it will give us Warm and Cool colors.

Principles of Design

- The first principle we are looking at is **focal point or emphasis.**
- The focal point is the most important visual on your artboard - it is the visual that draws your attention first.
- But how can we make this visual stand out? By simply applying the elements of design effectively! Think specifically in terms of using colour, size and value to place emphasis on your most important element.
- A rule when it comes to focal points is to only have one per page. You can't have two focal points competing for attention. If you have either no focal point or more than one, it will not be a focal point any more.
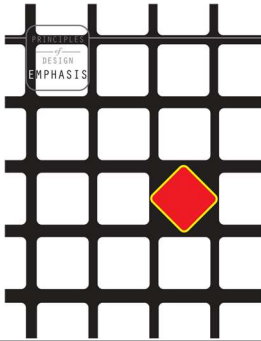
Focal Point / Emphasis

- Say you're creating a poster for a concert. You should ask yourself: what is the first piece of information my audience needs to know? Is it the band? Or the concert venue? What about the day and the cost of attending?

- Make a mental outline. Let your brain organize the information and then lay out your design in a way that communicates that order.
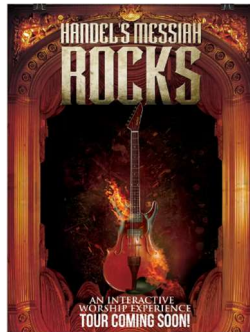
- If the band's name is the most essential information, place it in the centre or make it the biggest element on the poster.
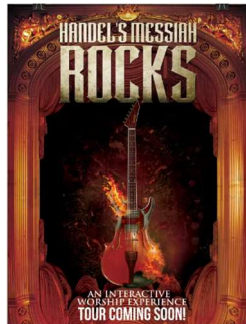
Focal Point

- Or you could put it in the strongest, boldest type. Learn about color theory and use strong color combinations to make the band name pop.

- Like writing without an outline or building without a blueprint, if you start your composition without a clear idea of what you're trying to communicate, your design will not succeed.

Contrast

- Contrast can be applied in almost any way.
- Simply using the elements of design in opposing ways will add contrast. Texture vs smooth; small vs large; dark vs light; positive space vs negative space.
- Even combining different patterns or textures can also create contrast. The options are literally unlimited.
- Contrast allows us to emphasise key elements and without it, your design will look uninteresting. We can even go as far and say that if there is no contrast, chances are that you do not have a focal point.
- Contrast creates space and difference between elements in your design. Your background needs to be significantly different from the color of your elements so they work harmoniously together and are readable.

Contrast

- As you seek out examples of really strong, effective design, you'll notice most designs only feature one or two typefaces. That's because contrast can be effectively achieved with two strong fonts (or even one strong typeface in different weights). As you add fonts, you dilute and confuse the purpose of your design.

Balance

- Never forget that every element you place on a page has a weight. The weight can come from color, size, or texture.
- Just like you wouldn't put all your furniture in one corner of a room, you can't crowd all your heavy elements in one area of your composition. Without balance, your audience will feel as if their eye is sliding off the page.
- Symmetrical design creates balance through equally weighted elements aligned on either side of a center line.
- On the other hand, asymmetrical design uses opposite weights (like contrasting one large element with several smaller elements) to create a composition that is not even, but still has equilibrium.
- Symmetrical designs are always pleasing, if not occasionally boring. Asymmetrical designs are bolder and can bring real visual interest and movement (more on that later!) to your composition.

Balance

Movement

- **Movement** refers to the principle that good design controls the eye's flow through a composition.
- This means that the most important element should lead to the second most important and so on.
- Movement also however needs to be balanced. Too much movement will exhaust your viewer so learn to use it sparingly.
- Interestingly, due to the fact that we read from top to bottom and left to right, we tend to view items as such.
- You will notice a lot of designs will have big bold headings at the top and the least important elements will be at the bottom due to the way we read and view things.
- It is not a good idea to have your most important element at the top, your second most important element way at the bottom and then the rest of the information scattered throughout your composition.

Movement

- This causes too much movement and your viewers won't know where to look. This Image is a great example of how movement have been applied by not only making use of the composition but also by making use of elements like arrows. This composition is thus viewed from top to bottom by the help of the arrows.

Movement

- Going back to our concert poster. If you decided the band was the most important piece of information on the page and the venue was the second, how would you communicate that with your audience?
- Movement is controlling the elements in a composition so that the eye is led to move from one to the next and the information is properly communicated to your audience. Movement creates the story or the narrative of your work: a band is playing, it's at this location, it's at this time, here's how you get tickets. The elements above—especially balance, alignment, and contrast—will work towards that goal.

Pattern

- In principles of design, pattern is the repetition of more than one design element. While repetition focuses on a single element being repeated, pattern refers to multiple elements repeated throughout a design (e.g. wallpapers and backgrounds).
- A seamless pattern is a repeated set of elements that flows without a flaw to create a unit. You can see seamless patterns predominantly in interior design when using tiles. The use of patterns can enhance the viewer's experience and the look of a final design.
- In the example below, the pattern repeats itself from edge to edge without any disruptions. The pattern is composed of multiple elements with varying sizes and depths.

Pattern

Unity

- Unity in the principles of design is the harmony produced by all the elements in a design piece. For instance, using similar colors that match and integrate elements organically makes it appear as if they belong together and are not just put on a page.
- You can achieve unity by making clear relationships between visual elements. You can find unity wherever you find clear organization and order, and the elements of the page won't be fighting for attention. Instead, they'll work together to make the message stronger. Too much unity can result in a sterile design with a lack of personality. That's when you can start incorporating other elements to add movement.
- Lack of unity would make your design feel cluttered and confusing. Viewers will be attracted to the wrong element of the design and won't get a clear message. A good rule of thumb is to place an element in your design only if it enhances the message. Ask yourself what the element is adding to the composition.

Unity

PRINCIPLES
of
DESIGN
UNITY
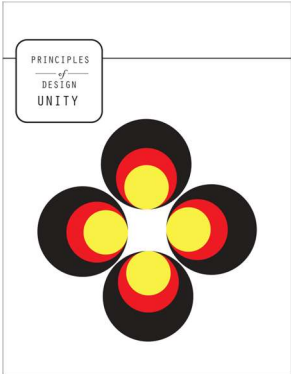
Repetition

- Using repeated elements on a layout can be pleasing to the viewer. Repetition is repeating a single element through the design. We can call a grid a repetition of lines because it creates a certain consistency. In layout design, repetition is shown through the folio placement to help viewers find their way in a book or magazine. The same folio placement creates continuity in the repetition.
- In a website, repetition is seen on the menu placement, which gives the viewers a constant placement that can make them feel comfortable and familiar. Repetition can also be achieved by repeating elements in a design like a logo or a tagline in a brand development project. Below, the repetition of waves gives a feeling that the page is endless. That's why in the principles of design, repetition is relevant.

Repetition

Rhythm

- Rhythm, a principle of design, has more complexity than the previous principles of repetition and pattern. Repetition and pattern are applied to the same element throughout a design. Rhythm is the visual tempo of a combination of elements when used repeatedly, and with variation, it gives the feeling of organized movement.
- Rhythm in the principles of design is usually hidden in works of art and is not as obvious as the design principles of repetition and pattern. In the example below, the diagonal lines aren't arranged in a specific pattern. Instead, there's a repetition of the elements with variations.

Rhythm

Proportion

- Proportion in the principles of design is the sense of unity created when all the elements in a composition relate well with each other. Proportion is mostly about scale and size when two elements are compared. For instance, in art and drawing, proportion is important for the elements to look realistic. Proportion as a principle of design doesn't necessarily refer to the size of one element but to the relationship of two or more elements.
- In layout hierarchy, the proportion of the headline compared to the photo caption needs to be larger as the headline is the most important element. Smaller elements have less importance. When you achieve a good sense of proportion in a composition, it can add harmony and balance.

Proportion
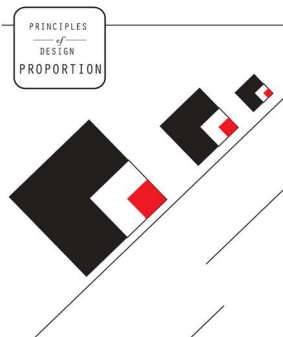
PRINCIPLES
of
DESIGN
PROPORTION

Harmony

- Harmony as a principle of design is the sense of cohesiveness between the elements in a composition. The elements shouldn't be exactly the same or completely different but related in some way. Color palettes or similar textures can create a sense of unity between different components. Using similarly shaped items will create harmony because they will seem related.
- Not enough or too much harmony can make a design dull; there needs to be some kind of variety for it to be visually interesting.

Introduction to Typography

- Typography is the science of using letter forms for communication. We use letter forms extensively in our daily life, in various media like newspapers, signage, application forms, letters, notebooks, textbooks, currency notes, posters, tickets, SMS, email etc.
- A very large number of digital fonts are available for a graphic designer to use in design projects. A designer carefully chooses fonts after understanding the design problem, the medium, target audience, production aspects and the context.
- The arrangement of type is the selection of typefaces, point size, line length, leading (line spacing) and letter spacing. Typography is performed by typesetters, compositors, typographers, graphic artists, art directors, and clerical workers. Until the Digital Age, typography was a specialized occupation. Digitization opened up typography to new generations of visual designers and lay users. Type glyphs (characters) are created and modified using a variety of illustration techniques.

Storytelling to pictographs, 40,000 BC

- For most of history, man has passed on information through story telling, but this is not a reliable way of conveying information, as anyone who has played "telephone" or tried to talk someone through a difficult computer problem can attest.

- The earliest way to record stories were through drawings and paintings, called "pictographs," the earliest examples of which have been found in caves and date from 40,000 – 10,000 BC.

- A pictograph conveys its meaning through its pictorial resemblance to a physical object. Cave drawings presented people, places and things in a simple, easy to understand way.

History

- **The earliest known cave paintings (found in France) date from 32,000 BC.**

History

- **Cave art portrays human hands, large numbers of animals in different activities, geometric figures and signs.**

- **They portrayed prehistoric animals...**
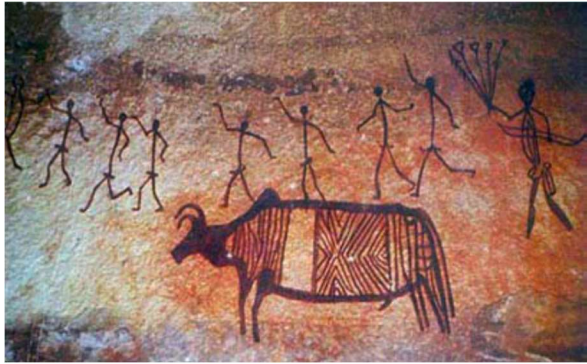
Indian cave paintings

Indian cave paintings included people and animals in domestic situations

Hieroglyphics

- The first hieroglyphics appeared about 3,400 BC on pottery in Egypt. Originally they were pictographs, like this one of a cat.

Hieroglyphics

Hieroglyphics incorporate ideographs, 3100 BC

- By 3100 B.C. Egyptian hieroglyphics used symbols to present thoughts or ideas — called "ideographs" — allowing for more abstract concepts than the more literal pictograms.
- A symbol for an ox could mean food, for example, or the symbol of a setting sun combined with the symbol for a man could communicate old age or death.

Egyptian ideograph for "weeping"
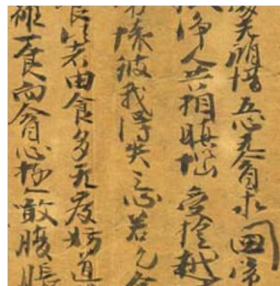
Hieroglyphics

Hieroglyphics become ideographs

- Ideographs are a graphic symbol that represents an idea or concept. For instance, a symbol of a star represents the heavens or a peace pipe represents peace.
- Egyptians, Native Americans and Asians are people who used ideographs.
- Chinese alphabets are still based on ideographs. Logos are also ideographs.

Hieroglyphics

Egyptian hieroglyphics were a combination of pictograms, ideograms, and phonetic sounds. They had no written characters representing vowels.

Blau Monument from around 3100 BC

Writing also developed in other parts of the Mediterranean. This is one of two stone tablets from southern Iraq during the Late Prehistoric period that may have recorded a land sale using both symbols and pictures.

Cuneiform

- Cuneiform, created in Sumaria (southern Iraq) around 3000 BC, was one of the first systems of writing to read from left to right.
- At this stage, the pictograms were "drawn" rather than "written".
- A pointed stylus was used to draw the curved lines of the pictographs, but drawing a curved line on wet clay is not as easy as it sounds, and it leaves granulated ridges on either side of the line.
- (The indents at the top here represent numbers.)

Cuneiform

- When the Sumarians started making their signs more linear and abstract, they cut river reeds into a triangular profile and used it to impress a line in the clay rather than dragging it across the surface, creating a wedge-shaped mark. (from Latin cuneus 'wedge')
- At first the Sumarians made a sign for every object, but around 700 symbols decided this was impractical.
- Abandoning their pictographic style, they began to create words phonetically, combining signs with the desired pronunciation for each syllable (think cat-a-log). This makes it the first written language.

Phoenicians, 1000 BC

- A non-pictographic consonantal alphabet, referred to as abjad.
- Developed to serve the needs of sailor/traders. One of the most widely used writing systems.
- Assimilated by many other cultures they traded with, including Greek, Hebrew and Arabic.
- Characters became less representational and more symbolic.

The Greeks create modern alphabet, 900 BC

- Phoenician was a language originally spoken in the coastal region called Canaan (areas where spoken include modern-day Lebanon, coastal Syria, northern Israel, Tunisia, Algeria and Malta).
- They traded all over the Mediterranean, taking the alphabet with them to use to keep track of what they were trading.
- The Greeks adopted and refined the Phoenician alphabet by adding the first vowels (5 of them).
- Written Greek did not have punctuation, lower case letters or spaces between words.
- "Typography" derives its origin from the Greek words τύπος typos = "That by which something is symbolized or figured …" and "to strike" and γραφία graphia = "to write".

The Greeks create modern alphabet, 900 BC

A Alpha	B Beta	Γ Gamma	Δ Delta	E Epsilon	Z Zeta
H Eta	Θ Theta	I Iota	K Kappa	Λ Lambda	M Mu
N Nu	Ξ Xi	O Omicron	Π Pi	P Rho	Σ Sigma
T Tau	Y Upsilon	Φ Phi	X Chi	Ψ Psi	Ω Omega

α Alpha	β Beta	γ Gamma	δ Delta	ε Epsilon	ζ Zeta
η Eta	θ Theta	ι Iota	κ Kappa	λ Lambda	μ Mu
ν Nu	ξ Xi	o Omicron	π Pi	ρ Rho	σ Sigma
τ Tau	υ Upsilon	φ Phi	χ Chi	ψ Psi	ω Omega

The Greeks create modern alphabet, 900 BC

- It is generally believed that the Romans adopted the Cumae alphabet, a variant of the Greek alphabet, from Cumae, a Greek colony in Southern Italy.
- Romans developed the alphabet further by adding more letters and it advanced rapidly to the modern alphabet. (Roman scribes also began joining and slanting letters in harmony with the natural motion of the hand.)
- Trajan's column in Rome, 113 AD, still stands as one of the most beautiful examples of Roman letterforms.

Refinements of the alphabet

- About 732 AD, Emperor Charlemagne, uniter of Europe, ordered the creation of a system of writing called the Carolingian Miniscule, the first lowercase letters that were more than just a small version of uppercase letters.

The roots of modern typography

- Modern typography traces its roots to the first punches and dies used to make seals and coins in ancient times.
- Though their purpose isn't understood, the first known moveable type artifact is probably the *Phaistos Disc.*
- Separate punches were used to imprint the disc sometime between 1850 BC and 1600 BC.

Moveable type invented

- China invents moveable type in the 11th century, but restricted by the thousands of characters required to use it.
- In 1439, Johannes Gutenberg invents a system of moveable type that revolutionizes the world by allowing mass printing of written material — accidentally bringing on, among other things, the Protestant Reformation and the Renaissance.
- Gutenberg developed an ingenious process employing a separate hard metal matrix, or mold, for each alphabet character, from which soft lead type could be hand-cast in great quantities. He then figured out how to assemble the type into a page of text, which could then be printed on paper using special inks he developed and a printing press of his own design.
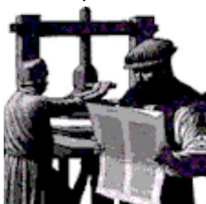
Gutenberg Bible

- Completed between 1450 and 1456, the *Gutenberg Bible* was the first book printed using his inventions.
- The "Blackletter" font he printed with was based on the regional handwriting style of the scribes his printed books competed with.

Example of Gutenberg's "Blackletter" font

- The "Illuminated" initial cap was not printed; a space was left and it was added by hand.
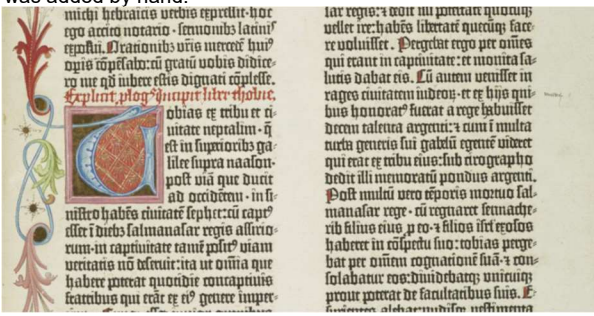
First "Roman" typeface

- Within 15 years of the invention of printing, Frenchman Nicolas Jenson designs and begins printing the first "Roman" font in Venice, Italy, 1470. Jenson construct his typeface on the basis of typographic principles, rather than copying manuscript samples.

Garamond

- The 1500s brings the beautiful proportions of French type designers Claude Garamond and Robert Granjon. (Below, Adobe Garamond.)

Caslon

- 1716-1728 brings the transitional roman typeface of **William Caslon** — thins are thinner, uniform serifs, more upright stresses.

Baskerville

- Baskerville is a serif typeface designed in the 1750s by **John Baskerville (1706–1775)** in Birmingham, England. It had so much more contrast than previous fonts that people claimed it blinded them.

Sans Serif

- In 1816, William Caslon IV produces a font specimen book listing a "sans serif " all caps with no lower case (left). Not much is known about it and no examples of it in use exist.
- The first popular sans serif was Accidenz-Grotesk, created for the AG typefoundry in 1896, the beginning of the modern era.

Geometric Sans Serif

- Futura, 1927, is a sans-serif typeface designed by Paul Renner. Based on geometric shapes, it became representative of the Bauhaus design style of 1919–1933. Although Renner was not associated with the Bauhaus, he believed that a modern typeface should express modern models, rather than be a revival of a previous design. The typeface is derived from near-perfect circles, triangles and squares and is based on strokes of near-even weight, which are low in contrast.

ABCDEFGHIJ
KLNOPQRS
TUVWXYZ
abcdefghijklmn
opqrstuvwxyz
1234567890

Types of Letterforms

1. **SIGNOGRAPHIC** – These letter forms are drawn, painted and fabricated. The term signographic is derived from sign writing. Various instruments such as brushes, paints, scales and knives are used to develop the letters in various surfaces. This style of writing is even chosen for printed letters. Signographic letterforms are not standardized. Since they are drawn by hand, if a letter comes more than once in a word, it may not be exactly the same.

2. **CALLIGRAPHIC** – These are free hand written letters, Calligraphy is the art of beautiful writing. Normal Pens, brushes and inks are used to write these letters. Similar to Signography, these are also not standardized.

Types of Letterforms

TYPOGRAPHIC – The word 'type' generally refers to letter characters that have been developed by some mechanical system with the help of a body of a metal piece, a negative film or a string of digits in a computer. These are standardized letter forms as they are made from moulds, stencils, etc or grids. These letter appears same as any time as they are printed.

Classification of Typefaces

- The majority of typefaces may be divided into four categories:
  - Serifs,
  - Sans serifs,
  - Scripts, and .
  - Decorative styles.

- Typographers and typography academics have established a variety of methods to more firmly categorize typefaces over time — some of these systems contain dozens of sub-categories. When it comes to identifying, selecting, and combining fonts, a classification system can be useful. While four categories are plainly insufficient for designers, there are many that are self-defeating.

Classification of Typefaces

Blackletter
- The oldest typeface, known as blackletter, come from the 1400s.
- These early typefaces had a handwritten calligraphy feel to them. Blackletter is a style of typeface based on early written forms that features elaborate thick to thin strokes and serifs.
- The Gutenberg Bible, the first book ever printed with movable type, was set in a Blackletter typeface to mimic the manuscript writing of the time.
- Blackletter type is most often seen on diplomas, certificates, formal invitations, and in the nameplates of some newsletters and newspapers. It is a calligraphy style with a bold character that was popular throughout the Renaissance period.
- Also Known As: Text | Old English | Gothic (not Sans Serif Gothic)
- Examples: *Black Forest, Linotext, Goudy Text, and Wedding Text*.

Classification of Typefaces

Standard Blackletter

Classification of Typefaces

Italic

- A typeface that is italic is one that is inclined to the right, rather than upright, like a roman typeface.

- However, rather than simply being a slanted or tilted variant of the roman face, a true or pure italic font is created from the ground up and contains distinct characteristics that are not found in the roman font.

- The majority of word processing and desktop publishing products have an option to convert a roman font to an italic style font..

Classification of Typefaces

- If you have an italic version of the font installed, this may function just fine. However, if an italic version is not available, some programmes will generate faux italics by slanting the roman typeface in the same direction as the roman font.

- Among those credited with designing the first italic typeface include Venetian printer Aldus Manutius and his type designer, Francesco Griffo. The term "italic" pays homage to Italy, where the style initially gained popularity.

Classification of Typefaces

Georgia (Normal)
Georgia

Georgia (Normal-Italic)
Georgia

Impact
Impact

Impact Oblique - "Italic"
Impact

Classification of Typefaces

Modern

- In typography, Modern is a style of typeface developed in the late 18th century that continued through much of the 19th century. Characterized by high contrast between thick and thin strokes and flat serifs, Modern fonts are harder to read than previous and later typestyles. Some later variations include the Slab Serifs with bolder, square serifs and the related Clarendon style with less contrast and softer, rounded shapes.
- Also Known As: Didone, New Antiqua Alternate Spellings: Moderne
- Examples: *Bodoni, Didot, Bernhard Modern Roman*

Didot
Regular | *Italic* | **Bold**
The five boxing wizards jump quickly.

Classification of Typefaces

Old Style

- In typography, Old Style is a style of font developed by Renaissance typographers to replace the Blackletter style of type. Based on ancient Roman inscriptions, these fonts are generally characterized by low contrast between thick and thin strokes, bracketed serifs, and a left-leaning axis or stress. There are two groups of Old Style typefaces: Venetian (Renaissance) and Garalde (Baroque).
- Also Known As: Antiqua, Ancient, Renaissance, Baroque, Venetian, Garalde Alternate Spellings: oldstyle
- Examples: *Garamond, Centaur, Goudy Oldstyle, Century Oldstyle, Palatino, Sabon*

Garamond
Goudy Old Style
Perpetua
Minion Pro

Classification of Typefaces

Serif

- These typefaces have small extensions, which embellish the basic structure of a typeface. Serif typefaces have existed since the beginning of type. They are visible in Old style and Humanist type serifs like Garamond. Baskerville, another serif typeface belongs to the transitional era. Bodoni and Rockwell are part of Modern and Slab serif(Egyptian) styled typefaces.

Serif

TIMES NEW ROMAN Georgia Palatino Garamond Baskerville

Classification of Typefaces

Sans - Serif

- Sans serif typefaces are those that do not have serifs, which are the small extra strokes that can be found at the end of the primary vertical and horizontal strokes of some letterforms (without serif). There are five primary classifications of sans serif fonts:
  - Grotesque,
  - Neo-Grotesque,
  - Geometric,
  - Humanist, and
  - Informal.
- *Arial, Helvetica, Verdana, Futura, Universe, and Franklin Gothic are some of the most popular sans serif typefaces.*

Classification of Typefaces

Slab - Serif

- Slab-serif fonts first appeared in the nineteenth century. They were first utilised in early illustrated and woodblock advertisements, and they have remained popular ever since.

- Nowadays, if your company is seeking for a font that has a little of quirkiness to it, a Slab-serif font can be the answer. As a result of its distinctive angles, curves, and "kicks," Slab-serif is an easy font to recognise. Many businesses employ a Slab-serif style font to their benefit, helping them to stand out that little bit more from the crowd.

- Take a look at the Volvo, Sony, and Honda logos; these companies all employ a Slab-serif style font in their logos to represent their products.

Classification of Typefaces

- It is a form of serif font that originated in the Modern style and has since evolved. There are more square and bold serifs here than there were in prior typestyles, which is a good thing.

- Square Serif, Clarendon, and Typewriter are all names for this typeface.

- *Clarendon, American Typewriter, and Rockwell are some examples.*

Classification of Typefaces

Classification of Typefaces

Display
- Display typefaces are part of a broad category and may generally be classified as such because they are used at high sizes, such as for headers, and hence can be treated as such.
- These types were inspired by other styles of lettering, such as handcrafted signage and calligraphy, which made use of the grandeur and drama of these letters to great effect. As a result, they become increasingly prominent in the construction of early poster design work.
- Their designs are frequently more quirky, changeable, and unpredictable as compared to the plain and more reserved typefaces associated with body copy.

Classification of Typefaces

Classification of Typefaces

Script

- An early 17th-century style of penmanship known as Script was a type of handwriting formed with a quill that was popular during the period. Joined letters resulted in fluid and flowing formations, which allowed for faster writing. It is divided into two categories:
- Formal Script: Formal scripts have a more elegant and conventional appearance than informal scripts. They are widely used for invitations and other types of decorative announcements, as well as for other purposes.
- Casual Script: A modern spin on the formal, the casual script has an informal and human touch to it. They are pleasant and appealing, and they are frequently employed on a range of media and as part of contemporary company identities.

Classification of Typefaces

Alex Brush   Allura
Pacifico   Kaushan Script
Sign Painter   Lobster

The Anatomy of Typography

- The anatomy of typography is an area of study that gives you basic knowledge of letters and their integral parts. It helps to educate your eye to recognize the underlying structure of various designs.

- Understanding the fundamental principles and concepts of typography is the first step to being a successful typographer. The most basic component of typography is the letter, and each letter of the alphabet is distinguished by its unique shape or letterform.

Classification of Typefaces
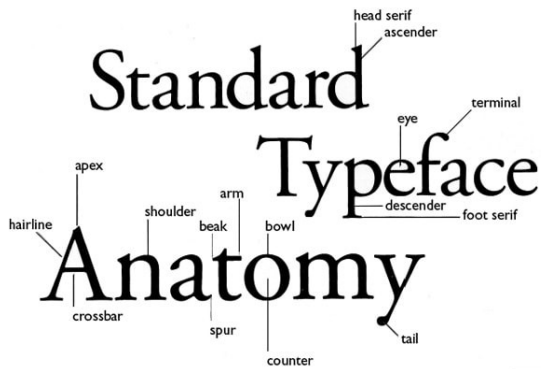
Anatomy of Typography

- **Baseline** - Majority of the characters sit on this imaginary horizontal line.
- The **capline or cap height** is another imaginary line wherein the heights of all the capital letters are marked in a typeface. However one has to keep in mind that the cap height is below the maximum height of the typeface.
- **Crossbar** - The crossbar is a stroke that connects 2 lines in capital letterforms of "A" and "H". Again, a cross stroke implies a horizontal stroke that does not connect two lines, for example, the lower case of "f" or "t".

Anatomy of Typography

- **Mean line** - The mean line better is known as midline is another imaginary horizontal line that marks the top edges of the lower case letters. You go wrong if you go by the literal definition of the term "mean line" because it actually doesn't imply the central line between the baseline and the cap height.
- **Serif** - It is the name assigned to the finishing strokes at the tops and bottoms of some typefaces. There is a lot to discuss serifs when we would learn about typeface distinctions.

- **Bowl** - It is nothing but the rounded curve that covers the negative space in a letter form. Consider, for example, it can be easily viewed in the following letters "e", "D", "o" and "g".

Anatomy of Typography

- It happens to be the bottom part of the lowercase letter (like "g", "j", "p", "q", "y" etc) that usually goes below the baseline of a typeface. Some other features that particularly extend below this baseline comprise of the old style numerals typefaces. These specific numerals were basically thought to mix appropriately with the lowercase roman numbers. If used within the body of the text they really look good and beautiful.
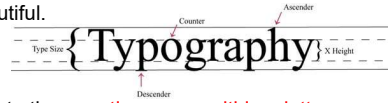
- **Counter** - Counter refers to the negative space within a letter, particularly if you consider letters like *"A", "o"* and *"P"* etc where the counter is fully enclosed. In letters like *"G", "u"* and *"c"* the non enclosed negative space is reflected, and they are also called counters.

Anatomy of Typography

- **Stem** - The main vertical or diagonal stroke depicted in a letterform is known as Stem. They consists of the vertical parts of the letters like "I" and "H" and also simultaneously all the strokes in the letter "W".
- **Title** - The title is defined as the dot above the lowercase "j" and "i".
- Terminal - The terminal is the culmination point of the stroke or stem that has no serif.
- **Ascender** - It is an extension that goes above the meanline and is generally found in some lowercase letters. These letters are, "b", "d", "f", "h", "k", "l" and "t".
- **Leg** - Legs are the lower angled strokes which you can see in the letters "K", "R" and "Q". They are also known as tails.
- **Ligature** - This addition of two characters to create another character is called ligature. They are commonly seen in serif faces .It is present to give space between certain characters and give the characters an aesthetic imprint.

Anatomy of Typography

- **X-height** - The space that exists in the vertical direction for the lowercase "x" in any typeface is known as X-Height. It is the distance the baseline and mean line of the body of characters in lowercase form. The X-Height is very important in the context of font shapes as the fonts with greater X-heights are easier to read.
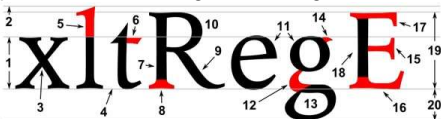
Typographic parts of a glyph: 1) x-height; 2) ascender line; 3) apex; 4) baseline; 5) ascender; 6) crossbar; 7) stem; 8) serif; 9) leg; 10) bowl; 11) counter; 12) collar; 13) loop; 14) ear; 15) tie; 16) horizontal bar; 17) arm; 18) vertical bar; 19) cap height; 20) descender line.

Anatomy of Typography

- https://typedecon.com/blogs/type-glossary
- https://fonts.google.com/knowledge/glossary

Typography: Kerning, Leading and Tracking

- **Kerning** and **Leading** are ways to manipulate the spacing between characters. Spatial manipulation in type can be a very important tool. Some fonts need to have individual characters adjusted to help create better readability and a more aesthetically pleasing layout. Changes to kerning and leading often go unnoticed, but in most situations that is what the designer will only want a subtle change that fixes readability.
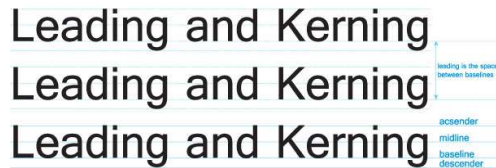
Leading

- **Leading** is the spacing between the baselines of type. The term leading is derived from the practice of placing lead strips between lines type on older hand set printing presses such as a letterpress. Adjusting the leading is also a very useful way of saving or using space on a page. Leading can also be used to change the aesthetics when dealing with a typographical design.

Kerning

- **Kerning** is the spacing in between individual characters. Most fonts will have specific default kerning for individual character sets so that the spacing in between the letters in words feels more natural. The image below has a sentence with and without custom kerning applied in 5 different spots to show how subtle the change is. Most of the time, people will not realize that kerning was included to change the type of the design.

Kerning for A Walrus can possibly be Lackluster.

Kerning for A Walrus can possibly be Lackluster.

Tracking

- Another adjustment to type that hasn't been mentioned is **Tracking**. Tracking is very similar to kerning in that it is the spacing between individual characters, but tracking is the space between groups of letters rather than individual letters. Tracking affects the overall character density of the copy. Other than the actual effect that it could have on readability of type, tracking would be used to make lines of type even. Tracking will help to eliminate widows and orphans in paragraphs.
- **Widows** are when the final line of a paragraph begins a new column or page.
- **Orphans** are when paragraphs end in single words, part of words or a short phrase that seems out of place.

Tracking

Tracking is often used to make lines of type even in order to remove hyphenation or widows and orphans from paragraphs.

Legibility

- **Legibility** describes how a typeface's glyphs can be correctly identified as characters and words, including how individual characters can be distinguished from one another. Legibility should not be confused with readability, although legibility does affect readability.

- The legibility of a typeface is a product of its design and relates to the ability to distinguish one glyph from another when reading. Factors contributing to a typeface's legibility include the following:

- **x-height**: This term refers to the height of the lowercase x from its baseline. The taller the x-height, the more legible the typeface tends to be.

Legibility

A grasshopper began to chirrup in the grass, and a long thin dragonfly floated by on its brown gauze wings. Lord Henry felt as if he could hear Basil Hallward's heart beating, and he wondered what was coming.

A grasshopper began to chirrup in the grass, and a long thin dragonfly floated by on its brown gauze wings. Lord Henry felt as if he could hear Basil Hallward's heart beating, and he wondered what was coming.

Legibility

- **Character width:** The easiest type designs to read are those that have an 'average' overall width. Very condensed as well as extended designs are less legible, especially for smaller settings such as text, subheads, and credits.

A grasshopper began to chirrup in the grass, and a long thin dragonfly floated by on its brown gauze wings. Lord Henry felt as if he could hear Basil Hallward's heart beating, and he wondered what was coming.

A grasshopper began to chirrup in the grass, and a long thin dragonfly floated by on its brown gauze wings. Lord Henry felt as if he could hear Basil Hallward's heart beating, and he wondered what was coming.

Legibility

- **Weight**: Extremely light and extremely heavy weights are more difficult to read, so if legibility is your goal, stick to something in the middle. Book weights (also called regular weights) are so named because their legibility means they are most often used to typeset books for that very reason.

A grasshopper began to chirrup in the grass, and a long thin dragonfly floated by on its brown gauze wings. Lord Henry felt as if he could hear Basil Hallward's heart beating, and he wondered what was coming.

A grasshopper began to chirrup in the grass, and a long thin dragonfly floated by on its brown gauze wings. Lord Henry felt as if he could hear Basil Hallward's heart beating, and he wondered what was coming.

Legibility

- **Design traits:** The overall shapes and design traits of a typeface, if too quirky or fussy, will reduce legibility. While this might be acceptable for shorter display settings, stick to simpler typeface designs for lengthy text settings.

- **Stroke contrast:** Extreme stroke contrast (that is, the ratio of thick to thin strokes) can reduce legibility as well. This is especially true of modern designs such as Bodoni and Didot, whose thin strokes can appear so thin when reproduced in print or on the web that they can become challenging to read when used too small, at lower resolutions, or for lots of text.

Legibility

A grasshopper began to chirrup in the grass, and a long thin dragonfly floated by on its brown gauze wings. Lord Henry felt as if he could hear Basil Hallward's heart beating, and he wondered what was coming.

A grasshopper began to chirrup in the grass, and a long thin dragonfly floated by on its brown gauze wings. Lord Henry felt as if he could hear Basil Hallward's heart beating, and he wondered what was coming.

Readability

- **Readability** is related to how the type is arranged (or typeset) and therefore is controlled by the designer. Factors affecting type's readability include:
- **Type size:** When setting text, the smaller the size, the more challenging it can be to read. This is especially true for seniors, children, and those with visual impairments. For these reasons, the demographics of your intended audience should be taken into consideration when deciding on a size for text.

A grasshopper began to chirrup in the grass, and a long thin dragonfly floated by on its brown gauze wings. Lord Henry felt as if he could hear Basil Hallward's heart beating, and he wondered what was coming.	A grasshopper began to chirrup in the grass, and a long thin dragonfly floated by on its brown gauze wings. Lord Henry felt as if he could hear Basil Hallward's heart beating, and he wondered what was coming.

Readability

- **Type case:** All cap settings for lengthy text are more challenging to read due to the lack of ascenders and descenders. These contribute to character recognition, so stick to upper and lowercase when readability is of prime importance.

A GRASSHOPPER BEGAN TO CHIRRUP IN THE GRASS, AND A LONG THIN DRAGONFLY FLOATED BY ON ITS BROWN GAUZE WINGS. LORD HENRY FELT AS IF HE COULD HEAR BASIL HALLWARD'S HEART	A grasshopper began to chirrup in the grass, and a long thin dragon-fly floated by on its brown gauze wings. Lord Henry felt as if he could hear Basil Hallward's heart beating, and he wondered what was coming.

Readability

- **Line spacing (aka leading):** Tight line spacing impacts readability negatively. The amount of line spacing needed to improve readability will depend on the size and design of a typeface, as well as its x-height. Therefore, when ease of reading is of high importance, make sure there is enough line spacing to maximize readability, which in general is at least two to three points for print, and a bit more for smaller digital devices.

A grasshopper began to chirrup in the grass, and a long thin dragonfly floated by on its brown gauze wings. Lord Henry felt as if he could hear Basil Hallward's heart beating, and he wondered what was coming.	A grasshopper began to chirrup in the grass, and a long thin dragonfly floated by on its brown gauze wings. Lord Henry felt as if he could hear Basil Hallward's heart beating, and he wondered what was coming.

Readability

- **Line length:** When the line length (or column width) is too short, it can result in hyphenated words, which reduce readability. In addition, the eyes have to make many 'returns' that can cause fatigue and reduce comprehension. On the other hand, very long lines can cause confusion when shifting from the end of one line to the beginning of another. For best readability, stick to 'average' line length, which is usually between 45 and 70 characters.
- **Color, or contrast:** Make sure there is enough color contrast between the type and its background. This is important when you are using black and white (and tints of the former) as well as color. When styling type for digital usage, be sure to allow for variation from one device, platform, and settings to another, as they can vary dramatically in how they display color and contrast.

Readability

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Basic typographic terms

- The first term, *typeface* is also known as a *font family*. Very important: typeface should not be confused with the term font.
- An example would be Times New Roman, or Arial. Most people incorrectly refer to these as fonts, where in fact, they are actually typefaces or font families.

Times New Roman is a typeface

Arial is also a typeface

Garamond is a typeface too

Times New Roman 25pt regular
Times New Roman 20pts Bold
Times New Roman 30pt Italic
Arial 15pt Bold
Arial 40pt Regular
Arial 30pt Regular

Basic typographic terms

- Another important term that you need to familiarize yourself with is **Leading**. Leading is also known as line spacing and determines the distance between each line of type.

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- **Kerning**, also known as letter spacing relates to adjusting the spacing between pairs of letters to create uniformity. An example can be the letters T & i in the word Time. By simply moving the i closer to the T is creates uniformity within the word.

Time

Time

Basic typographic terms

- **Tracking** links to improving the legibility and to fit more or less text into a given space. It is usually applied to a block of text as a whole and not just single letters. You will mostly make use of tracking when designing.

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- **Hyphenation** is when a word gets cut off due to its length and position. Apply hyphenation only to your body copy and not to your headings, subheadings and contact details.

Hyphenation is when a word gets cut off due to its length and pos-ition. Apply hy-phenation only to your body copy and not to your headings, sub-headings and contact details.

Mistakes to avoid

- **Poor use of typefaces -** Know and understand the mood and message your typeface conveys. If you struggle with this, get some input and ask your friends, family or colleagues to give their opinion.

I WANT TO SEE YOU EVERYDAY

I want to see you everyday

- This option on the right immediately has a more relaxing mood and does not make you as uncomfortable as the example on the left. Using the wrong typeface has dire consequences so learn to understand your typefaces and the feelings they convey.
- In addition to determining the mood of a typeface, make sure that you adhere to a limited number of typefaces as to not overwhelm your audience. The size of your typeface is also very important. Legibility is key at the end of the day.

Mistakes to avoid

- **Orphans & widows -** What do orphans and widows refer to in Graphic design terms? These mistakes normally happen in your body copy and thus a lot of people tend to miss them when proofing their artwork. We normally focus so much on the headings that we miss the small mistakes. An orphan is a single line of text at the bottom of a page and a widow is a single line of text at the top of a page and thus separating it from its paragraph. Don't separate single lines of text or words from their paragraphs.

What do orphans and widows refer to in Graphic design terms? These mistakes normally happen in your body copy and thus a lot of people tend to miss them when proofing your artwork.

We normally focus

much on the headings.

We miss the small mistakes.

An orphan is a single line of text at the bottom of a page and a widow is a single line of text at the top of a page and thus separating it from its paragraph.

Mistakes to avoid

- **Rivers -** A river is yet another term used in graphic design relating to large bodies of copy. Have you ever read a book or article and found this gap in-between the lines of type that you just simply can't avoid? Something line this?

A river is yet another term used in graphic design relating to large bodies of copy. Have you ever read a book or an article and found this gap in-between the lines of type that you just simply can't avoid? Your eyes keep seeing it even if you are not looking for or at it.

A river is yet another term used in graphic design relating to large bodies of copy. Have you ever read a book or an article and found this gap in-between the lines of type that you just simply can't avoid? Your eyes keep seeing it even if you are not looking for or at it.

- Your eyes keep seeing it even if you are not looking for or at it. This happens when we justify body copy and can be avoided by simply adjusting the tracking of the whole paragraph.

Mistakes to avoid

- **No margins**
- As we have been discussing since the start, having very narrow or even no margins are the first sign to identify an amateur. The reason why they should be avoided is that it can cut off valuable information, especially when you print a document.
- Also, leaving white spaces around your edges makes the document seem less cluttered.

As I have been saying since the start of this module, having very narrow or even no margins is the first sign to identify an amateur. The reason why they should be avoided is that it can cut off valuable information, especially when you print a document. Also, leaving white spaces around your edges makes the document seem less cluttered.
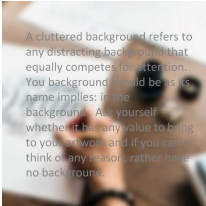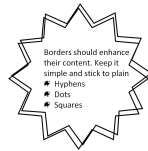
Mistakes to avoid

- **Cluttered background**
- A cluttered background refers to any distracting background that equally competes for attention. You background should be as its name implies: in the background.
- **Corny borders & bullets**
- A border's goal is to enhance certain elements. Having a big fat and corny border will certainly not draw attention to the content inside it. Corny bullets like lightning strike symbols, smiley faces or peace signs will also scream amateur, so please avoid them.

Mistakes to avoid

- **Distorted images**
  - I don't think I have to elaborate too much on this mistake as we have been learning how to avoid it since the get-go of this module. Just don't do it – ever!
- **Lack of negative space**
  - The reason why people tend to add elements into every open space they can find is their fear of white space. If you can recall from lesson 1, remember that negative space is an ELEMENT and that you can make use of it!

Color

- **Color** plays a vitally important role in the world in which we live. Color can sway thinking, change actions, and cause reactions. It can irritate or soothe your eyes, raise your blood pressure or suppress your appetite. When used in the right ways, color can even save on energy consumption.
- Color is one of the design elements that is so vast we will actually spend quite some time on it. It is probably one of the most powerful elements a designer can make use of to convey a message, thus understanding it is crucial.
- It not only involves the visual aspect but also a psychological aspect, When it comes to color, the actual tone and value can also change the mood, and color can also mean different things in different cultures. It is a topic that needs to be researched intensely before just combining a variety of colors, especially when it comes to designing something for a culture you are not too familiar with.

Color

- Good design should work in the absence of color and should enhance the features of the design. It should not simply be used as the design itself. Again, as with value, desaturate your design and if it doesn't work, you should reconsider your use of color.
- Color can group and organize elements together; it creates impact and evokes emotion. But to achieve all these, you will need to understand color theory.

Functions of Color

- Amongst all other elements, color has the most attraction value. That's why, advertisers use more of colorful advertisements instead of black and white. For example, when a large billboard is there, it is usually of bright colors, just to attract the human eye. In such cases various other elements like text, pictures, and graphics are secondary.
- ✓ Colors can create the right atmosphere: Colors can represent a product the successful transmission of the communication message. It also helps in emphasizing the important points.
- ✓ Colors can cheer: colored paper and tied with a bright ribbon.
- ✓ Colors can provoke: Sometimes provocative colors of a poster can force us to react.
- ✓ Colors make one proud: The uniform colors of IAF is blue, blue jersey of Indian Cricket Team.

Functions of Color

- Colors reflect the mood of the situation
- Colors give information
- Color is for retention

- If a color is not used skillfully in a design, the communicator may fail to pass the desired message. But in between shape and colors; color plays a secondary role.

Dimensions of color

- **HUE** - The term hue is used to define a specific color, such as red, green, or blue. The quality of a hue can be changed by adding another color or hue in it. Hue ranges from 0° to 359° when measured in degrees. Hues can refer to the set of "pure" colors within a color space.
- Hue is pretty much synonymous with what we actually mean when we said the word "color." All of the primary and secondary colors, for instance, are "hues."
- Hues are important to remember when combining two primary colors to create a secondary color. If you don't use the hues of the two primary colors you're mixing together, you won't generate the hue of the secondary color. This is because a hue has the fewest other colors inside it.
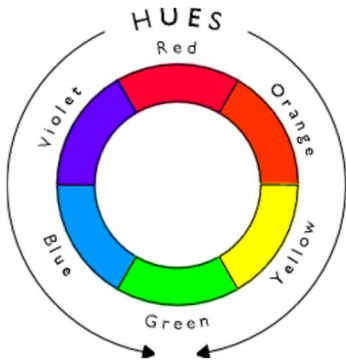
Dimensions of color

Dimensions of color

- **VALUE** - Value refers to the lightness or darkness of a hue. If the hue is light then the value will be more and if the hue is dark then the value will be less.
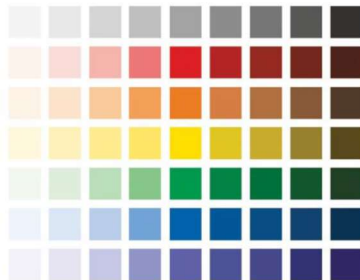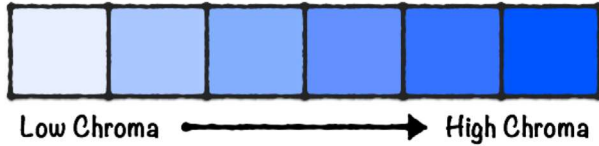
Dimensions of color

- **CHROMA** - It refers to the purity or intensity of a hue. It can also be changed by making the value light or dark, but in both phases, it loses its intensity.


Low Chroma ⟶ High Chroma

Dimensions of color

- **Shade** - You may recognize the term "shade" because it's used quite often to refer to light and dark versions of the same hue. But a shade is technically the color that you get when you add black to any given hue. The various "shades" just refer to how much black you're adding.
- **Tint** - A tint is the opposite of a shade, but people don't often distinguish between a color's shade and a color's tint. You get a different tint when you add white to a color. So, a color can have a range of both shades and tints.
- **Tone** (or Saturation) - You can also add both white and black to a color to create a tone. Tone and saturation essentially mean the same thing, but most people will use saturation if they're talking about colors being created for digital images. Tone will be used more often for painting.

Dimensions of color

HUE:
Pure Color

TINT:
Hue + White

TONE:
Hue + White and Black

SHADE:
Hue + Black
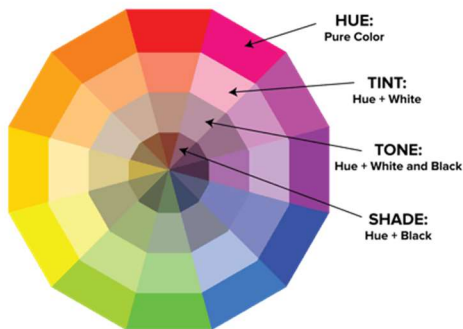
Primary Colors

We see millions of colors in the universe some of them are created from pigments (a substance that gives color to something else). All colors can be created by using the same basic colors, which are known as **Primary Colors**. These basic components of colors, when combined produced all remaining hues. Red, Green and Blue are the primary colors of light. **These are also known as Additive Colors,** as they can be added to produce white light. (as shown in the above figure)
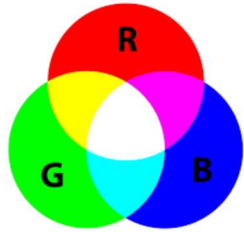
Secondary Colors

- Presence of all colors of light gives white and absence of all colors of light gives us black. A combination of any of the two primary colors produces secondary color.
- **Cyan, Magenta, Yellow and Black are secondary colors**. These are primary hues of pigments. They are also subtractive because in comparison to additive they produce dark colors after mixing. In case of pigments presence of all colors is black and absence of all colors is white.
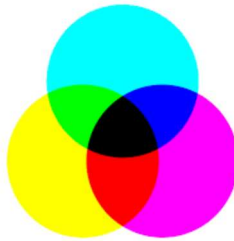
CMYK (Subtractive Color)

- CMYK (short for cyan, magenta, yellow, and key (black) and often referred to as **process color or four color**) is a subtractive color model, used in color printing, also used to describe the printing process itself. Though it varies by print house, press operator, press manufacturer and press run, ink is typically applied in the order of the abbreviation.
- The CMYK model works by partially or entirely masking certain colors on the typically white background (that is, absorbing wavelengths of light).
- **Such a model is called subtractive because inks "subtract" brightness from white.**

RGB (additive Color)

- In additive color models such as RGB, **white is the "additive" combination of all primary-colored lights**, while black is the absence of light. In the CMYK model, it is just the opposite: white is the natural color of the paper or other background, while black results from a full combination of colored inks. To save money on ink, and to produce deeper black tones, unsaturated and dark colors are produced by substituting black ink for the combination of cyan, magenta and yellow.

RGB (additive Color)

Additive colour mixture of Red, Green and Blue to produce Yellow, Cyan, Magenta and White

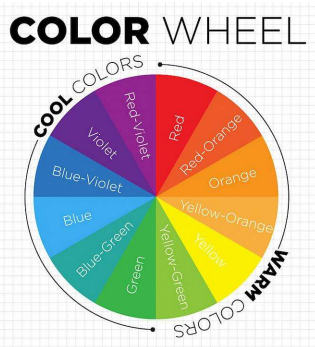Subtractive colour mixture of Yellow, Cyan and Magenta to produce Red, Green, Blue and Black
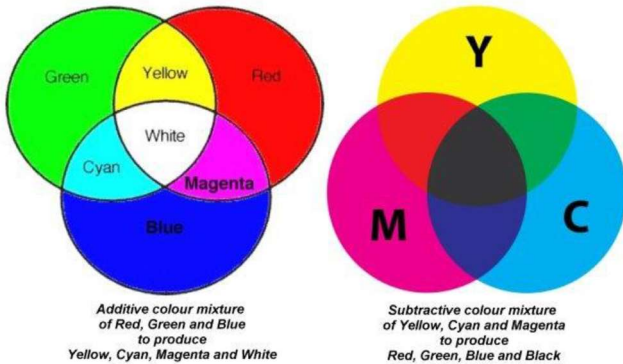
Color Wheel

- The color wheel can be broken into 12 colors.
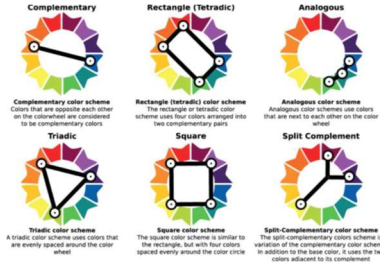- Splitting the color wheel in half between yellow and violet will divide the colors between warm and cool.

Color Wheel

- The color scheme, or the way we combine colors in a design, should reflect the purpose of our design. A color wheel containing all the twelve colors, which helps in deciding on a color scheme. The color schemes are as follows

Color Schemes

Complementary Color Scheme:

Two colors that are on opposite sides of the color wheel are called complementary colors. Complementary colors of graphic designs provide high contrast and high impact color combination. When placed together or next to one another these colors will appear brighter and more vibrant.

Complementary Color Scheme

A complementary color scheme is comprised of two colors that are opposite one another on the color wheel.

Color Schemes

- **Split Complementary**
- A split complementary color scheme involves the use of three colors. Start with one color, find its complement and then use the two colors on either side of it.

Split-Complementary Color Scheme

A split-complementary color scheme is comprised of two colors that are opposite one another on the color wheel, as well as the colors immediately next to them.

Color Schemes

- **Analogous**
- Analogous colors are among the easiest to find on the color wheel. Pick any color at any point on the wheel. Now, look at any three colors directly to the left or right of the chosen color. Together, those four are a group of analogous colors. Mixing colors that are adjacent to each other creates a colorful yet harmonious look. When using an analogous color scheme, it's best to choose one main color, using the other three as accent colors. This will help keep designs from becoming too chaotic or busy.

Analogous Color Scheme

An analogous color scheme is comprised of colors that are next to one another on the color wheel.

Color Schemes

- **Triadic schemes** are made up of hues equally spaced around color wheel.
- Triadic color schemes provide viewers with strong contrast, similar to a complementary color scheme. However, triadic color schemes achieve this effect without disturbing the peace.

Triadic Color Scheme

A triadic color scheme is comprised of three colors that are equidistant from one another on the color wheel.

Color Schemes

- **Monochromatic color schemes** are easy to create because they use only one color.
- Monochromatic schemes use different tones from the same angle on the color wheel (the same hue).

Monochromatic Color Scheme

A monochromatic color scheme is comprised of variations of one hue by adjusting the shades, tones, and tints.

Color Schemes

- Also known as the double-complementary color scheme, this scheme is made up of two complementary pairs. Another name for this (yes, this is a lot to remember) is **"rectangular colors"** because these colors can be found by creating a rectangle on the color wheel.

Tetradic Color Scheme

A tetradic color scheme is comprised of two sets of complemetary colors in the color wheel.

Color Schemes

- **The square color scheme** uses four colors equidistant from each other on the color wheel to create a square or diamond shape. While this evenly-spaced color scheme provides substantial contrast to your design, it's a good idea to select one dominant color rather than trying to balance all four.

Psychology of Colors

- RED - Red attracts the human eye
- **Energy**
  - Power
  - Strength
  - Excitement
  - Danger
  - Fire
  - Blood
  - Urgency
  - Traffic Stop
- **Passion**
  - Appetite
  - Emotion
  - Love

- GREEN - Green is the most restful color
- **Nature**
  - Fertility
  - Freshness
  - New Growth
  - Safety
  - Good Health
  - Healing Power
  - Free Traffic
- **Harmony**
  - Peace
  - Easiness
  - Calmness

Psychology of Colors

- BLUE - Blue is the most used office color
- Sea
  - Water
  - Ocean
  - Depth
  - Wealth
- Quality
  - Stability
  - Conservatism
  - Productivity
  - Wisdom
  - Intelligence
- Sky
  - Truth
  - Peace
  - Heaven

- Yellow - Yellow is a Happy Color. It transmits positive feelings such as optimism, joy, intelligence, happiness and energy. Although it also has negative connotations such as insecurity, jealousy, resentment, selfishness or falsehood.
- Sunshine
  - Light
  - Clarity
  - Energy
  - Warmth
- Optimism
  - Happiness
  - Positivity
  - Cheerfulness
  - Youngfulness

Psychology of Colors

Black - Black is Authority and Mystery

Authority
  Power
  Elegance
  Formality
Mystery
  Evil
  Fear
  Death

- Gray - Grey is Conservative
- Security
- Reliability
- Classic Knowledge
- Professional Wisdom

Psychology of Colors

- White
- White is Purity
- Cleanliness
- Neutrality
- Goodness
- Innocence

Spot vs Process Colors

- Spot colors and process colors are the two most widely accepted color forms used in the printing industry. Each one is suitable for a specific purpose.
- **Process colors,** also known as full colors are made using CMYK technology. The image is printed with a combination of four standard colors: cyan, magenta, yellow and black. When these colors are used in different combinations, quantities and densities, millions of colors are achievable using the varied size of ink dots. For example, when you combine 100% magenta with 100% cyan, you'll get a violet color. The spectrum of process colors includes several unique colors.

Spot vs Process Colors

- To reproduce a color image, it is separated into four standard colors and during separation, screen tints of small dots are applied at different angles of each of these colors. The separated colors are transferred to four different printing plates (each plate for one color) and then printed one by one, that is each plate with a color overprints the next.
- This creates a composite image which is an illusion of continuous tone for the naked eye. However, because of the dot pattern, the lines appear uneven or jagged, thus producing a dull image. Also, it is difficult to match and maintain color consistency with process color printing.

Spot vs Process Colors

- **Spot Color**
- Unlike the combination of four standard colors used in process colors, spot colors are produced when inks are laid down in a single run. The image printed is of pure and mixed inks without separate screens or multicolor dots. Each color requires a separate printing plate and press to print designs, thus making it costlier than process colors. But the image produced using spot colors is brighter, sharper and provide more even coverage compared to its counterpart.
- Pantone Matching System is the most common example of spot colors in the printing industry. It has a color palette of 14 basic colors (13 base pigments and 1 black color) and other colors are created by mixing different hues through a unique formula. That's why printing exact colors that the designer intends is possible while maintaining color consistency.

Spot vs Process Colors

CYAN   MAGENTA   YELLOW   BLACK

CMYK FINAL   ZOOM

Spot vs Process Colors

PROCESS (CMYK) COLOR   SPOT COLOR