Chapter 03

Persuade By Design

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Disclaimer:

For serious Learner, Minimum retention time required to put against each design principle is 1 minutes where it is expected to think twice the real world application of the given principle. This is a power point presentation not intended for sharing in a casual post way but due to time constraint it is there for you. This is not a tempting reels or content which will trigger you to continue it further but if you are serious about everything you do than it is a must read post, recommend to open it in a tab or desktop not in mobile.

Please Share and Repost but I would be more happy and thankful to you if you share after getting it.

Chapter 01

Color
Closure
Iconic Representation
Alignment
Common Fate
Affordance
Anthropomorphic Form
Consistency
Constancy
Contour Bias
Face-ism Ratio

Chapter 02

Good Continuation
Gutenberg Diagram
Highlighting
Horror Vacui
Inattentional Blindness
Interference Effects
Law of Pragnanz
Layering
Legibility
Mapping
Orientation Sensitivity

Chapter 03

Red Effect
Signal to Noise Ratio
Threat Detection
Three Dimensional Projection
Top Down Lighting Bias
Uniform Connectedness
Visibility
Visuospacial Resonance
Priming
Proximity
Figure Ground Relationship
Five Hat Racks

RED EFFECT

Red color communicate a lot about love, anger, dominance, attention, fertility based on context it apply.

The Red color is very sensitive to context, generalizes to product and activities that strongly relate female sexuality and male dominance. If the female persuade red, it reflect love, compassion, attractiveness whereas if male persuade red, it reflect anger, dominance, authority. In Product design, red color is key to influence customer based on its product category, also to seek quick attention.

A study comparing the boxing matches outcome found that contestant wearing red won a statistically significant greater number of matches.
Exception: IPL #RCB [Hahaha..]

There is a cast, where the costume design itself play a major role in setting the character mindset and theme of movie. We all know the movie and its revenue.

Further Reading

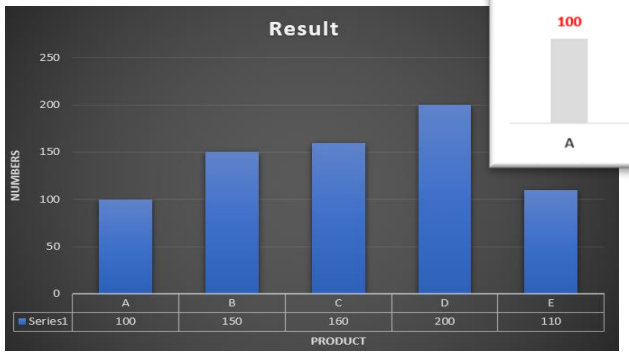
Red Enhance Human Performance in Contests by Russell Hill and Robert Barton [2005]

Romantic Red: Red Enhances Men's Attraction to Women by Andrew Elliot, Daniela Niesta [2008]

SIGNAL TO NOISE RATIO

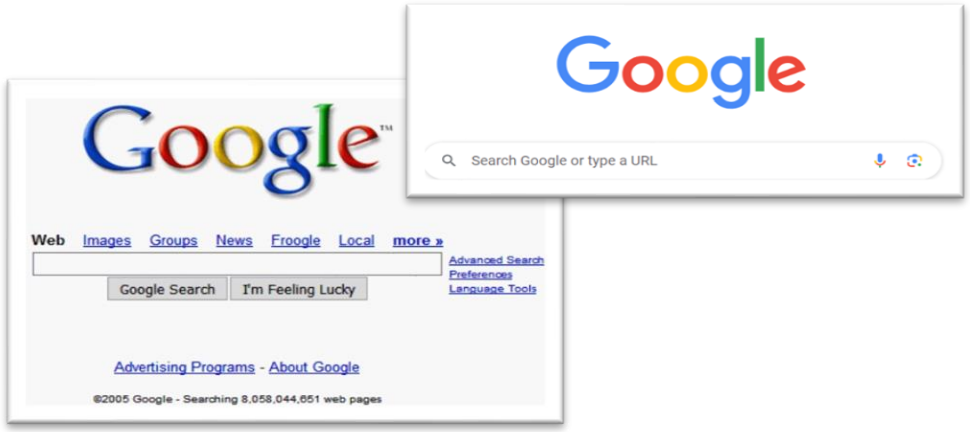
The ratio of the relevant to the irrelevant data or information in a display or page.

For better design, always try to maximize the signal to noise ratio. In other words, Keep it as simple as possible and to the point. The data which are relevant and contextual that only needs to be present as per the intended use cases. Eliminate non-essential.



Very High Noise, Least Desirable Presentation.

Signal to Noise Ratio is More, Better Presentation



Google Web Page in 2002, High Noise, Signal to Noise Ratio Less,
In 2023 Signal to Noise ratio is More, No Noise at all, other than your Web History.

Further Reading

A Decision Making Theory of Visual detection by Wilson P. Tanner Jr, John A. Swets [1954]

Visual Display of Quantitative Information by Edward R. Tufte [1983]

THREAT DETECTION

There is a tendency to detect threating stimuli more effectively and quickly than non-threating stimuli.

Threat features of subject like snake, spider or angry faces have mechanism such as wavy line of snake, the thin leg and round body of Spider, V shaped eyebrows of angry face can trigger fear and get quick attention without accompanying negative emotions. While Designing a product, it can be applied to get the attention in a noisy environment. Purpose is to maximize the detectability and minimize the negative effect.

Get the most of attention in noisy environment or Market Use in Logo Design as well like Jaguar, Puma..

Further Reading

The Principle of Psychology by William James, Henry Holt [1890]

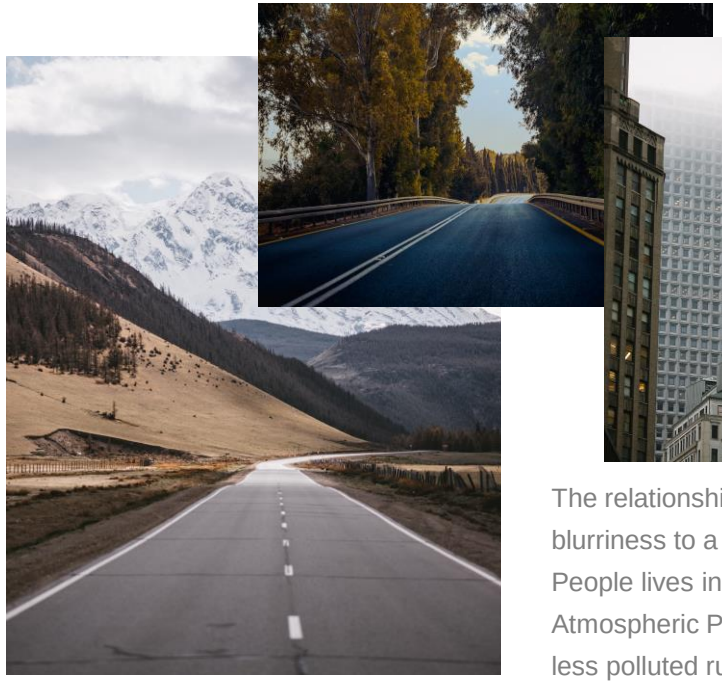
Finding the Face in the Crowd: An angry superiority effects by Christine H. Hansen, Ranald D. Hansen [1988]

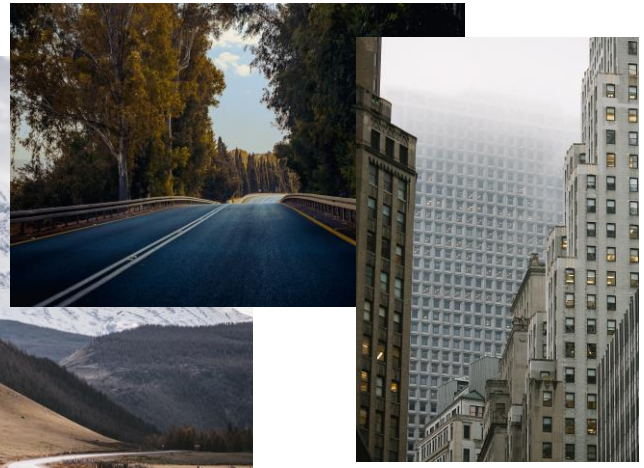
THREE DIMENSIONAL PROJECTION

There is a tendency to see any objects and pattern as 3 dimensional when certain visual cues are present.

Human are evolved to see things as 3 dimensional under the visual cues includes interposition, size, elevation, linear perspective, texture gradient, shading, and atmospheric perspective.

Now a days we all are aware about the virtual reality things and 3D Advertisement, are common use case where 3D projection apply.





The relationship between the degree of blueness and blurriness to a distance is a function of experience. People lives in smoggy area have different sense of Atmospheric Perspective than people who live in less polluted rural area.

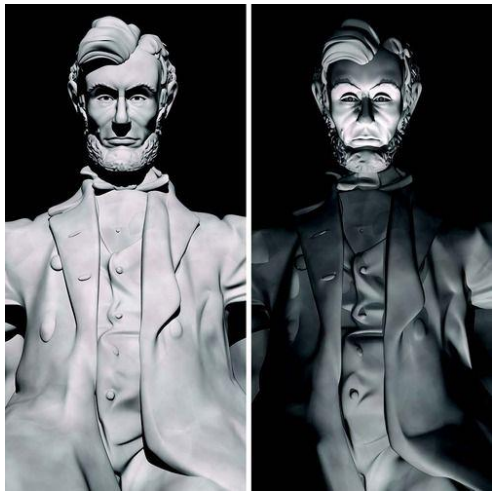
Further Reading

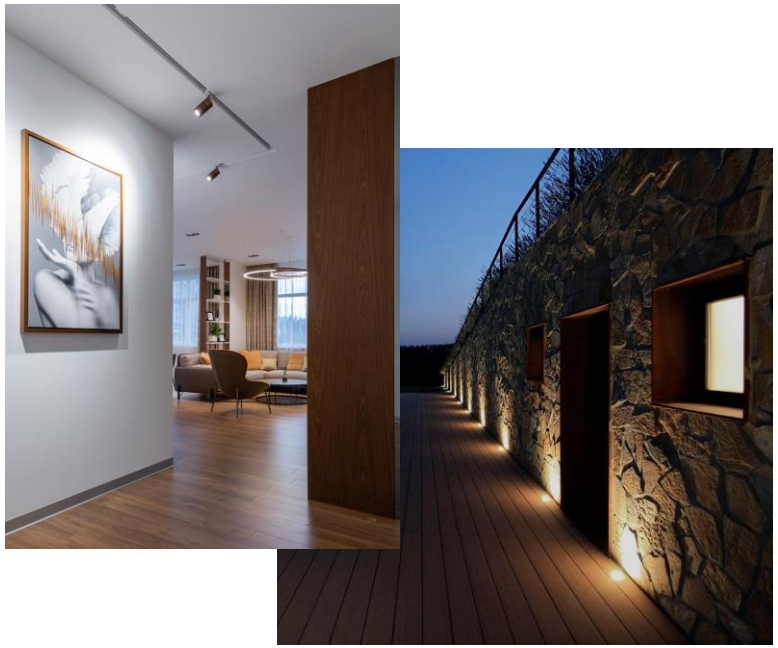
Sensation and Perception by Margaret W. Matlin, Hugh J. Foley, Allyn & Bacon [1997]

TOP DOWN LIGHTING BIAS

When there is a light source at the top of the object, dark and shaded area perceive as shadows of the object.

Top Down Lighting Bias play a significant role in interpretation of the depth and natural appearance of any object or body, it can be manipulated in many ways by designer or any business outlet in order to psychologically trick the perception about brand and product. Use single top left light source when depicting natural looking or functional objects or environment where as use bottom up light source when depicting unnatural looking or foreboding objects.





Further Reading

Perception of Shape from Shading, Nature by Vilayanur S. Ramachandran [1988]

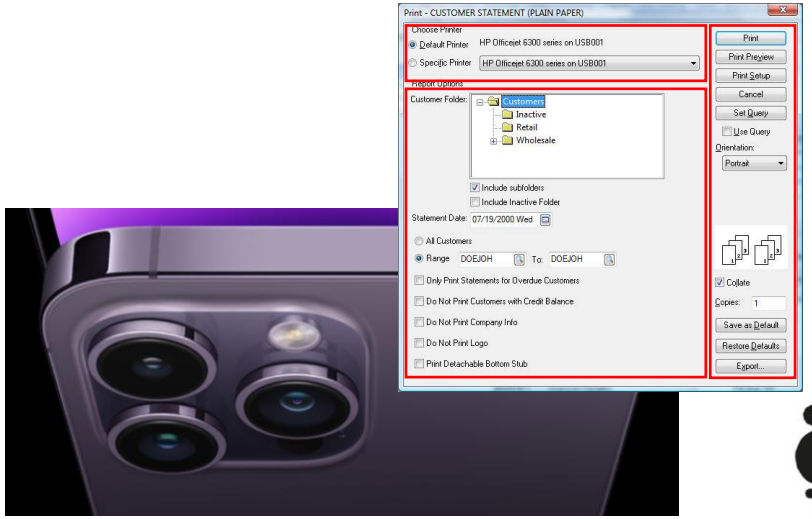
Where is the Sun by Jennifer Sun, Pietro Perona [1998]

UNIFORM CONNECTEDNESS

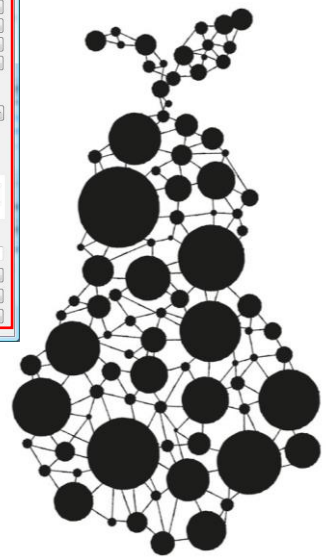
Objects and elements that are connected by uniform visual properties (color) are perceived to be related.

Uniform connectedness overpower the other gestalt principles proximity and similarity.

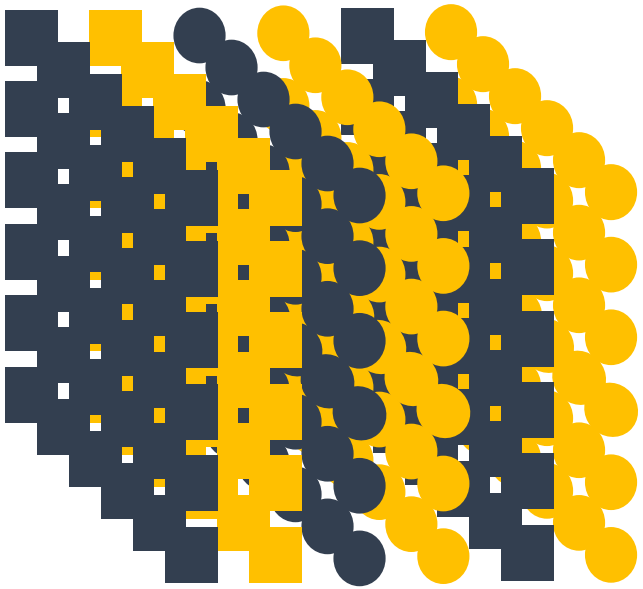
Common region and connected lines are two basic strategy to apply connectedness in design. Common region are formed when edges come together and form a visual area where elements are grouped within that region where as connected lines are formed when two elements are joined with explicit lines.



Different elements (3 different camera and flash light) connected through a common region. In UI design say Print Tab, three different common region as relevant for user.



Different elements connected through explicit lines Mostly applicable to flow chart design.



3D Matrix with different visual properties perceived as 6 layer of elements with two different category. Color overpower the proximity and similarity.

Further Reading

Rethinking Perceptual Organization: The Role of Uniform Connectedness by Stephen Palmer, Irvin Rock [1994]

VISIBILITY

System or product are more usable and likable when they clearly indicate their status, the possible action that can perform, and consequence of action once they performed.

Based on the use case, most of the time visibility is desirable and some times it is not. One of the most violated principle.

A complex plant or system under study can be visualize using simulation software, An end user product say Washing Machine with display make it more convenient for user. On the other hand, it is bad idea to make kitchen sink visible or you never want to visualize dustbin.

Further Reading

Design of Everyday Things by Donald Norman [1990]

VISUOSPATIAL RESONANCE

A phenomenon where an image achieves optimal clarity due to resonance between the spatial frequency of the image and the observer's distance from the image.

The visibility of lines, edges, and boundary in the image is a function of the spatial frequency of the image and the distance of observer. High spatial frequency images are easily interpreted up close, but not visible from distance where as low spatial frequency image are not visible up close but easily interpreted from distance.

Right most hybrid image depicts two familiar figures rendered at different spatial frequency.
Up close, we see Albert Einstein who is rendered at high spatial frequency where as from distance, we see Marilyn Monroe who rendered at low spatial frequency.

The first known hybrid image is the elusive smile of Leonardo da Vinci's Mona Lisa Painting.
Observe up close, she doesn't smile where as from distance subtle smile appear.

Further Reading

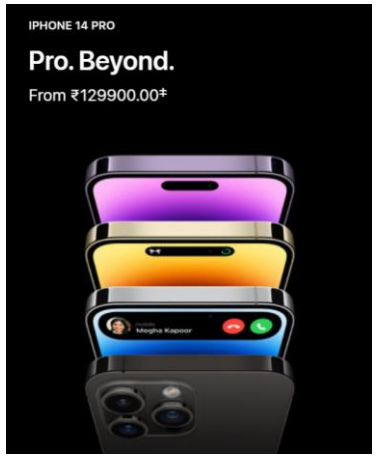
Masking in Visual Recognition: Effect of 2 Dimensional Filtered Nosie by Leon D. Harmon, Bela Julesz [1973]

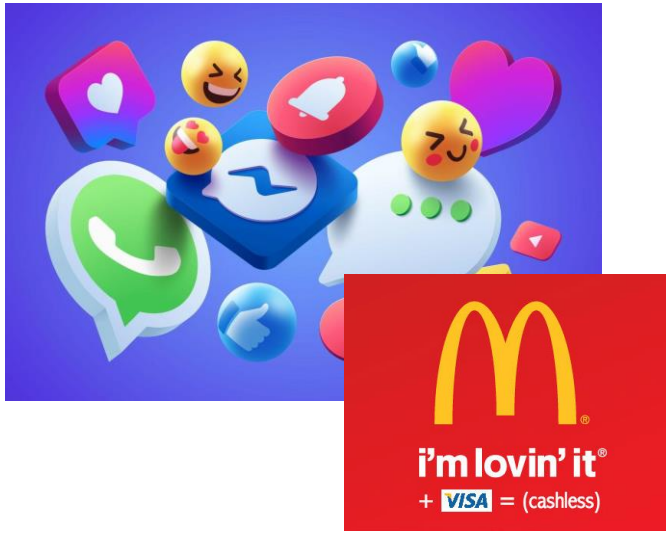
From Blobs to Boundary Edges: Evidence for Time and Spatial Scale Dependent Scene Recognition by Philippe Schyns, Aude Oliva [1994]

PRIMING

A process of training human mind for a specific need or goal by just putting some related concept or thought .

Priming is an effective means of influence when the stimulus introduced activates concept that are consistent with the preexisting need or goal. This is used every where no matter we accept it or not like in theatre or in stadium, there is tempting environment for drinks and snacks. When people read or have pre exposure of some concept, most probably they are going to follow the same concept further.





It's time to Go Beyond
Safety Innovation
Never seen Before
This is Pro Display, Pro Camera and Bla Bla..
These are some priming tools for Apple Business for affluent user.
They forgot to tell the Product Value in their ad which is Product Function per Dollar.

Learning might be Difficult, But Un-Learning is next to Impossible!!

Further Reading

Automaticity of Social Behavior: Direct Effects of Trait Construct and Stereotype Activation on Action by John Bargh, Mark Chen, Lara Burrows [1996]

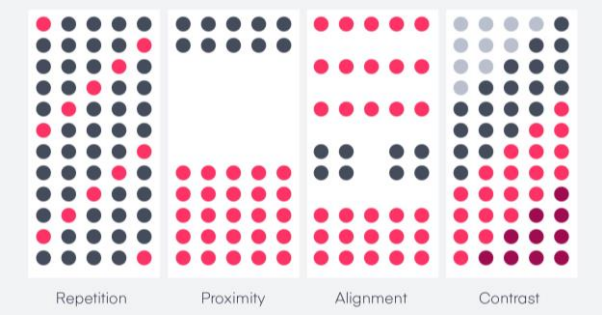
Losing Consciousness: Automatic Influences on Consumer Judgement Behavior and Motivation by John Bargh [2002]

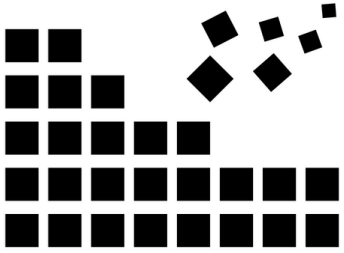
PROXIMITY

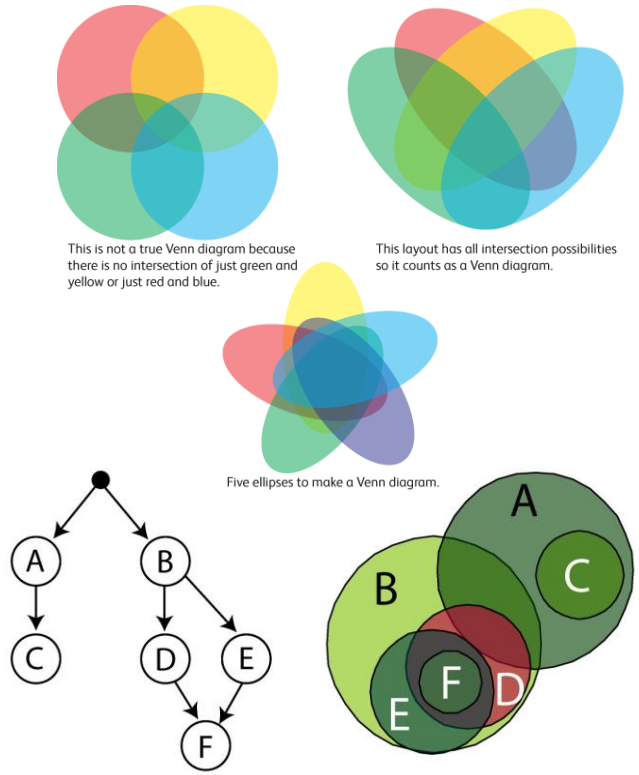
Elements or objects that are close together are perceived to be more related and connected.

Certain proximal layouts imply specific kinds of relationship, and considered in layout design.

Connecting or overlapping elements are generally interpreted as sharing one or more attributes where as proximal but non-contacting elements or objects are interpreted as related but independent.







Euler Circles and Venn Diagrams (method of illustrating the relationship between sets of things in logic and mathematics) Utilize Proximity Principle.

Further Reading

Laws of Organization in Perceptual Form by Max Wertheimer [1923]

Principle of Gestalt Psychology by Kurt Koffka, Harcourt Brace [1935]

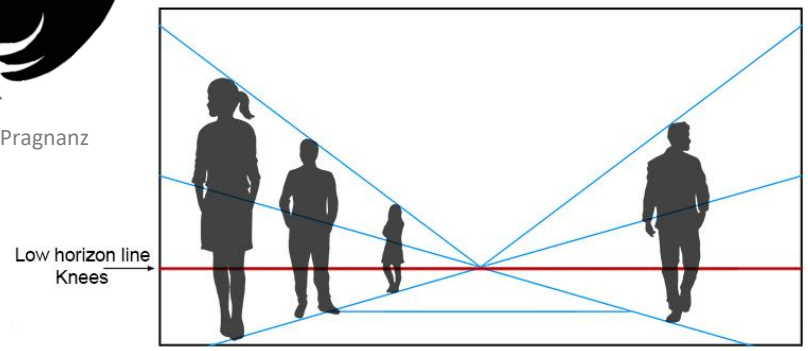
FIGURE GROUND RELATIONSHIP

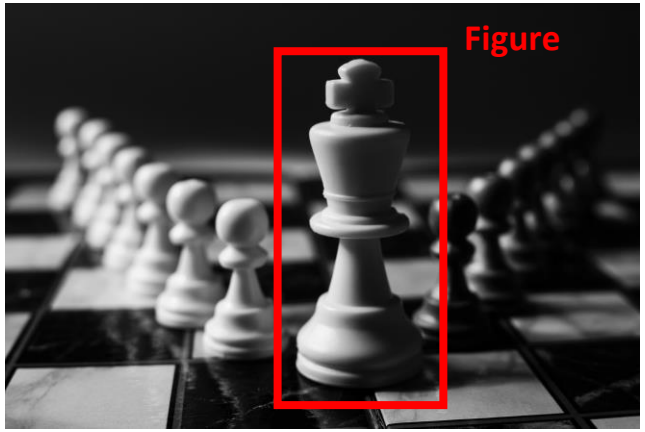
Elements in frame are perceived as either figure (Object of Focus) or ground (rest of perceptual field).

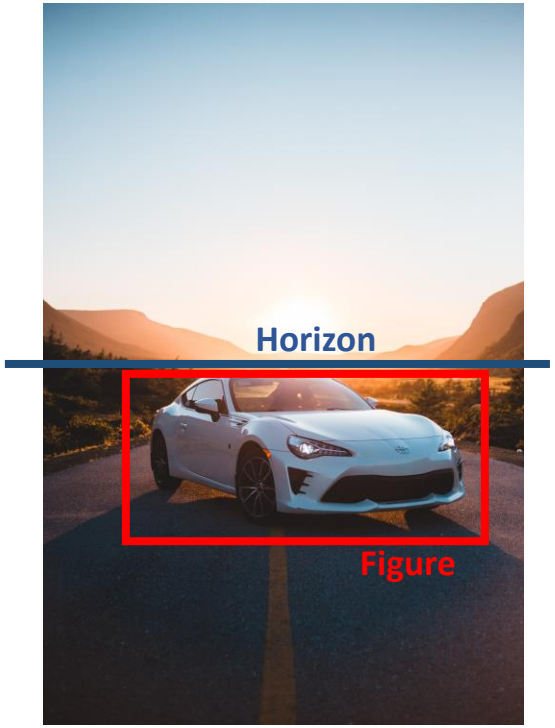
The visual cues that determine which elements will be perceived as figure and which as ground are,

- Figure have definite shape, Ground continue behind the object of focus.
- Figure seems closer where as ground seems further away.
- Elements below the horizon line are most likely figure where as ground are above the horizon line.
- Elements in the lower region of display or page are perceived as figure and in the above region as ground.

Similar to Law of Pragnanz







Further Reading

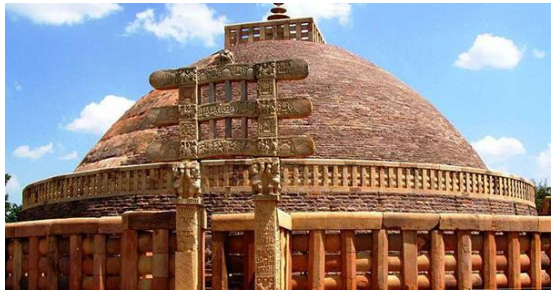
Figure and Ground by Edgar Rubin, Gyldendalske [1915]

Lower Region: A new cue for figure-ground assignment by Shaun P. Vecera, Edward K. Vogel, Geoffrey F. Woodman [2002]

FIVE HAT RACKS

The most fundamental way to organize data or information are 1. Category 2. Time 3. Location 4. Alphabet 5. Continuum, called as Five Hat Racks.

Also known as five ways of organizing information. Based on the factor which contribute the most of attention and make people think in a certain way, organize your data or information to end user.



Further Reading

Information Anxiety by Richard Saul Wurman, Bantam Books [1990]

Reference

Universal Principles of Design By William Lidwell, Kritina Holden, Jill Butler

I welcome all sort of feedback and question to the topic which I have talked about in all three chapter of Persuade by Design.

Feel Free To Discuss Any Design Problem.

Direct Message at LinkedIn or Call +91 7070519149

Thank You!!