

# The Psychology of Shapes

- *“I found that I could say things with color and shapes that i couldn’t say any other way” – Georgia O’Keefe*
- **Subconscious mind responds to shapes** by associating them to **qualities -- representative of.**
- We form these connections from universal associations - - without even being consciously aware of it,
- **Red octagon as the STOP sign.**
- Brands use **shapes along with colors** to form their logos and other visual elements to **trigger emotional connections.**

# • The Psychology of Shapes

- **Commonly used shapes are:** *Circles, Ovals, and Ellipses*
- **Round shapes-** positive emotional message, suggest community, infinity, relationships and unity.
- **Squares and Triangles**
- Logos -- straight edges suggest stability, strength, efficiency.
- Triangles -- power, and associations with science, religion and law.
- *Horizontal Lines* - community, equality, tranquility, calmness.
- Vertical lines in Cisco and SoundCloud-**strength, and aggression.**

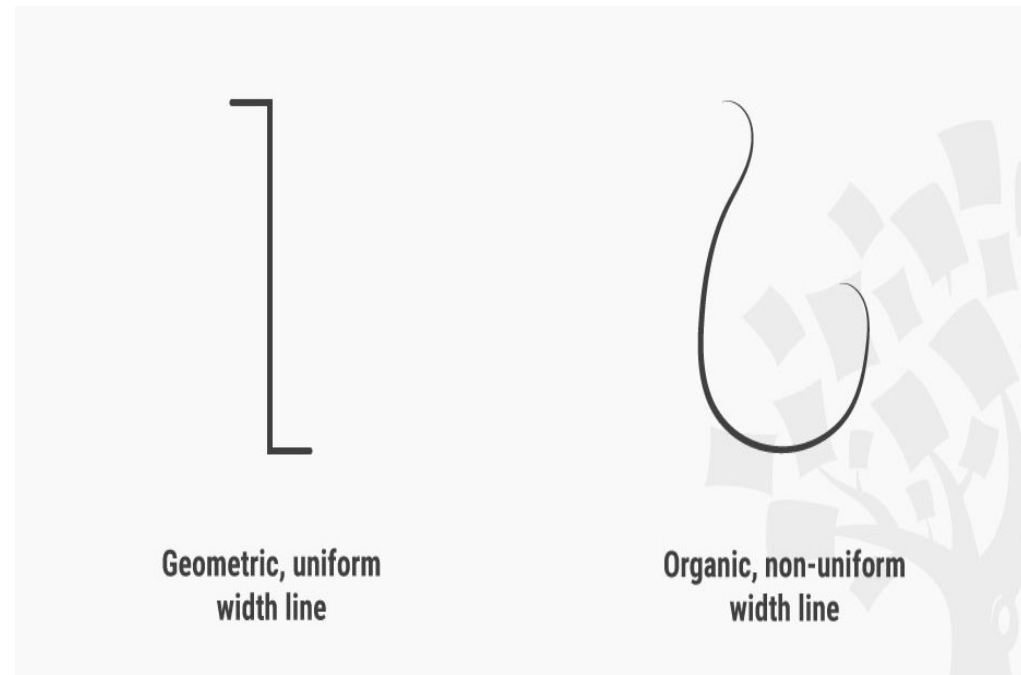


## VISUAL DESIGN – KEY PRINCIPLES AND FEATURES

- Visual design - creating and making the general aesthetics of a product consistent
- elements of visual design: line, shape, negative/white space, volume, value, colour and texture.
- Learning how to achieve unity, gestalt, hierarchy, balance, contrast, scale, dominance, and similarity will reward
- Line
- Lines - strokes connecting two points, most basic element of visual design.
- Can be used to create shapes, - repeated to form patterns - create textures.

## VISUAL DESIGN – KEY PRINCIPLES AND FEATURES

- Lines - thick or thin, straight or curved, have uniform width or taper off, be geometric
- drawn by a ruler or compass or organic (are drawn by hand).
- *Lines are simple, but can convey different emotions by using different properties*



## VISUAL DESIGN – KEY PRINCIPLES AND FEATURES

- line can also be implied: that is, *suggested* by forming an invisible connection between other elements
- Interaction Design Foundation, “Interaction Design Foundation” around the tree -semicircular implied line.



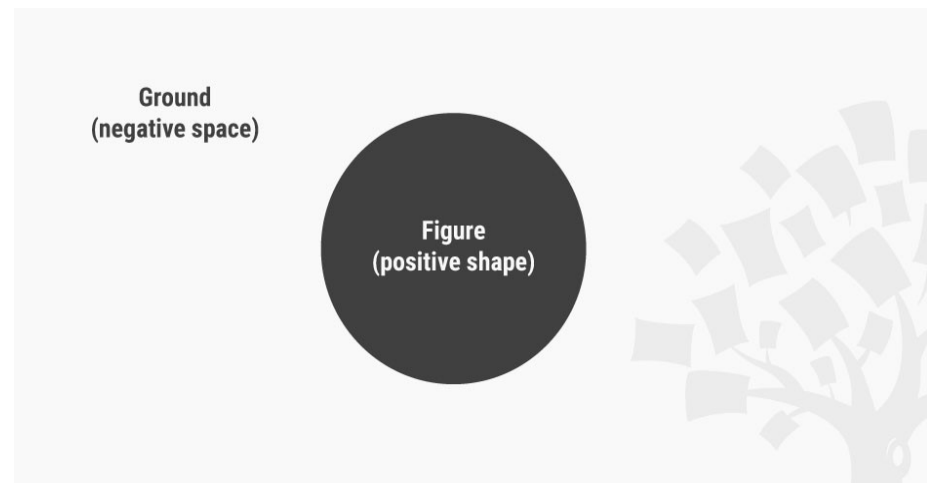
## VISUAL DESIGN – KEY PRINCIPLES AND FEATURES

- **Shape**
- -self-contained areas, formed by lines -formed by different colour, value or texture
- two dimensions: **length and width.**
- Users identify objects by shapes,
- Details such as lines, values, colours and textures
- **Negative/White Space**
- Negative space --white space -- empty area around positive shape.
- Relation between the shape &space is called *figure/ground*,
- shape - figure ; area around shape - ground.

A Basic Shape

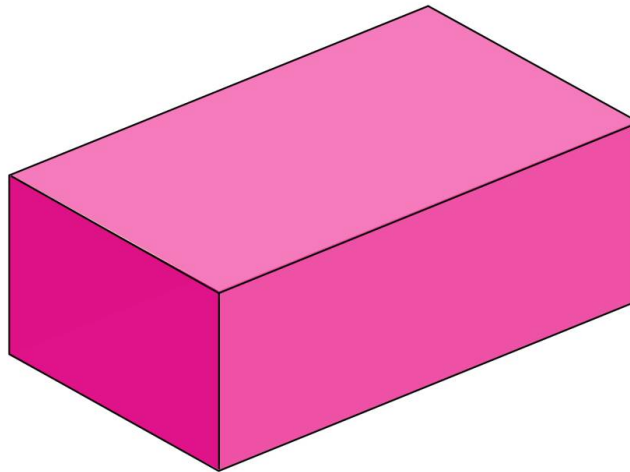
## VISUAL DESIGN – KEY PRINCIPLES AND FEATURES

- designing positive shapes -> negative spaces at the same time.
- Negative Space Very Important - boundaries of the positive space and brings balance to a composition.
- positive shape and negative space to create the image of a panda. (WWF). No explicit drawing uses negative (white) space around the black shapes – *creates panda structure*



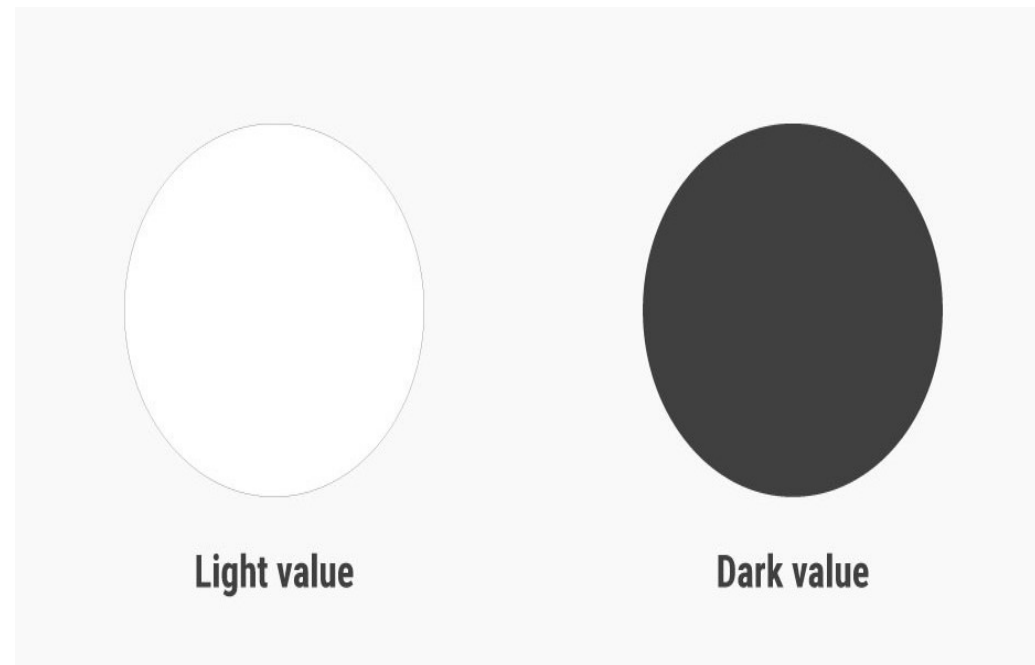
## VISUAL DESIGN – KEY PRINCIPLES AND FEATURES

- **Volume**
- -visuals that are three-dimensional - *length, width and depth*
- rarely used in visual design,
- digital products **end up being viewed on a 2D screen**, although some apps use 3D models and graphics.
- 3D images viewed on a 2D screen are still 2D images!





- **Value**
- Value, quite simply, describes light and dark.
- *Light value vs. dark value: value describes lightness and darkness*
- *Differences in values **create clear designs**, designs using **similar values tend to look subtle***



- design with a high contrast of values (**light and dark values-- sense of *clarity*,**
- **similar values -- a sense of *subtlety*.**
- use value to simulate volume in 2D - by using lighter values where the light hits the object ; darker values for shadows

Clarity

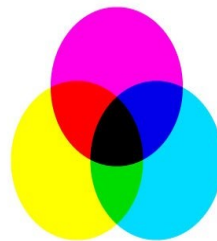
Subtlety

## Colour Theory

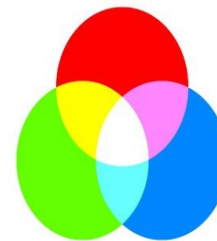
- -An element of light.
- Branch of design focused on the mixing and usage of different colours in design and art.
- an important distinction exists between colours that mix subtractively / additively.
- In paint, *subtractive mix* - pigments in paints absorb light.
- different pigments mixed together, - mixture absorbs a wider range of light giving darker colour.
- subtractive mix of cyan, magenta and yellow -> black colour.
- A subtractive mix of colours in paint and print produces the CMYK (i.e., **C**yan, **M**agenta, **Y**ellow and black**K**) colour system.

# Colour Theory

- **Digital design** - product shows up on a screen, **colours mix additively** - screen emits light; colours add to one another accordingly.
- different colours are mixed together on a screen, the mixture emits a **wider range of light giving lighter colour**.
- additive mix of **red**, blue and **green** colours on screens -- **white light**.
- Additive mix of colours on digital screens **RGB system**.



Subtractive mix  
(in print)



Additive mix  
(on screen)

## Texture



- surface quality of an object.
- can be created by a *repeated pattern of lines, or by using tiled images of textures.*
- *diagonal lines add a 'grip' effect* to 'smooth' rectangle.
- As a designer – 2 types of textures
- *tactile textures* -- feel the texture,
- *implied textures* -- can only see, not feel
- Most visual designers - *implied textures*, screens allows them feel mostly

- app icon designs in iOS 6 and earlier mimic the **glossy texture of glass** - incite users to tap them
- Apple (in)famously - **linen fabric texture** -- user interface.
- popularity of **flat\_design** - **minimalist style** --clean spaces and two-dimensional, flat illustrations
- textures in visual design use reduced.. *can* still be very useful.



# Principles of Design

- “The best designers sometimes disregard the principles of design. When they do so, however, there is usually some compensating merit attained at the cost of the violation. Unless you are certain of doing as well, it is best to abide by the principles.” – William Lidwell
- **Unity**
- creating a sense of harmony between all elements in a page.
- page with elements -- visually or conceptually arranged together -- create a sense of unity.



Unity



Lack of unity

## Principles of Design

- *lack of unity in designs – a sense of unease and chaos.*
  - *Our eyes govern our judgements.*
- **designing websites--** use of a grid for achieving a sense of unity - **elements organised in a grid will follow an orderly arrangement.**
- **strike a balance between a boring and a chaotic design.**

### Gestalt

important for separate sections of a website distinct by increasing the white space between them



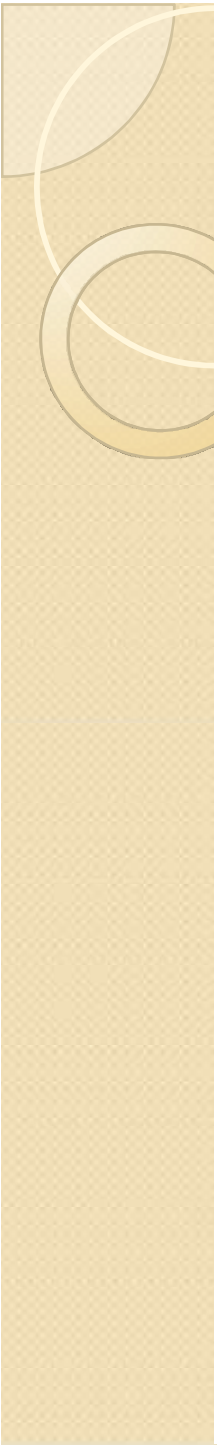
- parts of a website we group together by using gestalt principles close to one another - same shape, similarly sized —conceptually grouped together.
- “**Accidentally**” grouping elements which are not conceptually similar -- confused users.
- *Designs with clear sections are easier to process , scan than those without—mainly if the sections are conceptually distinct.*



- **Hierarchy**
- *difference in importance* of the elements in a design.
- Colour , size are the most common ways to create hierarchy
- by highlighting a primary button, or using larger fonts for headings.
- Items at the top of a page or app viewed as having a higher hierarchy than those below.
- **Font size & style - establish hierarchy.**

## Large header is clearly important

Smaller subtitle is of secondary importance, and will only be read after the header

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- **Balance**
  - principle governing how we distribute the elements of a design evenly.
  - Balanced designs - appear calm, stable and natural, **imbalanced designs make us feel uneasy.**
  - *Imbalanced designs - unsustainable and unnatural.*
  - Balance can be achieved by **having symmetry in the design**
  - webpage with centralised text and images
  - *without symmetry —asymmetrical balance.*
  - **arrange differently sized elements in a way that results in unity.**
    - imagine a centre point of the design - **distribute the elements in a way that creates balance.**



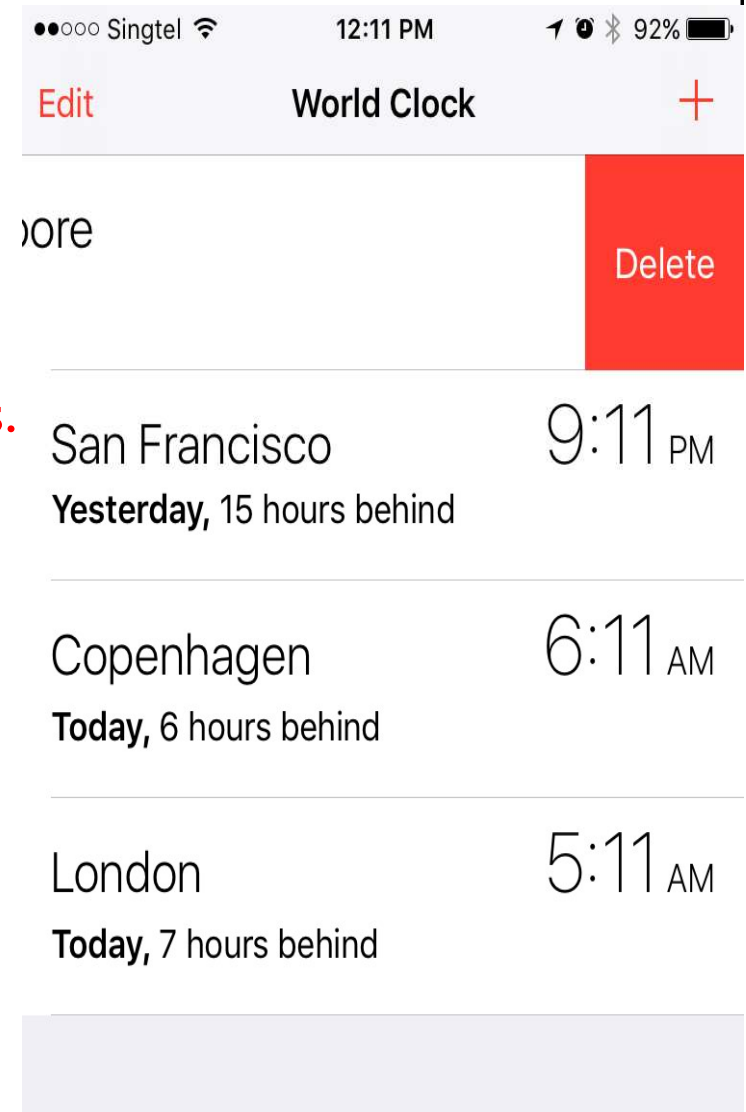
Balance



Imbalance

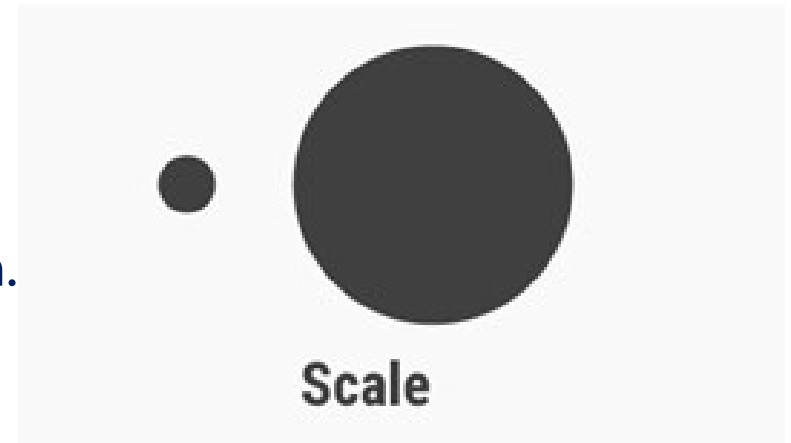
- **Contrast**
- make an element *stand out* by manipulating differences in colour, value, size and other factors.
- designers - logo design, UI - red to make certain elements stand out.
- iOS, red often appears in the “Delete” action -- irreversible action is about to occur.

- **Green** - positive actions such as “Go” and “Accept”
- Do not ignore the cultural meaning of colours when designing for contrast.
- Design for a client in a far-off land - learn and design to conform to the cultural considerations.
- ask yourself,
- **“Is their red lucky or angry?”**
- **Is their black business like or funerary?**



**Scale** - *Relative sizes of the elements* in a design.

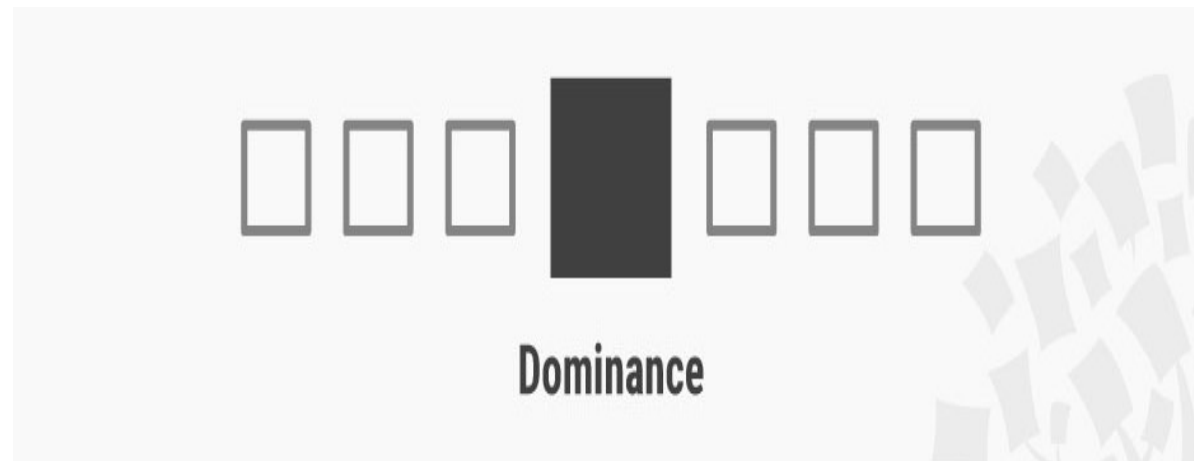
- make an element larger than others appearing with **emphasise that element.**
- use scale to **create a sense of depth** - nearer objects appear larger to the human eye
- **Exaggerated scales of images** - interest and drama to them.



## **Dominance**

- *focus on a single element.*
- colour, shape, contrast, scale, and/or positioning
- websites have a main “hero” image- dominance to appeal to users
  - natural attraction

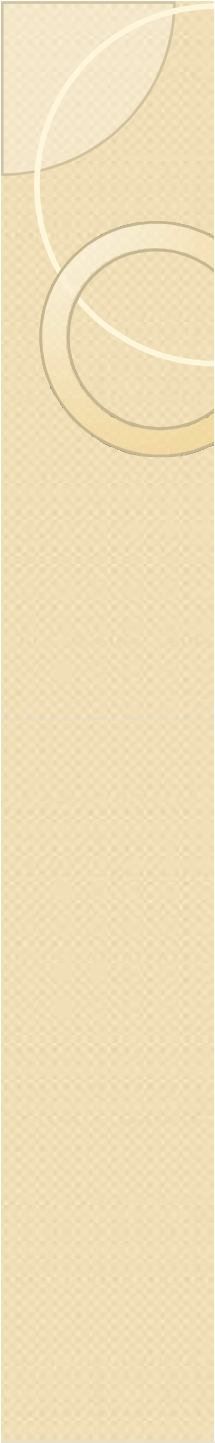
- Dominance established using positioning, shape and colour, etc.
- visual design - dominance while still maintaining the *unity* and *balance* of websites
- else **design** creates disorienting experience for users.

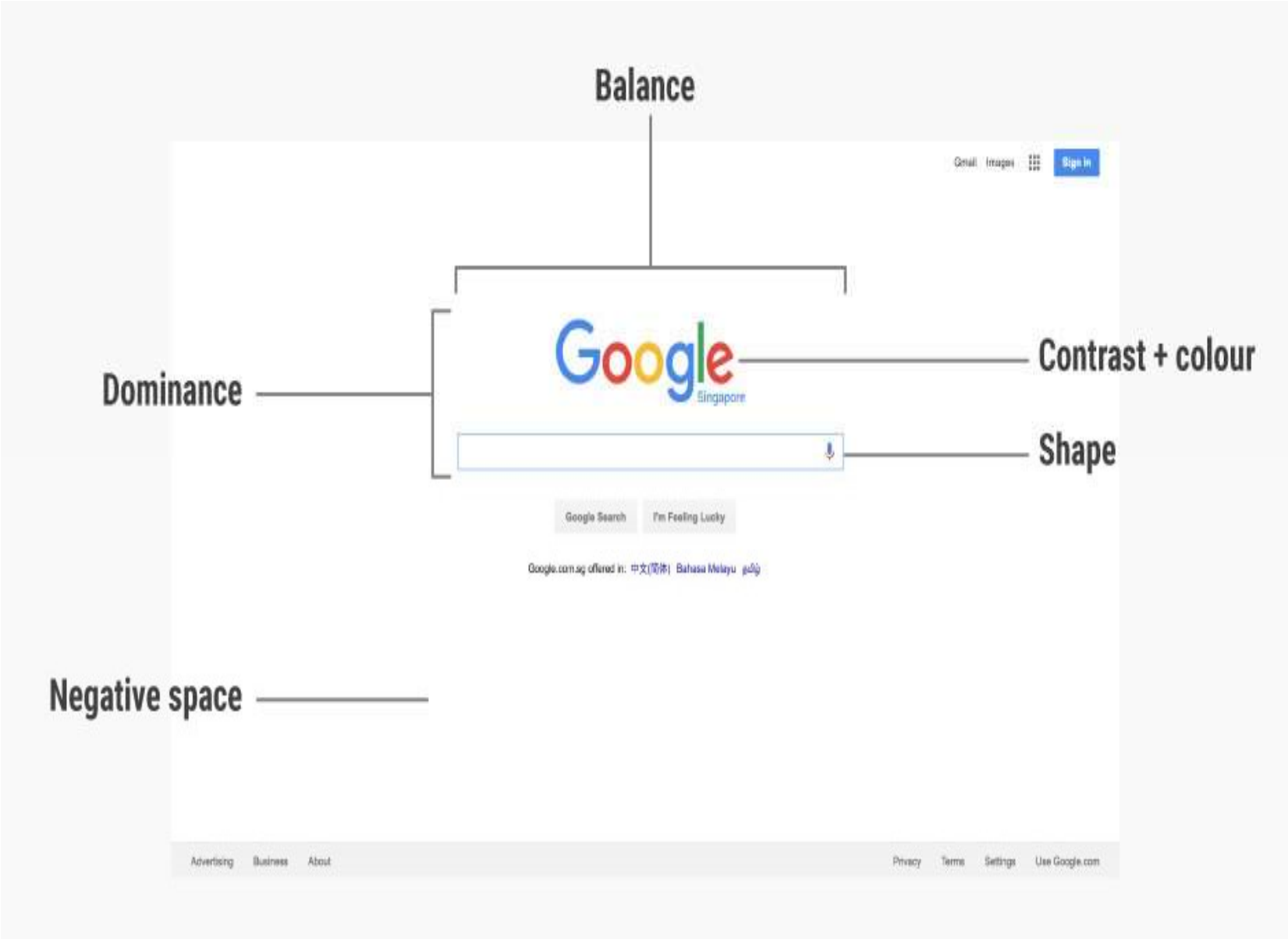
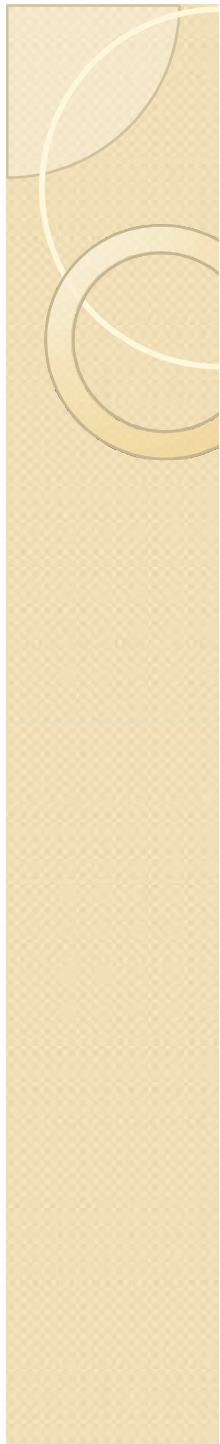


## Case Study of **Google Home Page** on Design Aspects

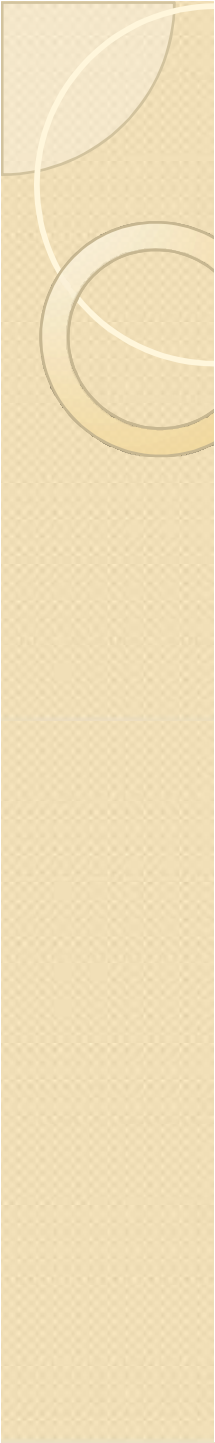
- one of the most visited webpages in the world.
- raw simplicity of the page is partly why it is so well designed
- **Plenty of Negative Space** – what better example for 80 20 ?
- other factors that contribute to Google's Success!
- **Dominance:** large Google logo ; search\_box -  
core (and to most, sole) focus of the entire page.
- **Contrast (and colour):** Google's logo bright  
(mostly primary) colours,
- Mix well - a visually pleasing logo.
- logo - sufficient contrast against a white background, **stand out on the page.**

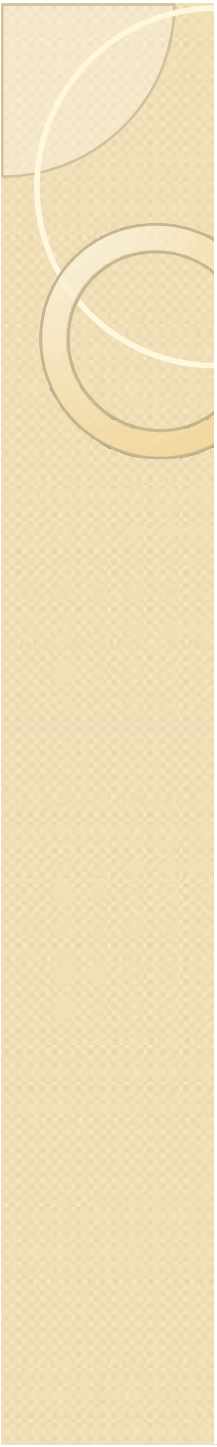


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- **Shape:** search box uses a rectangular shape - delineate the search field - making it very usable.
  - **Negative space:** Google's homepage is predominantly made out of negative space -- search box (the main function of the page) the centre of attention.
  - Negative space also works well for the page, acts like a **blank sheet of paper** before users type in their search terms.
  - **Balance:** almost vertically symmetrical, **sense of balance** - very pleasing - calm to look at.



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- **Quartz's homepage**
  - digital-first and mobile-first news agency with a global audience,
    - 2012 by Atlantic Media, publishes *The Atlantic*.
  - **bold homepage** -featured news stories front and centre
  - easy to admire the effect as a whole without looking past it at the nuts and bolts
  - elements set together so well - age-old principles -'wow' effect
    - **Dominance:**
  - main news story immediately catches eyes -- large, bold font makes it dominant on the homepage.

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- **Hierarchy:**
  - homepage uses a clear hierarchy to establish the relative importance of various elements.
  - main story, with the largest text and bolded weight, has the highest hierarchy.
  - next 4 stories, positioned below the main story - smaller fonts -  
- subordinate hierarchy under the main story.
  - **Scale, value and colour:**
  - homepage features a large (full page height) “Q”, mask of the hero image for the main story.

- 
- large “Q” quickly establishes website identity. “Q” stands for “Quartz” with the use of scale.
  - relative light value and greyscale colour of the “Q” - fade into the background, overall focus on the headline of the main story
  - **Negative space:** Most of the homepage is negative space,. When the mouse is brought over the - content is king!
  - main story headline, the “Q” mask disappears, filling the negative space with the featured image. unique play of negative space can stimulate interest in a website’s design.
  - **Unity:** grid\_system - create a sense of unity. four stories have equal width, uniformly spaced - orderliness and structure.

Scale + value + colour

