



Principles and Elements of Design Applied to Architecture

Visual Design Elements

Six integral components used in the creation of a design:

Line

Space

Color

Texture

Form and Shape

Value

Line

Types

Vertical – Represents dignity, formality, stability, and strength

Horizontal – Represents calm, peace, and relaxation

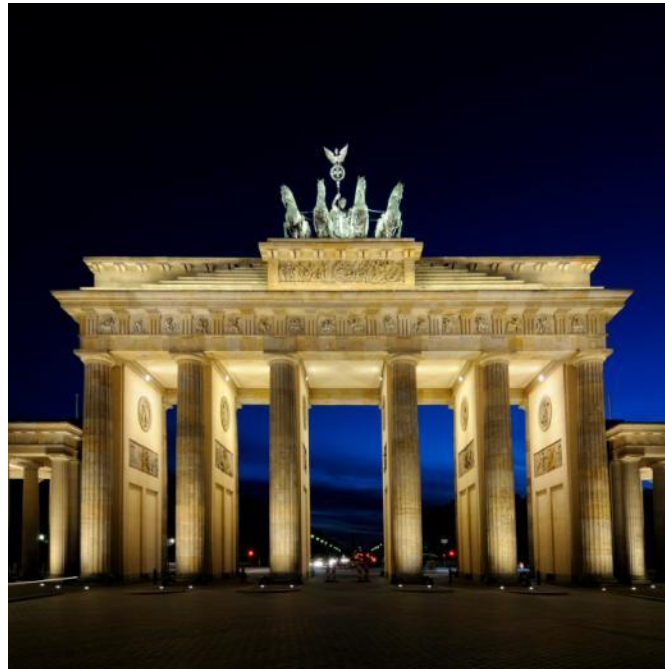
Diagonal – Represents action, activity, excitement, and movement

Curved – Represents freedom, the natural, having the appearance of softness, and creates a soothing feeling or mood

Vertical Lines

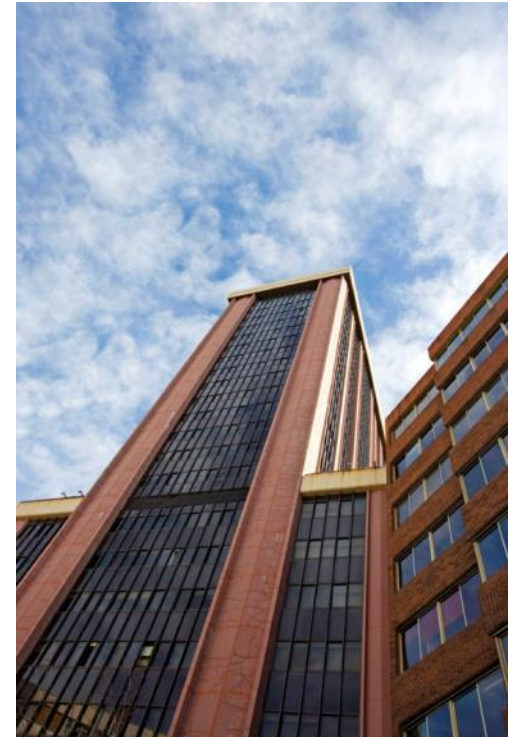


The Empire State
Building
Architect: Shreve, Lamb,
and Harmon



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Brandenburg Gate
Berlin



Skyscraper
Madrid, Spain

Horizontal Lines



Community Christian Church
Kansas City, MO
Architect: Frank Lloyd Wright, 1940

Diagonal Lines



Curved Lines



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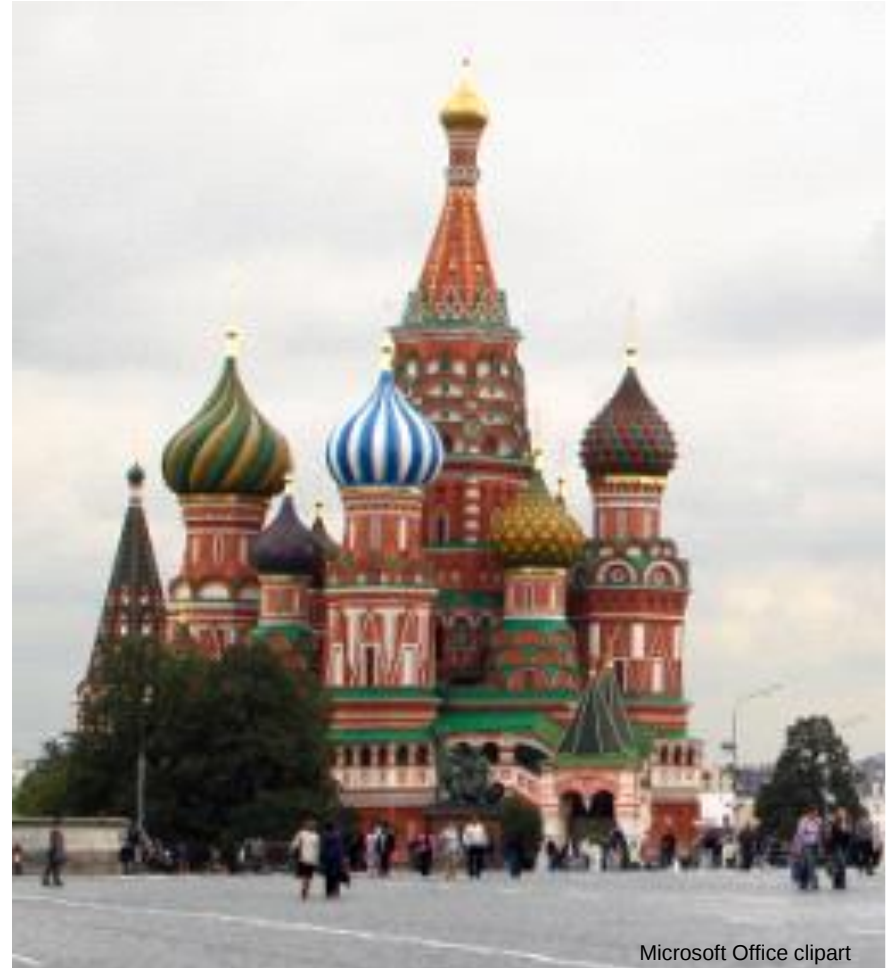
Sydney Opera House
Jorn Utzon

Color

Color has an immediate and profound effect on a design.



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Saint Basil's Cathedral
Moscow

Color

Warm Colors

Reds, oranges, yellows



Cool Colors

Blues, purples, greens



Color



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Colors can affect how humans feel and act

Form and Shape

Form: (3D) The shape and structure of something as distinguished from its substance or material.

Shape: (2D) The two-dimensional contour that characterizes an object or area.

Form and Shape



Oriental Pearl Tower
Shanghai
Architect: Jiang Huan Cheng,
Shanghai Modern Architectural
Design, Co.



Marie-Elisabeth-Lüders-Haus
Berlin, Germany

Space

By incorporating the use of space in your design, you can enlarge or reduce the visual space.

Types

- Open, uncluttered spaces
- Cramped, busy spaces
- Unused vs. good use of space



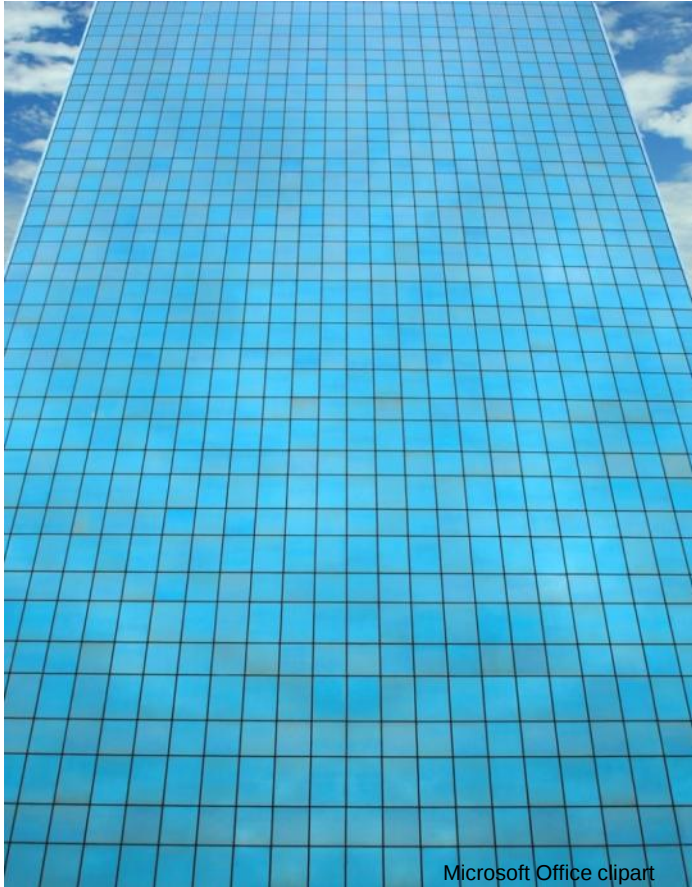
Texture

The surface look or feel of something

Smooth Surface – Reflects more light and therefore is a more intense color.

Rough Surface – Absorbs more light and therefore appears darker.

Smooth Texture



Glass façade of a high
rise office building



Exterior metal façade of Disney Concert Hall
Los Angeles

Rough Texture



Park Güell – Barcelona, Spain
Architect: Antonio Gaudí



Value

The relative lightness or darkness of a color



Methods

Shade – Degree of darkness of a color

Tint – A pale or faint variation of a color

Value



Downtown buildings in Bangalore, India

Visual Design Principles

Seven principles encompass an interesting design.

- Balance
- Rhythm
- Emphasis
- Proportion and scale
- Movement
- Contrast
- Unity

Balance

Parts of the design are equally distributed to create a sense of stability. Both physical and visual balance exist.

Types

- Symmetrical or formal balance
- Asymmetrical or informal balance
- Radial balance
- Vertical balance
- Horizontal balance

Balance

Symmetrical or Formal Balance

The elements within the design are identical in relation to a centerline or axis.



The Taj Mahal Mausoleum
Agra, Uttar Pradesh, India

Balance

Asymmetrical or Informal Balance

Parts of the design are not identical but are equal in visual weight.



Chateau de Chaumont
Saone-et-Loire, France

Balance

Radial Balance

Design elements radiate outward from the center.



Dresden Frauenkirche
Dresden, Germany



Galleria Vittorio Emanuele II
Milan, Italy
Architect: Giuseppe Mengoni

Balance

Vertical Balance

The top and bottom parts are equal.



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Balance

Horizontal Balance

The parts on the left and right sides are equal.



Chi Lin Buddhist Temple and Nunnery
Kowloon City, Hong Kong

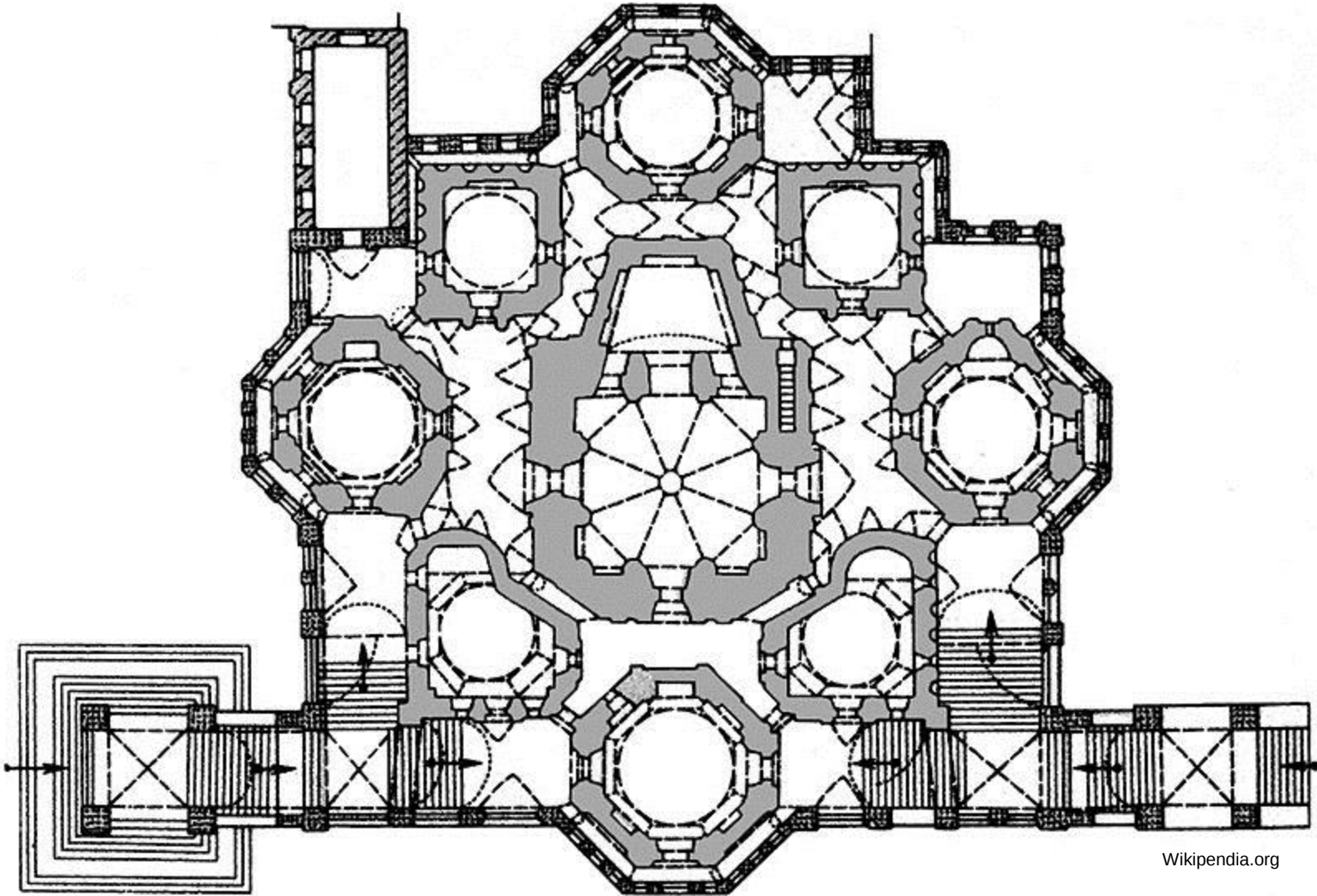


Hearst Castle
San Simeon, CA
Architect: Julia Morgan



Building façade
Limberg, Germany

Balance



Rhythm

Repeated use of line, shape, color, texture or pattern

Types

- Regular rhythm
- Graduated rhythm
- Random rhythm
- Gradated rhythm

Rhythm

Regular Rhythm

An element is repeated at the same repetition/interval each time.

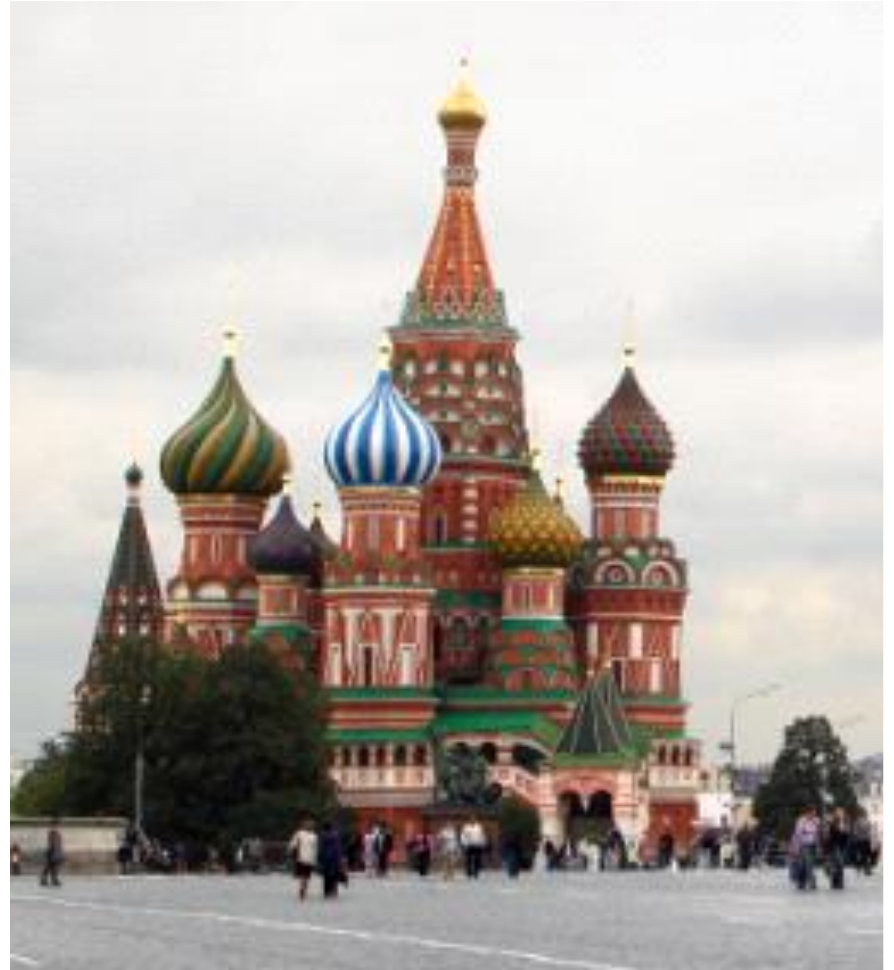


Cube house design
Rotterdam, Netherlands

Rhythm

Random Rhythm

The beats of the element are random or are at irregular intervals.



Rhythm

Gradated Rhythm

The repeated element is identical with the exception of one detail increasing or decreasing gradually with each repetition.



www.wikimedia.org

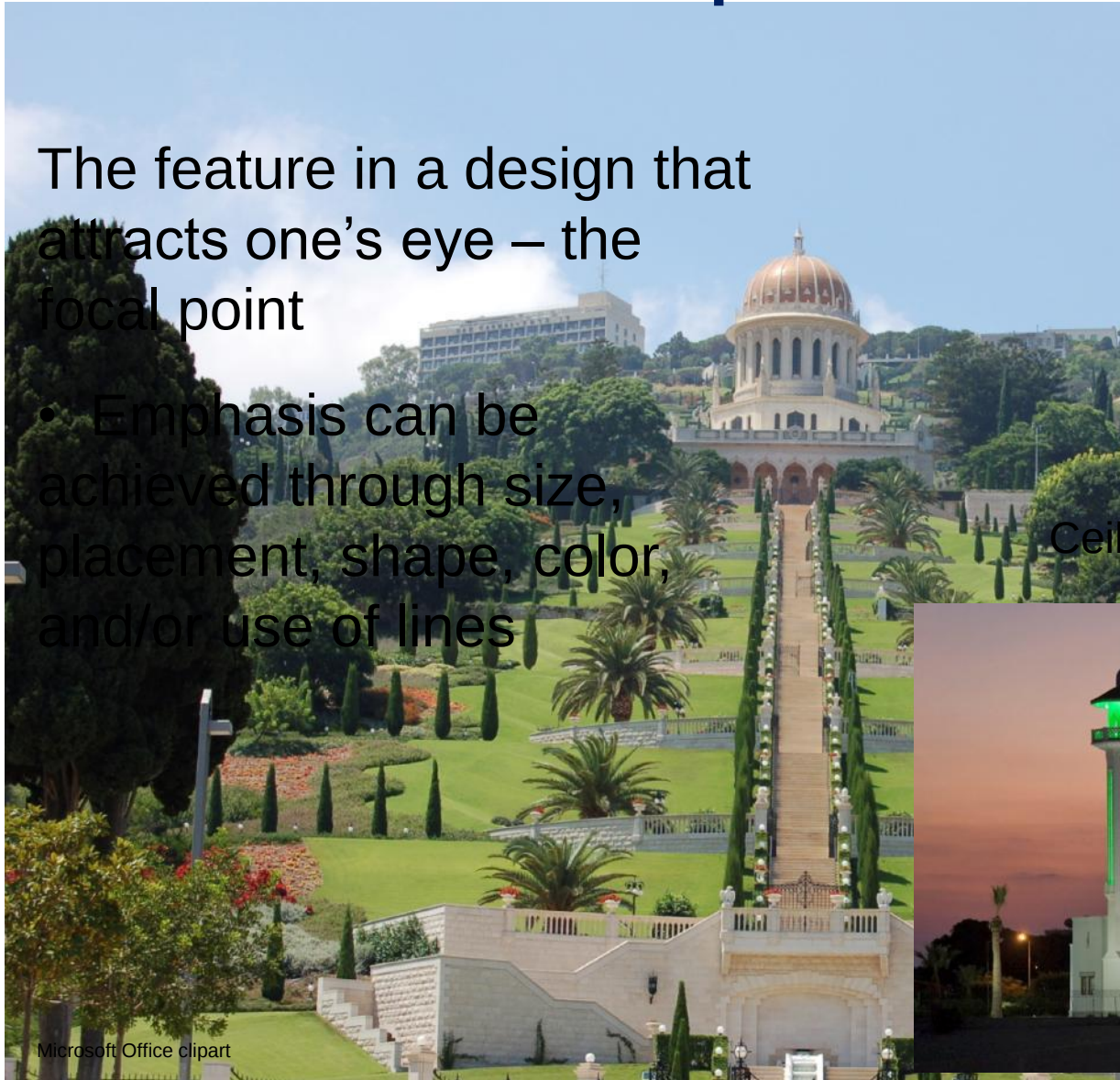


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Emphasis

The feature in a design that attracts one's eye – the focal point

- Emphasis can be achieved through size, placement, shape, color, and/or use of lines



Ceiling mosaic in Park Güell



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Mosque - Egypt

Proportion and Scale

Comparative relationships between elements in a design with respect to size

3:5 ratio is known as the Golden Mean



Movement

Flow or feeling of action



Contrast

Noticeably different

Can be created with

- Color
- Proportion and scale
- Shape
- Texture
- Etc.



Unity

Unity is achieved by the consistent use of lines, color, material, and/or texture within a design.



Unity

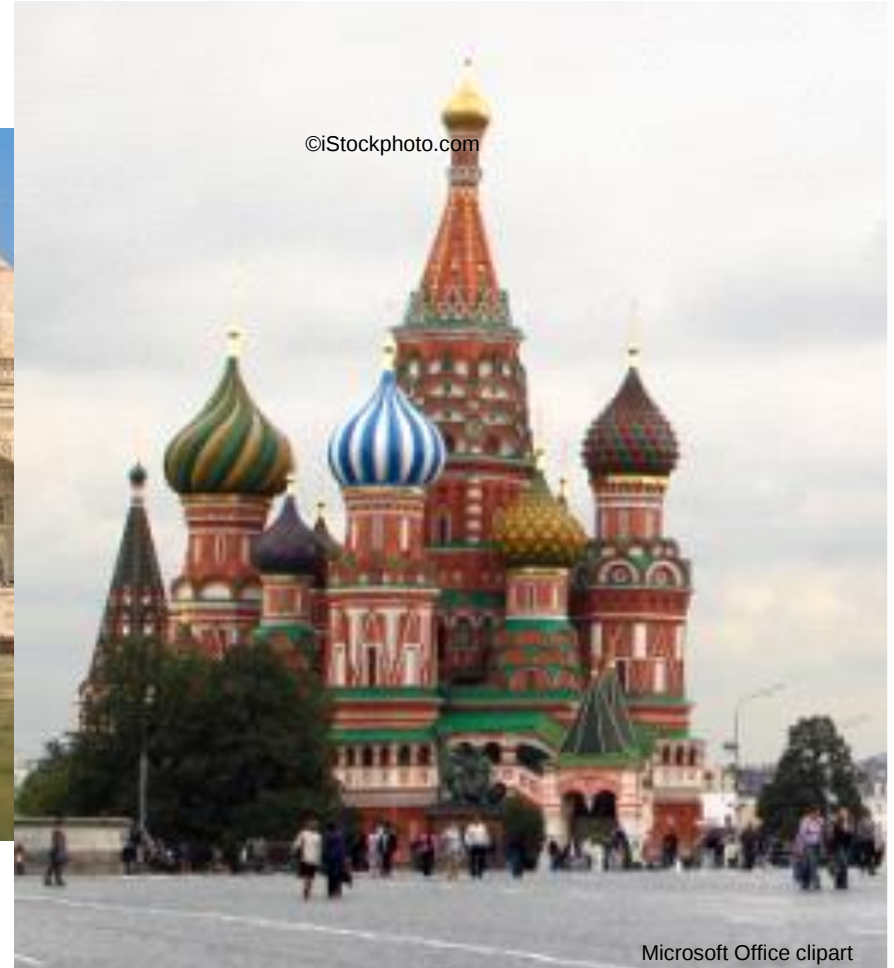


Image Resources

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