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
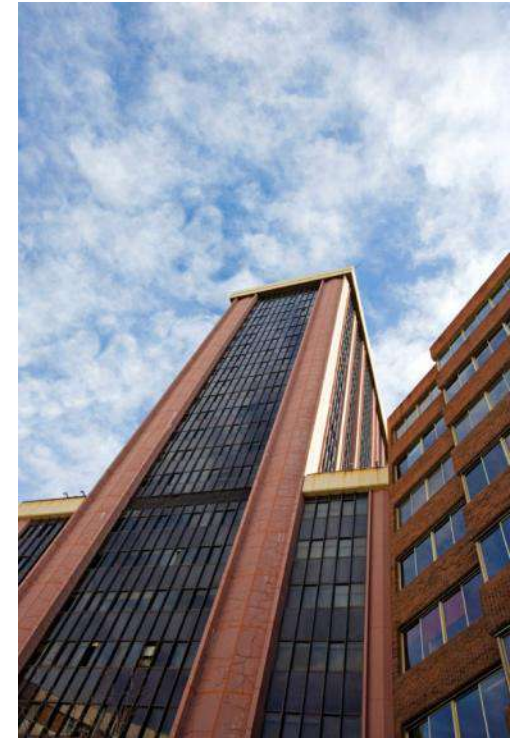
Vertical Lines

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

Brandenburg Gate
Berlin

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Skyscraper
Madrid, Spain

Horizontal Lines

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Wikimedia.org

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

Diagonal Lines

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Curved Lines

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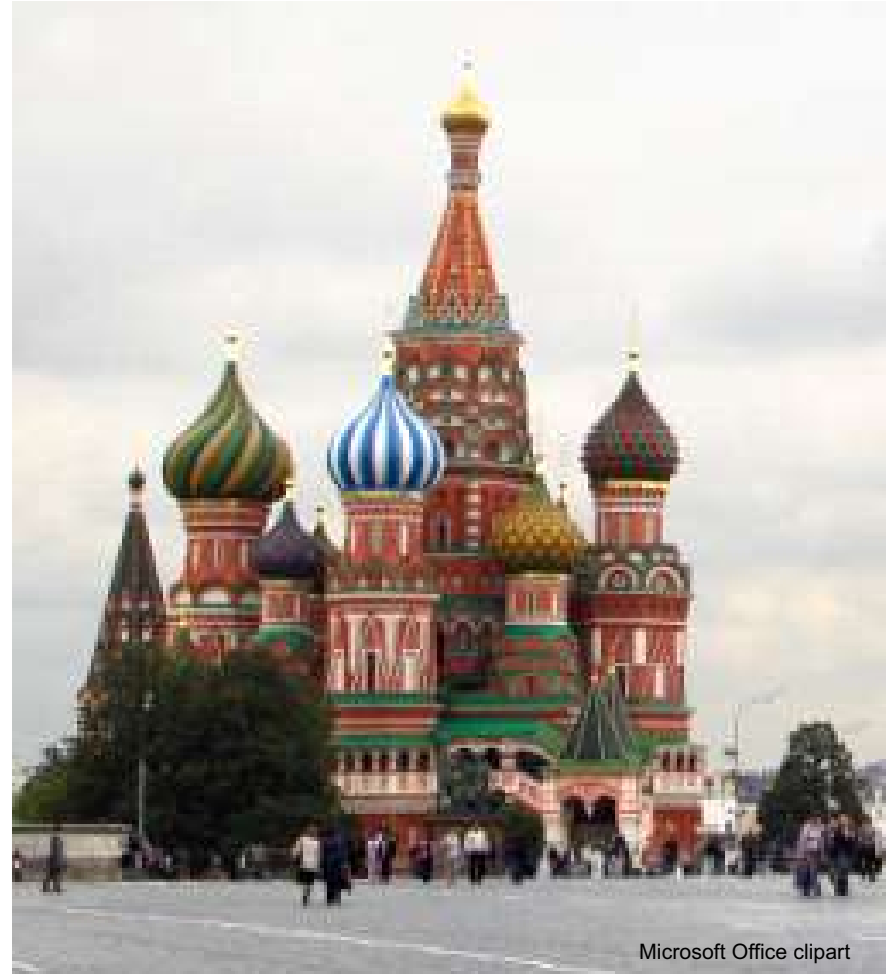
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Sydney Opera House
Jorn Utzon

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

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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

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

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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

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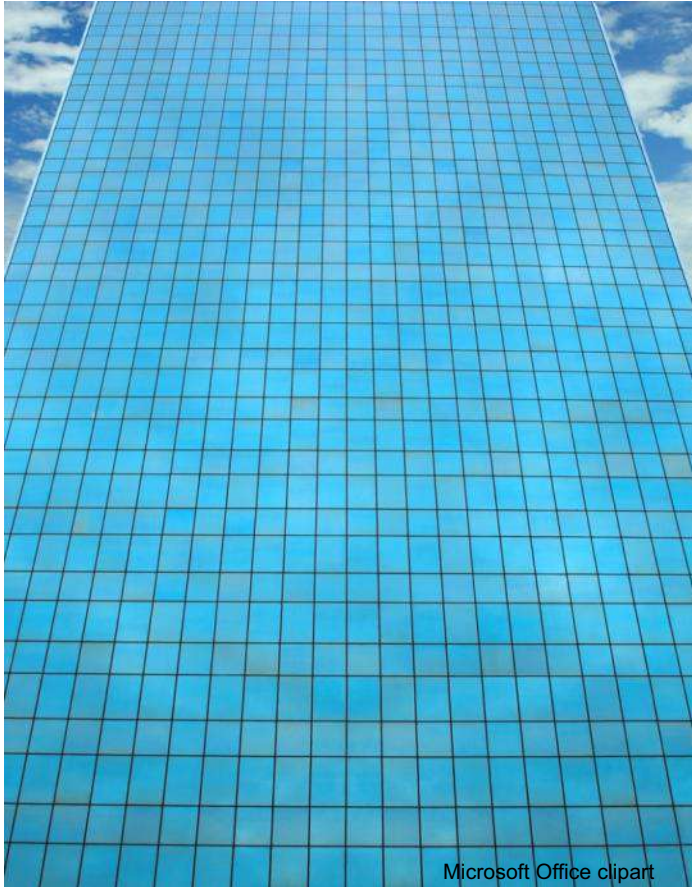
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Texture

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
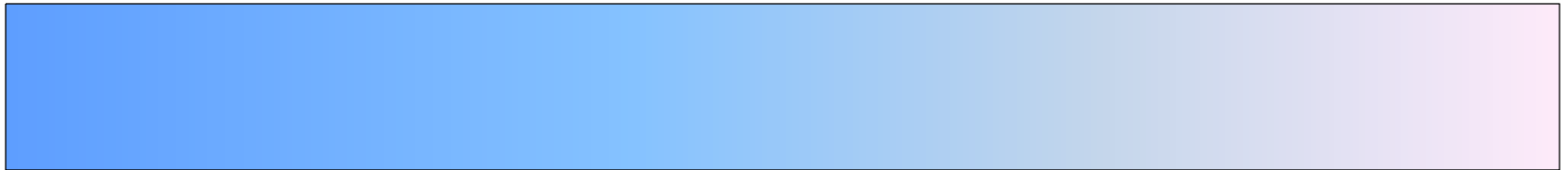
Rough Texture

©iStockphoto.com

Park Guell – Barcelona, Spain
Architect: Antonio Gaudí

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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

©iStockphoto.com

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.

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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.

Wikipedia.org

Chateau de Chaumont
Saone-et-Loire, France

Balance

Radial Balance

Design elements radiate outward from the center.

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Dresden Frauenkirche
Deresden, Germay

Microsoft Office clipart

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.

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Hearst Castle
San Simeon, CA
Architect: Julia Morgan

Chi Lin Buddhist Temple and Nunnery
Kowloon City, Hong Kong

Building façade
Limberg, Germany

Balance

Wikipendia.org
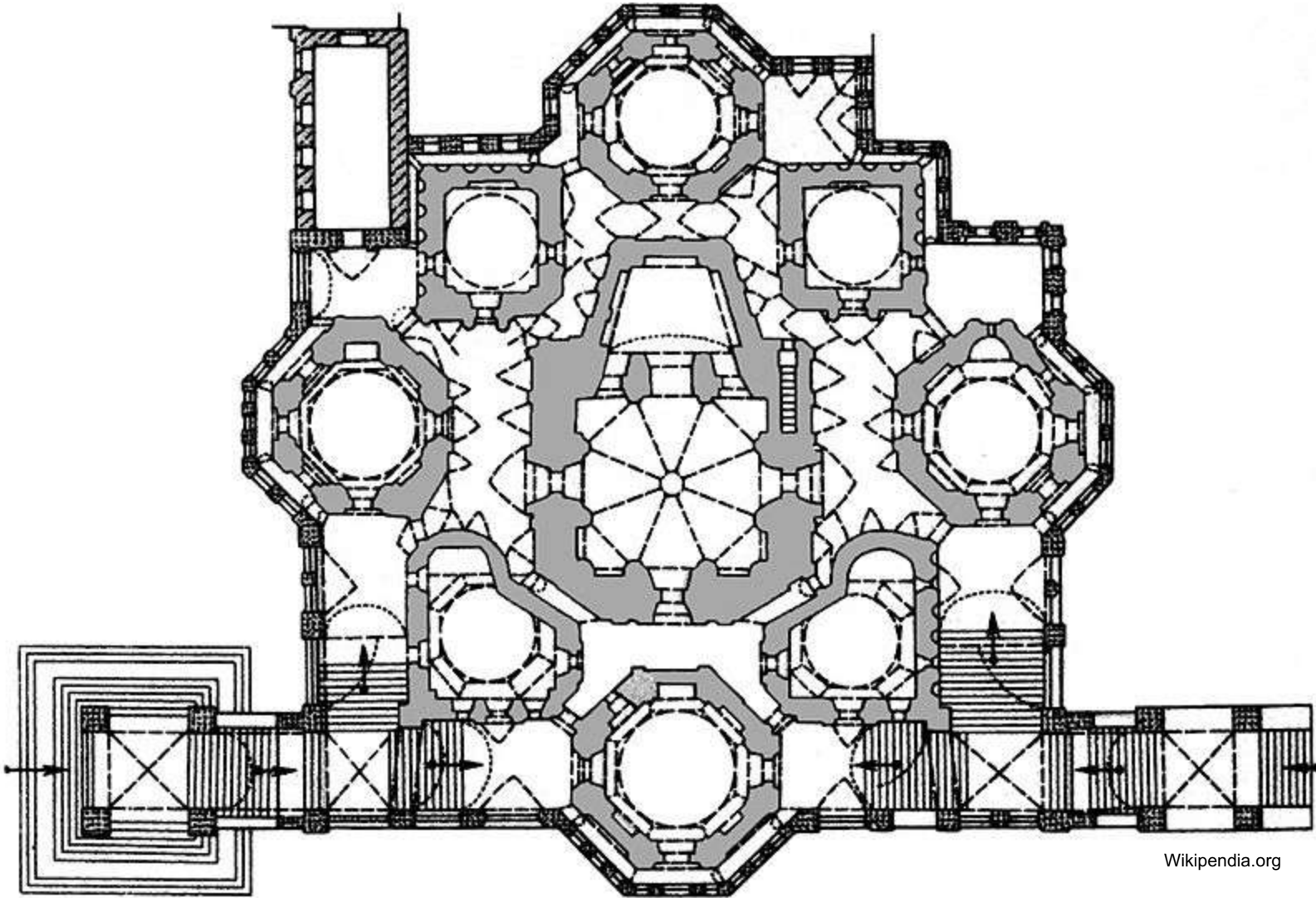
Rhythm
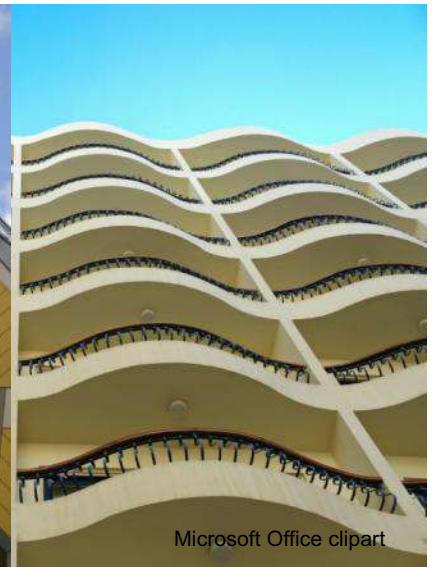
Repeated use of line, shape, color, texture or pattern

Types

- Regular rhythm

- Graduated rhythm

- Random rhythm

- Gradated rhythm

Rhythm

Regular Rhythm

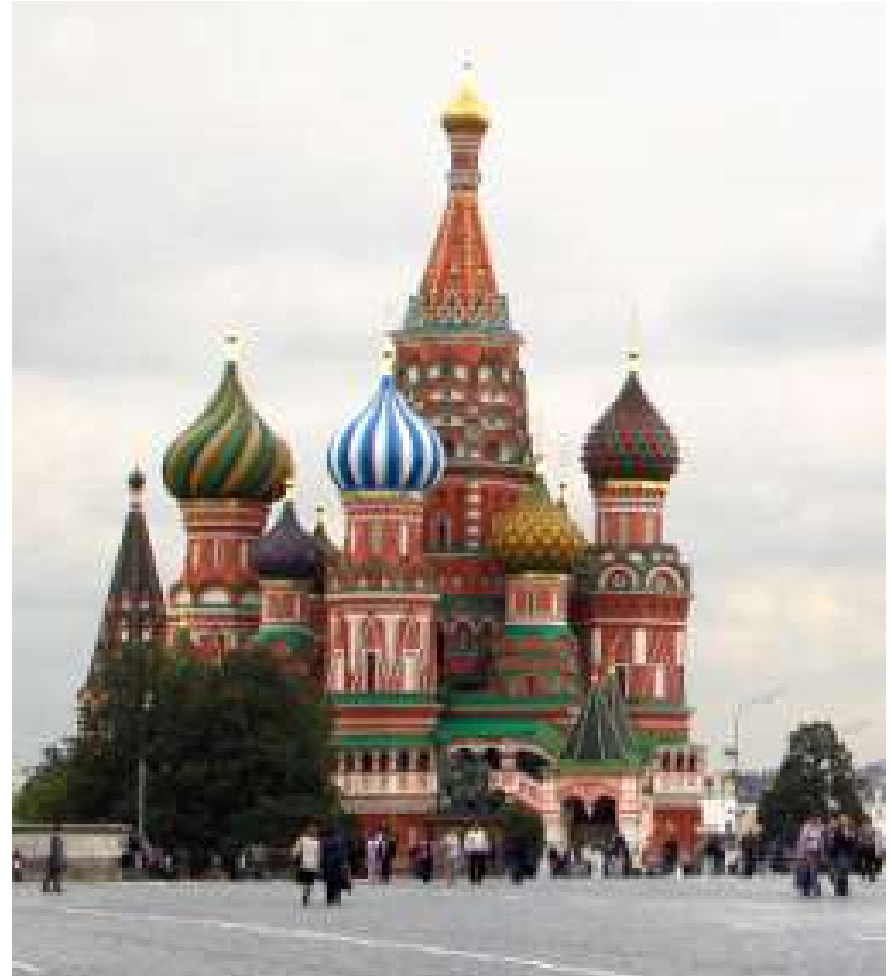An element is repeated at the same repetition/interval each time.

Microsoft Office clipart

Microsoft Office clipart

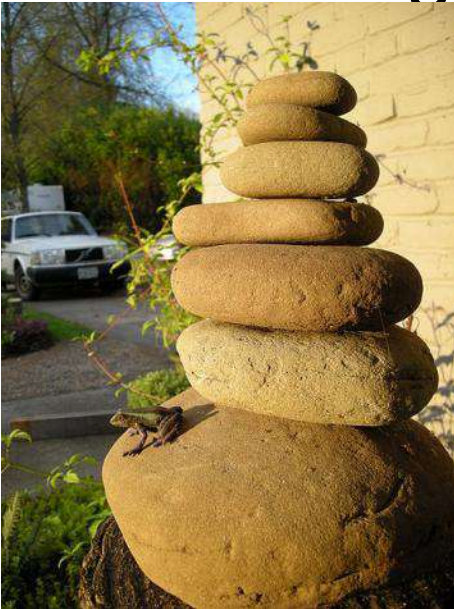Cube house design
Rotterdam, Netherlands

Rhythm

Random Rhythm

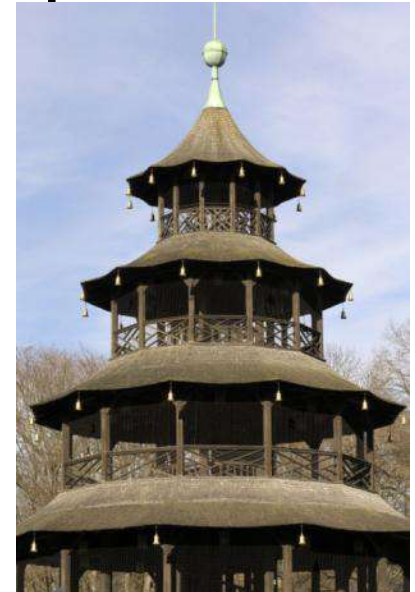The beats of the element are random or are at irregular intervals.

Rhythm

Gradated Rhythm

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

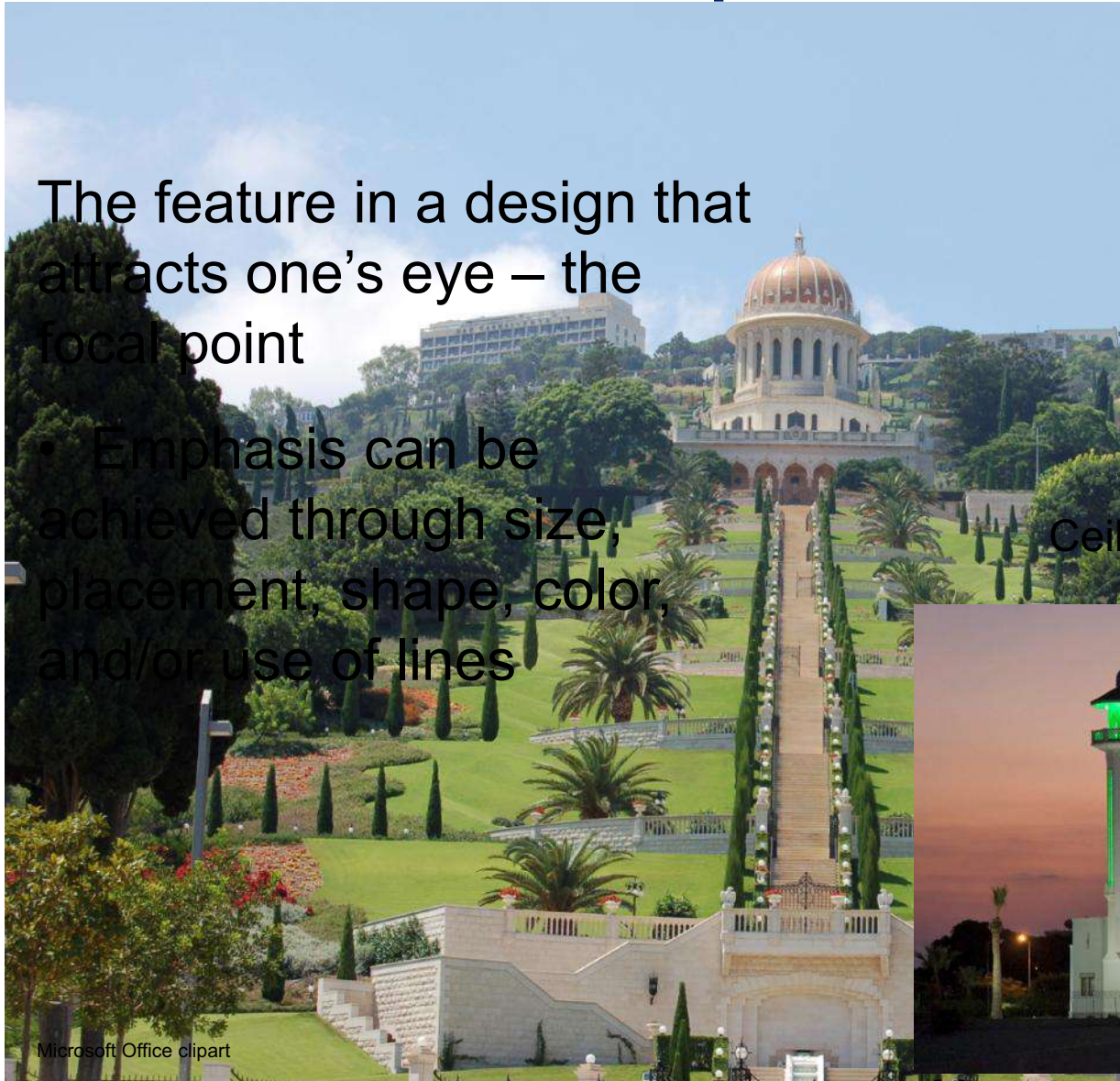Microsoft Office clipart

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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

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Ceiling mosaic in Park Gruell

Microsoft Office clipart

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

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Movement

Flow or feeling of action

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Contrast

Noticeably different

Can be created with

•Color

•Proportion and scale

•Shape

•Texture

•Etc.
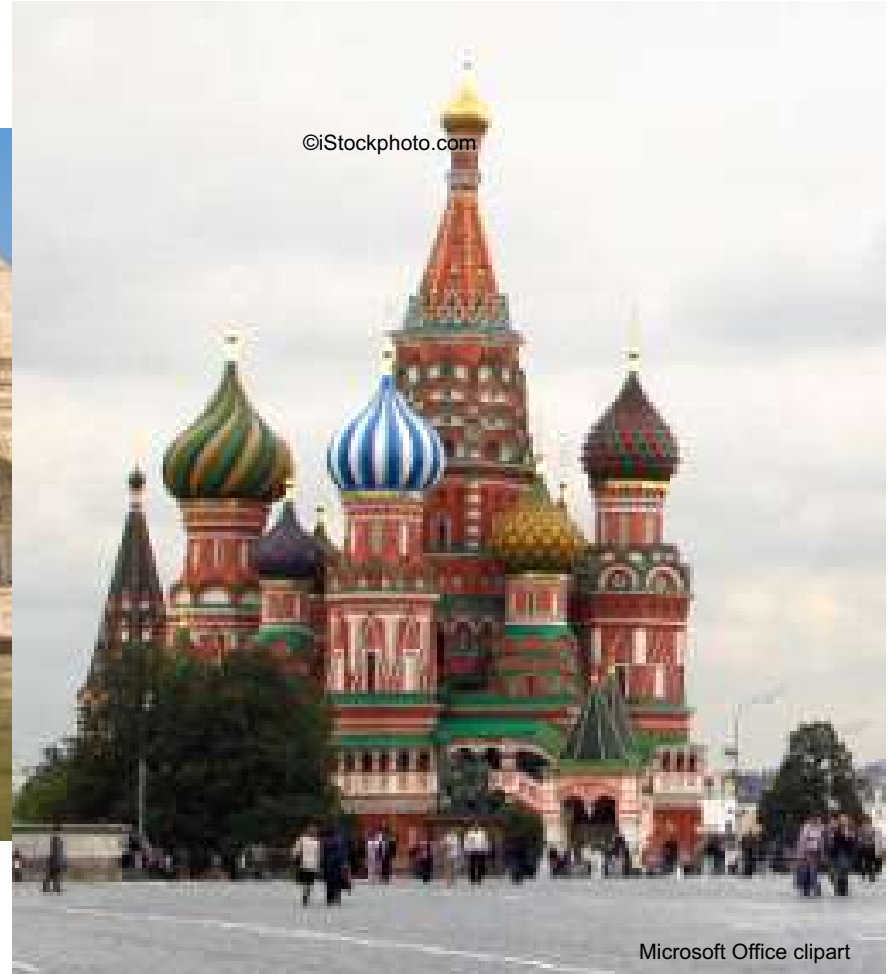
Unity

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

Unity

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Image Resources

Microsoft, Inc. (2008). Clip art. Retrieved January 7, 2009, from http://office. microsoft.com/en-us/clipart/default.aspx

Wikipedia. Retrieved January 7, 2009, from http://en.wikipedia.org

iStockphoto. Retrieved January 7, 2009 from http://www.istockphoto.com/index.php

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Great Buildings. (2009). Retrieved January 7, 2009, from www.greatbuildings.com.

Heart Castle – Hearst San Simeon State Historical Monument. (2009). Retrieved January 7, 2009, from www.hearstcastle.org