

Understanding Form Language

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Overview

- Frameworks of Understanding
 - Gestalt
 - Golden Section
 - Semiotics
 - Visual Form Language Structure
- Form Language "Movements"
 - Biomimicry
 - Industrialization
 - Anthropomorphism
- Some Examples

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Framework of Understanding

Various established ways of characterizing and understanding form language:

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Framework of Understanding: Gestalt

Various established ways of characterizing and understanding form language:

- Psychological term meaning **"unified whole"**
- Theories of **visual perception**, developed by German Psychologists
- Generally refer to two dimensional compositions; can be applied to three dimensions as well.

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Framework of Understanding: Gestalt | Figure/Ground

Birch Vase, Bob Pritchard

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Framework of Understanding: Gestalt | Proximity

Abici Nesting Tables, Tarciso Colzani

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Framework of Understanding: Gestalt | **Equilibrium**



*Eames La Chaise,
Charles and Ray Eames*
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Framework of Understanding: Gestalt | **Isomorphic Correspondence**



*H2 Interior,
Hummer*
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Framework of Understanding: Gestalt | **Closure**



*Rollback Designer Chair,
Unknown*
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Framework of Understanding: Gestalt | **Similarity**



Lego
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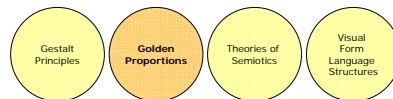
Framework of Understanding: Gestalt | **Whole/Parts**



*85 Lamps,
Rudi Graumanns*
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Framework of Understanding: Golden Proportions

Various established ways of characterizing and understanding form language:



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Framework of Understanding: Golden Proportions

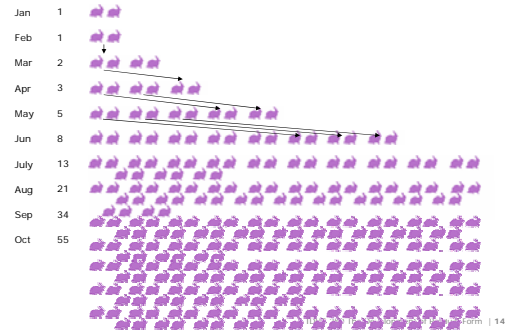
Fibonacci studied rabbits.



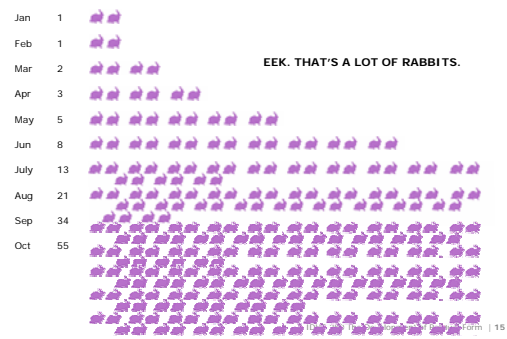
If a male and female rabbit are put in a field,
 And, after one month, they make sweet love,
 So at the end of the second month,
 a female can produce another pair of rabbits,
 And rabbits never die,
 And the female always produces both a male and female,

How many pairs of rabbits are there in one year?

Framework of Understanding: Golden Proportions

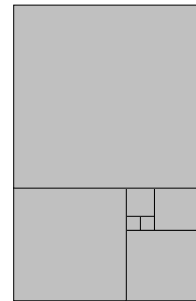


Framework of Understanding: Golden Proportions



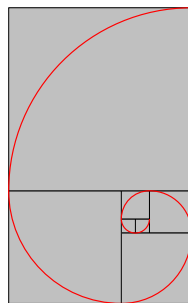
Framework of Understanding: Golden Proportions

- 1 In fact, there are 144 pairs of rabbits after a year.
- 1
- 2
- 3 The sequence of numbers produced is known as the Fibonacci Sequence of Numbers. It goes on forever.
- 5
- 8
- 13 Why should we care?
- 21
- 34 It's a **golden rectangle**.
- 55
- 89
- 144



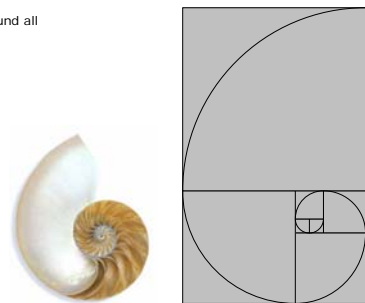
Framework of Understanding: Golden Proportions

- 1 By connecting quarter circles together ..
- 1
- 2 .. we make a curve ..
- 3
- 5 .. known as the Fibonacci spiral.
- 8
- 13
- 21
- 34
- 55
- 89
- 144



Framework of Understanding: Golden Proportions

The Fibonacci spiral is found all around us in nature ..



Framework of Understanding: Golden Proportions

.. and in humans ..

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Framework of Understanding: Golden Proportions

.. and art.

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Framework of Understanding: Golden Proportions

A documented human preference for golden section proportions (and the Fibonacci spiral) - 1:1.618, or roughly 5:8

(Images from Geometry of Design: Studies in Proportion and Composition).

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Framework of Understanding: Golden Proportions

A documented human preference for golden section proportions (and the Fibonacci spiral) - 1:1.618, or roughly 5:8

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Framework of Understanding: Golden Proportions

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Framework of Understanding: Theories of Semiotics

Various established ways of characterizing and understanding form language:

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Framework of Understanding: Theories of Semiotics

Semiotics is the **study of signs**.

What is a "sign" (What does it mean to signify something)?


Signs:

1. Carry meaning
2. Usually communicate the meaning
3. Use "codes" to help communicate meaning and values
 - The name of the Item
 - The body movements necessary to use the Item
 - The preferences for an item over another item

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Framework of Understanding: Theories of Semiotics

Consider this Item as a "sign":

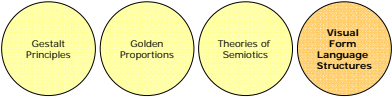


- It has a name
What relevance does the name have?
- It has meaning
How is meaning different than function?
- It has cultural connotations and connections
What does it mean to have an iPod? How is it different than having a Walkman?

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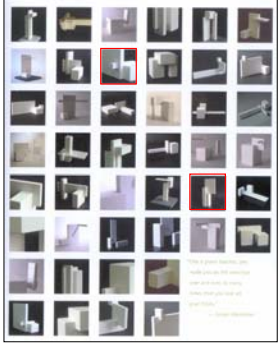
Framework of Understanding: Visual Form Language Structures

Various established ways of characterizing and understanding form language:



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Framework of Understanding: Visual Form Language Structures



Describe what you see. Can you? Why or why not?


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Framework of Understanding: Visual Form Language Structures



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Framework of Understanding: Visual Form Language Structures



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Framework of Understanding: Visual Form Language Structures



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Form Language "Movements"

Trends are usually identified "after the fact":

- Biomimicry
- Industrialization
- Anthropomorphism

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Form Language "Movements" : Biomimicry

(also referred to as Bionics)

To study nature and then imitate or take inspiration from these natural designs

- Not just related to form
- System approach
- Complex problem solving via evolution

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Form Language "Movements" : Biomimicry



Birdhouse gourd

Chiasso Vera Vase, 2005

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Form Language "Movements" : Biomimicry



Black may beetle

Beetle Cabriolet Prototype, 1948

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Form Language "Movements" : Industrialization

What does the word "Industrial" in "Industrial Design" actually refer to?

- Roots of our field in the Industrial Revolution
- Mechanical (ie, analog) nature of many products
- Mass production, etc

Industrialization refers to the form (and often material) characteristics that make a product seem **technologically advanced**

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Form Language "Movements" : Industrialization



Apple G5 Tower, 2005

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Form Language "Movements" : Industrialization



Avante Elite Toaster Oven, 2005

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Form Language "Movements" : Industrialization



Porter-Cable 12 Volt Drill, 2004

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Form Language "Movements" : Anthropomorphism

Psychological process, **assigning real-life (human or animal) characteristics to inanimate objects.**

- Making things familiar
- Keeping things the same
- Reflecting product attributes
- Projecting human values

People do this naturally: designers can also encourage people to do this.

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Form Language "Movements" : Anthropomorphism



Toaster, Philips By Alessi Workshop, Alessandro Mendini, 1994

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Form Language "Movements" : Anthropomorphism



Electric Water Kettle, Philips By Alessi Workshop, Alessandro Mendini, 1994

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Form Language "Movements" : Anthropomorphism



Serie Stelline, Etam, Allessandro Mendini, 1987



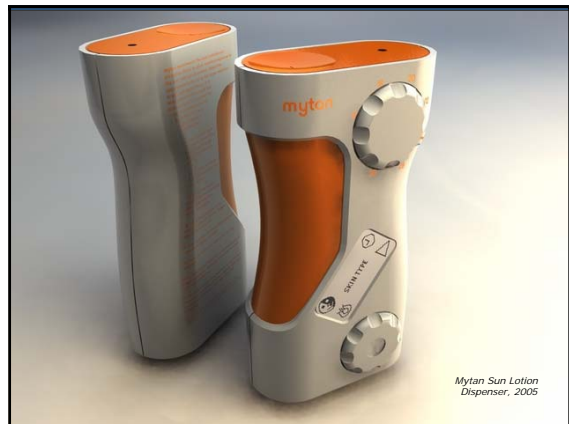
Sirfo, Allessandro Mendini, 1986

Some Examples

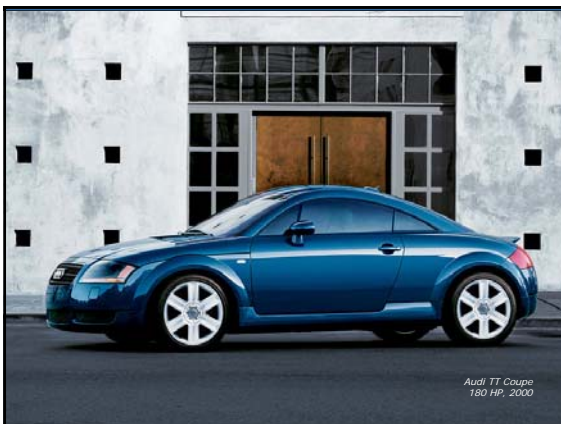
Consider the vocabulary you would use to describe the following products ...



Xcute DV1 Cellular Telephone, 2005



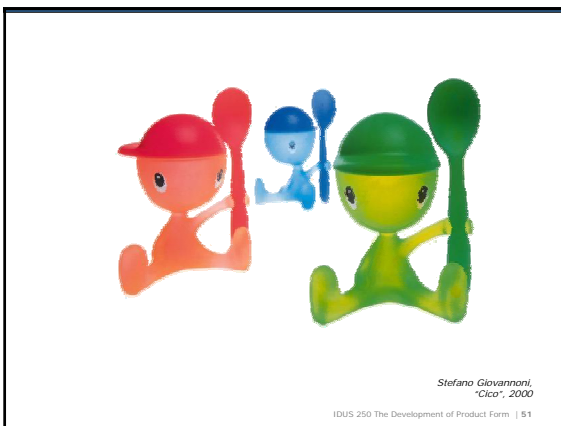
Mytan Sun Lotion Dispenser, 2005



Audi TT Coupe 180 HP, 2000



Hug Salt and Pepper Shakers, Alberto Mantilla, 2002



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