

# 2.744



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# Form



Woodie Flowers

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# Giving



Charles Dumont

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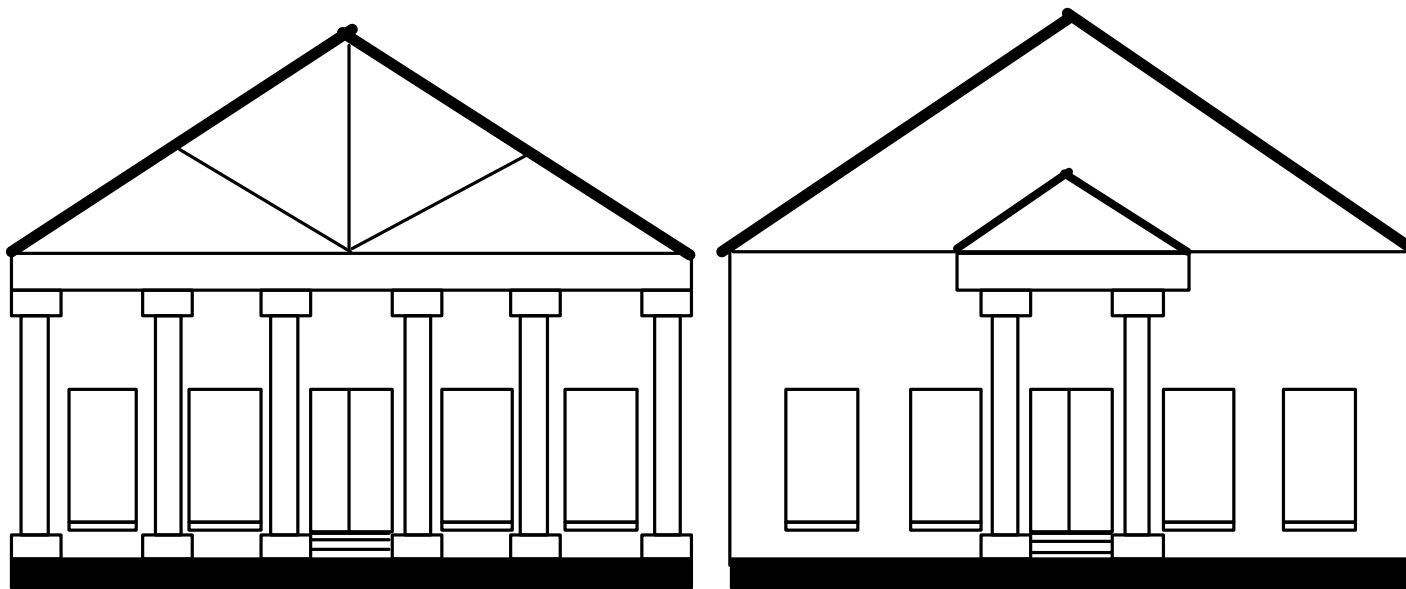
Jacob Wronski

[wronski@mit.edu](mailto:wronski@mit.edu)

**Form is Function**

# Form Follows Function

Louis Sullivan







○ **Look here**

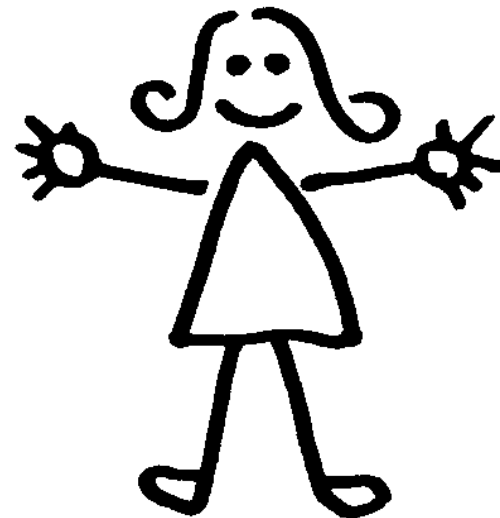
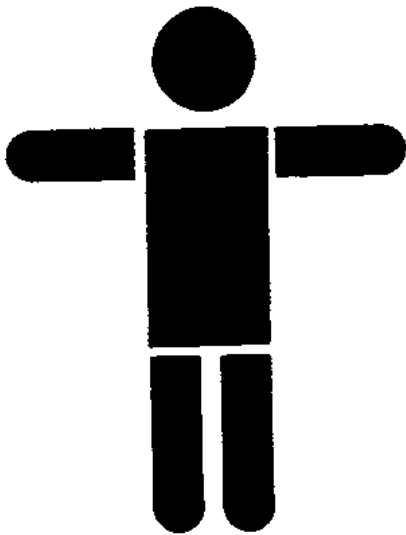
Released this month in Japan is Sharp's handy and very elegant microscope, the YH-750M, designed to replace costly and clumier equipment used in medicine, industry and education. This hand unit and a processor are wired up to a monitor which displays whatever the 'scope is pointed at, magnified 50 times. An IC memory in a small control unit retains up to three images for display later.

# Form Follows Function

Tips for *designing* form

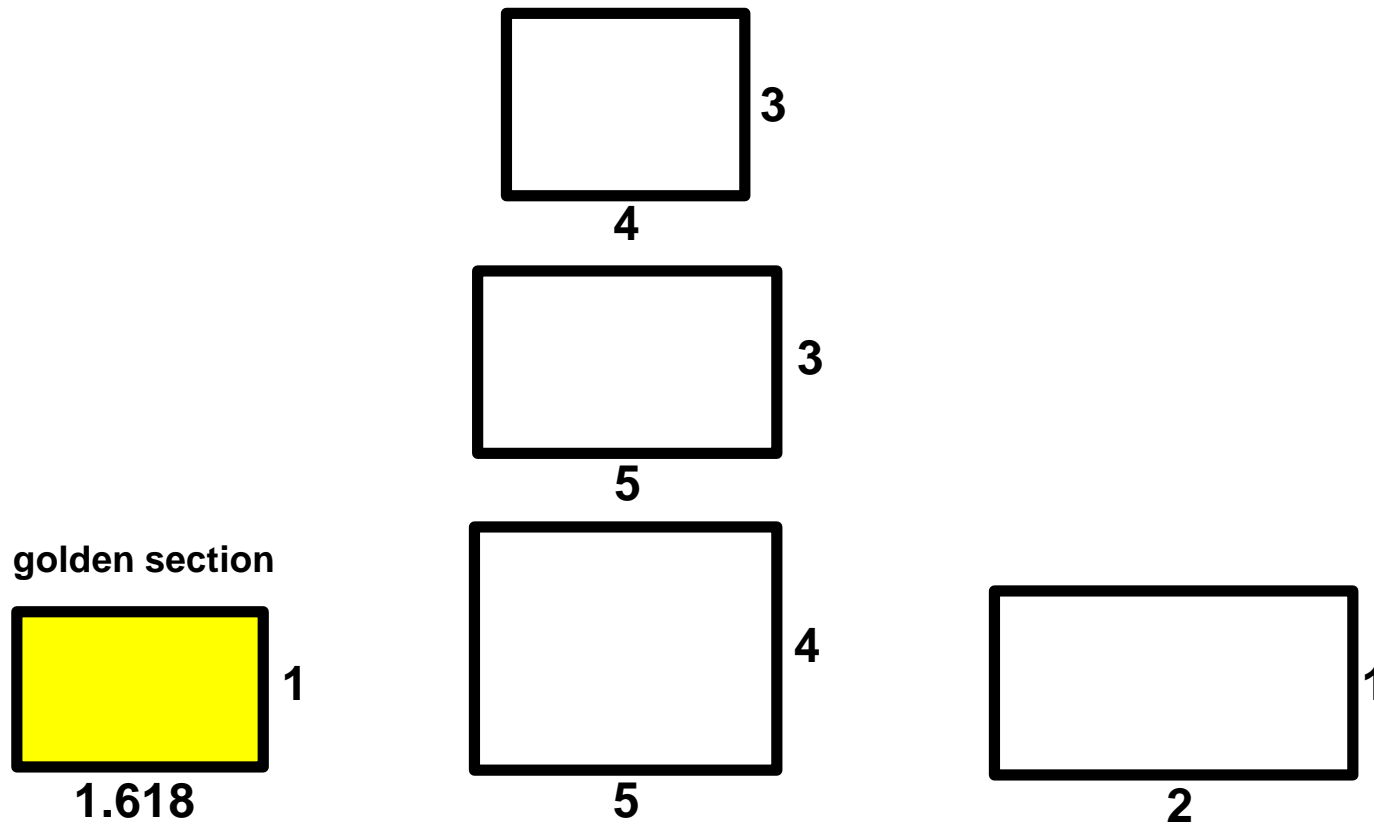
Structural Principles

vs styling



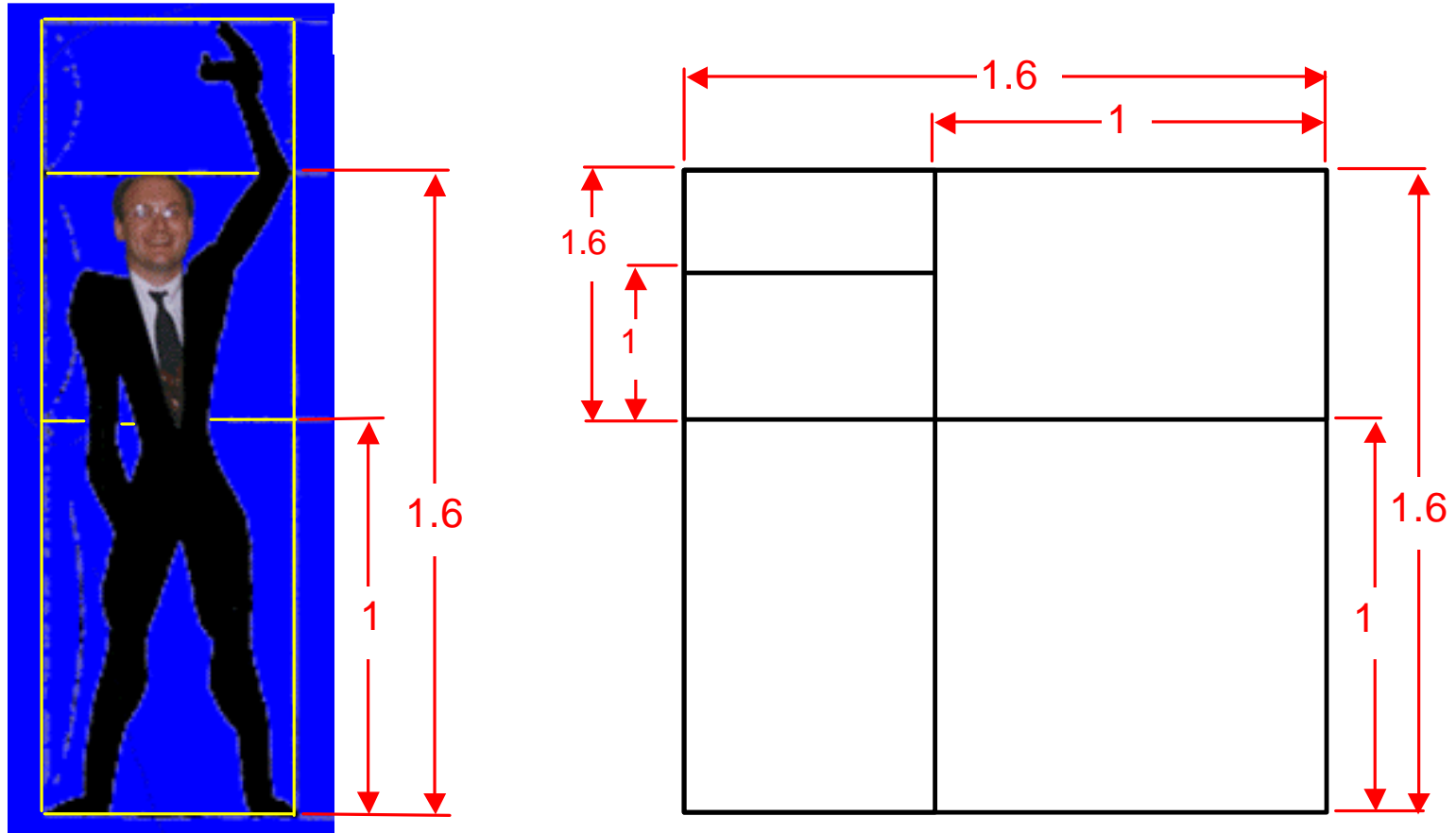
# Structural Principles

## Proportion



# Consistency of Proportion

Le Modulor: Corbusier



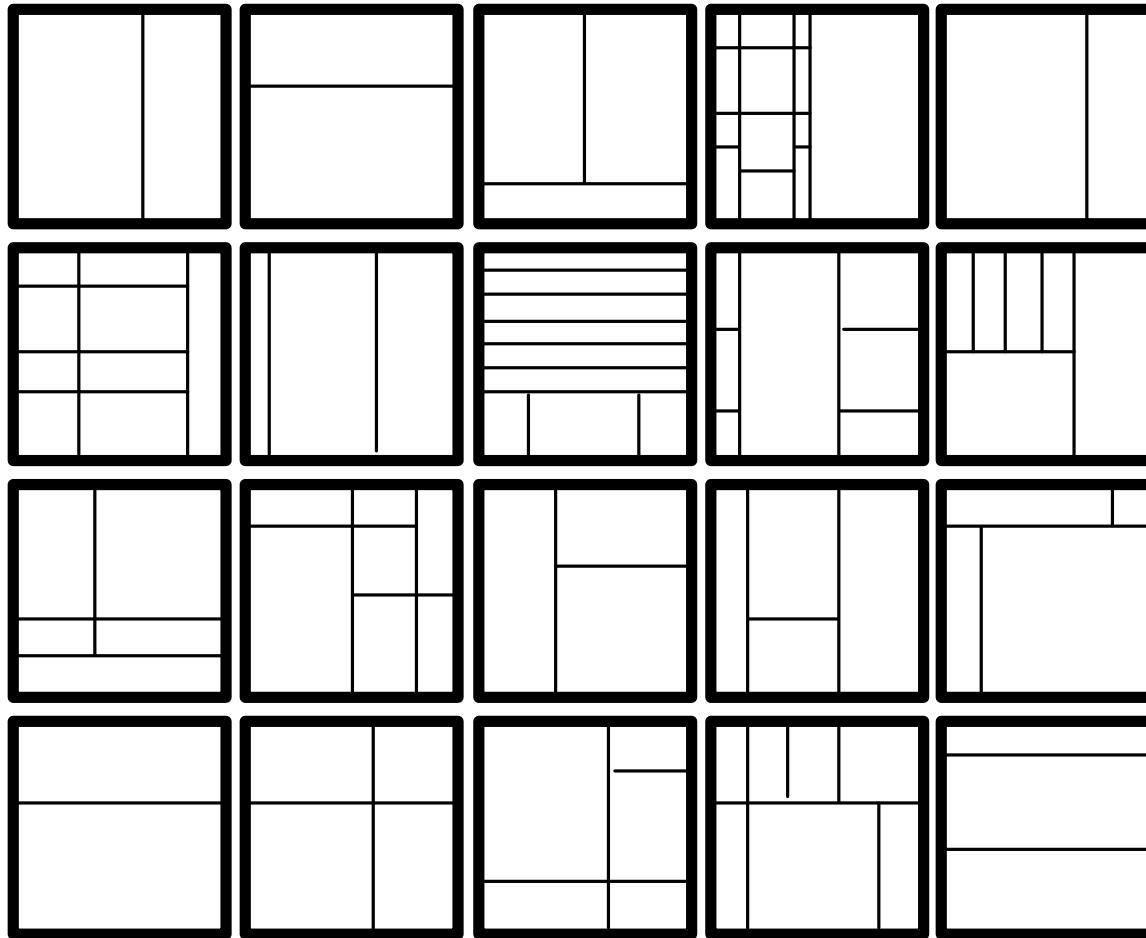
Fundamental Unit = 1 Wallydraigle = 1.18 m

Fundamental Number = 1.6 Wallydraigles



# Consistency of Proportion

## Combinatorial panel exercises









# Structural Properties

## Principle directions

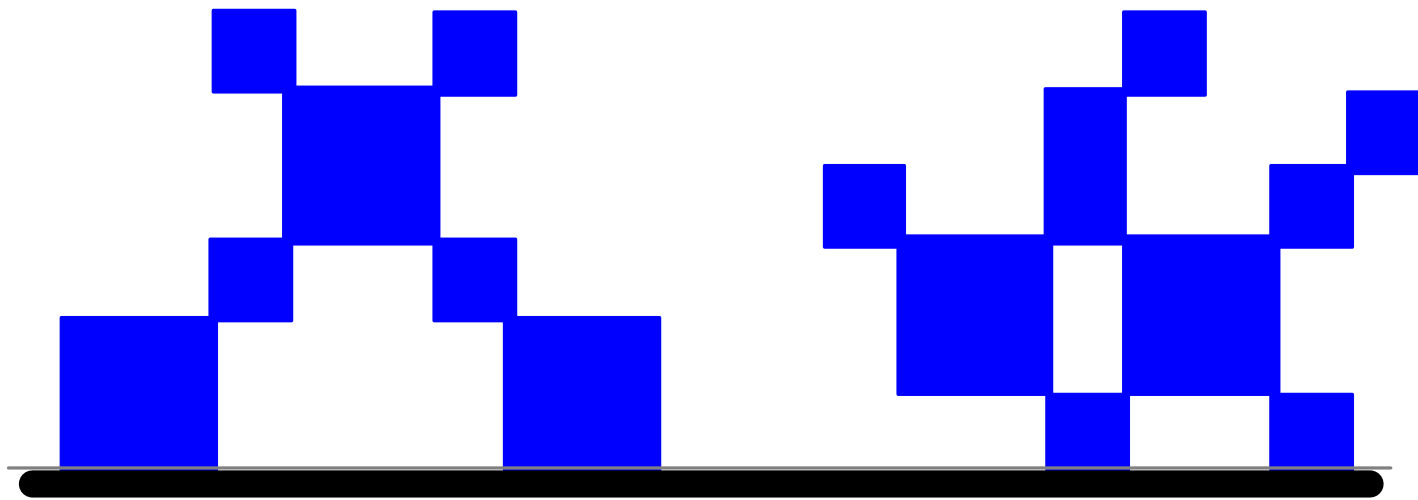


perception of width and height



# Structural Principles

## Visual balance

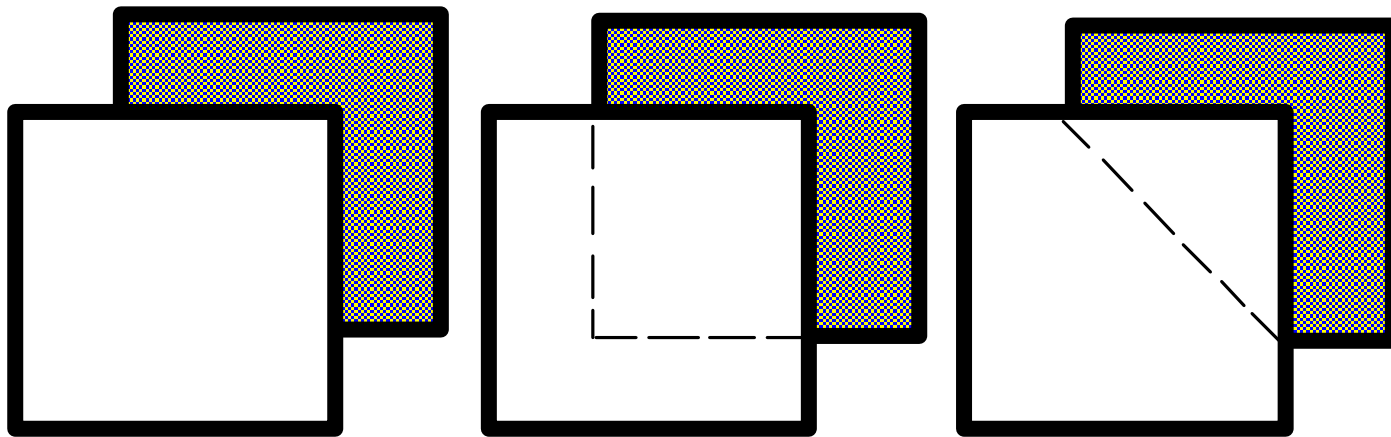






# Perception

## Principle of Pragnanz



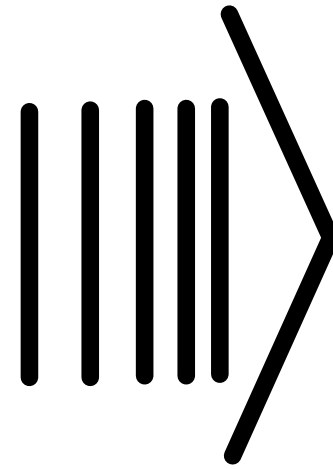
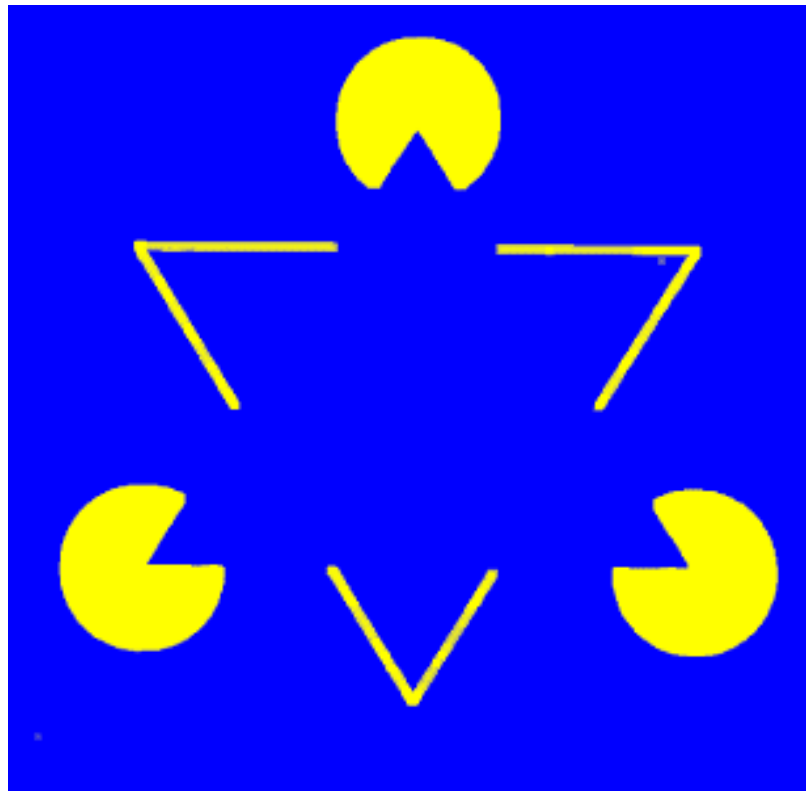
# Principle of Pragnanz

Example



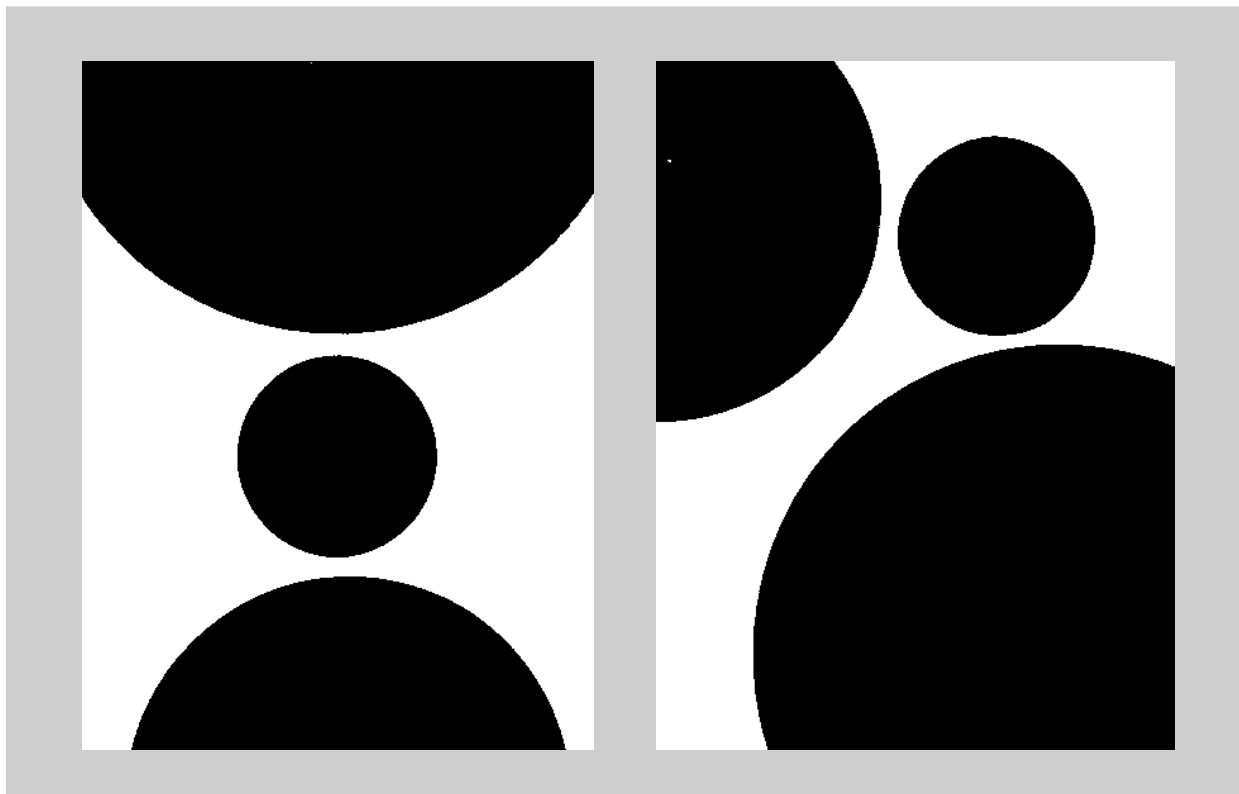
# Principle of Pragnanz

Positive/negative space



# Form Design

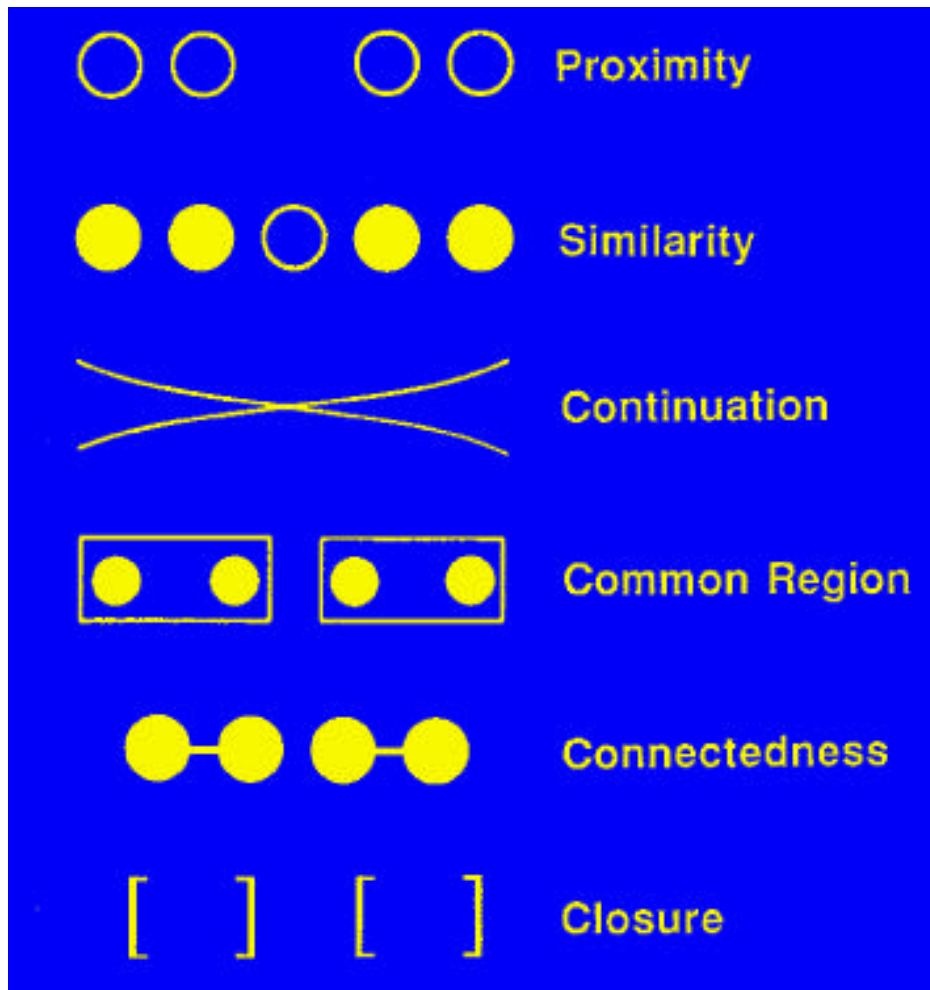
Balanced positive/negative space





# Grouping Laws

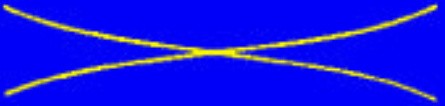
Simplify using the principle of Pragnanz



○ ○ ○ ○ Proximity




Proximity  
Similarity  
Continuation  
Common region  
Connectedness  
Closure

 Continuation



- Proximity
- Similarity
- Continuation
- Common region
- Connectedness
- Closure

 Similarity



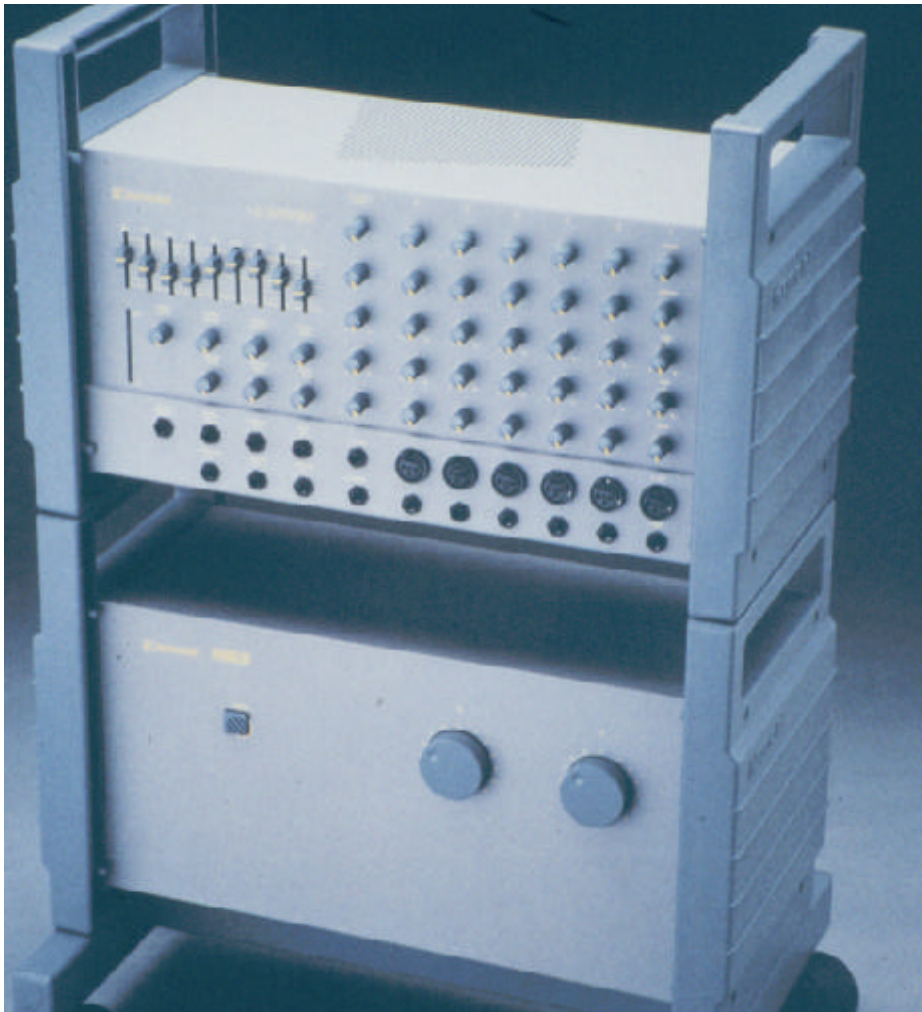


## Connectedness



Proximity  
Similarity  
Continuation  
Common region  
Connectedness  
Closure

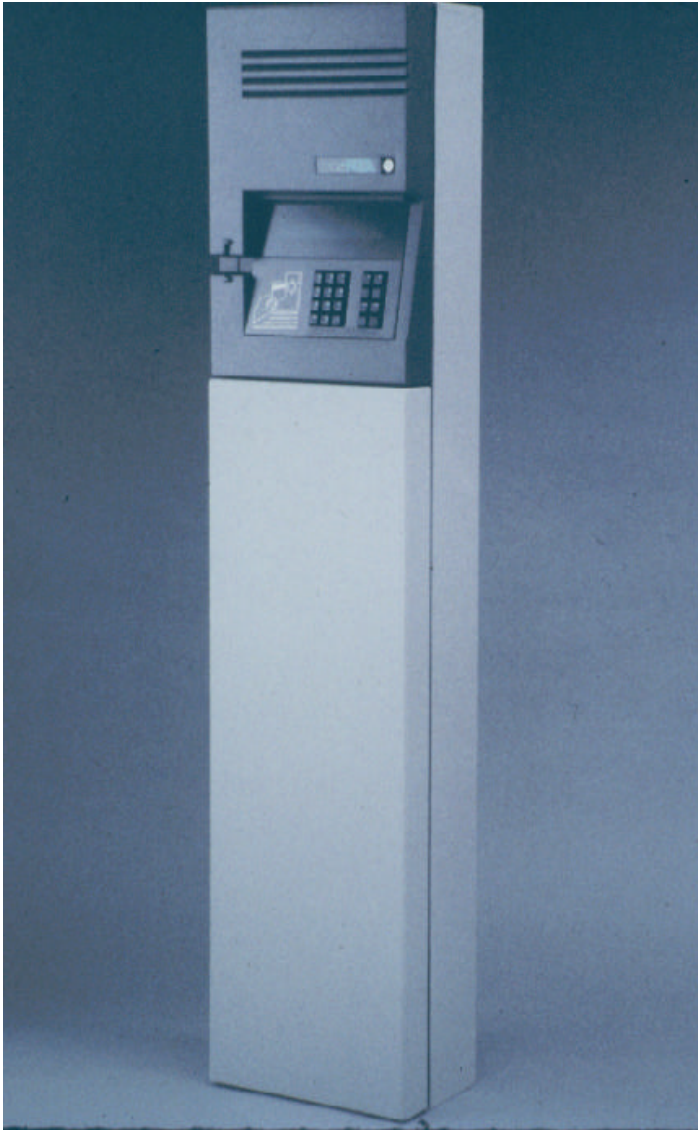
● ● ○ ● ● Similarity



Proximity  
Similarity  
Continuation  
Common region  
Connectedness  
Closure

□ ● ● □ ● ● Common Region

[ ] [ ] Closure



Proximity  
Similarity  
Continuation  
Common region  
Connectedness  
Closure

[ ] [ ] Closure



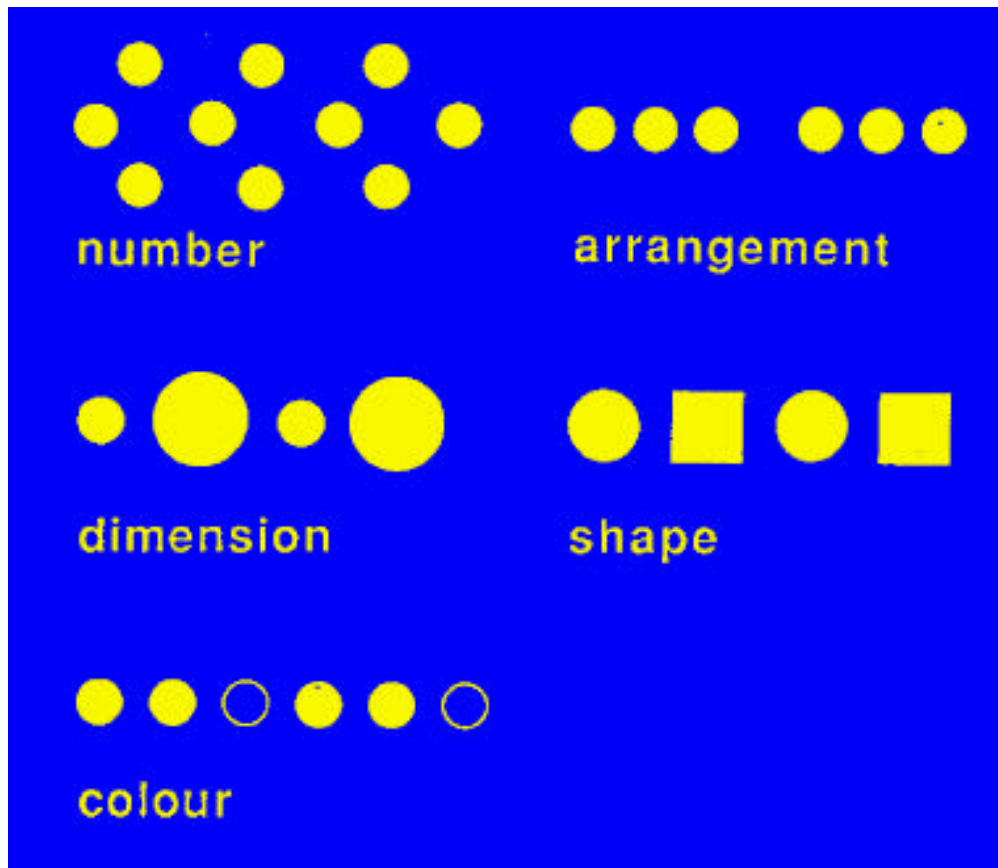
Proximity  
Similarity  
Continuation  
Common region  
Connectedness  
Closure

● ● ○ ● ● Similarity

○ ○ ○ ○ Proximity

# Structure Principles

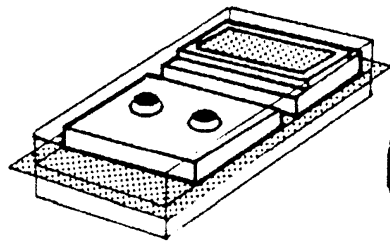
## Theme rhythms



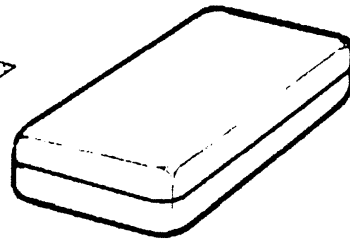
unity  
predictability  
interest

# Form Giving Process

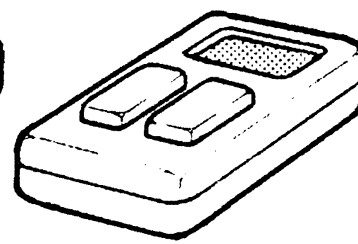
## Organization and styling



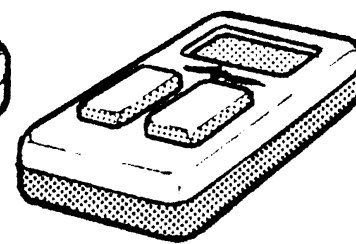
Organization



Surface



Detail

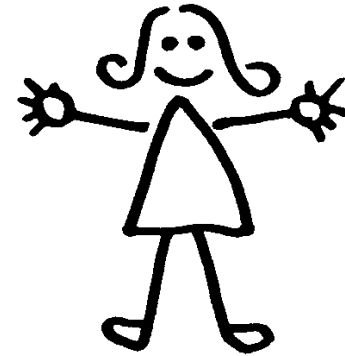


Graphics

# Styles

Coherent shape vocabulary

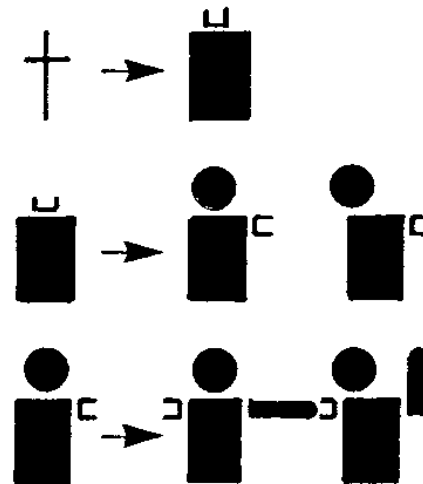
styled shapes



Primitives  
(alphabet)



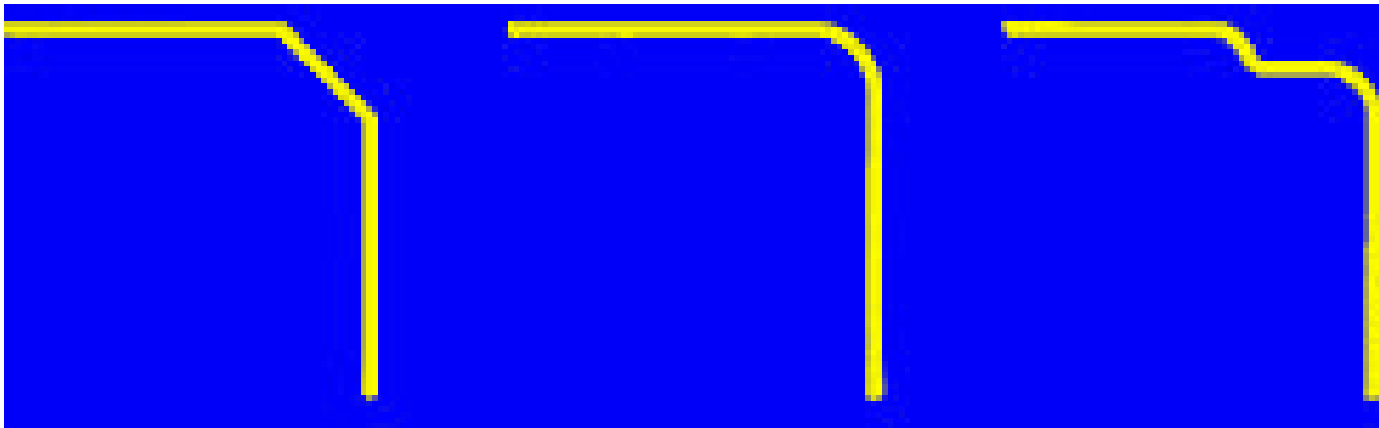
Non-terminal  
characters



Re-write rules

# Styles

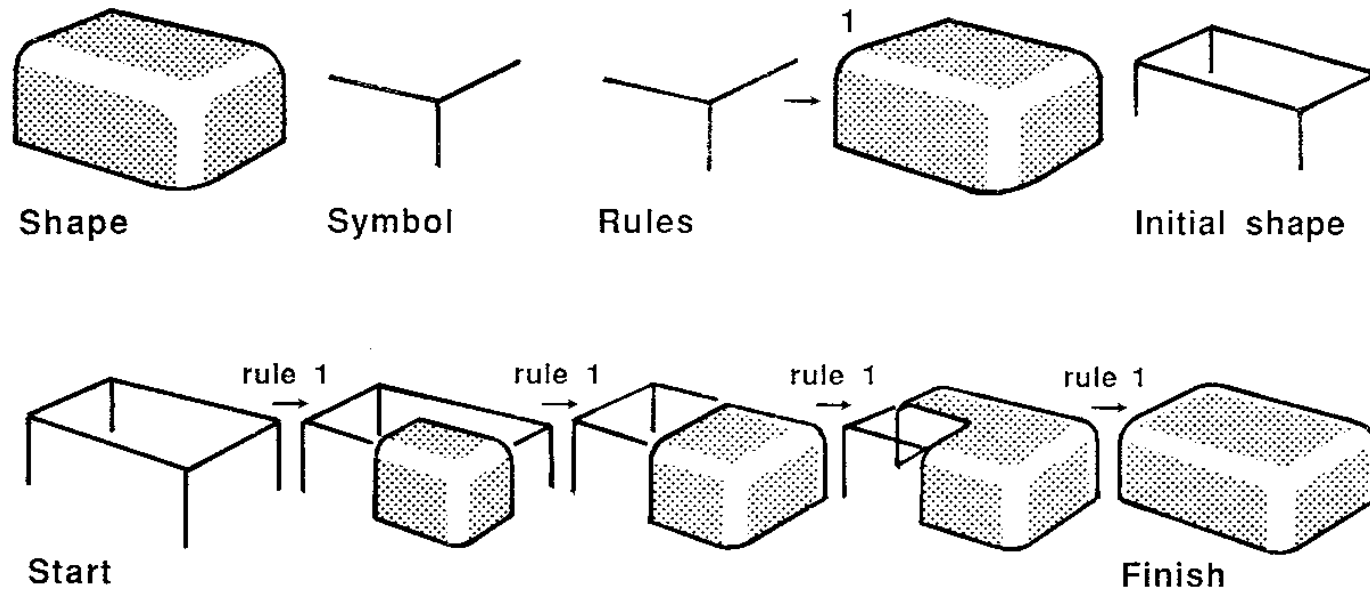
Characteristic corner details





# Styles

## Systematic application of details



# Form Giving

Organization principles but...

Observe

Illusions are commonplace

actual geometry



perceived geometry

