

# Architectural Theory

*All photographs by J. Wunderlich unless noted otherwise*

J. Wunderlich PhD

B.S. Architectural Engineering (U. Texas)

*Plus 2 years of Urban Design (U. California, San Diego)*

# Agenda

- *Architectural vocabulary*
- *Some personal designs*

# Architectural Vocabulary

- Form
- Scale
- Behavior
- Context
- Proportion
- Balance
- Symbolism
- Tastes
- Anthropomorphism
- Color
- Texture
- Rhythm

# Form

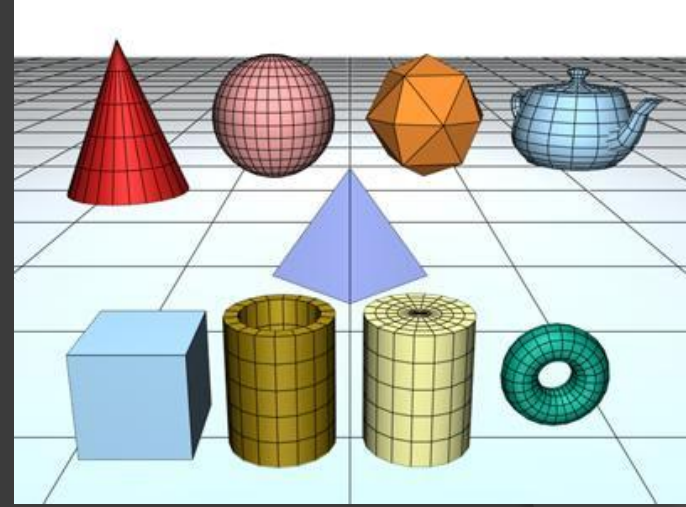
- ◉ Recently in the U.S. and many developing countries we accept geometric shapes with sharp edges
- ◉ In the past, Euclidian (columns, domes) were more accepted
- ◉ Louis Sullivan, and later Frank Lloyd Wright and various Modern Architects would say,

*“Form follows function.”*

However Frank Lloyd Wright said:

*“Form follows function - that has been misunderstood. Form and function should be one, joined in a spiritual union.”*

We will discuss later Frank Lloyd Wright's inspirations from Japan, and the development of his “Organic Architecture”



# Scale

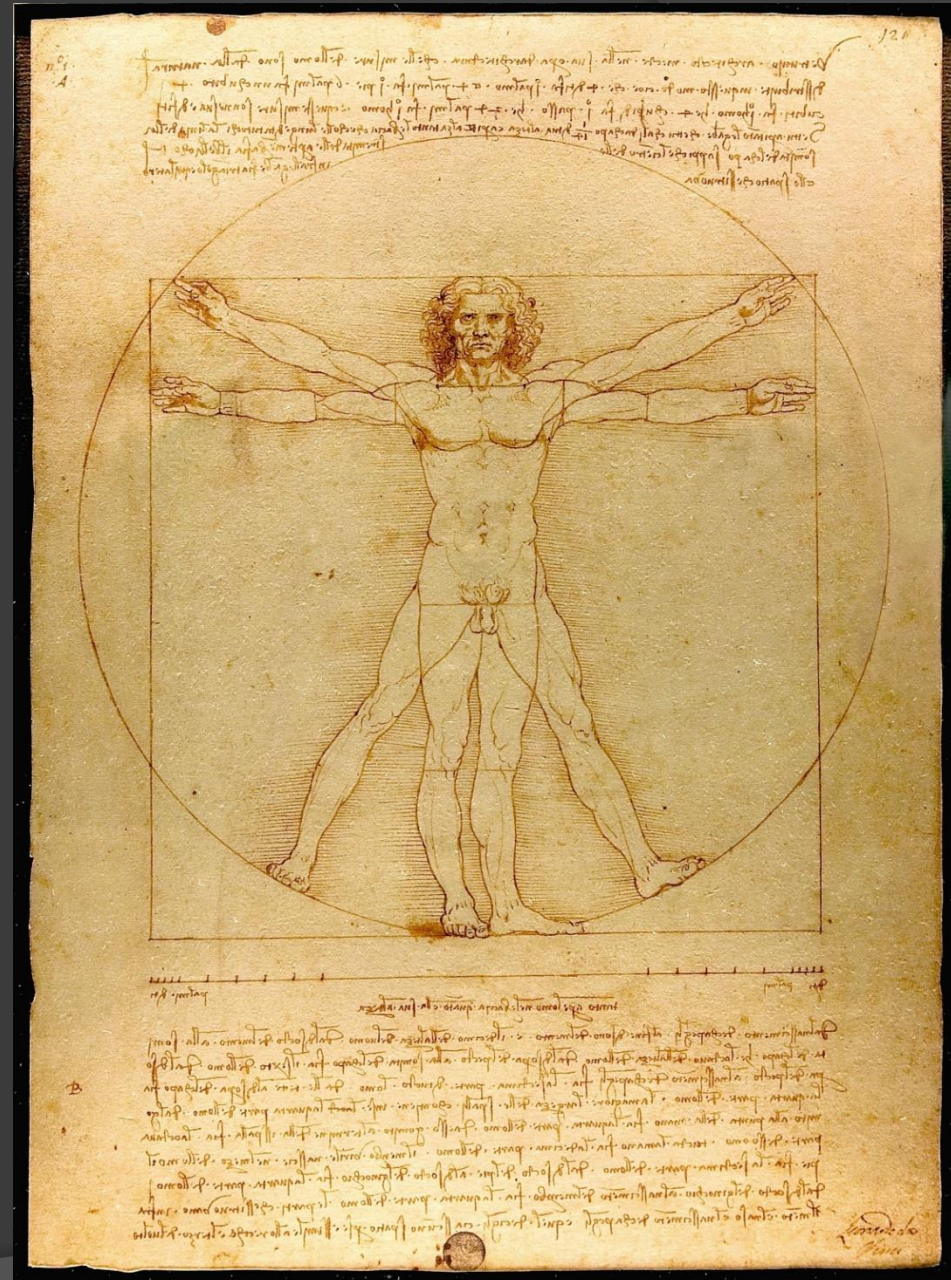
- Architecture may relate to the scale of humans
  - If not, architecture may be
    - Monumental, impressive
    - Intimidating, frightening
  - Columns on building can give illusion of scale
  - Surroundings and adjacent buildings can scale-up or scale-down a building



# Behavior

## ● Bodies create space

- Activities
  - Ergonomics
- Group interactions
- Beliefs
- Movement through spaces
- Flow - interior to exterior
  - Bank of widows and French doors invite outside in



# Context

- ⦿ Architecture can be an expression of a time
- ⦿ Can relate to other buildings
- ⦿ Can relate to land
- ⦿ Be “Organic” !



Photograph by other



Photograph by other





Photograph by other

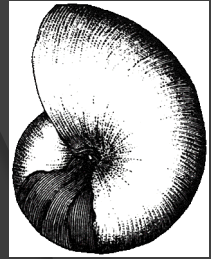


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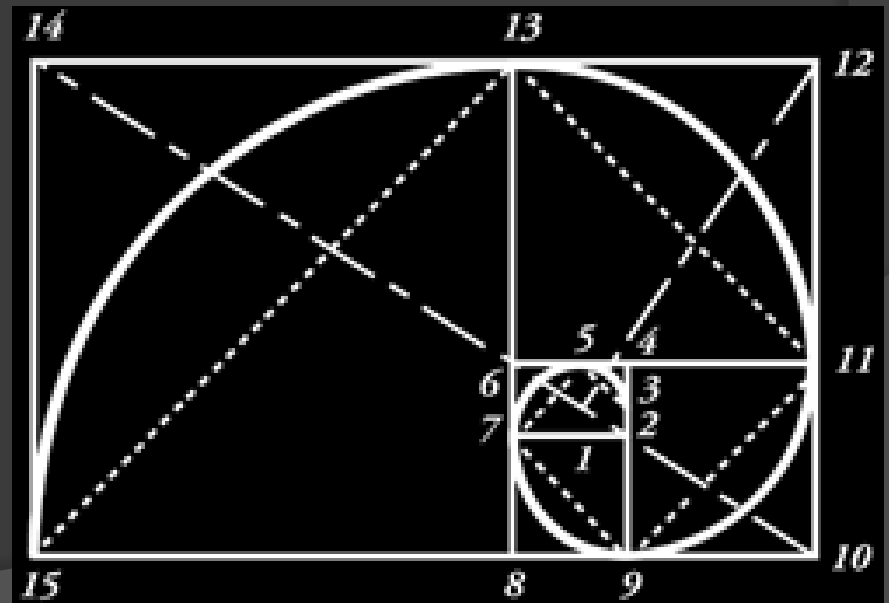
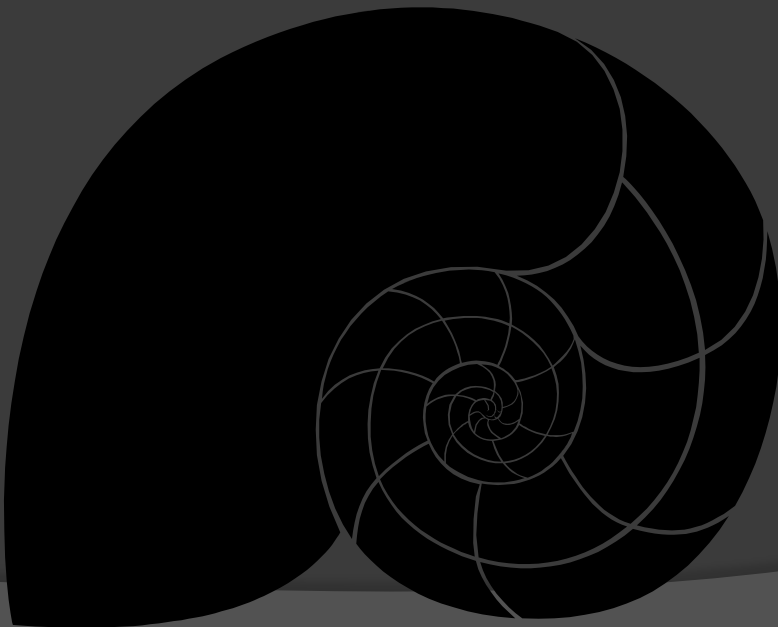


Photograph by other

# Proportion



- Relation between spaces
  - Between rooms in a floor plan
  - Between elements of a facade



# Balance

## ◎ Symmetry

- May symbolize order, or wealth
- May put people at ease (perceived stable)

## ◎ Asymmetry

- Can symbolize revolt
- Can evoke feeling of movement & excitement, or comfort
- Can arise from organic vernacular growth
  - Medieval cities
- Frank Lloyd Wright made entrances low and dark to surprise you with the final destination
- Also, light at end of corridor draws you in



# Symbolism

- ⦿ Power
- ⦿ Status
- ⦿ Change
- ⦿ Tradition
- ⦿ Spirit

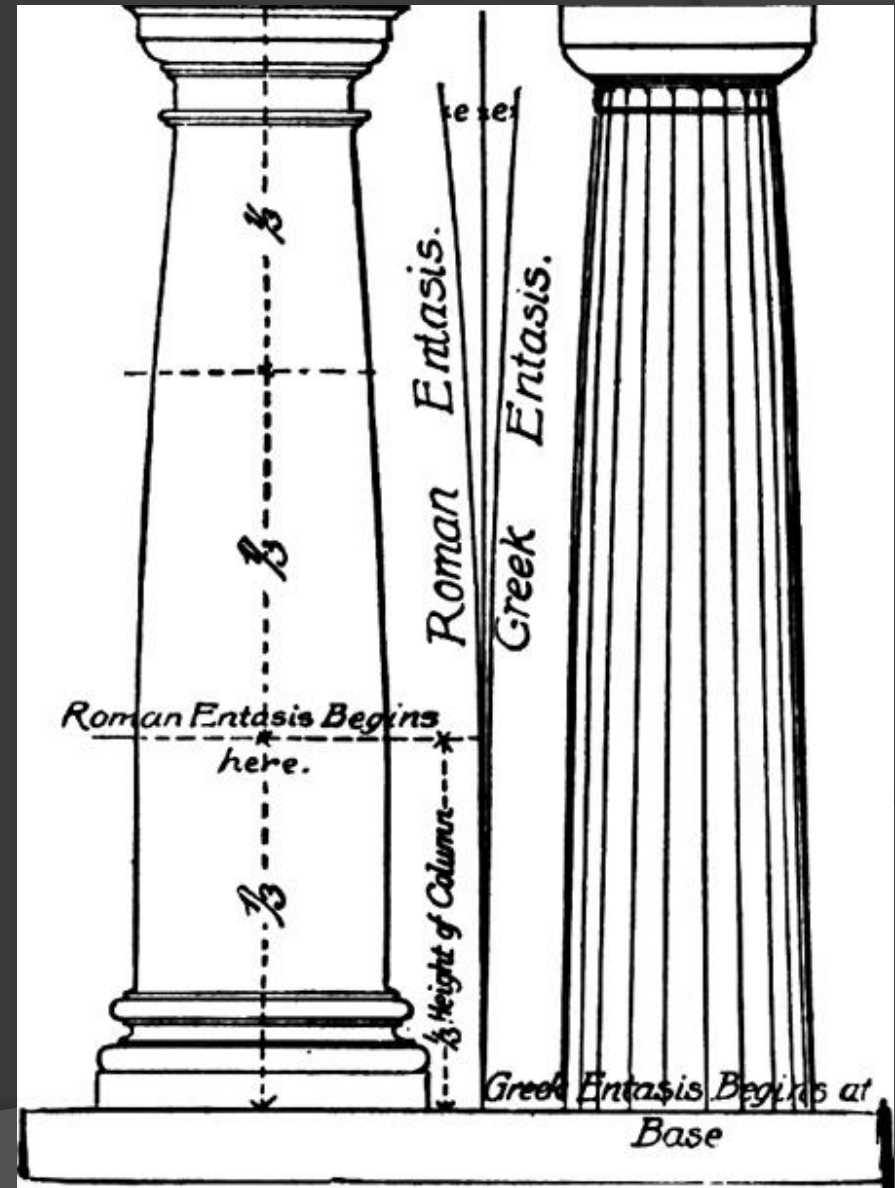


# Tastes

- ① Change over time
- ① Vary across cultures

# Anthropomorphism

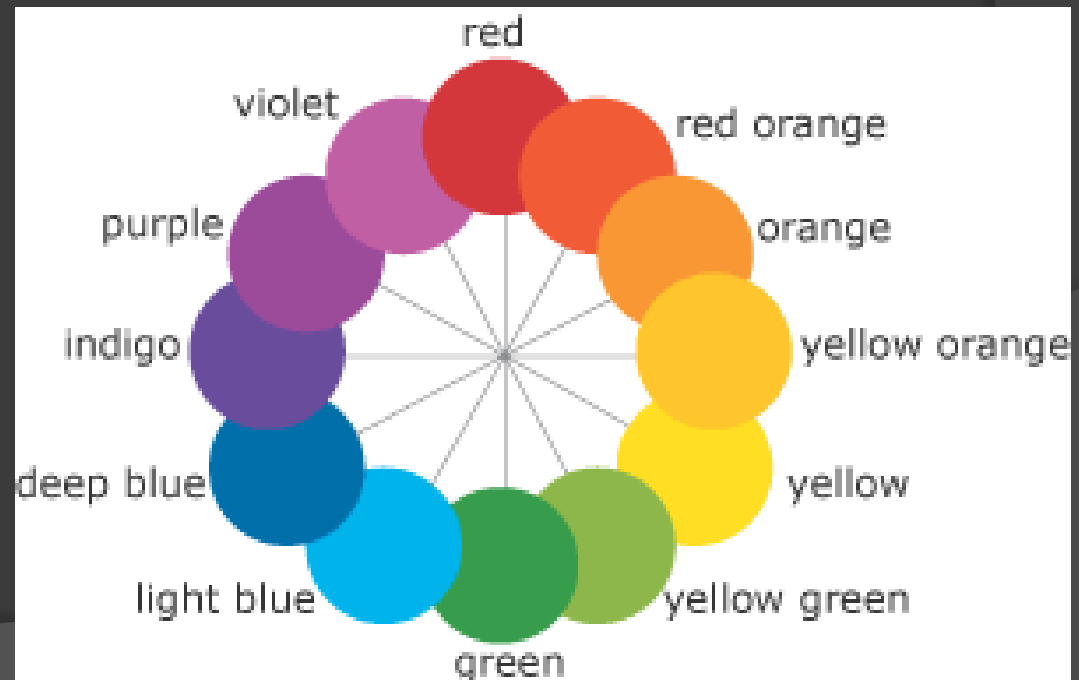
- Animate the inanimate
  - Equate columns with humans
    - “Entasis” in columns is a slight curvature to resemble hips





# Color

- ⦿ Harmonized colors
  - Use different hues of same color or pair hues of colors close to each other on color wheel



# Texture

Random



Ordered



Smooth



Rough



# Rhythm

- Like Music





# Rhythm



**VIDEO:**

<https://www.youtube.com/watch?v=36Fmp2pVKOc>



- ◎ Some J Wunderlich Personal Case Studies

# JT Wunderlich 1977 (age 16)

*high school student*

3<sup>rd</sup> prize

Philadelphia Municipal Building

Pennsylvania state-wide Architectural Design Competition

## **ARCHITECTURE THEORY** (2015 reflection)

- ▶ Form = interconnected octagons
- ▶ Scale = human
- ▶ Behavior = welcoming, serving
- ▶ Context = metropolitan city center
- ▶ Proportion = complimenting octagons
- ▶ Balance = symmetrical
- ▶ Symbolism = democracy, leadership
- ▶ Tastes = simple geometric forms
- ▶ Anthropomorphism = none intended
- ▶ Color = uniform
- ▶ Texture = smooth, ordered
- ▶ Rhythm = radiating center
- ▶ STYLE = Modern



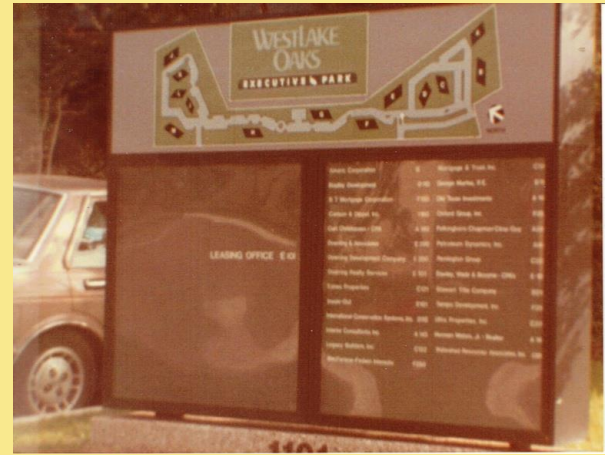
# JT Wunderlich 1984,85

Doerring Development Company

Austin TX

“Project Manager” / Designer

Helped Design and Build a thirteen building office park



One of two IBM360 Computer Centers in complex





# JT Wunderlich 1984,85

Doerring Development Company

Austin TX

- Wrote architectural and engineering specifications
- Worked under registered Architect at Doerring Development Corporation, one of the companies of Doerring & Associates
- Managed all construction (Doerring acted as General Contractor)

# "Project Manager" / Designer

In today's highly dynamic financial markets, investors require a real estate investment partner who is truly capable of managing their investment needs. One with a proven track record, a history of success, and the resources to provide expert personalized counseling and investment services.

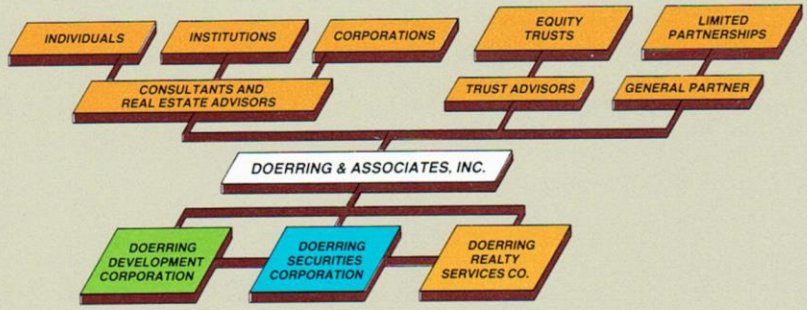
Based on those demands and qualifications, Doerring is the type of partner that institutional and individual investors can count on. In good times. And bad.

In recent years when few investments have preserved capital from the erosion of taxes, inflation and high interest rates, Doerring & Associates has consistently compiled an impressive record of performance through prudent acquisitions. Doerring's investment properties have provided the investor with outstanding capital growth and tax benefits. They still do today.



In every area of operation, the company provides expert personal service and investments of the highest caliber for a variety of sophisticated clients who require long-range programs for estate preservation and growth.

You will discover that Doerring shares your goals and professional objectives. More importantly, you'll see that Doerring has the resources to make your investment goals a reality.



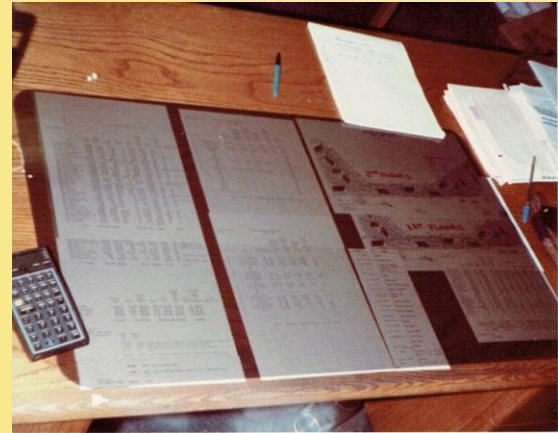
**JT Wunderlich 1984,85**

*Doerring Development Company*

*Austin TX*

*“Project Manager” / Designer*

My office



# JT Wunderlich 1984,85

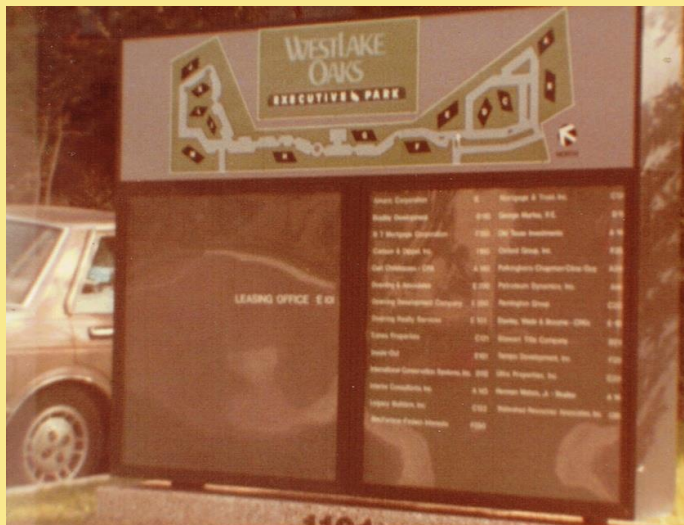
*“Project Manager” / Designer*

*Doerring Development Company*

*Austin TX*

## ARCHITECTURE THEORY (2015 reflection)

- Form = sharp-edged cubes
- Scale = monumental cluster
- Behavior = private work spaces
- Context = minimal imposition on landscape
- Proportion = parallelogram-buildings; complimenting each other
- Balance = asymmetrical
- Symbolism = changing, but complimenting, the natural landscape
- Tastes = simplicity
- Anthropomorphism = none
- Color = reflective black (camouflage)
- Texture = smooth, ordered
- Rhythm = melodic site plan
- STYLE = Modern



## JT Wunderlich 1985,86

*“Director of Projects” / Designer*

High-tech office complex in San Diego CA

JDC inc (*Development Company*), La Jolla CA

- On Architectural Design Team  
(as Developer’s Representative – “Director of Projects” )
- Added significant Architectural Design
- Project nominated for annual San Diego “Orchid Award”



# JT Wunderlich 1985,86

La Jolla, CA

Xscribe Corp., the nation's largest manufacturers of computer-aided court transcription systems, will occupy 60 percent of this complex.

Xscribe — currently housed in three separate locations at Kearny Mesa, Carroll Canyon and Torrey Pines — found a need to consolidate its facilities into one central headquarters.

The five-year built-to-suit lease contract calls for construction of a two-story, 60,000-square-foot structure. A compatible, three-story 44,000-square-foot office building will be erected adjacent to Xscribe's facility, surrounding a common courtyard.



*"Director of Projects" / Designer*

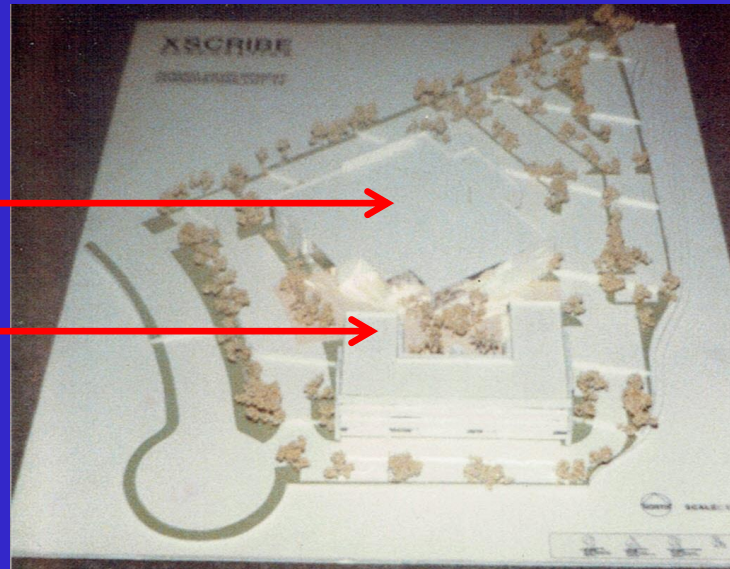


# JT Wunderlich 1985,86

La Jolla, CA

*"Director of Projects" / Designer*

- 66,000sf hi-tech office and light manufacturing
- 44,000sf office building



**JT Wunderlich 1985,86**  
*La Jolla, CA*

*“Director of Projects” / Designer*



**JT Wunderlich 1985,86**  
*La Jolla, CA*

*"Director of Projects" / Designer*





JT Wunderlich 1985,86

"Director of Projects" / Designer

High-tech office complex in San Diego CA

JDC inc (*Development Company*), La Jolla CA

**ARCHITECTURE THEORY** (2015 reflection)

- Form = sharp-edged cubes
- Scale = both human & monumental
- Behavior = outgoing, but peaceful within
- Context = San Diego high tech
- Proportion = blue cube in pink shell
- Balance = asymmetrical
- Symbolism = change, birth, tech
- Tastes = cubic with soft connections
- Anthropomorphism = emergence
- Color = pastel pink, blue, green
- Texture = smooth, ordered
- Rhythm = harmonized
- STYLE = Modern



**JT Wunderlich 1987**

1000sf Calivita Remodel  
San Diego, CA

Before



*Design/Builder*

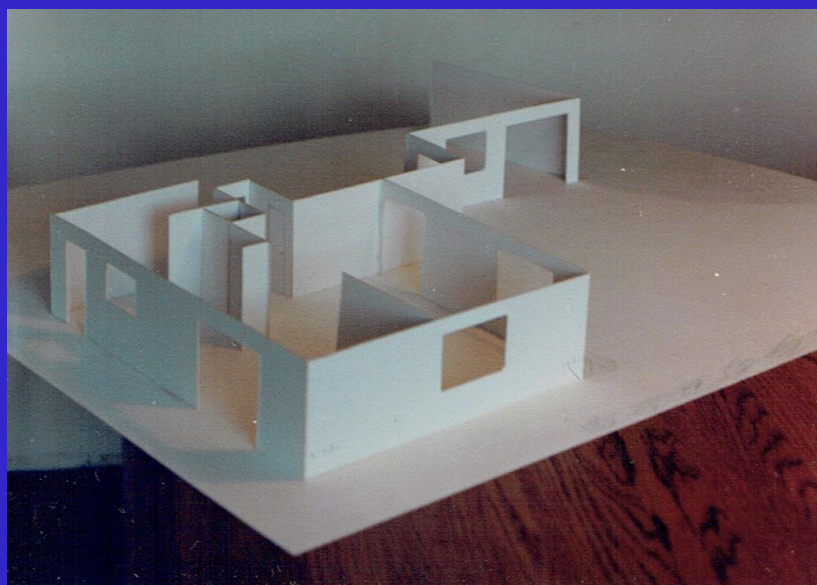
After



**JT Wunderlich 1987**

*San Diego, CA*

*Design/Builder*



**JT Wunderlich 1987**

*San Diego, CA*

*Design/Builder*



**JT Wunderlich 1987**

*San Diego, CA*

*Design/Builder*



*Also work in kitchen and bedrooms - No pictures taken*

# JT Wunderlich 1987

1000sf Calivita Remodel

San Diego, CA

*Design/Builder*

## ARCHITECTURE THEORY (2015 reflection)

- Form = rectilinear & Euclidean
- Scale = human
- Behavior = nesting
- Context = San Diego
- Proportion = paired rectangles
- Balance = asymmetrical
- Symbolism = tasteful upgrade
- Tastes = craftsmen, international
- Anthropomorphism = none
- Color = complimentary
- Texture = varied
- Rhythm = syncopated
- STYLE = Post-modern, craftsmen



JT Wunderlich 1989,90

Wayne PA

*Design/Builder*









**JT Wunderlich 1989,90**

Wayne PA

*Design/Builder*







**JT Wunderlich 1989,90**

Wayne PA



*Design/Builder*



*Also, other work in bathrooms,  
throughout house, and landscape.*

*- No photo's taken*

# JT Wunderlich 1989,90

School Lane Remodel

Wayne PA

## ARCHITECTURE THEORY (2015 reflection)

- Form = gables, vertical
- Scale = human
- Behavior = home
- Context = suburb
- Proportion = vertical
- Balance = symmetrical
- Symbolism = raise the roof
- Tastes = traditional
- Anthropomorphism = none
- Color = pastels, natural wood
- Texture = smooth, ordered
- Rhythm = slow tempo
- STYLE = Colonial, Post-modern

Design/Builder



# A Pennsylvania Country Home Design



# A Pennsylvania Country Home Design

- Inspired by childhood on Philadelphia Main Line
- And trips to Europe





# A Pennsylvania Country Home Design

## Site



# THREE MAJOR DESIGN CHOICES



selected design

DESIGN CHOICE 3



# A Pennsylvania Country Home Design

Reminds me of this picture I took in St. Peters Cathedral in the Vatican in Rome after I had built this ->



# A Pennsylvania Country Home Design

- Before and After



**JT Wunderlich 2002**

*Homeowner / Design-Builder*

Southeastern Pennsylvania

2000sf remodel +1500sf new

4000 man  
hours

Only  
contract was  
shingles and  
concrete  
mix truck

No  
Employees



**JT Wunderlich 2002-present**  
**Southeastern Pennsylvania**  
**2000sf remodel +1500sf new**

*Homeowner / Design-Builder*

**ARCHITECTURE THEORY** *(2015 reflection)*

- ⊙ Form = cubes and gables, vertical
- ⊙ Scale = human
- ⊙ Behavior = home, animal reserve
- ⊙ Context = Amish and Mennonite farmland
- ⊙ Proportion = complimentary gables
- ⊙ Balance = asymmetrical
- ⊙ Symbolism = stability, family, framed vista's
- ⊙ Tastes = traditional, simple elegance
- ⊙ Anthropomorphism = none intended
- ⊙ Color = white, grey, black
- ⊙ Texture = smooth, ordered
- ⊙ Rhythm = semi-syncopated
- ⊙ STYLE = Post-modern, colonial, craftsmen

