

Test Review #2  
Design 20

CHAIRS

Klismos Greek 5th & 4th century BCE  
Curving, splayed sabre-shaped legs  
Hand carved  
Fabric or animal skin on the seat.



MICHAEL THONET  
Bentwood chairs, light and curvilinear.  
Developed a system of steam bent veneers.  
Seats of cane or plywood.  
Mass production, low prices  
Cafe chair 1st produced 1859 & still in production.



MARCEL BREUER, architect Bauhaus  
Among first to use tubular steel

Wassily Chair  
For painter Wassily Kandinsky's home  
Tubular-steel & leather



Cesca Chair  
Most archetypal ex. of steel furniture  
Woven cane seat, cantilever  
"Cesca" after daughter Francesca.

MIES VAN DER ROHE  
Cantilever Chair  
With and without arms  
Tubular steel and leather



Barcelona Chair (Mies)  
First displayed International  
Exposition 1929  
Chrome frame  
Leather upholstery & straps  
Cantilevered over x frame

Brno Chair  
For Tugendhat House in Brno, Czech  
Cantilever  
steel and leather

LE CORBUSIER  
Grand Comfort Armchair  
Furniture = machine for sitting  
Chrome plated tubular steel  
frame.  
Leather cover



Chaise Lounge  
Rubber webbing and animal skin/ leather  
Rocking and multiple positions

EERO SAARINEN  
Tulip chair  
One leg - pedestal chair  
Reinforced-plastic shell  
Load-bearing capabilities of early  
plastic required aluminum stem.



Womb chair  
Covered fiberglass shell with:  
foam rubber padding and upholstery

RAY & CHARLES EAMES  
Architect & Furniture design,  
Function of chair more important than appearance.  
Charles & Ray Eames (husband & wife) and  
Eero Saarinen developed (1940's):  
New laminates & wood bending techniques,  
Fiberglass and plastics for furniture.  
Produced for Navy during the WWII:  
Wood leg splints, stretchers, & aircraft parts

Eames Wood Dining Room Chair  
Laminated Wood  
Some with metal legs  
Some animal hide upholstery  
mechanical details visible



Lounge Chair and Ottoman  
Eames' first design for luxury market  
Leather and wood  
Not mass-produced, hand labor & craftsmanship

EAMES AND SAARINEN  
Plastic armchair  
Fiberglass shell  
Material developed for aircraft radar domes  
First fiberglass chair

ARNE JACOBSEN, Danish architect  
Ant Chair Jacobsen's most  
successful design  
Still in production  
1 piece molded plywood seat & back



Egg Chair  
Shell + molded polyurethane foam  
Upholstered with fabric or leather  
Can swivel & adjustable  
Tension depending on the user's weight.  
Star base is made of aluminum.

Swan Chair  
Similar to egg chair, with wings.

GERRIT RIETVELD  
Red and Blue Chair 1918  
Regarded as first modernist chair.  
Lacquered wood

## RIETVELD (CONT.)

### Zig-Zag

Wood, cantilever

Response to Bauhaus steel chairs

## ALVAR AALTO Finnish Architect

### Cantilever

Removed layers of veneer at areas of greatest curve

Laminated birch, bent and rolled to provide support

## 60'S CHAIRS:

Pop culture in / functionalism out

Explore the new materials and processes .

## VERNER PANTON

First single-piece plastic chair

Borrowed shape of Rietveld's Zig-Zag

## HANS WEGNER, Danish

### PEACOCK CHAIR

solid ash and teak

comfort was a goal

### Classic Chair (aka "The chair")

solid teak, woven cane seat

harmony of craftsmanship & modern design

handmade

sculpture-like forms.

Careful study of human form

## ITALIAN CHAIRS:

### Sacco

Leather or vinyl bag

Filled with polystyrene beads

### Marilyn (After Marilyn Monroe)

Lips design

Reinterpretation of Dali's Mae West Sofa

Lightweight foam construction

### Joe (After Joe DiMaggio)

Inspired by Claes Oldenburg

Natural glove leather, expensive

Molded polyurethane foam

### Blow (inflated)

pop material

cheap and expendable

## 70'S CHAIRS

Growing concern over environment:

Oil crisis of 1973 , earth's dwindling resources.

## FRANK GEHRY

### Easy Edges

Laminated corrugated cardboard

Immediate success, withdrawn by Gehry

(Didn't want to distract from reputation as architect.)

### Little Beaver

Edges left as if an animal had been chewing

Laminated corrugated cardboard

## (FRANK GEHRY, CONT.)

### Hat Trick or Apple Basket series

Inspired by wicker furniture & bushel baskets

Collection named after ice hockey terms

Laminated hard white maple

## PHILIPPE STARCK, French

Defends plastics as only ecologically sound solution

### Costes Chair

Plywood on black lacquered steel base

Leather and ebony trim

### Eros

Martini glass shape.

Plastic and chromed-steel base

### Dr. Glob Chair

Front legs and seat polypropylene (red),

Rear legs; steel tubing

## INDUSTRIAL PRODUCTS

Design for large-scale industry & mass distribution.

Significant style trends Industrial design

1. MAYA Design  
Most advanced, yet acceptable
2. Packaging Embellishment  
Protective case for a product
3. Streamlining -- bullet shapes & sleek lines  
Minimizes resistance through a fluid or air.
4. Accelerated obsolescence  
Esthetic design changes that tempt owners to replace goods more frequently

## AMERICAN DESIGN examples:

Zeroll Ice Cream Scoop

Defrosting fluid uses body heat

Zippo Lighter lifetime guarantee

Lear Jet First mass manufactured business jet

Slinky -- Originally to stabilize ship instruments

Tupper Ware Original seals for WWII gas masks

Tea Kettle Michael Graves

Segway Human Transporter-self-balancing scooter

Intel microprocessor. IBM used in its first PC

Macintosh Classic Apple computer

## RAYMOND LOEWY

One of most successful American designers

Largest design firm in 1930's

Air Force One for President Kennedy

S-1 Locomotive, Silversides Greyhound bus

Studebaker automobile, Sncase helicopter

Sears Coldspot refrigerator

Lucky Strike pack, Shell & Exxon logos

## WALTER DORWIN TEAGUE

Kodak cameras and Polaroid Cameras

Cash Register

(TEAGUE CONT)  
Texaco Stations  
Blue Sled glass radio  
Boeing 707 interior

#### PHILIPPE STARCK

Architect furniture & industrial designer  
Designed interiors for French President Mitterand  
Hot Berta tea kettle. Water in thru handle  
Juicy Salif lemon juicer cast aluminum  
Dr. Kiss toothbrush, Dr. Skud fly-swatter

#### ARCHITECTS

EERO SAARINEN, Finnish  
International Style (Modern) & Expressionism

General Motors Technical Center Mich.  
reflected modern technology  
stainless steel

CBS Headquarters - only skyscraper (NY)

Dulles Airport, Virginia  
For Federal Government.  
Steel & concrete suspension structure.

TWA Kennedy Airport  
Free-flowing curves, concrete  
Bird-like symbolism  
Fully-designed environment

Gateway Arch St. Louis, Missouri  
stainless steel  
graceful sweeping tapered curve

#### PHILIP JOHNSON

Modern & Post Modern architect.  
Director Architecture Department, MOMA (New York)  
Intro. European modern architecture to America  
Coined term: International Style:

Seagram's Building.  
Collaborated with mentor, Mies on

"Glass House," Connecticut  
Johnson's own home  
Rectilinear structure  
Use of large glass panels as walls.  
Central brick cylinder containing a bathroom  
Low walnut cabinets for kitchen equipment.

Crystal Cathedral. Garden Grove LA  
Structure: 4-pointed star  
A gigantic chimney for cooling.  
Bigger than Notre Dame Cathedral  
Steel frame tent with glass panels

Post Modern Architecture & Johnson  
Late 20th-century architecture  
Includes historical references  
Classical elements reintroduced  
More playful than classical or classical revival

American Telephone and Telegraph N.Y.  
Top resembles Chippendale cabinet  
Postmodern architectural landmark

Pittsburgh Plate Glass -- Gothic post modern

San Francisco Financial District:  
101 California  
sawtooth setbacks  
glass cylinder, open atrium  
40 foot piers cut through atrium  
580 California  
faceless sculptures  
glass mansard roof

#### MICHAEL GRAVES

Portland Building  
Post-Modern Icon  
Energy efficient, low budget  
Small square windows  
Deep colors—browns, blues, and rusty red

Team Disney, Burbank Post-modern  
Disney Corporate Offices & studio lot.  
Columns: 7 dwarfs  
Mural in dining room by Graves

Hyatt Regency Japan  
Copper clad columns, red sand stone base  
Pyramid on dome, which illuminates lobby

Clos Pegase Winery, Napa Valley, post modern

FRANK GEHRY, Canadian  
Deconstructed architectural style  
Exploded aesthetic.  
Adapted aerospace software to architecture.

Gehry House Santa Monica  
Deconstruction  
Re-working conventional, bungalow  
"Cheap tech" off-the-shelf and ordinary  
Old house wrapped with metal slipcover  
Slanted lines and angled protrusions.

Norton House Venice, California  
Post-Modern  
Lifeguard shack, log tori  
Maximize views & privacy on a tiny site

(GEHRY CONT.)

Chiat/Day Office Venice, California.

White building nautical look

Copper clad columns: forest

Binoculars (Claus Oldenburg)

entry to the building

skylights in eye piece

conference rooms

Netherlands Group, Czech Republic

"The "Wave" or Fred and Ginger

Steel, glass, precast concrete

Guggenheim, Bilbao, Spain

Limestone, titanium

Walt Disney Concert Hall, LA

Exterior titanium. Interiors douglas fir.

RICHARD MEIER

Modern architect

Materials and techniques

White enameled panels and glass.

Influenced by Corbu

Douglas House Michigan

Lake side slope

White structure contrasts with environment

Interior floor extends through glass wall to deck

Multiple levels/planes

Nautical look

High Museum of Art, Georgia

Steel columns & concrete

White porcelain-enameled steel

Interior is an homage to Wright's Guggenheim

Getty Center Los Angeles, 1997.

Art Museum funded by: Getty, American oil billionaire

Material: travertine (type of limestone)