

History of Architecture

Why do we need to study History of Architecture?

- •Having a working knowledge of Architecture styles is essential. Such understanding deepens the appreciation of design and serves as a basis to foster creative energies.
- Designers study styles of the past and present to enrich current environments.
- •Today's Architecture is a conglomeration of different architecture elements of the past.

Egyptian (4500-330 BC)

Known for building Pyramids for kings and pharaohs

Developed Trabeated Construction. (Vertical post support a horizontal lintel)

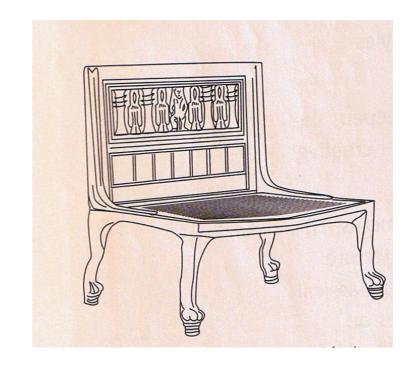
Used hieroglyphics

Columns perhaps originally made from papyrus reeds lashed together, created vertical lines, which led to fluting on columns in later designs.



Egyptian

Used straw for flooring, therefore furniture was raised on small blocks so animal-shaped legs could be seen



Motifs included the lotus bud, reeds, papyrus, and lilies



Greek (3000 BC-150 AD)

Known for their order, proportion, and refinement of design

Built temples to honour their gods, surrounded by open porticos (porches) and columns

Developed the truss system, a triangulated load-bearing construction to allow for sloped roofs.

The triangle formed by the truss is called a pediment



Greek

Developed a system of naming the design and details of columns.

These classical order of architecture, still used today,

includes:

Doric (Plain square capital on top of columns)

Ionic (Capital with spiral design called a volute)

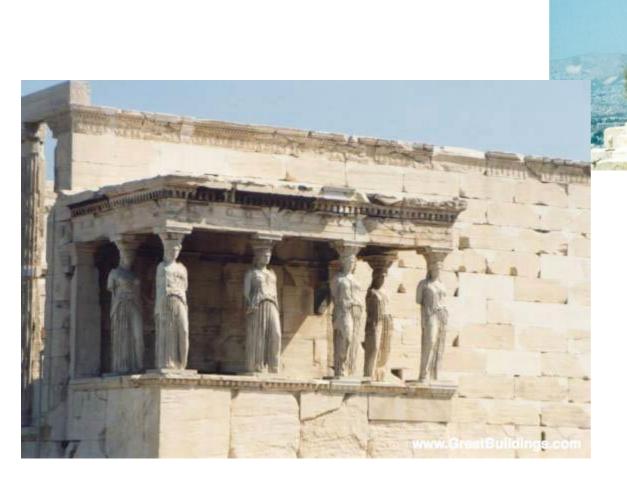


Corinthian (Capital with two rows of acanthus leaves)



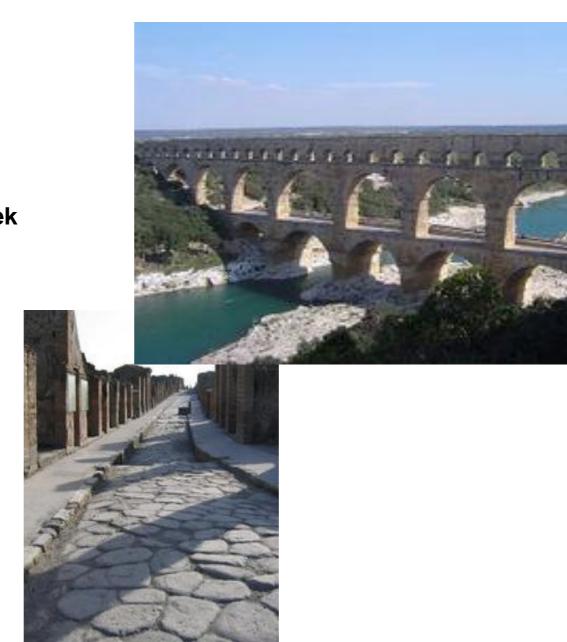
Greek

Mastered the art of carving marble into a human form. When used for support, the human form is called a caryatid



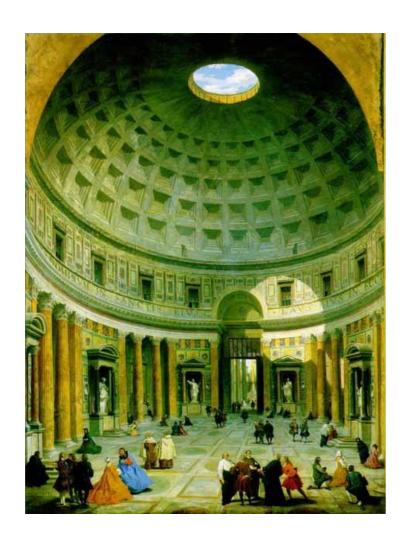
Roman (750 BC-400 AD)

Known for their engineering expertise, particularly the development of roads and aqueducts adapted from Greek designs



Roman

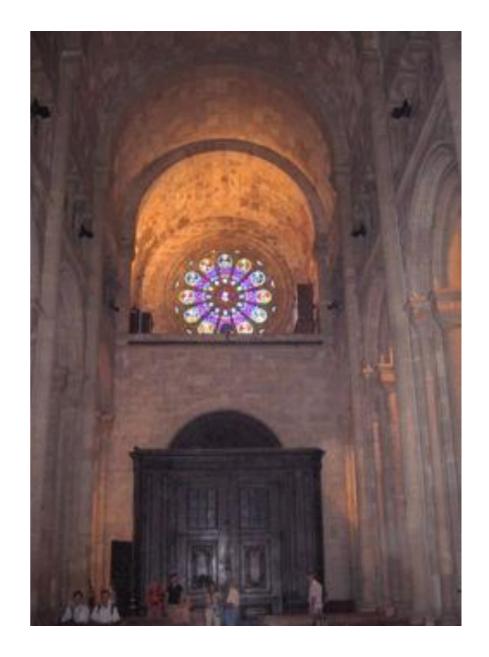
Developed the concrete arch and dome





Roman

Developed the barrel vault, also known as a tunnel vault or a wagon vault, is an architectural element formed by the extrusion of a single curve (or pair of curves, in the case of a pointed barrel vault) along a given distance. The curves are typically circular in shape, lending a semi-cylindrical appearance to the total design. The barrel vault is the simplest form of a vault: effectively a series of arches placed side by side.



Roman

Developed pilasters

(Columns partially embedded in the walls)



Roman Continued

Added two classical orders:

Tuscan (Similar to Doric but without column fluting)



Composite (Capital combines acanthus leaves and volutes)



Gothic (1150 – 1500 AD)

Gothic architecture has nothing to do with the historical Goths.

It was a pejorative (derogatory) term that came to be used as early as the 1530s to describe culture that was considered rude and barbaric.

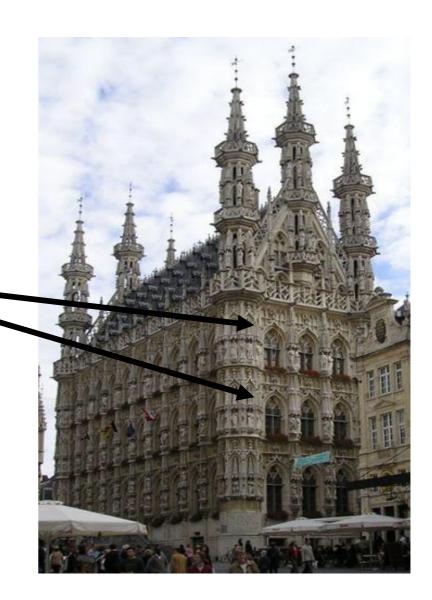
In English seventeenth century usage, "Goth" was an equivalent of "vandal," a savage despoiler with a Germanic heritage and so came to be applied to the architectural styles of northern Europe before the revival of classical typed of architecture.

Gothic style is very ornate and definitely has a unique look

Gothic architectural features commonly associated with ecclesiastical design include:

The pointed arch and vault

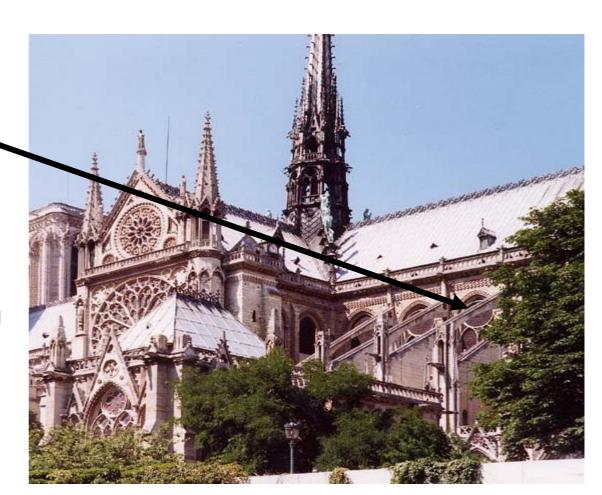
Tracery (Constructed of net-like decorations around upper windows)



Slender columns in clusters

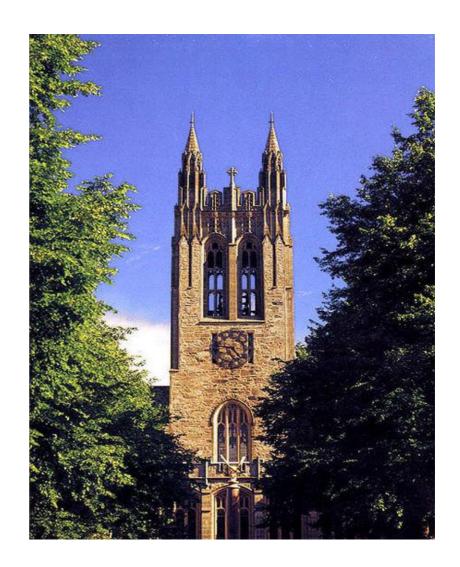
Buttresses or Flying Buttresses

(An architectural structure built against or projecting from a wall which serves to support or reinforce the wall. Buttresses are fairly common on more ancient buildings as a means of providing support to act against the lateral (sideways) forces arising out of the roof structures that lack adequate bracing.)



Another example of Gothic style

•What features can you pick out?



Baroque (1600-1715)

"In the arts, Baroque is a period as well as the style that dominated it. The Baroque style used exaggerated motion and clear, easily interpreted detail to produce drama, tension, exuberance, and grandeur in sculpture, painting, literature, dance, and music. The style started around 1600 in Rome, Italy and spread to most of Europe.

The popularity and success of the "Baroque" was encouraged by the Roman Catholic Church which had decided at the time of the Council of Trent that the arts should communicate religious themes in direct and emotional involvement. The aristocracy also saw the dramatic style of Baroque architecture and art as a means of impressing visitors and expressing triumphant power and control.

The word baroque derives from the ancient Portuguese noun "barroco" which is a pearl that is not round but of unpredictable and elaborate shape. Hence, in formal usage, the word baroque can simply mean that something is "elaborate" (Wikipedia.org).

Baroque

Means "Misshapen Pearl"

Major influence came from Italy and France

Ornate, symmetrical designs

Flamboyant and heavy proportions



Baroque



Baroque



Spanish settlers came to Florida in the 1500's

California Ranch and Colonial most common California evolving Spanish Homes

Red Tile roofs

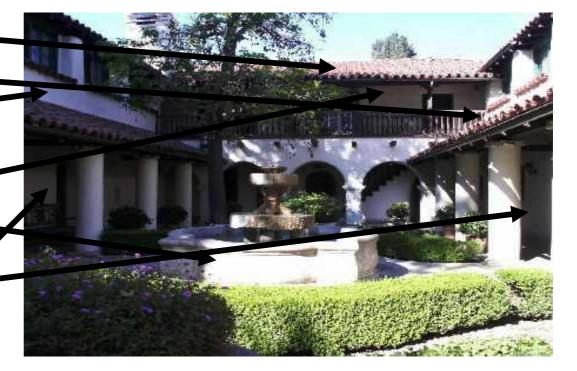
Low pitched roofs

Stucco

Fountains

Balcony

Arcade (Hallway to the outside)





Morrish Shapes



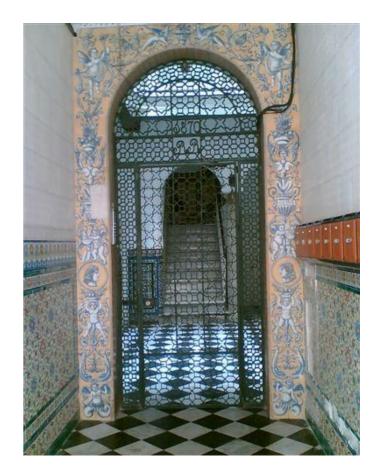


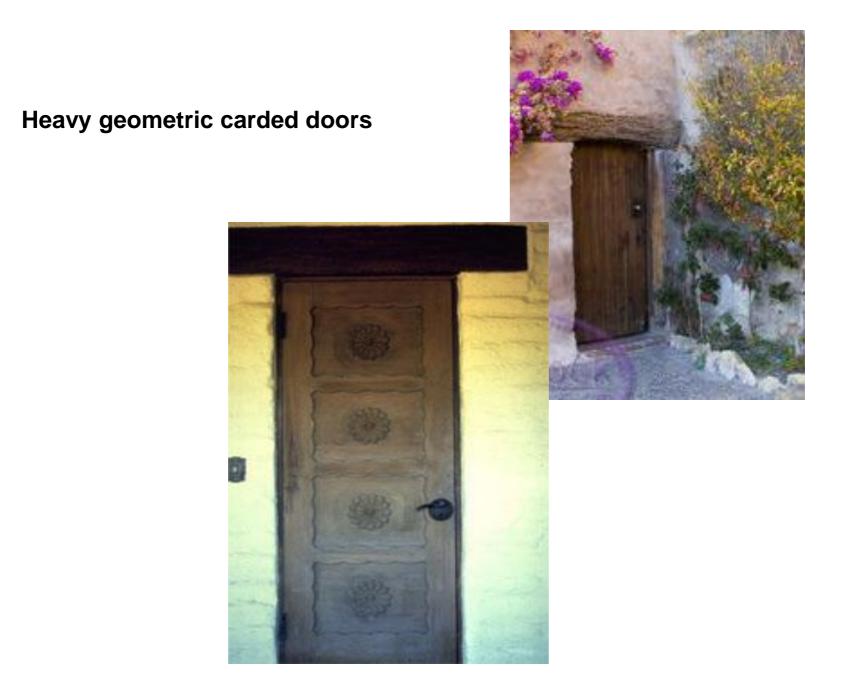
Reja

(Can be made out of wrought iron or wood. Used as a door or window that is open so the breeze can come through the home)



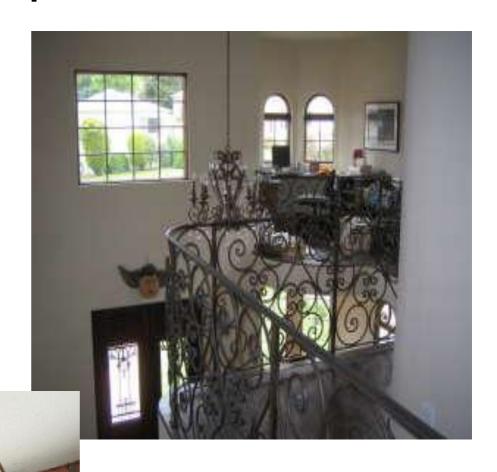


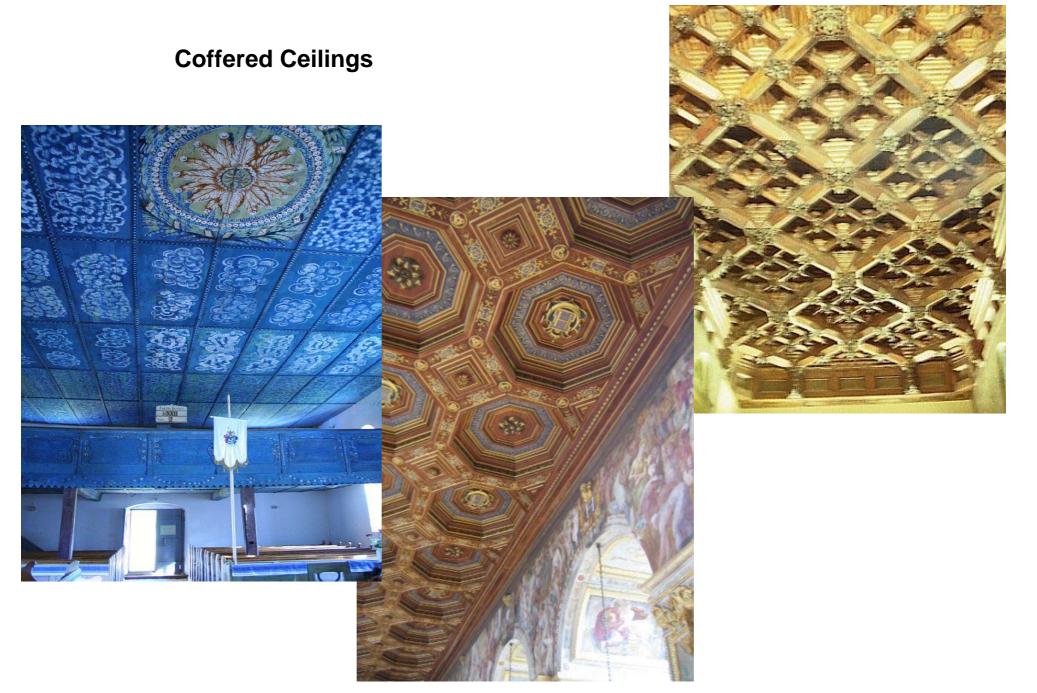




Wrought Iron detailing and chandeliers

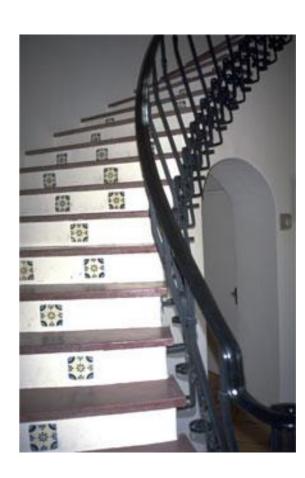






Tile Risers



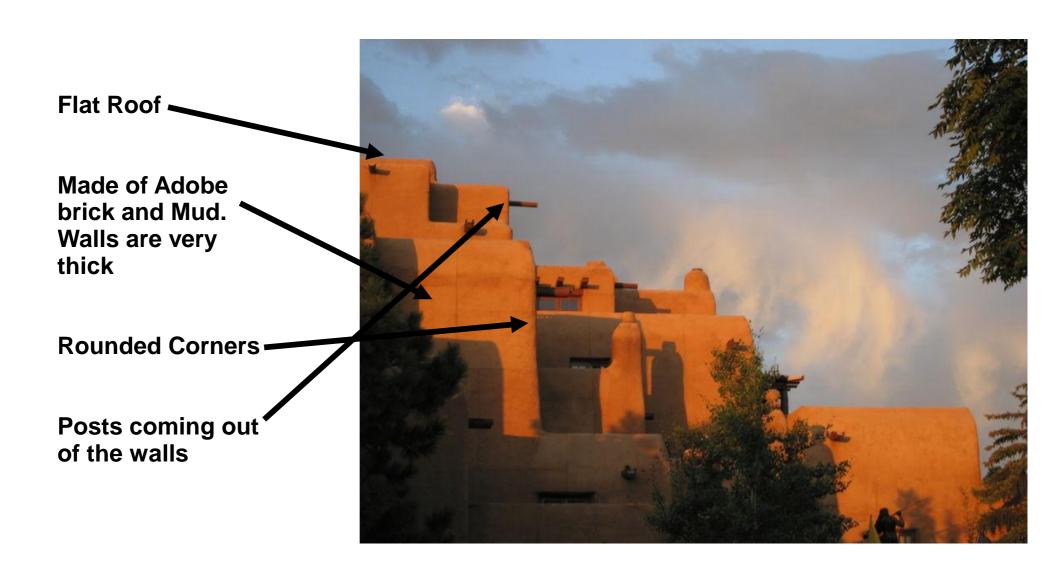


Early seventeenth century

Also referred to as Adobe Style.
Colonists of European extraction arrived in New Mexico early in the seventeenth century and began building houses using the same methods employed by the local Pueblo Indians.



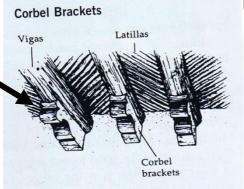




Zapata (Double corbel bracket)



Corbel Bracket



Niche



Beehive Fireplaces



Spanish Santa Fe Style also decorates homes with mirrors framed with tin and skulls that are hung on the walls

English Styles Tudor, Elizabethan and Jacobean Style (1140-1700s)

Dominated by heavy masculine designs

Architecture characterized by half-timbering (timbers are visible on the outside of the building)

Interiors characterized by plain, plastered walls or ornately

carved panels



Tudor, Elizabethan and Jacobean Style

Big Beams

Daub and wattle (Used in constructing houses. A woven latticework of wooden stakes called wattles is daubed with a mixture of clay and sand and sometimes animal dung and straw to create a structure.)

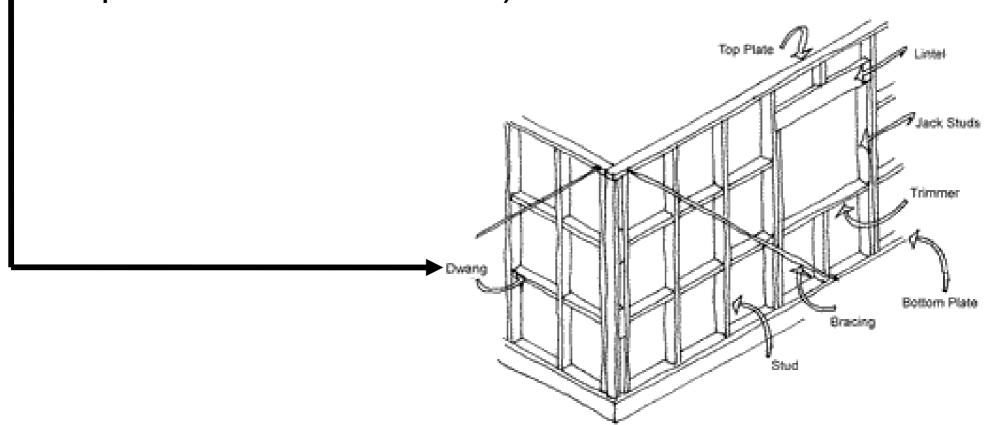


Daub and wattle looks like this when it is complete



Tudor, Elizabethan and Jacobean Style

Noggin-Brick work in between timber (In carpentry, a noggin, or dwang is a short length of material, usually wood, inserted between two studs, joists, rafters or similar to brace a frame or to support a fixture. It is also the term for a brickwork infill-panel in timber frame construction.)



Tudor, Elizabethan and Jacobean Style







Tudor, Elizabethan and Jacobean Style

High Pitched Roofs



Tudor, Elizabethan and Jacobean Style

Another example of Tudor style



Two main Architects

Inigo Jones



Sir Christopher Wren



Georgian

Symmetrical designs exhibited dignity and formality, reflecting classic Greek and Roman Architecture

Chimneys on each side

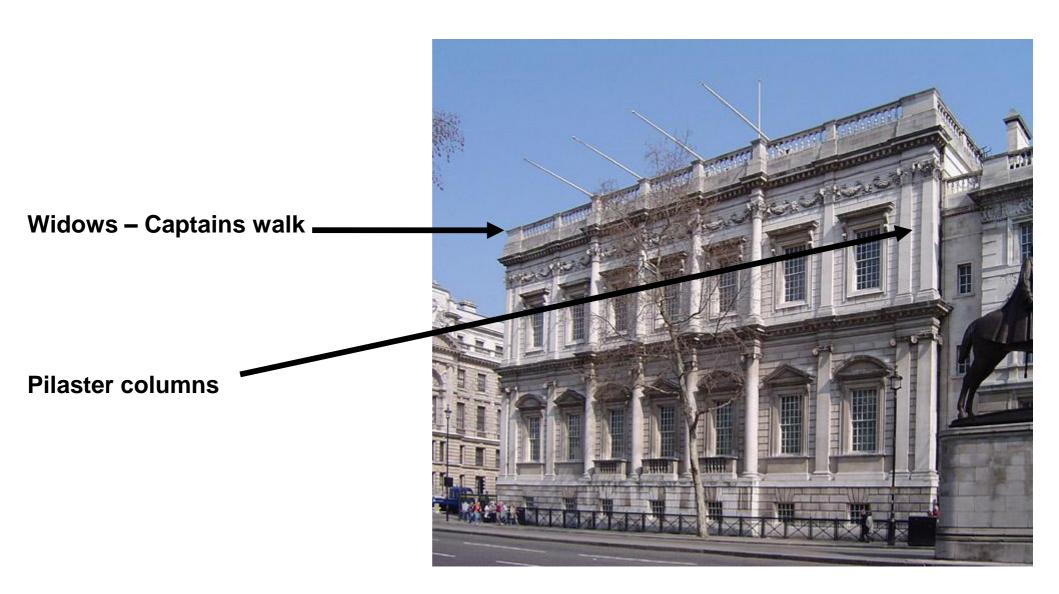
Central entrance

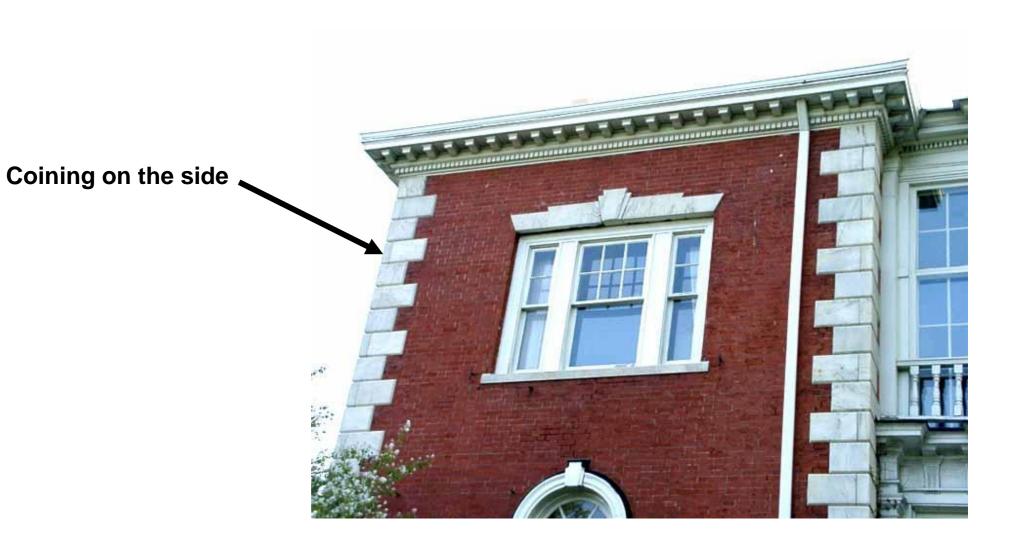


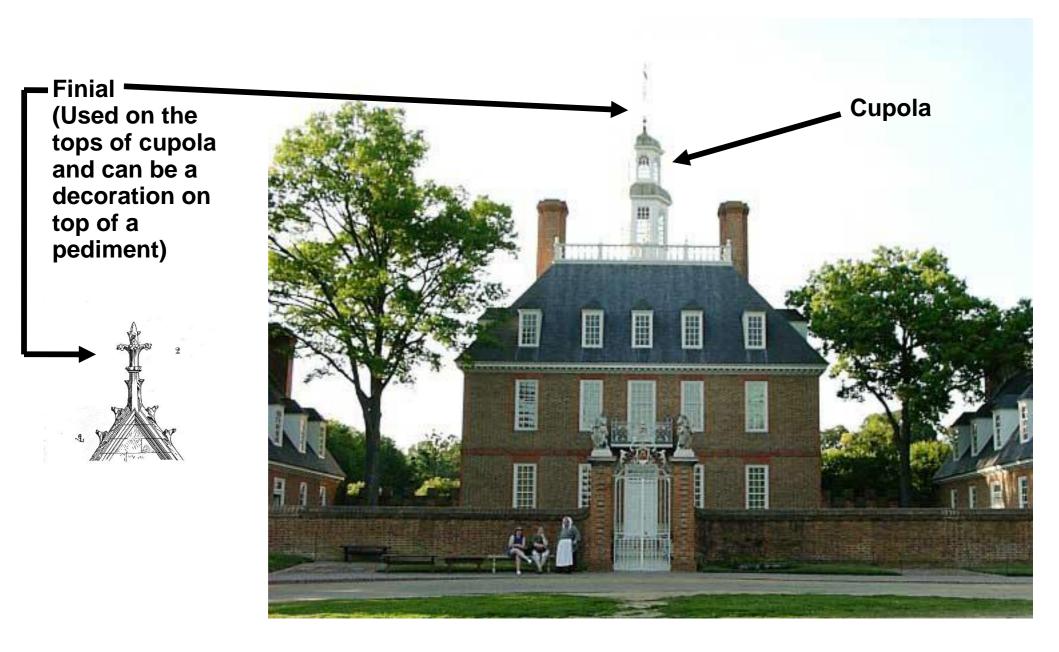


Dormers with pedamits



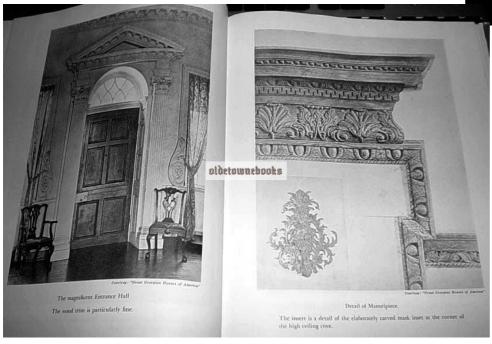






Used brass chandeliers.





Used shell carving for decoration

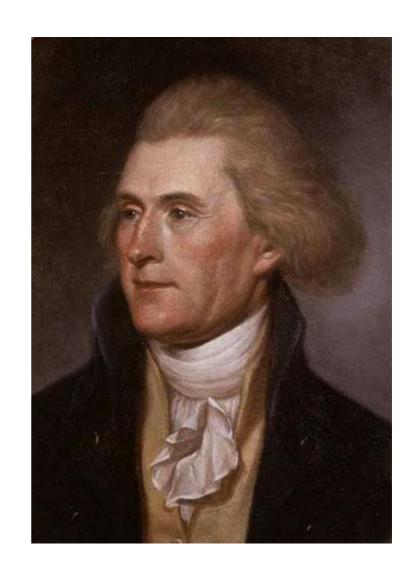
Another example of Georgian style



Neoclassical or Late Georgian (Federal) 1760-1801

Wanted a new architecture, Thomas Jefferson promoted this new type of architecture

Architecture inspired by Roman Palladian style; even more formal Federal Style



Neoclassical or Late Georgian (Federal)

Chimneys on either side

Crown moulding over the windows

Woodwork painted white

Used crystal chandeliers



Neoclassical or Late Georgian (Federal)

Rotunda Dome

The Federal style is a very formal and majestic form of architecture. It was used for the capital buildings to impress the leaders of other countries when they came to visit. Very commanding.



Neoclassical or Late Georgian (Federal)

Another example of Federal style



(4) American Styles 1600-1700

1. Saltbox

Wooden frame house with a ling, pitched roof that slopes down to the back

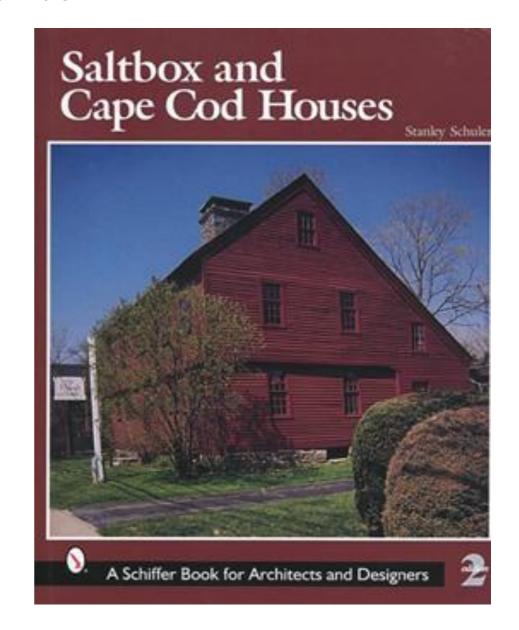
One story in the back and two story's in the front

Flat front and central chimney

Asymmetry of the unequal sides and the long, low rear roof line are the most distinctive feature

Shingles

Central doors and chimney



Saltbox

Another example of Salt Box style



2. Garrison Style 1600-1700

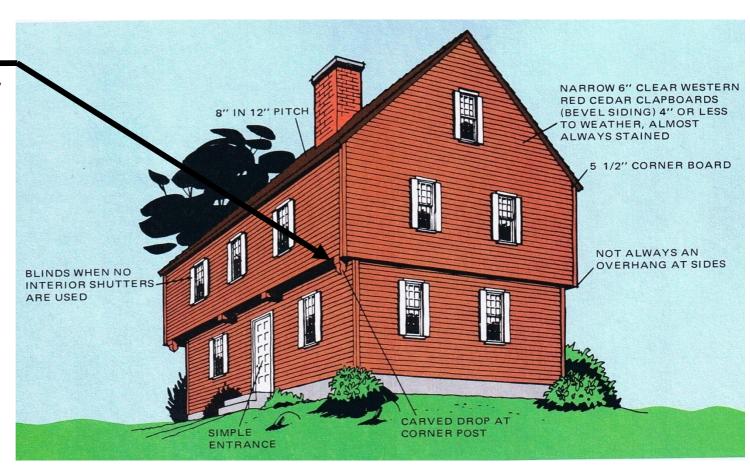
Typically is two stories with the second-story overhang in the front

Pendants under the — overhang (pineapple or a corn shape)

Chimney at the end

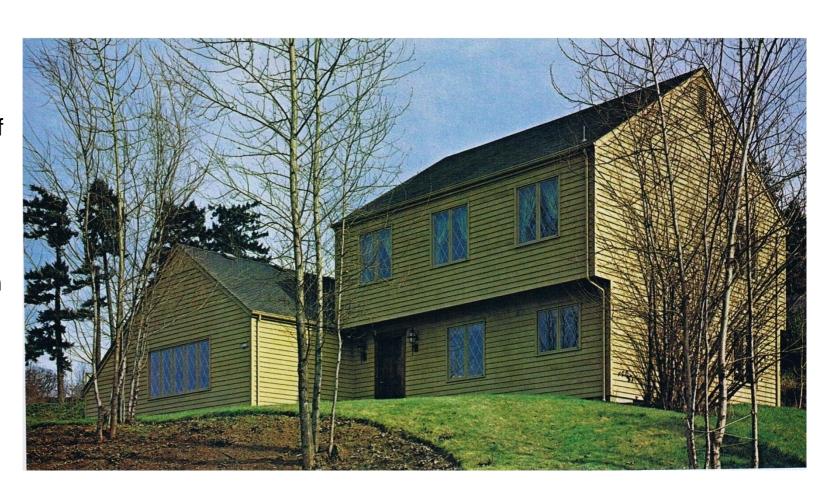
Older garrison homes have casement windows with small panes of glass, later versions have doublehung windows

Second-story windows often are smaller than those on the first floor



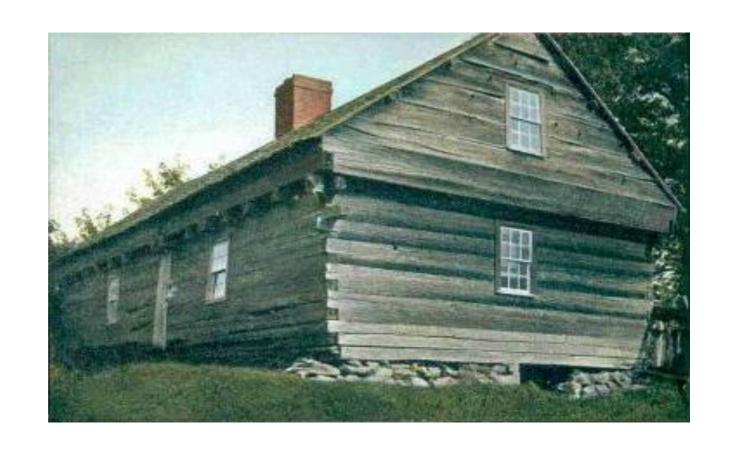
2. Garrison Style

Another example of Garrison style



2. Garrison Style

Another example of Garrison style



3. Gambrel Style 1600-1700

Symmetrical twosided roof with two slopes on each side.

Upper slope is positioned at a shallow angle while the lower slope is steep

Creates more head room because of its double pitched roof

Central chimney and doors



3. Gambrel Style

Barns are made after the Gambrel style



3. Gambrel Style

Another example of Gambrel style



4. Cape Cod 1600-1700

A house covered in wood with a sloped roof

Central chimney and door

Low cottage roof

Also called a rainbow roof

Can be two stories

No overhang

Small paned windows

Plank door



4. Cape Cod

Another example of Cape Cod style



Colonial Dutch Early 20th Century

Houses of stone, brick, or clapboard

Gambrel roof with a line that breaks near the ridge

Flaring eaves that give the roof a bell shape

Sash windows and doors typical of mainstream English/American design

Low doors

Inside decor includes:
quilts, simple flowers and
vases, hand stitched pillows,
stencils, blue and white
china, simple furniture,
country feel, tulip motif,
ducks, ocean, heart theme,
used tin for their chandeliers,
and blue and white checker
design



Colonial Dutch

Another example of Colonial Dutch style



Swedish

Known for their log cabins

Hand made furniture

Quilts

Tulip motifs

Painted ceilings

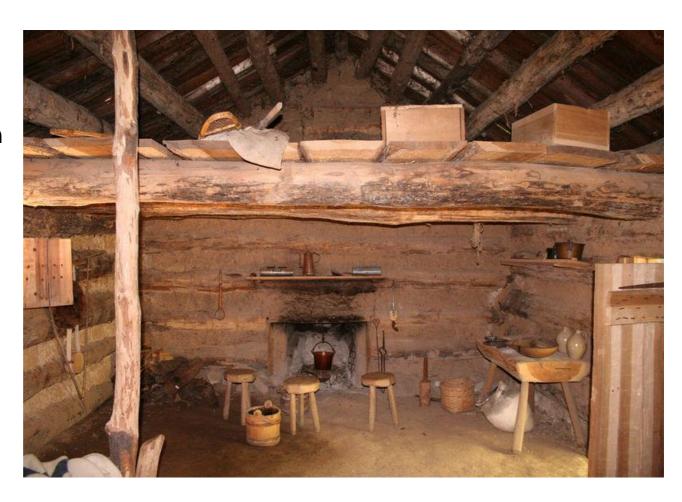
Stencilling

Antler chandeliers

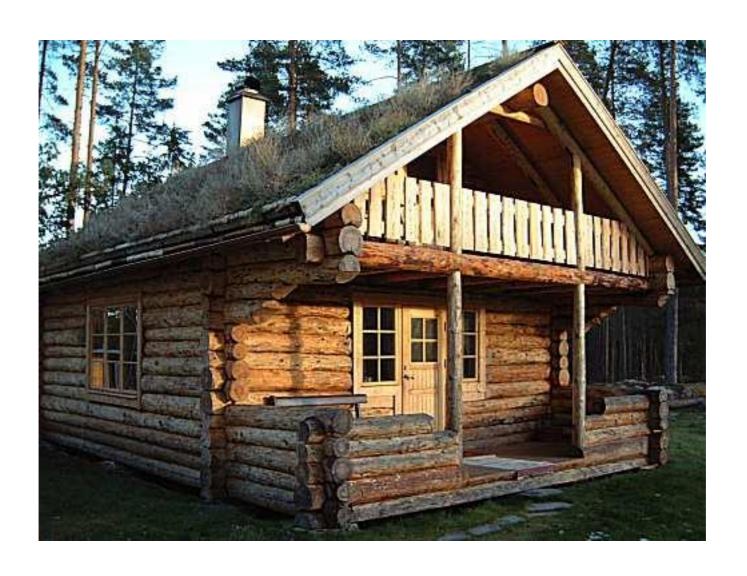


Swedish

Interior of the log cabin



Swedish



Italian Stately 1840-1920

Dominated American houses between 1850-1880

Common in expanding towns and cities in Midwest, and stillgrowing older cities in Northeast Lest common the South

Very common in San Francisco

Style began in England as part of the picturesque (Romantic) movement: a reaction to formal classical ideas.

In U.S., houses followed the informal, rural models of picturesque movement. Modified for use as typical "main street" commercial architecture in Midwest.

Popularised by Andrew Jackson Downing.

Italian Stately 1840-1920

Porches

Tall narrow buildings

Tall, narrow windows

Commonly arched or curved windows above

Brackets under the eves

Pediment

Flat roof

Steps going up to the front door



Italian Stately

Bay Windows

Italian Stately



Italian Stately



Italian Stately

Another example of Italian Stately style

•What features can you pick out?



Queen Anne Victorian 1840-1920

More asymmetrical

Steps that go up to porch

Collenets (cluster of columns)

3rd Floor was either a ball room or play room



Queen Anne Victorian

Fish Scale siding



Queen Anne Victorian

Ginger bread detail



Queen Anne Victorian

Another example of Queen Ann style

What features can you pick out?



Arts & Crafts 1860-1920

A deliberate attempt to expressing surface textures of ordinary materials, such as stone and tiles, with an asymmetrical and quaint building composition.

The decline of rural handicrafts, corresponding to the rise of industrialized society, was a cause for concern for many designers and social reformers, who feared the loss of traditional skills and creativity

The Home Arts and Industries Association was set up to promote and protect rural handicrafts.

The first American Arts and Crafts Exhibition opened on April 5, 1897, with a mandate to "develop and encourage higher standards in the handicrafts." The 21 founders were interested in more than sales, and focused on the relationship of designers within the commercial world, encouraging artists to produce work with the highest quality of workmanship and design.

In essence it was a revolt against machine-made products

Arts & Crafts

Shingle Homes

Mahogany wood

Have bookcases on either side of the fireplace

Cover nail holes with wood pegs

Low pitched roof lines

Large porches

Exposed beams on the outside of the home

Leaded glass in the doors

Shed Dormer

Green favourite color, green tiles and green chairs



Arts & Crafts

Another example of Arts & Crafts style

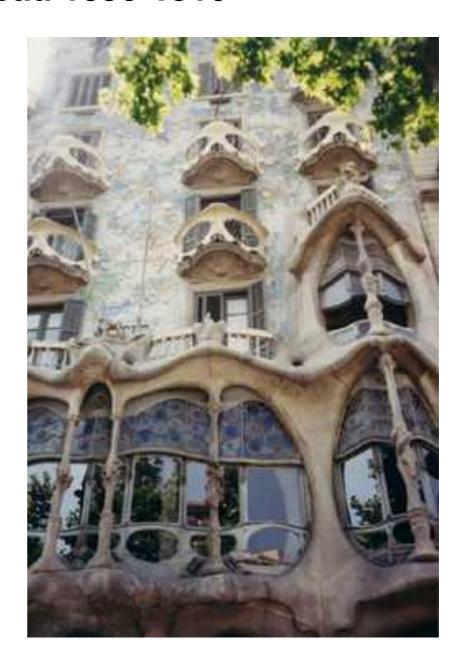
•What features can you pick out?



Art Nouveau 1890-1910

Style based on nature, employing organic flowing forms

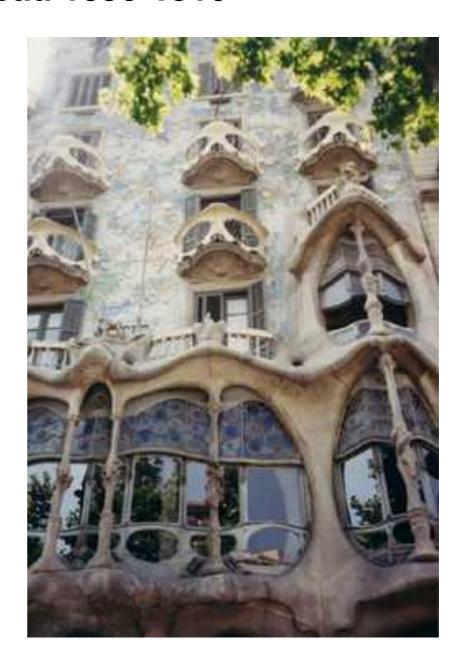
Well know architect is Antonio Gaudi



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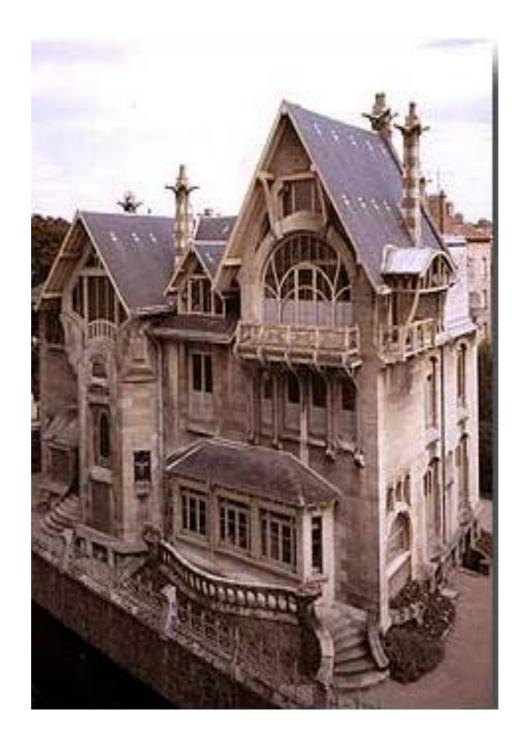


Art Nouveau





Art Nouveau



Organic Architecture 1894- Present

Most famous architecture for this style was Frank Lloyd Wright

Developed prairie style houses

Characterized by a building that appears to "grow out of the land"



Art & Vogue or Art Deco 1909-1940

Decorative Style

Swirling forms animals and humans

This time period is when poster became popular – poster means poor mans art

Worshiped the move stars and movies

Time of glamour, jazz, ballroom dancing

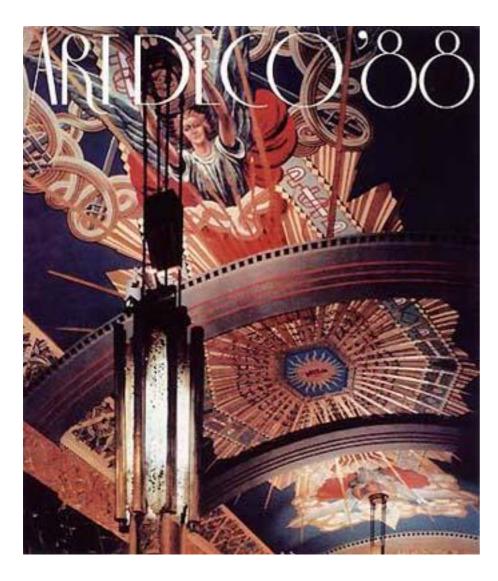
"Anything Goes" was the motto

Different designs

Checker board designs

Jute box, rumpus rooms, and old coke machines

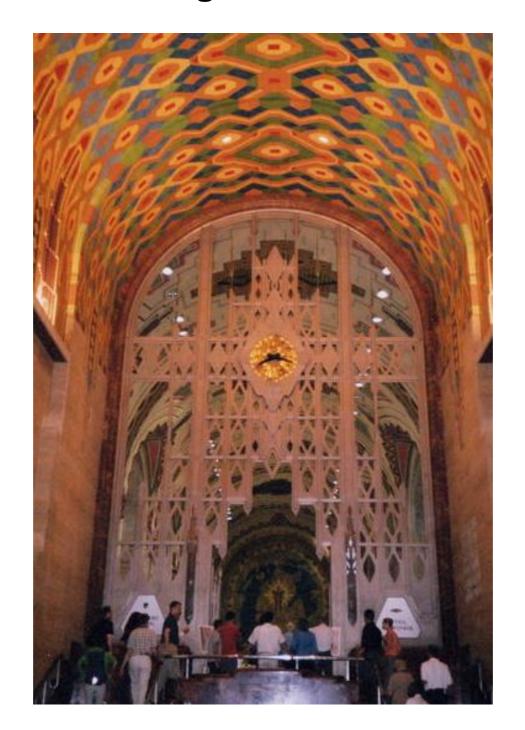
Introduced the white and black furniture and sky scraper furniture



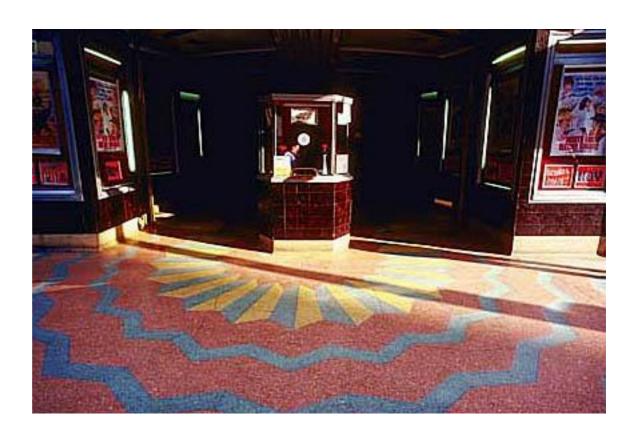




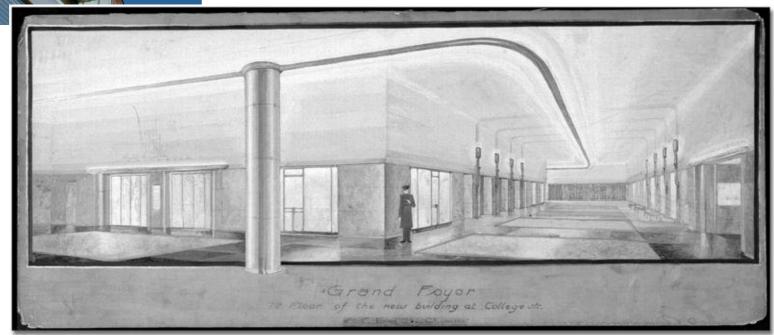


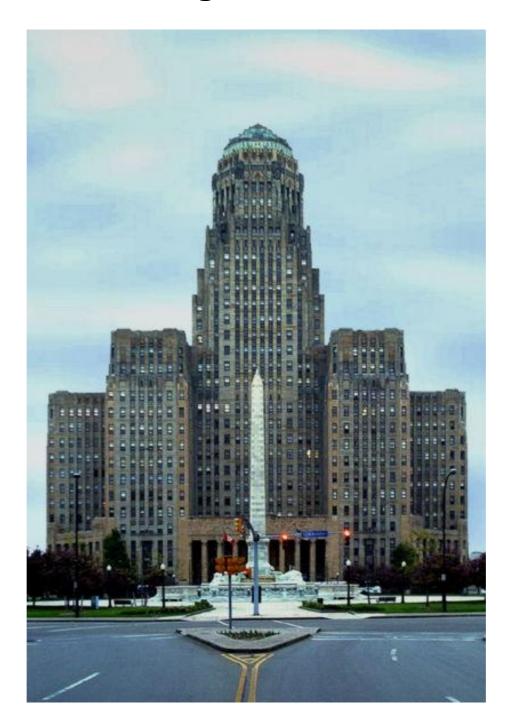


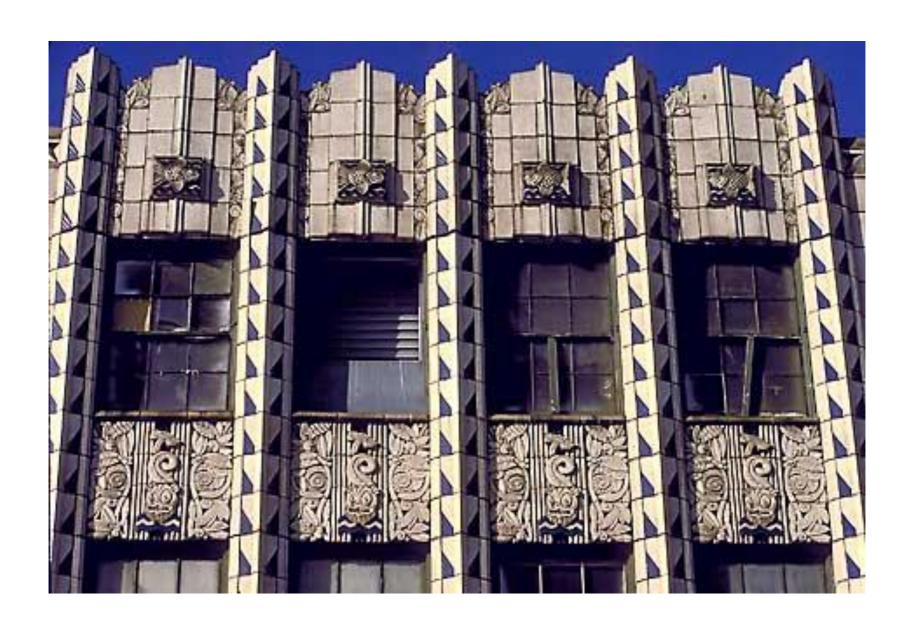














International Style (Turn of Century-1950)

The international style term usually refers to the buildings and architects of the formative decades of modernism, before World War II. The term had its origin from the name of a book by Henry-Russell Hitchcock and Philip Johnson which identified, categorized and expanded upon characteristics common to modernism across the world. As a result, the focus was more on the stylistic aspects of modernism. The basic design principles of the international style thus constitute part of modernism.

Style based on functionalism and purity of line

International Style

Common materials included reinforced concrete, stucco, steel, and glass

Stark white finishes

Open floor plan and large expanses of glass



International Style



International Style

