## History of New York City Architecture

1820-1865
The Lure of the Past,
The Promise of the Future

## Changes in Architecture and the Building Industry

- New York City infrastructure
- Rise of Architecture as a profession
- Rapid changes in building technology
- New building types
- Multiplicity of styles


## New York City Infrastructure



- Fire remained a constant threat

- Croton aqueduct system built for fire prevention and public health


- Streets remained congested and dirty
- Encouraged movement to the "suburbs"


## NYC 1825-1850




- Many new materials were introducedCast iron, plate glass, wire nails, light wood framing

- Canals, especially the Erie Canal which opened in 1825


## Advances in building technology



- Mechanization made work easier, quicker and cheaper

- Rapid improvement of transportation used to move people, goods and raw materials. Innovations included the steam ship...

- And railroads which traversed the country. New York City was the terminus



## Croton Water Supply System



## Croton Water Supply System

High Bridge


## Croton Water Supply System Viele Map 1865



Reservoir, $42^{\text {nd }} \mathrm{St}$.

## Developments in architecture and building technology

Architecture developed as a profession
Extensive advances in building technology
Transportation became easier and faster
New building types introduced

## Architecture developed as a profession

- Number of architects increased
- Combination of college education and engineering experience
- Extensive libraries of design, mathematics and science collected

- 1837 First attempt to establish a professional organization of architects
- 1850 NYC architect won right in court to be paid for preliminary designs
- 1857 American Institute of Architects established


## New building types were introduced



- "The office"

- Department stores


- Libraries, schools and colleges

- Cemeteries


## classicism

## revival of principles of Greek and Roman architecture

symmetry, proportion, geometry, ordered


## the Orders: terminology



## What is an order?

- An order is the total assemblage of parts consisting of the column and its appropriate entablature.



## orders



- Tuscan Corinthian



## Tuscan

- Simple base
- Unfluted shaft
- Plain frieze
- Variation on the Doric column



## Doric

- Heaviest and most massive of the orders
- No base
- Fluted column



## Ionic

- Base
- Fluted shaft
- More elaborate capital with volute (a spiral curve; a curved top)



## Corinthian

- Base
- Fluted shaft
- Thinnest
- Richly decorated
- Large capital with 3-4 layers of curling acanthus leaves



## Composite

- Base
- Fluted shaft
- Most sculpturally elaborate
- Acanthus leaves of

Corinthian capital combined with the volutes of the Ionic order


# entablature is the whole assemblage of parts supported by the column. 




The entablature is divided into three parts:
cornice (any molded projection which crowns or finishes the part to which it is attached)
frieze (a decorative band)
architrave (ornamental moldings)


## pediment

In classical architecture, it is the triangular gable end of the roof above the horizontal cornice.

In later work, a surface used ornamentally over doors or windows.


## portico

porch with a roof usually carried by columns, protecting the main entrance to a building.



From Asher Benjamin's The Architect, or Practical House Carpenter

## temple front

A temple front is a decorative façade treatment consisting of columns carrying a pediment and resembling a Classical temple. It extends across the entire front façade.


## rustification

- Cut stone having strongly emphasized recessed joints and smooth or roughly textured block faces, used to create an appearance of strength. There are many patterns of rustification.





## arch

- A curved construction which spans an opening; usually it consists of wedge-shaped blocks called voussoirs, or a curved or pointed structural members which is supported at the ends or



## arch terminology





## Multiplicity of styles

- Greek Revival 1820-1850
- Gothic Revival 1840-1870
- Italianate 1840-1860
- Additional: Renaissance, Egyptian, Romanesque revivals
"Eclectic Revivals" characterized this era


## Greece c. 450 BCE



## Characteristics of the <br> Greek Revival Style 1820-1850

- Simplified forms and proportions
- Bold silhouette
- Use of columns and pilasters
- Broad proportions
- Temple front with pedimented gable
- Or flat entablature with unadorned friezes
- Entrances covered by porticos
- Or door framed by entablature and pilasters
- Sparse and simple ornamentation
- Buildings were generally larger

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## NYC 1825-1850





- 1-13 Washington Square North, attributed to Ithiel Town \& A.J. Davis, 1832-1833.

- 1-13 Washington Square North, attributed to Ithiel Town \& A.J. Davis, 1832-1833.


- 1-13 Washington Square North -- entrance details


## Old Merchant's House

- 29 East $4^{\text {th }}$ St. 1832
- Late Federal, early Greek Revival


*Snug Harbor Cultural Center/ originally Sailors' Snug Harbor,
Buildings B, C and D, Minard Lafever, 1831-1841
*Snug Harbor Cultural Center/ originally Sailors' Snug Harbor, Buildings B, C and D, Minard Lafever, 1831-1841

- *La Grange Terrace, also known as Colonnade Row, attributed to Seth Geer, 1832-1833.

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- St. James Church, attributed to Minard Lafever, 1835-1837.

