Site, Situation and the Industrial City

The information and graphics in this presentation are drawn from William Cronon, Nature’s Metropolis (New York & London: W.W. Norton & Company, 1991)
BR: How would you describe the location of Chicago?

- BR Music
- Song: Drink Muddy Water
- Artist: Sonny Terry and Brownie McGee
Definitions

- **Site**: the relationship between a city and the physical environment and landscape in which it is located - its immediate area
- **Situation**: the relationship between a city and the rest of the urban system in which it is located - its connections to other places
- **Hinterland**: the area effected or dominated by a city - its trade area
Defensive Sites

- River-meander site
- River-island site
- Offshore-island site
- Peninsula site
- Sheltered-harbor site
- Acropolis site

Legend:
- City
- Fortifications
- Road
- Escarpment
Mont Saint-Michel
Mont Saint-Michel
Would this be a good type of place for urban growth in the 21\textsuperscript{st} century?

- No, there is no longer a need for this kind of protection, so isolation becomes a disadvantage.
- Yes, 21\textsuperscript{st} century cities depend (among other things) on tourism money, and Mont Saint-Michel is a prime tourist destination.
- Isolation has gone from being essential to being an inconvenience to being an amenity, …
- Site characteristics are evaluated differently in different periods of a culture’s evolution.
This “defensive” city is invaded by some 3,000,000 tourists annually!

Carcassonne, France
Sites favoring commerce

Bridge-point site

Confluence site

Head-of-navigation site

Portage site

City

Waterfall

Road

Marsh
Pittsburgh, “the point”

Originally a defensive site, but perfect for river-based commerce and later for industry …
Chicago’s Site- Native American View

- Value of a location is often shaped by perceptions
- Site of Chicago seen as a swamp and wild onion field by the Native Americans- “Only the white man would live there”
- Chicago means “place of the wild onion” in Potawatomie (or “smelly place by the river”)
Chicago’s Site - European View

- When settlers first came to the town of Chicago, they found a swampy expanse of low, flat land only two feet above the river level.
- Chicago suffered from poor drainage, chronically muddy streets, and backed up sewers.
- Good place to live? No! Did that stop anyone? No! Why Not?
Chicago’s Site

- Settlers simply decided to overcome the site’s inherent problems
- Solution to drainage issue-
  - raise the level of the city’s streets and buildings

Why not just go someplace else?
Chicago’s Situation

- What was seen as a wild onion field by the Native Americans was seen as a point of least distance between two inland waterways by the European settlers.
- Founded at the southwestern tip of Lake Michigan because of its proximity to the Great Lakes and Mississippi River systems.
- Chicago’s situation predisposed it to be dominant within the urban system.
In the mid 19th century Chicago vied with St. Louis for the role of the leading city in the “West”

Why Chicago?
Why St. Louis?

Chicago’s Situation

- Chicago’s situation predisposed it to be dominant within the urban system.
- Its development and rapid growth would not have occurred without the rich resources found in its regional hinterland.
Situation and Hinterland

- Early development - access to the Western interior and its rich resources of furs.
- When Fur trade died out in the 1830s, Farms and ranches sprung up on the fertile soil of the western prairies and sent their produce to Chicago.
- Here it was processed and shipped to the Eastern markets.
Situation and Hinterland

- Lumber from the forests of Michigan and Wisconsin was cut in sawmills along the Chicago River before being shipped West.
- Later, iron ore from Minnesota and coal from Southern Illinois made their way to the steel mills of the city's South Side.
- Entrepreneurs and investors took advantage of its situation (some made money and some lost it) to turn this city into the leading city of the Midwest.
Rise to regional dominance

- Chicago rose to the position of the dominant western city in the U.S. by 1870
- population of 1 million by 1890, up to from only 4,500 people in 1840
- the city grew by 19,000 people each year for 50 years
- passed up St. Louis during the Civil War
- but urban dominance involves more than just population size
In the mid 19th century Chicago vied with St. Louis for the role of the leading city in the “West”

Why?

Why St. Louis?
BR: How might competition between the Canal and railroad benefit Chicago? How are they symbiotic (complementary)?

- BR Music
- Song: Wabash Cannonball
- Artist: Doc Watson
The rail lines created a pattern…

west of Chicago they formed radial lines, like a funnel (W. to E.) or a sprinkler (E. to W.)

east of Chicago they formed a “trunk” to New York
Seven Characteristics of a City

Cities are:
- Central places
- melting pots of people's and cultures
- places of exchange (products, materials, services, ideas)
- places of storage and supply
- engines of change / centers of creativity
- Influence places beyond their borders
- Connected to other cities
BR: Watch the video segment from City of the Century on
Dizzying time-space compression
Shipping rates were held in check by competition between water and rails
Chicago’s role was as coordinator of north-south and east-west flows. Lumber traveled from north to south, and hardware had to be directed from east to west.
Chicago as a case study of spatial linkages in the industrial era

- logging & lumber
- grain shipping
- meat slaughtering and packing
- debt
Logging & Lumber

- north-south axis
- summer-winter seasonality
- economically marginal
- totally depended on Chicago:
  - lumber market
  - labor market
  - land market
  - credit market
Transformation of nature
Grain Shipping

- best soil in the U.S. lay under the tallgrass prairie
- steel plow (1822) was able to cut heavy sod
- the impetus for rapid land conversion lay in Chicago’s monetary instruments and grain-handling technologies
- Chicago Board of Trade introduced grading system for grain (1848)
- grain elevators required graded grain, drastically reduced per-bushel overhead costs due to waste and labor
The crucial shift: treating grain as a fluid element rather than discrete items

new way (Chicago Board of Trade)

old way (selling by the bag)
Meat Slaughtering & Packing

- 20-40 million bison eliminated in 25 years
- about 2000 per day
- grain farms and cow pastures replaced the open prairie as European peoples replaced Native Americans
- Union Stockyard: 10 miles of feed troughs, 500,000 gallons of water/day, 2,300 pens
- **economies of scale** allowed Chicago meat packers to undercut the prices of local butcher shops throughout the Midwest
The first “assembly line” was a disassembly line
Meat Slaughtering & Packing

- Any city creates a market that encourages both settlement and land conversion.
- Industrial era infrastructure (i.e. the train and refrigeration combined) made it possible for the city to exert this influence over a wider area.
- The stockyards, originally at the south end of the city, became a focus of activity and a nucleus of new urban growth.
- The stockyards even became a popular tourist destination and people could watch the animals being slaughtered.
How beef was shipped long distance
Debt

- Credit flows are normally hidden & private
- Bankruptcy filings bring them into the public record
- **Q: Were 19th c. Chicago debtors different from debtors in Peoria?**
- Study of 1873 financial panic shows invisible economic links
- Peoria’s hinterland is local while Chicago’s stretched from the Gulf coast to Lake Superior and from the Mississippi to Cape Cod!
Chicago’s dominance was indicated by its debts in the recession of 1873-74.
## First and second nature

<table>
<thead>
<tr>
<th>FIRST NATURE</th>
<th>SECOND NATURE</th>
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<tbody>
<tr>
<td>animals &amp; plants in an area reflect climate, soil, topography, etc.</td>
<td>animals &amp; plants in an area reflect shipping, investing, and human diet</td>
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<td>the most important flows are energy flows</td>
<td>the most important flows are cash flows</td>
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<tr>
<td>natural complexity makes prediction difficult</td>
<td>social complexity makes prediction difficult</td>
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Chicago represents “the industrial city” in the American imagination:

- dirty
- rough
- uncivilized
- dynamic
- creative
- corrupt
Hog butcher for the World
Tool Maker, Stacker of Wheat,
Player with Railroads and the Nation’s
Freight Handler;
Stormy, husky, brawling,
City of the big shoulders.

Carl Sandburg
“Chicago is a city of Working people, who came to earn their daily bread in heavy industries--steel, packing, railroads, farm equipment. They came seeking more than bread though. There has always been in this city, this cockeyed wonder of a town, a quest for beauty.”

Studs Terkel
“Chicago the jazz baby--the reeking, cinder-ridden, joyous Baptist stronghold, Chicago the chewing gum center of the world, the bleating slant-headed rendez-vous of sociopaths and pants makers--in the name of the seven Holy Imperishable Arts, Chicago salutes you.”

Ben Hecht
“I have struck a city--a real city--and they call it Chicago. The other places do not count. ...Having seen it, I urgently desire never to see it again. It is inhabited by savages ... and its air is dirt. Also it says that it is the ‘boss’ town of America.”

Rudyard Kipling
Fate of the American small town

- The American small town ("Optimo City") evolved from a fort, struggled for the county seat, is laid out in a grid, bears evidence of dependency on the railroad, is racially and economically segregated, is still tied to its rural hinterlands, is focused on a courthouse square, and is both threatened and enchanted by the promise of growth.

- J. B. Jackson (1952)
Fate of the American small town

- Small town founded in the 19th c. is now “in retreat”
- Architecture from 19th c. remains but the purpose for the town has been undermined and the buildings are often empty
  - Automobile and freeway formed the basis of a different type of spatial organization
  - Long-distance travelers pass through, don’t stay the night
  - Residents no longer gravitate toward the center of town for routine shopping
  - Residents go to distant cities for major shopping at “regional shopping centers”
- Witold Rybczynski (1995)
Caldwell County Courthouse
Lockhart, TX

Mike Flanery: http://courthouses.flanery.net/index.html
Site and situation work together

At a given point in history, within a particular culture, a certain site may be perceived as advantageous or disadvantageous

- It may present a threat or an opportunity
- Much of the judgment rests on technology, especially transportation and storage technology

Part of this judgment relates to the potential of a city to interact with other cities (its situation)