

Nature's Metropolis
By William Cronon

Reviewed by Talia Henze, Susan Radke-Sproull, Drew Redman, and Nic Arcos
January 2007, URBDP 565A, University of Washington

Author biography

William Cronon is a history, geography, and environmental studies professor at the University of Wisconsin in Madison where he holds the title of Frederick Jackson Turner and Vilas Research Professor. He has committed himself to understanding “the history of human interactions with the natural world”¹ by publishing a number of related major works and articles and also by involving himself in a variety of pertinent organizations. He currently teaches courses on geography, environmental history, and the American west.



His first book, Changes in the Land: Indians, Colonialists, and the Ecology of New England, which examined the passing of New England’s landscape from Indian to colonial control, was awarded the 1983 Frances Parkman Prize. In 1992, after Nature’s Metropolis, he co-edited a collection of essays entitled, Under an Open Sky: Rethinking America’s Western Past. Most recently, in 1995, he published his own collection of essays, Uncommon Ground: Rethinking the Human Place in Nature. This book included his essay "The Trouble with Wilderness, or, Getting Back to the Wrong Nature," in which he proposes a controversial definition of wilderness that is not completely walled off from that which is human.²

Nature’s Metropolis was nominated for a Pulitzer Prize in History, and was awarded a Chicago Tribune’s Heartland Prize, a Bancroft Prize, a George Perkins Marsh Prize from the Society for Environmental History, and a Charles A. Weyerhaeuser Award from the Forest History Society.

Dr. Cronon acts as the general editor for Weyerhaeuser Environmental Books Series for the University of Washington Press, and he serves on the editorial board for a number of historical and environmental journals. He is also a member of the National Board for the Trust for Public Land and part of the Governing Council for the Wilderness Society. He has also served as president of the American Society for Environmental History. Throughout his academic career, he was a history professor at Yale University and was the recipient of a Rhodes Scholarship, and Danforth, Guggenheim, and MacArthur Fellowships.

Dr. Cronon is the child of a historian. He has said, “almost every question I had about the world included asking how things got to be this way.”³ He has devoted his life to academic pursuits, ferreting out and crafting the larger significance of our historical relationship with the environment. In a plenary address to the Land Trust Alliance Rally in 2005, he said, “land conservation protects nature. But it also protects community and democracy and our core values as a nation.”⁴

¹ Cronon’s website, Jan 28: <http://history.wisc.edu/cronon/Biography.htm>

² “An Interview with William Cronon,” *Scapes* (Parsons New School for Design, Department of Architecture, Interior Design, and Lighting), 5 (Fall 2006), 34-45.

³ “An Interview with William Cronon.”

⁴ **Cronon's Plenary Address to the 2005 Land Trust Alliance Rally**

Critical reception

Nature's Metropolis, written by William Cronon, was published in 1991. Reviews of the work appeared in journals and periodicals ranging from *The New Yorker* to economic journals, from design-focused *Metropolis* to the scholarly *Annals of the Association of American Geographers*, from publications that explore American History as a qualitative subject to publications that embrace geography to apply quantitative analysis to understanding patterns in history.

Reviewing the book in 1992 as a work of American history, Peter Conclanis' review⁵ can be viewed as a wounding personal attack on Cronon's work, in both style and content, or a breath of fresh air, depending on the point of view: At the same time accusing Cronon of a tendency, across his works, to drift "into (Birken-)stock condemnations of accumulation," Conclanis does find the book to achieve a certain level of originality that should be praised. Additionally, he gives accolades for the fine details that Cronon's book achieves in Chapter 2 through 7. Conclanis expresses an appreciation for the research and links that Cronon completes.

However, in Conclanis' view, the author's faults are too overwhelming to be ignored. Most of these faults center on a certain "smugness of tone" and "self-importance" as Cronon introspects in the early and closing chapters. Further, Conclanis accuses Cronon of ignoring entire disciplines (development economics, regional sciences, etc.) and parallel industrial activities in Chicago (foundry and machining, clothing and apparel, and manufacture of tobacco products) that would balance the story. Moreover, he takes issue with Cronon's "introduction" of models such as von Thunen's circles without giving due credit for the extent to which they have dominated the field of regional development for decades.

Ultimately, Conclanis feels that Cronon's work is too greatly flawed in content and style to praise as a worthwhile representation of Chicago's history of development. (Some of this review seems to be less than objective. Cronon himself at the outset of the book emphasizes that the book is not intended to be a history of Chicago's development. *ed.*)

Writing in the same year for the journal for the Society for the History of Technology, *Technology and Culture*, Carl W. Condit had a slightly more positive view⁶. Overall, Condit commended Nature's Metropolis as a valuable contribution to urban history, but felt that Cronon focused too much on entrepreneurs, and not enough on economic, material, and cultural history. Condit praises the narrative as 'rich and lively' and largely agrees with Cronon's premise that that Chicago and its hinterlands grew together in a "natural-cultural symbiosis of prairie agriculture, forest lumbering, city enterprises, canals, and railroads."

However, Condit criticizes Cronon for missing crucial aspects of Chicago's geography in determining its regional status: abundant iron ore in Michigan and Minnesota and coal in

⁵ Conclanis, Peter A. "Urbs in Horto." Review of *Nature's Metropolis: Chicago and the Great West*, by William Cronon. *Reviews in American History* 1992 20 (Mar): 14-20.

⁶ Condit, Carl W. *Technology and Culture*, Vol. 33, No. 3. (Jul., 1992), pp. 591-593.

Illinois and Indiana. These two minerals guaranteed the concentration of wealth and railways in Chicago. Also, cultural aspects like the Chicago Symphony Orchestra, the Field Museum of Natural History, libraries, the Art Institute, and the University of Chicago were overlooked in Cronon's discussion of the World Expo: "The civic creations of the 1890's can and should have been integrated with the material on the world's fair..."

These criticisms contrast with a review by Verlyn Klinkenborg, himself an acclaimed author and essayist, in *The New Yorker* in 1991.⁷ The enthusiastic tone of his review invites readers to plunge into Cronon's "rare historical work which treats nature and the moral force we derive from it seriously without lapsing into tendentiousness and without harming the quality of its historical analysis." In particular, Klinkenborg's imagination is captured by Cronon's description of the commercialization of "first nature" ("the nonhuman world of ecological relations") into commodities (lumber, grain, and meat). Klinkenborg reflects his own enthusiasm by devoting most of the text of his review to delivering the message of the book, presumably as a way of encouraging his audience to dive in. Klinkenborg ends his review with what appears to be Cronon's final message as well: the city and the country are inextricably linked, the welfare of one is bound in the welfare of the other, and we should be systematically taking better care of both.

Similarly, C. F. Runge, in a 1993 issue of *Land Economics*,⁸ embraces Cronon as an "environmental historian" who "cares deeply for the environment" and uses Chicago as a symbol to explore the "impact of market forces on the faces of nature." Runge's review of the book is strongly positive, concluding that in Cronon's book are lessons for the economist who fails to see the link between economic and market expansion and the depletion of the very resources that made that expansion possible.

⁷ Klinkenborg, Verlyn. "Boosted." Review of *Nature's Metropolis: Chicago and the Great West*, by William Cronon. *The New Yorker* 1991 (July): 77-79.

⁸ Runge, C. F. Review of *Nature's Metropolis: Chicago and the Great West*, by William Cronon. *Land Economics* 1993 69(1) (Feb): 116-118.

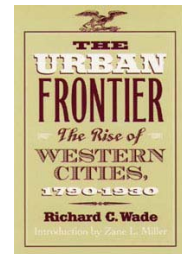
Contextualizing the work

In a recent interview, Cronon, a leading figure in environmental history, stated that his is a relatively new subject of research, dating only to the 1970s.⁹ So, while it is good to look at Cronon's work in the context of his contemporaries, it is also necessary to take a quick look at older schools of thought which provoke the environmental historian's reaction



Frederick Jackson Turner, 1861 – 1932, provides us with a perfect portal to the latter school of thought. Turner had an enormous impact on the history of the American west. What historians refer to as the “Frontier Thesis” or the “Turner Thesis” is outlined in one of his most famous essays, “The Significance of the Frontier in American History,” published in 1893 and delivered in a lecture at the Chicago World's Fair.¹⁰ In a brief review of a number of works on the western frontier, Turner's is the thesis against which many historians measure their own arguments. Since 1947, there has even been a professorship at the University of Wisconsin Madison named after him. It is a small measure of irony that William Cronon, currently the Frederick Jackson Turner Professor at this university, spends a good number of pages at the beginning of *Nature's Metropolis* addressing and rebutting Turner's contribution to and influence over the subject of frontier expansion in the American west. Turner's theory is that savage wilderness is slowly taken up in progressive stages by rural pursuits and increasingly intense agriculture uses that result in increasingly urban settlements.¹¹ Cronon and his contemporaries, including Robert Wade, make the case that settlement of the American west was not the result of a Turner-like evolution along a hierarchy from wild to urban; rather, in Cronon's vision, western evolution of city and country occurred concurrently and in intricate tandem.

Robert Wade, in his 1959 work, *The Urban Frontier: The Rise of Western Cities, 1790 – 1830*, turned the Turner thesis inside out by arguing that cities, funded by advance investments in boom times, were the entities which sparked agricultural economies (in turn supporting the economic structure of the cities¹².) Wade broadly outlines of the nascent efforts of Pittsburg, Cincinnati, Lexington, Louisville and St. Louis to establish early “frontier” urban locales, each consciously modeling an already



⁹ “An Interview with William Cronon,” *Scapes* (Parsons New School for Design, Department of Architecture, Interior Design, and Lighting), 5 (Fall 2006), 34-45.

¹⁰ Online Wikipedia entry on Frederick Jackson Turner, viewed on January 27, 2006 at: http://en.wikipedia.org/wiki/Frederick_Jackson_Turner

¹¹ *Nature's Metropolis*, pp. 46-54.

¹² H-Urban Book Reviews by Carl Abbott, Portland State University, “Abbott on Wade, Urban Frontier Review,” viewed January 28 at <http://h-net.msu.edu/cgi-bin/logbrowse.pl?trx=vx&list=h-environment&month=9707&week=e&msg=eI2f247HrpMGft3mjRRwYQ&user=&pw=> and by James Wunsch, Empire State College, “Wade's frontier,” viewed January 28 at <http://h-net.msu.edu/cgi-bin/logbrowse.pl?trx=vx&list=h-urban&month=9706&week=a&msg=yL//3tK5cN0lm%2bao7Wh%2bAA&user=&pw=>

established coastal city. “In each area, urban leadership built up trade and industry and also supplied the impulse and economic support for civilization and culture.”¹³ Wade appears to be associated with the poignant anti-Turner argument that the advance of western settlement was not a ‘natural,’ practically pre-ordained evolution, but the result of a more aggressive pursuit of economic and commercial expansion. Cronon takes up a similar historical perspective. Wade and Cronon also express similar thoughts on the integrated histories of both urban and rural landscapes.



In Nature's Metropolis, Cronon recognizes Donald Worster as having influenced his work. Worster published Nature's Economy: A History of Ecological Ideas in 1977; it was republished in 1985 and 1994. In an attempt to uncover “the roots of our contemporary perception of nature,” Worster reviews the history of ecology in five stages. He starts with 18th century romantic relationships to nature and ends in an analysis of the contemporary evolving rivalry between notions of ecosystems and an “organicist” approach.¹⁴ At a time when the subject of environmental history was in its early phases, Worster provided a thoughtful guide through the fluctuations in our perception of the natural world. Cronon uses a similar approach in his careful treatment of “first” and “second” natures in Metropolis.

These three examples only give a small representative of Cronon's contemporary context; Cronon himself lists many other examples. In Nature's Metropolis, he recognizes the influence of Michael Conzon (who wrote historical geographies on metropolitan dominance), Patty Limerick (a fellow Turner critic), and Allan G. Bogue (who wrote about the political and economic forces that shape agriculture). For their particular influence in linking human and natural history, Cronon has also cited¹⁵:

- Aldo Leopold, The Sand Country Almanac
- Rachel Carson, Silent Spring
- George Perkins Marsh, Man and Nature
- Carl Sauer, Man's Role in Changing the Face of the Earth, and
- Raymond Williams, The Country and the City, and in particular, his essay “Ideas of Nature” in Problems of Materialism and Culture.

¹³ Catherine E. Reiser, “Untitled Review of The Urban Frontier: The Rise of Western Cities, 1790 – 1830 by Richard C. Wade.” The Mississippi Valley Historical Review, Vol 46. No.3 Dec 1959, pp 507-509.

¹⁴ From Nature's Economy, quoted in an untitled book review by J. Sheail, Journal of Ecology, Vol. 83, No. 3 (June, 1995), pp. 556-557.

¹⁵ “An Interview with William Cronon,” Scapes (Parsons New School for Design, Department of Architecture, Interior Design, and Lighting), 5 (Fall 2006), 34-45.

Outline of the Book

Preface: Understanding the book

- A dozen years in the making
 - Started as doctoral dissertation
 - Myriad sources
 - Historical accounts
 - Chicago guidebooks and booster flyers
 - Patterns of newspaper subscriptions: in 1834, ¾ were mailed outside the city
 - Land ownership and bankruptcy records
 - Railroad company books
 - Commodity receipts
- Author's goals
 - Present a history: not a history of Chicago, or of the Great West, but a history of the relationship between them
 - Explore century-old economic and ecological transformations that continue to affect all of North America
 - Tell the city-country story as a unified narrative
 - Explore environmental change in relation to the actions of human beings
 - Combine economic and environmental history in a way that will excite
 - Reflect on our collective future
- Book's structure
 - Organize the book around commodity flows
 - Understand environmental change in relation to the actions of human beings
 - Present a series of stories, each tracing the path between an urban market and the natural systems that supply it
 - Present a series of historical journeys between city and country in an effort to understand the city's place in nature
- Underlying premises
 - No city played a more important role in shaping the landscape & economy of the mid-continent during the second half of the nineteenth century than Chicago
 - One cannot understand the growth of Chicago without understanding its special relationship to the vast region lying to its west
 - In Chicago's story is the starting point for today's environmental problems
 - City and country have a common history, so their stories are best told together
 - Few economic institutions more powerfully affect human communities and natural ecosystems in the modern capitalist world than commodity markets
 - Commodities that feed, clothe, and shelter us are among our most basic connections to the natural world
- Key terms
 - *Great West*: from Lake Michigan all the way to the Pacific Ocean
 - *Frontier*: areas on the periphery of the metropolitan economy

- Nature
 - *First nature*: original, un-constructed world
 - *Second nature*: artificial nature erected atop first nature

Prologue: Questions to ponder about the “Cloud over Chicago”

- Where is the line between “natural” and “unnatural?”
 - Is it the same as between “country” and “city?”
 - Is the line at untouched hinterlands? Plowed fields, farms, woodlots, agricultural countryside? Second-growth forests? Streets, buildings, parks?
- Can city and country be treated as isolated places?
 - Could farms survive without the cities?
 - Could cities survive without the crops delivered by the farms?
 - Can people truly build a world for themselves apart from nature?
- Is the city “august as well as terrible?”
 - Is Chicago proof that the US is, indeed, “nature’s nation?”
 - Is Chicago proof of the triumph of human will over natural adversity, a “wonder of nature transformed?”
 - Have the same forces that created the city robbed its citizens of their humanity?
 - Is one “curiously alone” from values that give human life larger meaning: closeness to neighbors, a sense of rootedness in the soil, a feeling of belonging?
 - Does living in such a place risk putting human creation above the works of God?
- Part I of the book lays the groundwork for understanding subsequent environmental changes
 - Tallgrass prairies give way to cornstalks and wheat fields
 - White pines of the north woods become lumber
 - Vast herds of bison die to make room for more manageable livestock

Sources: ~20 sources, mostly novels or essays in which Nature, city, and country are depicted

Part I: To be the Central City – Chapter 1: Dreaming the Metropolis

- Patterns on a Prairie Landscape: metropolitan history begins with geography
 - Chicago “the wild garlic place” was first defined by its geography: rich glacial soil, natural harbor, river access, borderland between western prairies and eastern forests
 - 1770’s: fur-trading post
 - 1830: vast trading network, prosperous but small
 - 1833: beginning of Chicago’s metropolitan history... Chicago more than doubled population, became center of the most intense land speculation in American history
- Booster Dreams: theories of economic growth that dominated 19th century thinking
 - Boosters worked from a surprisingly coherent model of urban and regional growth: symbiotic relationship between cities and their surrounding countryside
 - Believed that big profits came from town sites, not agricultural land
 - Believed that features of the landscape pointed toward key locations that nature had designed for urban greatness
 - *Regional resources* that would center the region’s trade on the city
 - *Natural transportation routes* (and their evolution)
 - *Climatic forces* (temperate zone)
 - Goodin’s gravitational theory (forerunner of *central place theory*): cities had their roots in natural phenomena but ultimately grew because people chose to migrate to them
 - Rural populations clustered around small villages, which clustered around larger towns, which clustered around still larger cities... to an ultimate central metropolis... the ultimate spatial arrangement of human beings
 - Drove careful quantitative analysis, e.g., of census and demographic data, to predict where the ultimate central city would arise
 - Speculators gambled on an urban future, without Chicago passing through a “pastoral stage” of agriculture or small town
- Metropolis and Empire: new model of the relationship between a city and its hinterlands
 - America’s cities would grow by commercial power, not military might: the central metropolis would be the center of a commercial empire wherein the flow of “tribute” would enrich all and impoverish none
- Reading Turner Backward: two views of the Great West are two sides of the same coin
 - Boosters’ vision of the future: urban markets make rural development possible... Chicago was an intimate part of frontier settlement from the beginning
 - Turner’s view as frontier historian: the appearance of cities marked the end of the rural frontier... Chicago rose to power as the frontier drew to a close

- Reconciliation may lie in a theory of urban-rural systems called *central place theory*, with roots in von Thunen's 1826 *The Isolated State*: a mathematical description of the spatial relationships and economic linkages between city and country
- Movement of capital held one of the most important keys to the metropolitan empire... explains why large cities developed so much more quickly in the West than Turner's evolutionary frontier stages suggest

Sources: 100+ sources – primary data (flyers, newspapers, letters, records), autobiographies, historical essays/analyses, geology/naturalist guides

Part I: To be the Central City – Chapter 2: Rails and Water

- Market in the mud: a “second nature” built on and improved “first nature” and the distinction blurred as people reshaped the landscape to reflect their vision of it
 - Natural avenues of transportation might play important roles in shaping a city’s future, but the preexisting structure of the human economy (second nature, not first nature) determined which routes and which cities developed more quickly
 - What built Chicago? A junction of Eastern means and Western opportunity
 - Just as von Thunen predicted, Chicago’s regional economy was shaped primarily by distances between city and country expressed not in miles but in the time and expense devoted to transportation
- Artificial corridors: canal and railroad
 - Disadvantages of “first nature” transportation (silted harbor, stretches of marshland, bad drainage, seasonal constraints) limited business
 - 1848: canal opened, linking Chicago to the east, after state financing woes from 1830’s through 1845: markets boomed
 - 1848: 10 miles of railroad financed by farmers and towns along its line
 - 1850’s: most rapid rail expansion in American history: all roads led to Chicago
 - Revolutionized Chicago’s access to the Great West
- Railroad time: key innovations
 - First: radical break with geography: straightest possible route between market centers
 - Second: operated independently of climatic factors: reduced seasonal economic cycles
 - Third: shrank distances by shrinking time: flow of people, of goods, of information: the birth of the new “standard” time zones
 - Fourth: broke restrictive relationship between biological energy and movement
 - Required concentration of capital and unprecedented levels of coordination over thousands of square miles
 - \$1.1B invested in American railroads by 1860
 - Railroads spent money moving goods and passengers in order to earn a profit out of the difference between their receipts and their operating expenses
- The logic of capital: Chicago’s growth was nourished chiefly by its linkages to eastern areas with greater concentrations of capital
 - Investors from eastern cities controlled most of Chicago’s railroad networks
 - Most important feature: Chicago’s location at the breaking point between eastern and western rail networks: no single railroad company operated trains both east and west of Chicago.
 - This “trunk and fan” geography of the railroad, and the fact that ships had cost advantages if time was not an issue, set the stage for the rates and cost structures that maintained Chicago’s dominance: Chicago became the link that bound the different worlds of east and west into a single system.

- Chicago became a metropolis, not based on being “the central city” that the boosters envisioned, but by being the gateway to the Great West.

Sources: 100+ sources – primary data (flyers, newspapers, letters, records, esp newspaper subscriptions, railroad receipts, company reports), census data, autobiographies, historical essays

Part II: Nature to Market – Chapter 3: Pricing the Grain: Future

- Grains and people transported
 - Transportation to markets and country-side
 - Without farmers there is no city
- New crops introduced into regional ecology
- New tools, draft animals, techniques
 - Professional farming/breaking was expensive and complex
 - Non-subsistence farming
- Farmers located near river and forested areas
 - Flat land
 - Transport and resources
- Cities gateway of trade
 - Warehouses on water
 - Insurance industry prospered among shippers/traders/etc
- Railroads provide quick and efficient access to new areas
 - More warehouses
 - Elevator
 - Technology replacing individual workers
 - Owned by rail companies
 - Lower costs of transport
 - Non-water based settlements emerge
- Sack unit
 - Transport required many stops
 - Producer's product until sold in city/market
- Chicago Board of Trade
 - Replacing local country shop keepers as regulators
 - Standardization/grading of product (ie grain)
 - Grain mixed, not owned by producers
 - Regulation
 - Fraud questioned honesty and integrity of system
- Telegraph allows new market geography and guaranteed sales
- Futures market
 - Price of grain not grain
 - Grain is separated from nature
 - A tradable commodity even though has not grown or been planted

Sources: 200 sources – newspapers, letters, records, newspaper, handbooks, guides, company reports, board reports, government reports, autobiographies, historical essays

Part II: Nature to Market – Chapter 4: The Wealth of Nature: Lumber

- Forest/nature converted to capital
 - Social relationships produce capital
 - Based on consumption not production
 - Soil quality was high
- Nature made the city
- White pine
 - Strong and easy to use
 - Floated (transport)
 - Chicago allowed the movement of water, men and wood
- Technological innovations (ie band saw) prevented capital from being wasted
- Flows of supplies
 - From city to mill (local shops) and from mill to city (lumber)
- Chicago center for wage labor
 - Set standards for regional wages
- Lumber industry dependent on credit
 - Cycle of natural year (ie weather) troubled the business cycle
 - Chicago was dependable market for lumber
 - Took on different roles: manufacturer, sipper, wholesaler, retailer
 - Lake and rail
 - Cash market
- Housing construction manuals (balloon frame)
 - Wood specifications used by lumber industry
 - Price wars drove price too low for sustainability
 - Undercapitalization and overproduction, destruction of northern forest
- Railroad expanded access options to wood
 - The geography of capital was as important as geography of nature
 - Buyers and sellers brought together
 - New regions compete with Chicago
 - Replacing lake transport
- National Association of Lumber Dealers (NALD)
 - Unification of dealers in opposition of Chicago wholesalers
- End of Civil War opens up southern lumber
 - Industry decline continues
 - Additionally, forest resource exhausted by industry and settlement patterns (ie clear cutting)
- Paper industry allows northern woods to continue as economic capital

Sources: 200+ sources – social and political economic theories, newspapers, records, newspaper, handbooks, guides, company reports, board reports, industry newsletters, government reports, autobiographies, historical essays

Part II: Nature to Market – Chapter 5: Annihilating Space: Meat

- Stockyard a social and economic achievement
 - Rail line looping the stockyard is triumph of engineering craft
 - Meat as a new commodity, similar to wheat and lumber
 - Great hall
 - New corporate network
- American diet is altered
- Bison annihilated
 - Rail provides access to buffalo territory easily and quickly
 - Technological innovations made bison more profitable
 - Native Americans effected, as bison is essential resource
- Ecological changes
 - However, cattle did preserve short grasses
 - Migratory patterns altered
 - Feedlots replace pasturing
 - Profitable not to “waste” land
 - Maintain the level of product/meat rather than “wasting” through drives
- Disassembly line
 - Mass production techniques made humans indispensable
 - Developed into factory size operations
 - Greater meat output
- Industrial dependency on weather cycles
 - Capital inefficiency
 - Ice on rails became focus
 - Refrigerator cars developed and Chicago prospers
 - Chicago influences/regulates the market
- Packers realign existing meat trade networks
 - Dressed meat puts butchers and livestock dealers out of business
 - Railroad forced to comply with packers demands
 - American public must be persuaded to consume dressed meat
- Meat industry (and nation) obsessed with turning “waste” into profit
- Technology (transport, refrigeration, etc) and market make location unimportant

Sources: almost 200 – social and political economic theories, newspapers, records, newspaper, handbooks, nature guides, company reports, board reports, stockyard newsletters, government reports, autobiographies, historical essays, encyclopedia of social sciences

Part III: The Geography of Capital - Chapter 6: Gateway City

- Mapping Capital: economic relationships between investors and businesses
 - Chicago revealed the importance of elevators, railroads, and refrigerator cars for the West
 - “separation of production and consumption had moral as well as material implications”
 - Shift from ‘first nature’ to ‘second nature’ was a change from local ecosystem economy to regional and global economy
 - Second nature as capital
- Credit Flows: mapping creditors and debtors illustrates the flow of capital
 - Bankruptcy records of 1873 allow mapping analysis
 - Creditors: workers, wholesalers, and transport companies
 - Von Thunen’s model of agriculture surrounding metropolis is too simplistic
- The Urban Hierarchy
 - Central Place Theory doesn’t account for Chicago’s sudden prominence
 - Chicago’s credit flows were formed top-down, not bottom-up
 - “From the Appalachians to the Sierra Nevada, the Great West was Chicago’s domain” as a central wholesale distributor
 - Chicago’s importance is due to New York, Massachusetts, Pennsylvania, and local investors
 - A diversified economy = a stable economy
 - Diversification created demand for reliable intelligence and communications
 - Large concentrations of goods by wholesalers frees up capital for retailers
- Gateway Rivalry: Chicago and St. Louis
 - Chicago was a gateway between Northeast/European capitalist economy and the colonizing West
 - Rank and function of cities change by “shifting geography of capital”
 - Chicago’s railroad allowed competitive pricing over St. Louis
 - Civil War cut off St. Louis from main source of capital in New Orleans
 - Chicago credit 2 x that of St. Louis

Sources: ~75 consisting of primary guidebooks, federal bankruptcy records, court cases, journal articles, census data, and history texts.

Part III: The Geography of Capital - Chapter 7: The Busy Hive

- Reaping the Factory's Harvest: Growth of factory employment
 - Regional rail market and empty cars allows for cheap freight
 - Advertising, traveling salesmen, and credit produce greater consumerism
- The Merchant's World: Prerailroad
 - A diversified rural retailer = a stable retailer (at least until the railroad comes)
 - Poor communications, high storage requirements, and infrequent supplying creates risk and inefficiency
 - Frontier economy dependent on credit
- The Merchant's World: Postrailroad
 - Fast, predictable service year round allowed more frequent cycling of capital and economic expansion
 - "The railroad brought country and city closer together"
 - Containers used for storage and transport
 - Staples and produce available locally, with specialty goods from Chicago
 - Telegraphs and mail service allowed up-to-date communication
- Catalogs on Kitchen Tables
 - 1872 saw the synthesis of 'railroads, urban manufacturing, wholesaling, improved postal service, advertising' into mail-order catalogs, delivering technological advances anywhere, guaranteed
 - Civilization can be mailed anywhere
 - Montgomery Ward and Sears, Roebuck were the biggest mail-order merchants in the world by 1900
 - Division of labor, hierarchy, technology, and efficiency were posters of ideal industrialism and urbanism
 - Agrarian protests of middleman economics
 - "The geography of capital was about connecting people to make new markets and remake old landscapes." Capital produced obscured relationships.

Sources: ~75 including newspaper articles, primary merchant invoices, historical essays, census data, photographs, and journal articles.

Part III: The Geography of Capital - Chapter 8: White City Pilgrimage

- The Great Fair
 - Chicago's influence climaxed in 1893
 - Grand scale of World Expo celebrated culmination of human endeavor
- Miracle of the Phoenix
 - 1871 downtown fire – 300 dead, 100,000 homeless, \$200 million in property damage
 - Chicago economic infrastructure remained intact to support birth of highrises and suburban sprawl (including Olmsted's Riverside community)
 - Fire codes restricted building types and clustered land uses
 - Disneyland nature of the Expo and suburbs obscured relationship with the city and region
- Metropolitan Vice
 - The city as a dangerous, corrupt, sinful place to avoid
 - Vice is part of the attraction of being anonymous in a metropolitan environment, a moral freedom that many guidebooks of the vice district capitalized upon
 - The vice economy was supported by male travelers and supplied by female migrants, both often from the country
- The Moral Economy of City and Country
 - Agrarian fears of cities attracting their youth and corrupting them are grounded in a reality of better opportunities for employment and entertainment, not moral superiority of the country.
 - Farmers recognized the need to form associations, get higher education, and coordinate to compete in the new economy and receive the same benefits of civilization that cities did
 - Grange economic theory failed due to naive understanding of high-risk distribution systems
- City and Country as a Unity
 - Technological improvements supported the city as well as the country, yet there was a disconnect between the capital relationships that occur between them.
 - The collective outcome of individual choices has created a unity of varying degrees between the people of the city and the country.

Sources: 100+ including historical essays, guidebooks, historical novels, newspaper and magazine articles, and journal articles.

Epilogue: Where we were Driving

- Ethics rest upon a single premise: the individual is a member of a community of interdependent parts
- Chicago became a victim of its own success
 - Opening a market for so vast a region encouraged human migration, environmental changes, and economic developments that produced other great cities
 - Growth had hidden costs that diminished Chicago's competitiveness
 - By 1860's, diseconomies of scale: transferring from west-in to east-out rail lines created traffic problems
 - By 1870's, high costs of renting rail cars and storing market goods caused shippers to seek alternative routes
 - By the time of the World's Fair (1893), 600 people / year were killed in the city by at-grade trains
 - Congestion was an inevitable price of Chicago's success as a railroad metropolis
 - Any solution required capital, which would *further* increase cost of transportation in the city: rural residents would bear the costs as a "metropolitan tax on the hinterlands"
- At the same time, exhaustion of resources on which Chicago depended opened the way for new innovations, new resources, and new centers to service them
 - Weyerhaeuser moved west as white pine was exhausted
 - Centers of wheat production shifted north and west, as Chicago's nearest hinterlands turned to corn and feedlots
- The story of each gateway city in American frontier history has always ended in similar ways as each encountered self-induced limits to growth
 - Gateway status is temporary: St. Louis, Cincinnati, Buffalo, Albany
 - Bound to forces of market expansion, environ degradation, self-induced competition
- The countryside needs the city as a contrast
 - Romanticism, Olmstead, and the rural ideal would have no context without the urban contrast
 - Suburbs grew from a flight from but inextricable ties to their city
 - Rural retreats would have no economy without their hinterland status
- Final reason for embarking on the book: troubled that one so rarely asks the question about how a city's life and markets connect to the countryside around it
 - Cronon feels a moral schizophrenia as an environmentalist who is a captive of the rural ideal that does not exist
 - The market has a remarkable ability to foster relationships and then obscure them
 - The urban and rural landscapes are not two places but one: they created each other and they now depend on each other for their survival

- We have a moral responsibility to for the ways they shape each other's landscapes and alter the lives of people and organisms within their bounds: we all live in the city and we all live in the country
- We fool ourselves if we think we can choose between them

Sources: ~20 sources – newspapers, memoirs, letters, historical essays/analyses

Critique of contents

Cronon's principal thesis was that a symbiotic relationship exists between cities and their hinterlands. Cronon's historical research gathered primary artifacts such as newspaper clippings, original invoices, census data, court rulings, photographs, federal bankruptcy data, and guidebooks. Secondary artifacts included journal articles and texts. Finally, a descriptive narrative captures the human successes and tragedies of the interrelationship between the city and the country.

Cronon has truly accomplished his goal of combining economic and environmental history in a way that will, if not excite, then at least intrigue. As Runge assessed, there contain lessons for economists who fail "to see the link between economic and market expansion and the depletion of the very resources that made that expansion possible." Cronon accurately describes the abstract quality of commodities and their resulting moral and ecological distancing in production and consumption. The role of place in economic theory was made evident in Cronon's book.

Cronon is so steeped in history that he tends to assume that we know more than we do, such as his numerous references to historian Frederick Jackson Turner, and yet we are never given a proper introduction to this figure. In this sense, his audience is somewhat limited to historians of the book's copyright date. The validity and reliability of primary bankruptcy data is addressed by examining a period of national economic recession and assuming similar nation-wide impacts.

Basically, the details are fantastic. He uses articles from newspapers and industry newsletters to research every intricacy. Nothing seems to be omitted about the industries' effects on the market and businesses and the laborer is treated with as much attention as the business owners. The shortcomings are that he gets so caught up with minutia that his points tend to waiver and lose their power and emphasis. Critics suggest that Cronon's focus on only three major industries attributes greater weight to those industries in Chicago's development, while ignoring the equally or more important geographic roles of iron and coal and industrial roles of foundries and machine shops. This assessment is perhaps too critical as Cronon is merely writing about industries that are typical and representative of Chicago's relationship with its hinterland. It isn't necessary to delve into all industries, economics, geographic advantages, and cultures to prove his point.


To summarize, Cronon's ability to see shades of grey in every perspective and to juggle layers of complexity are admirable, but the resulting complexity may be overwhelming to the layperson.

Presentation

Slide 1

**Nature's Metropolis:
Chicago and the Great West**
by William Cronon

Reviewed by
Talia Henze,
Susan Radke-Sproutl,
Drew Redman,
and Nic Arcos



Slide 2

William Cronon

- Professor University of Wisconsin-Madison (Frederick Jackson Turner and Vilas Research Professor)
- Yale University




"...how we depend on the ecosystems around us to sustain our material lives; how we modify the landscapes in which we live and work; and how our ideas of nature shape our relationships with the world around us."

Slide 3

William Cronon


- Changes in the Land: Indians, Colonialists, and the Ecology of New England*, awarded the 1983 Frances Parkman Prize
- Uncommon Ground: Rethinking the Human Place in Nature*, collection including his essay "The Trouble with Wilderness, or, Getting Back to the Wrong Nature," 1995
- Under an Open Sky: Rethinking America's Western Past*, collection of essays, co-edited 1992



Slide 4

William Cronon

- Weyerhaeuser Environmental Books Series
- Trust for Public Land
- Wilderness Society
- American Society for Environmental History
- Recipient of a Rhodes Scholarship, and Danforth, Guggenheim, and MacArthur Fellowships.



Slide 5

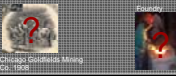
Nature's Metropolis: Reviewed

Widely reviewed: a message for a diverse audience

- General readers (*The New Yorker*)
- Economists (*Land Economics*)
- Urban designers (*Metropolis*)
- Geographers (*Annals of the Association of American Geographers*)

Criticism

- Style: smug, self-important
- Content: missing key industries, gloss over dominant economic models



Slide 6

Nature's Metropolis: Reviewed

Recognition


- nominated for a Pulitzer Prize in History
- Chicago Tribune's Heartland Prize
- Bancroft Prize
- George Perkins Marsh Prize (Society for Environmental History)
- Charles A. Weyerhaeuser Award (Forest History Society)

Praise

- Meticulous research
- Historical accounts, census data, railroad records, newspapers, newspaper subscription records, land ownership/bankruptcy records, commodity receipts, memoirs, letters...
- Original approach
- Readable
- Inspiring

Slide 7

Nature's Metropolis: Context



Frederick Jackson Turner

"The Significance of the Frontier in American History" (1893)

- Frontier Thesis or Turner Thesis
- Influence

Slide 8

Nature's Metropolis: Context

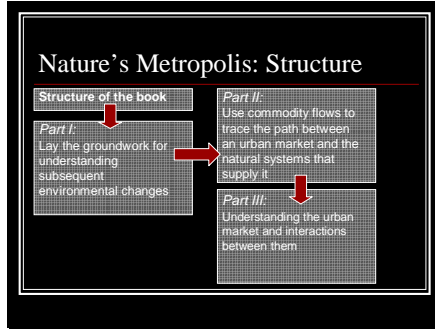
Robert Wade	David Worster
 <p><i>The Urban Frontier: The Rise of Western Cities, 1790-1830 (1959)</i></p> <ul style="list-style-type: none">■ the anti-Turner turn	 <p><i>Nature's Economy: A History of Ecological Ideas (1977)</i></p> <ul style="list-style-type: none">■ history of ecology

Slide 9

Nature's Metropolis: Outcomes

Author's Goals	continued...
<ul style="list-style-type: none">■ Present a history of the relationship between Chicago and the Great West■ Explore century-old economic and ecological transformations that continue to affect all of North America■ Tell the city-country story as a unified narrative	<ul style="list-style-type: none">■ Explore environmental change in relation to the actions of human beings■ Combine economic and environmental history in a way that will excite■ Reflect on our collective future

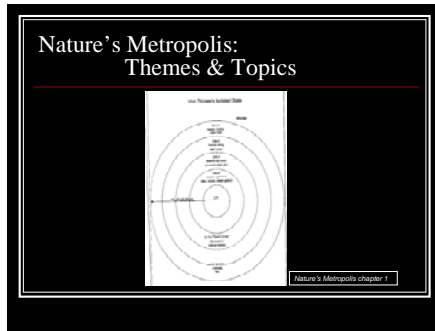
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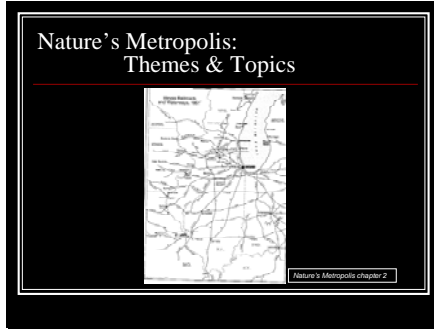
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- Nature's Metropolis:
Thesis, Research Methods, and Writing Style**
- No city without country and no country without city
 - Hello primary sources!!
 - Devil in the details

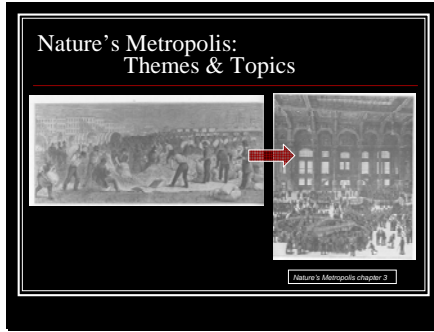
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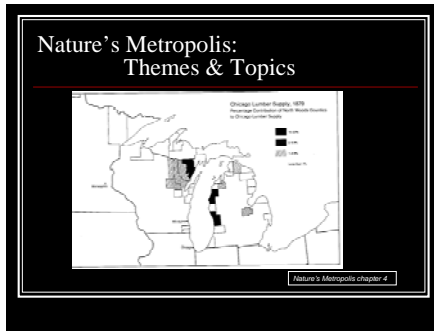
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Slide 14



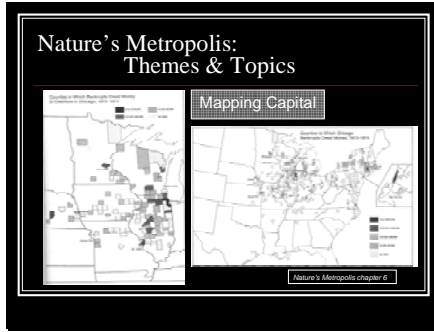
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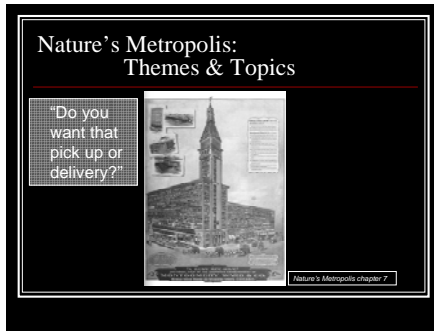
Slide 16



Slide 17




Slide 18



Slide 19

Nature's Metropolis: Themes & Topics

Chicago...Vice



Nature's Metropolis chapter 9

Slide 20

Discussion Questions

It is implied that nature's liberation from geography under a city's location might include: Time, population, processing, packing, distribution, of goods, and the technological and market changes allow this to occur. We (Americans) currently live in a society of post-urban decay. Is Ostrom's assessment accurate? Will this globalisation, specialisation, commercialisation, and post-urban decay continue to shape cities?

Comment on Ostrom's statement that "cities were once a single process, that the individual is a member of a community of interdependent parts." In particular, how does this relate to the conviction that "we all live in the city and we all live in the country" and the "bird's eye" view of history is a myth?

Do Americans and American cities today that "not here" and "beyond nature" as they Chicago brooms die? In what ways so or not?

Ostrom says that the story of such gateway city in American frontier history has indeed in that encountered self-induced limits to growth. Seattle has been described in the Open Space Region as the Gateway to the Pacific. Drawing from Ostrom's work, what might we learn here? Or, do you even think the "gateway" label is relevant any longer?

What are some ways that we deal with, talk about, and imagine our current "global economy" given its modern global scale?

The dichotomous views of town and country are still felt today in suburban sprawl and "striated" cities. Both town and country are attractive, yet repulsive. Why? As Ostrom says, is it a matter of money, technology, and country pulling us in either direction? Or is something deeper like a primal connection with what is wild and a human connection with what is civilized?

Discussion questions

1. It is implied that nature's liberation from geography makes a city's location meaningless. Transportation, processing/packing, domestication of animals, and other technological and market changes allow this to occur. We (Americans) currently live in a society of 'just-in time' delivery.
Do you think this Cronon's assessment is accurate? Will this globalization/specialization/convenience trend persist? How will it shape cities?
2. Comment on Cronon's statement that "ethics rest upon a single premise: that the individual is a member of a community of interdependent parts." In particular, how does this relate to his conviction that "we all live in the city and we all live in the country" and the "rural ideal" view of history is a myth?
3. Cronon says that the story of each gateway city in American frontier history has ended as it has encountered self-induced limits to growth. Seattle has been described in the Puget Sound Region as the Gateway to the Pacific. Drawing from Cronon's work, what might its future hold? Or, do you even think the "gateway" label is relevant any more?
4. On page 51-52, in discussing von Thunen's theory of concentric circles (pictured on page 50), Cronon writes: "...the city and the country are inextricably connected and...market relations profoundly mediate between them. A rural landscape which omits the city and an urban landscape which omits the country are radically incomplete as portraits of their shared world. [This suggests that there are some kinds] of underlying market principles that have linked city with country to turn a natural landscape into a spatial economy."
What are some ways that we deal with, talk about, and imagine our current "spatial economy," given its modern global scale?
What might be some of the consequences of our ability or inability to visualize the increasingly complex link between the "rural landscape" (or the source of a commodity) and the "urban landscape" (or the destination of a commodity)?
5. Do Americans (and American cities) today blur "first nature" and "second nature" as early Chicago boosters did? In what ways so or not?
6. Pre-transcendental 'nature' was nasty and brutish and human habitats were places of refuge in the wilderness. Brought to prominence by the likes of Olmsted, John Muir, and Theodore Roosevelt, Transcendentalism viewed nature as harmonious, simple, and spiritual, much like Cronon's 'country'. If rural areas were sublime, then industrial towns like Chicago were viewed as dirty, chaotic, and full of vice, yet maintaining a level of sophistication. These dichotomous views of town and country are still felt today in suburban sprawl and 'civilized' cities. Both town and country are attractive, yet repulsive. Why? As Cronon asserts, is it an interrelationship between town and country pulling us in either direction? Or is it something deeper like a primal connection with what is wild and a human connection with what is civilized?