

Planetary Urbanization since 1800

Planetary urbanization

urbanization over time

Explaining Urbanization

Pull factors

Industrial Revolutions

Latin American urbanization and protectionism

Neoliberal capitalism and Global South

Agglomeration economies/population magnets

Push factors

Land concentration/privatization

industrialization/mechanization of agriculture

environmental deterioration

Population growth and resource crunch

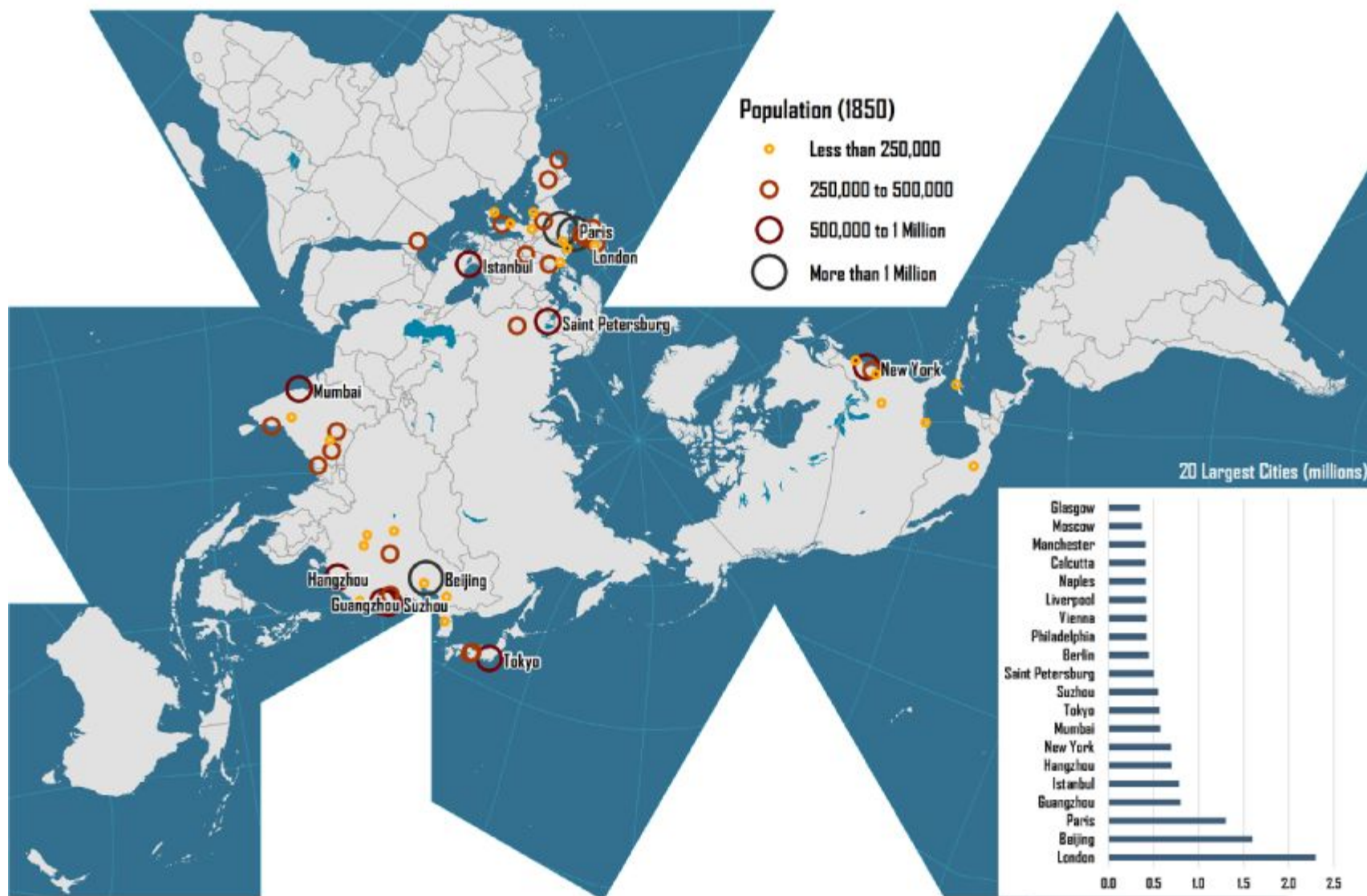
Urbanization and environment

Urban Environmental injustice

Urban metabolisms

examples of urban metabolism

Demystification of commodities



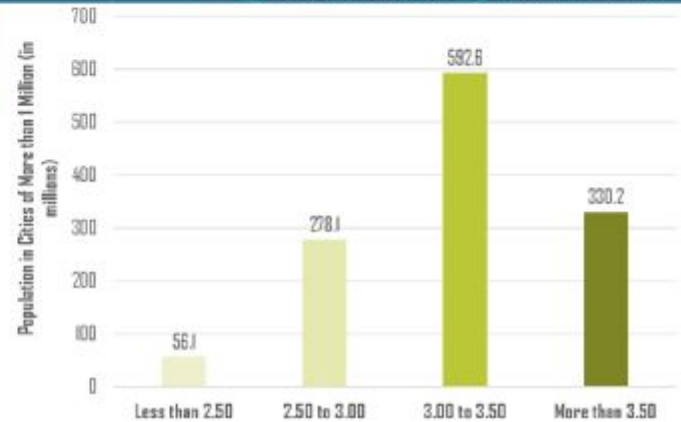
Urban Population (2010)

- 1 to 2 million
- 2 to 4 million
- 4 to 8 million
- 8 to 16 million
- More than 16 million

LPI (2010)

- Less than 2.50
- 2.50 to 3.00
- 3.00 to 3.50
- More than 3.50

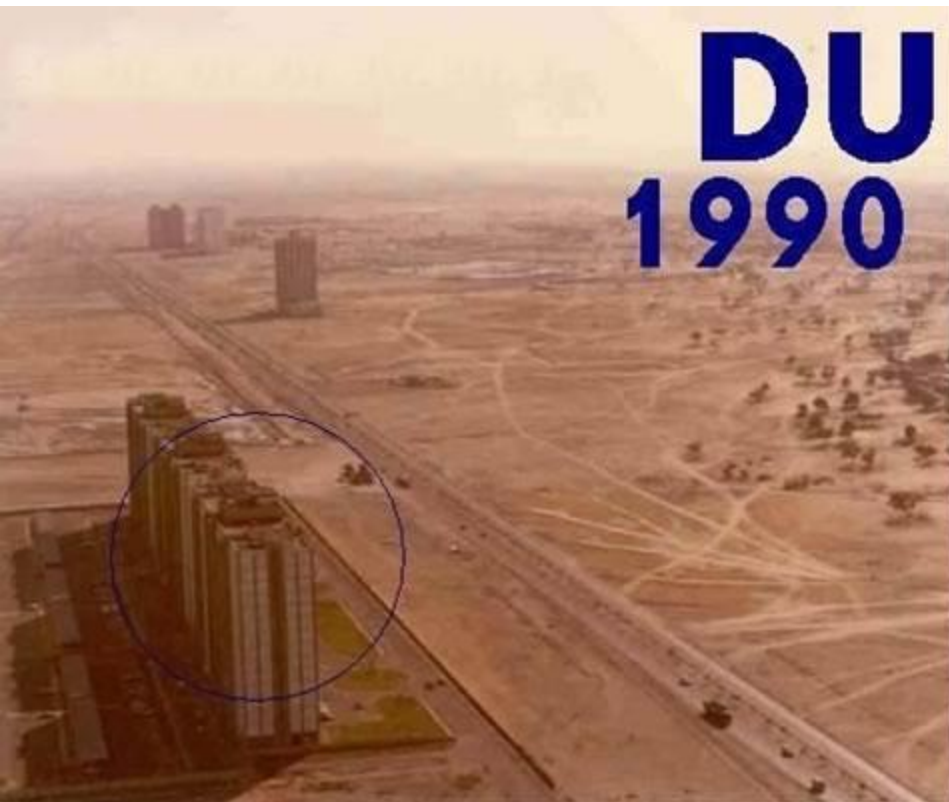
Population in Cities of More than 1 Million and National Logistics Performance Index





DUBAI

1990 2003



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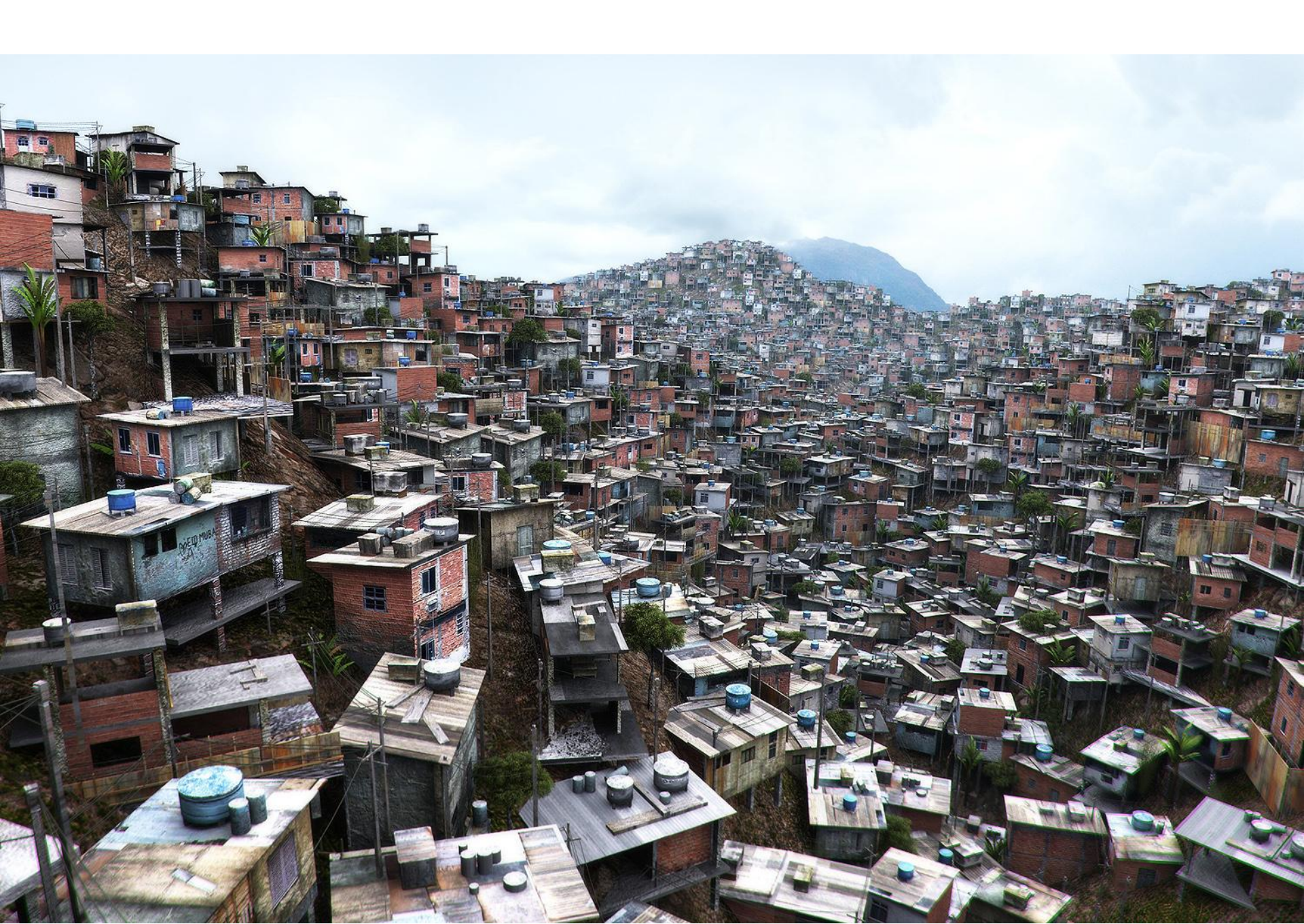
Demystification of commodities

Explaining Planetary urbanization

- Push and Pull factors
- Pull
 - the two industrial revolutions and jobs
 - political economies in global south (protectionism and neoliberal policies since 1980)
- Push
 - Land concentration and privatization
 - Mechanization of agriculture
 - Environmental damage
 - Population growth and resource crunch in countrysides
 - Neoliberal capitalism since 1980







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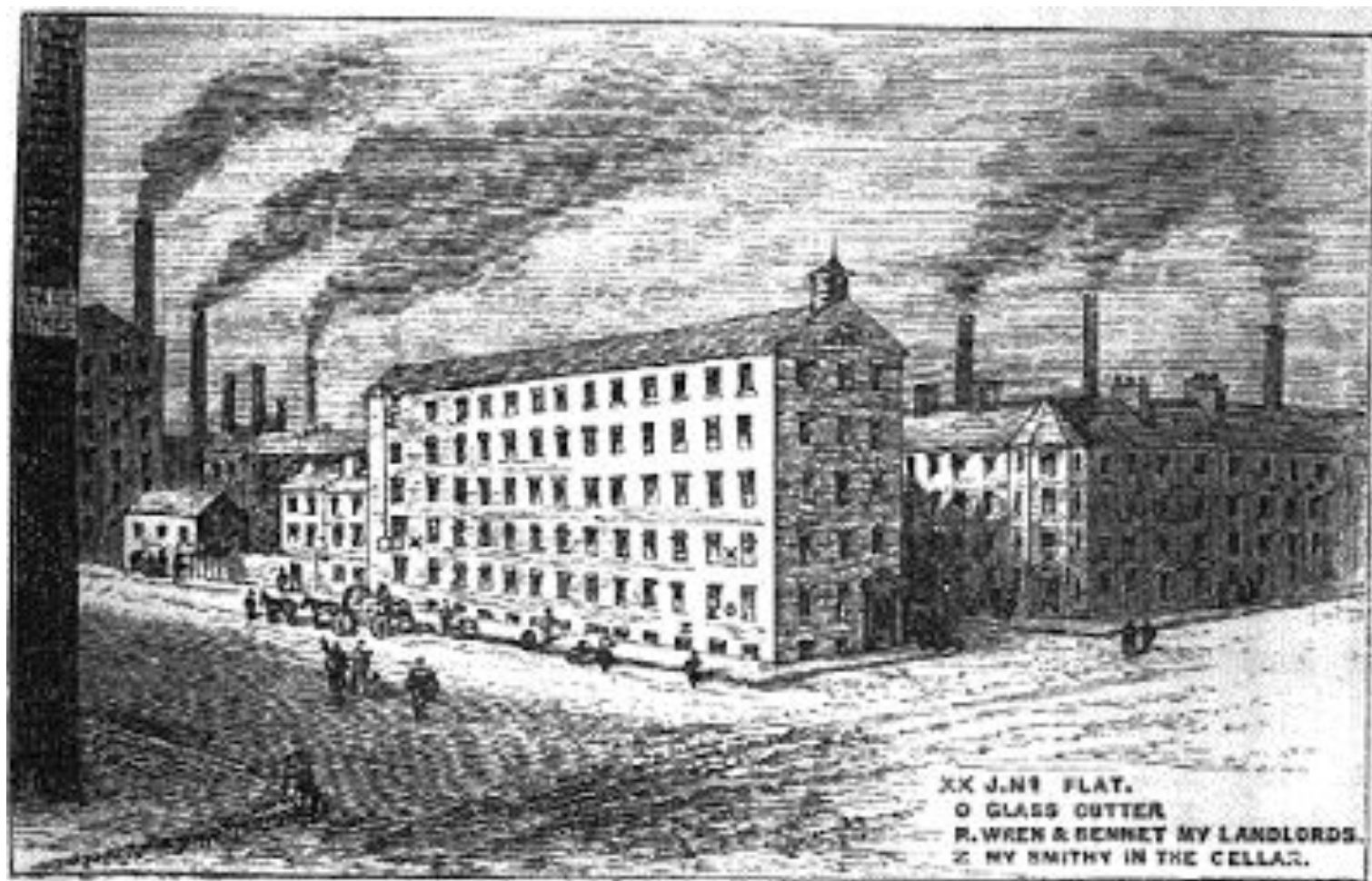
Demystification of commodities

Urbanization as an environmental problem

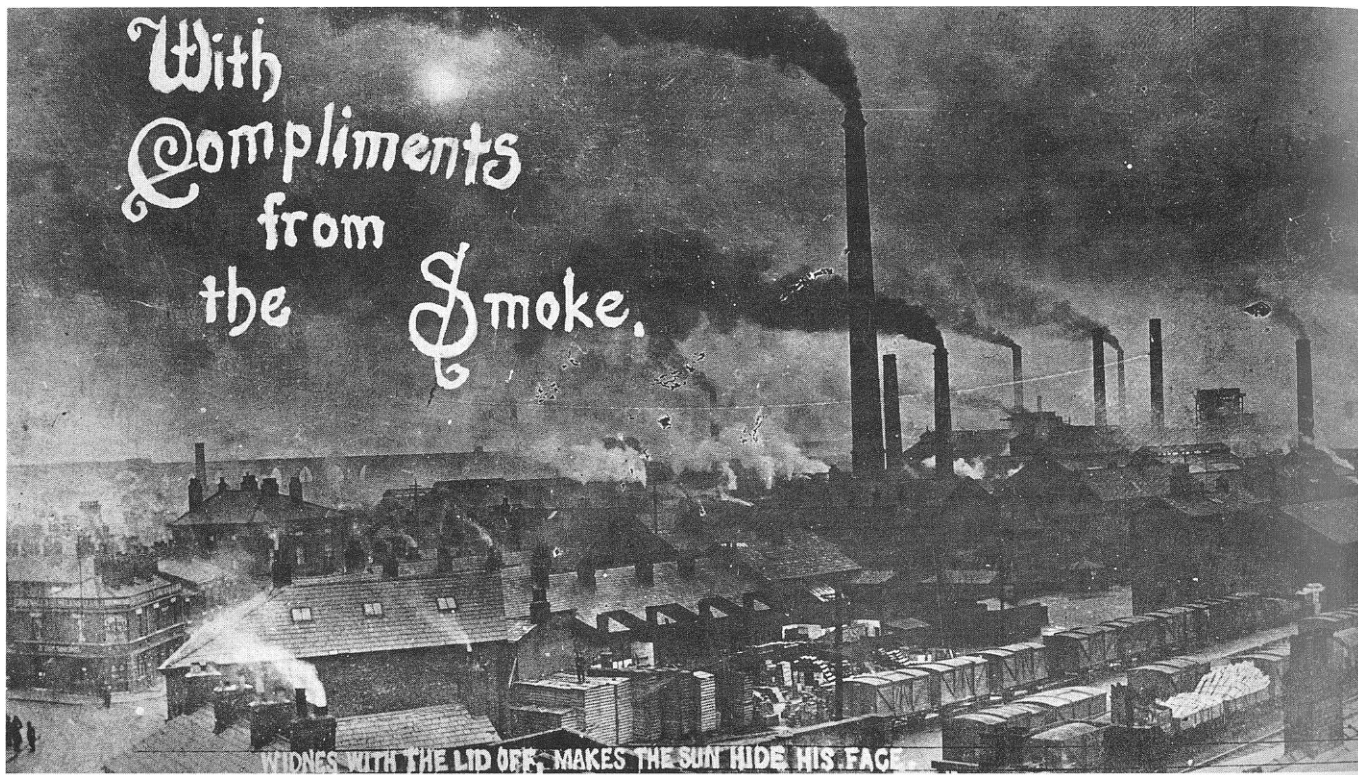
- Long histories of segregation and environmental injustice
- Hundreds of millions who do not enjoy the promises of modern urban life







XX J.N. FLAT.
O GLASS CUTTER
R.WREN & BENNET MY LANDLORDS.
2 MY SMITHY IN THE CELLAR.



Urbanization as environmental problem II

- Urban metabolisms—urbanization on wide spatial scale, beyond city limits
 - Inputs and outputs, materials consumed and then expelled
 - Outputs as wastes
 - Inputs come from vast rural hinterlands

Commodity demystification

--Uncovering the environmental and social conditions of production of the products we purchase and consume. This includes waste disposal. Tendency to ignore these conditions

--essential for considering how cities can be made more sustainable













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Consumerism and Demystification of commodities

Leave you with a set of questions about cities

- Can cities and its corollary urbanization be environmentally friendly (sustainable), that is, strike a balance between resources available and resources consumed? And, by emitting wastes in a way that limits contamination? If so, how?
- Can cities be more environmentally just by class and race/ethnicity?

Global Environmental Problems
Climate Change

Others?

1. Air Pollution
2. Water Pollution
3. Deforestation
4. Soil depletion and contamination
5. 6th Extinction
6. Environmental Injustice

All these environmental problems are aggravated by climate change

Air pollution

80% of world's urban population breathes unhealthy air

Water pollution

- garbage, pesticides, fertilizers, mining waste, and untreated human and animal waste
- immense public health and ecological dangers

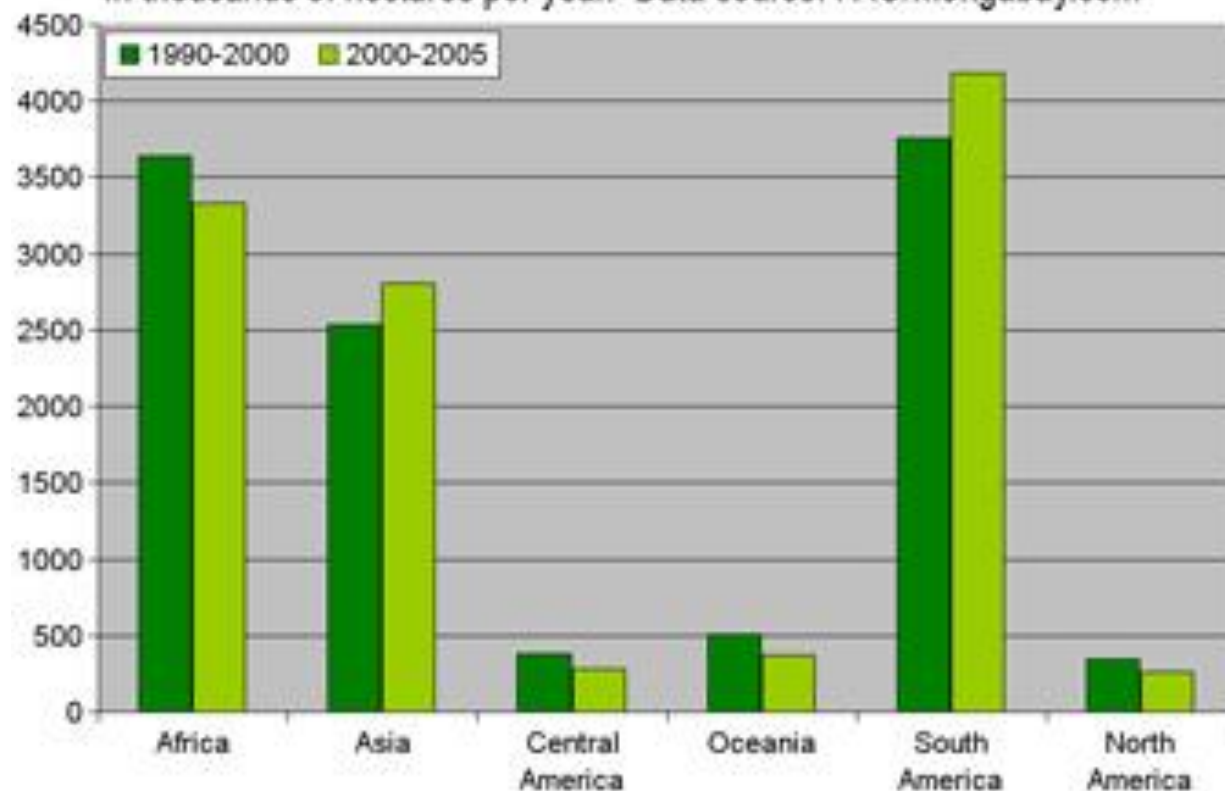


Deforestation

- urban growth
- to make consumer goods from wood
- land clearing for agriculture and ranching

TROPICAL DEFORESTATION BY REGION, 1990-2000 & 2000-2005

In thousands of hectares per year. Data source: FAO/mongabay.com



World Forest Cover, 1990-2010

Region	Total Forest Cover		
	1990	2000	2010
Million Hectares			
Africa	749	709	674
Asia	576	570	593
Europe	989	998	1,005
North and Central America	708	705	705
Oceania	199	198	191
South America	946	904	864
World	4,168	4,085	4,033

Source: Compiled by Earth Policy Institute from U.N. Food and Agriculture Organization, **Forest Resources Assessment 2010: Global Tables** (Rome, 2010), www.fao.org/forestry/fra/fra2010/en/.



**1kg beef
needs :**

121,8 m² arable
land

1500 litres
water

7 litres
petrol

This is equivalent to :

160 kg potatoes

1 year's daily
shower



**Cows emit 80 times the greenhouse gases for
the equivalent of 1kg of wheat.**

Soil depletion and contamination

- Soil erosion and loss. Over last 50 years 30% of arable land has become unproductive
- caused by deforestation and use of unsuitable tropical soils, monoculture, and unsustainable tilling practices
- rising soil infertility. Infertility \square fertilizer. Vicious cycle of fertility loss and more fertilizer. Law of diminishing returns



The 6th Extinction

½ of all living organisms may be gone by 2100

Overfishing and overhunting

main causes are deforestation, pollution, and climate change

Looming Insectageddon



2050

IS THE YEAR EXPERTS
SAY WORLD FISHERIES
EXPECT TO COLLAPSE



\$50B

1/5 OF FISH ARE CAUGHT
ILLEGALLY RAKING IN AN
EST. \$50B A YEAR



80%

THE WORLD'S FISH
STOCKS ARE ALREADY
FULLY EXPLOITED



90%

OF PREDATORY FISH:
TUNA, SHARKS,
SWORDFISH, COD
& HALIBUT ARE GONE!



300,000

WHALES AND DOLPHINS
ARE KILLED EACH YEAR
VIA BY-CATCH



8M SQUARE MILES

THE GREAT PACIFIC
GARBAGE PATCH IS 2X
LARGER THAN THE
UNITED STATES!

Environmental Injustice

Something we've discussed a fair amount.
We will frequently return to it.

What is it?

Environmental Injustice/inequality

- The ways in which environmental pollution or other types of environmental degradation is unequally distributed in space to affect poorer, marginalized, and often people of color, more acutely than wealthier people.
- This occurs in living environments (towns and neighborhoods) and also working environments (fields and factories)
- Reinforces notion that environmental problems are social problems
 - A harm to “nature” is often a harm to people and their livelihoods
 - That harm (who and how) is correlated with one’s social position, by economic class, race, etc.

In your estimation, what is the most threatening environmental problem humanity faces today (apart from climate change)

- A. The 6th extinction
- B. Soil loss and pollution
- C. Environmental Injustice
- D. Deforestation
- E. Water and/or air pollution