Urbanizing China

A reflective dialogue

11.S945, MW9:30-11:00 9-450B, Professor: Jinhua Zhao, TA: Liyan Xu
Chongqing, one of the fastest-growing and biggest cities on earth, with a population of 29 million. The old buildings under the high-rises are destined for demolition in the near future.

Justin Jin for The New York Times
Visitors from the countryside amid a giant project under construction in Chongqing. In southwestern China, away from the coast, it is the engine of China’s inland economic development.

Justin Jin for The New York Times
Minxin Jiayuan is a flagship low-income housing project in Chongqing. Vast sums of money will be needed to pay for schooling, health care and retirement programs for the now landless farmers.

Justin Jin for The New York Times
Li Rui, 60, scavenged his former village for building materials in Liaocheng. Mr. Li was a farmer until three years ago, when the local government razed his village for an urban development zone.

Justin Jin for The New York Times
A rural migrant in a garment factory on the outskirts of Chongqing. Skeptics say the government’s headlong rush to urbanize is driven by a vision of modernity that has failed elsewhere.

Justin Jin for The New York Times
Why do we care about China?
China vs. US

GDP, $trn*

<table>
<thead>
<tr>
<th>Year</th>
<th>China</th>
<th>US</th>
</tr>
</thead>
<tbody>
<tr>
<td>2001</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2006</td>
<td></td>
<td></td>
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<tr>
<td>2011</td>
<td></td>
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<tr>
<td>2016</td>
<td></td>
<td></td>
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<tr>
<td>2021</td>
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</tbody>
</table>

Long-term assumptions, annual average %

<table>
<thead>
<tr>
<th>Country</th>
<th>Real GDP growth</th>
<th>Inflation†</th>
<th>Yuan appreciation†</th>
</tr>
</thead>
<tbody>
<tr>
<td>China</td>
<td>7.75</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>US</td>
<td>2.5</td>
<td>1.5</td>
<td></td>
</tr>
</tbody>
</table>

China overtakes US in 2018

Enter values between -10 and +10; maximum two decimal places. Press Enter or tab to another field to update chart.

*At current prices and market exchange rates †GDP deflator ‡Against the dollar

Source: The Economist Dec 27th, 2011
China vs. US
Measured by 21 different indicators: manufacturing output, exports and fixed investment.
GHG Emissions from Transport 2000-2050

(Million ton CO$_2$)

+129%

- Additional CO$_2$-Emissions by 2050
- CO$_2$-Emissions 2000

Source: 2010 ProgTrans AG
Per Capita GHG Emissions from Transport 2000-2050 (t CO₂/cap/a)

- North America: 5.5 + 0.6 = 6.1
- South America: 2.0 + 1.2 = 3.2
- Europe: 3.3 + 1.3 = 4.6
- Africa: 0.3 + 1.3 = 1.6
- Middle East: 1.4 + 0.1 = 1.5
- India: 0.5
- China: 1.0 + 0.8 = 1.8
- Former Soviet Union: 2.3 + 1.6 = 3.9
- Oceania: 2.5 + 0.9 = 3.4

- = + carbon footprint (CO₂/cap) 2050
- = carbon footprint (CO₂/cap) 2000

Source: 2010 ProgTrans AG
Policy Transfers

- **Singapore ➔ Shanghai**
  - Car industry
  - City state vs. city in a region

- **Shanghai ➔ Beijing?**
  - Bidding vs. lottery
  - Control use vs. control ownership

- **China ➔ West?**
  - Local context vs. generic human nature

*Borrowing from the west*

*Experimenting within*

*Exporting knowledge?*
Poor People vs. Poor Country?

1.3 Billion Poor People in Middle Income Countries
As a researcher...

A dynamic system vs. a static system
Why do we care about China?

- Intellectual curiosity
- Altruism
- Interconnected world (abstract / tangible)
- Exporter of knowledge?
  - Technology implementation
  - Policy transfer
- New phenomena and new experience
It is the first time since we began our detailed coverage of the United States in 1942 that we have singled out a country in this way.

The principal reason is that China is now an economic superpower and is fast becoming a military force capable of unsettling America.

But our interest in China lies also in its politics: it is governed by a system that is out of step with global norms.

In ways that were never true of post-war Japan and may never be true of India, China will both fascinate and agitate the rest of the world for a long time to come.
Immense
Rapid
Out of Sync
Urbanization Rate in China

1980

Urban: 190m
Rural: 863m

Natural Growth: ~350m

2011

Urban: 690m
Rural: 656m

Natural Growth: ~350m

2040

Urban: ~1,000m
Rural: ~500m

Natural Growth: ~350m

1.05 Billion
18%

1.35 Billion
51%

1.5 Billion
67%

Source: United Nations, Department of Economic and Social Affairs, Population Division: World Urbanization Prospects, the 2009 Revision. New York 2010
Rebuild all American cities in 30 years

- infrastructure
- services
- institutions
- ...
Beijing 1982

Beyond index

PM2.5 Jan 12, 2013
Beijing 755; NYC 19
Immense
Rapid
Out of Sync
Class 1: Multiple Interpretations
Urbanization Out of Sync
Multiple Interpretations

Built environment

Administration

Economy

Welfare

Lifestyle

Political

Cultural
Multiple Interpretations

“Noosphere”
Sphere of Human Thoughts
both at the top and at the bottom
Multiple Interpretations

Spatiality

De-spatialization

Other interpretations?

migrants going back to hometown
Tensions
Tensions

People vs. land

Economy vs. environment

Financing vs. urban form

Locals vs. migrants
Tensions

Examples from the syllabus
Next 30 years vs. past 30 years
Percentage of urbanized population in 2009

Urbanization Rate in China

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Rural 863m

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Source: United Nations, Department of Economic and Social Affairs, Population Division: World Urbanization Prospects, the 2009 Revision. New York 2010
Next 30 years vs. past 30 years

- changing nature of the challenges
- responses in urban governance
China’s transition

**Status quo**
- Quantity
- Production
- Infrastructure centered
- Large scale
- Competitive
- Top down

**Direction / Ideal**
- Quality
- Consumption
- People centered
- Small scale
- Cooperative
- Participation

China’s transition
Is China an Outlier?

Didn’t NYC grow as fast in late 19th century?
Chinese Going to Town

2011: 1.35 billion; 51.3% in urban areas

Urbanisation
Population living in urban areas, % of total

Sources: CEIC; UN Population Division; The Economist
Connections

CNY 2 trillion high speed rail ... urban agglomeration ... spatial structure transformation ... real estate development ... urban and regional relationship ... governance
Land Reform
Housing market
Urban Finance
Urban Agglomeration
Cultural Heritage
Affordable housing
Infrastructure
High Speed Rail
Spatial Equity
Big Data
Aging Society
Migrant workers
Urban Form
Urban vs. Region
Real Estate Development
Energy Efficiency
Car Love Affair
Governance
Discussion 6
What difference does rapid urbanization make?

E.g. we need to discuss affordable housing with or without rapid urbanization?

Exacerbate, change the nature, provide opportunity, no difference?
### Cases and Connections

#### Preface
- Urbanization Out of Sync
- Is China an Outliner?
- Fundamentals: Hukou and Migration

#### Land & Money
- Land Use and Public Finance Institutions
- Quota Market in Chongqing: De-spatialize Land Transfer
- Brownfield in Beijing: How Cities Recycle Industrial Land?
- Public Finance Innovations in Nanchang
- Real Estate Development Process

#### Hardware
- Managing Car Ownership
- Urban Infrastructure
- Dispersion of Urban Agglomeration through High Speed Rail
- Costs of Air Pollution: Human Health Damage
- Progress in Energy Efficiency: Technology, Policy and Market
- Financing Urban Access: Transportation, Urban Form and Land Grabbing
- Untangling Complex Urban Issues through Emerging Big Data

#### Software
- Drifting and getting stuck: Migrants in Chinese cities
- Urbanization vs. Citizenization: Migrants in Wangjingxi Market
- Spatial Justice in Affordable Housing Design in Ningbo
- Preserving Beijing’s Spatial Tradition in Rapid Urban Development
- Aging Society: Offering Care to the Elderly in the Confucius Society
- Forging Greater Xi’an: New Regional Strategies
MIT as a Big Kindergarten

Mitchel Resnick
NPR’s On Point with Tom Ashbrook

Future of Newspaper
Jeff Bezos buying Washington Post
A Reflective Dialogue
Programming of a Class

• Jinhua opens the topic (10 min)

• Guests present the case (15 min)

• Dialogue (30 min): Jinhua challenges the guests and students participate in the debates

• Guests reflect on the discussion (10 min)

• Jinhua concludes (5 min)

• Students write in-class idea notes (10 min, details below)
On the idea notes

- In class; email or paper
- What does the talk **inspire** you to think? Either as a practitioner, a researcher, or a citizen
- How does this particular talk **connect** to other topics?
- Any **personal** experience related to the discussion today?
- Did the dialogue today **change** any of your prior notions about China? How so?
- What if you were the **presenter** today? Anything you would do differently?
- On data, method and **research design**: anything you’ve learned?
- Ideas for your team project?

*Liyan and I will synthesize and report back!*
Speakers

15 guests from MIT, Tufts, Harvard, Columbia, Stanford, Tongji and Tsinghua

Jinhua: critical commentator that provides a coherent story line and 2~3 generic logic.
# Students’ Role

<table>
<thead>
<tr>
<th>Options of class registration</th>
<th>12 Credits</th>
<th>6 Credits</th>
<th>Listener</th>
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</thead>
<tbody>
<tr>
<td><strong>Class participation 40% =</strong></td>
<td></td>
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<tr>
<td>27% (in class idea notes) + 13% (discussion)</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
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<tr>
<td><strong>Literature synthesis 20%</strong></td>
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<td></td>
<td>Yes</td>
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<tr>
<td><strong>Team project 40%</strong></td>
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<tr>
<td>a) Idea: not graded</td>
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<tr>
<td>b) Proposal: 10%</td>
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<td>c) Draft report: 10%</td>
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<tr>
<td>d) Final report: 20%</td>
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</table>

Listeners are welcome on one condition: to attend at least 70% of the classes and submit in-class idea notes.
Literature Synthesis

- Holes in the structure
  - Education
  - Law and rule of law
  - Property right
  - ...
Literature Synthesis

• Pairing of students
• Flip sides of the same issue
Full of contradictions

• E.g. Environment
• Biggest renewable energy
• Biggest polluter
China Hype and China Bashing

- GDP: 9.5% per year for 30 years
- Urbanize 370m people without slum
- Raise hundreds of millions of people from poor
- Million miles of road, billions of square feet of housing
- Biggest CO$_2$ emitter
- Severe pollutions
- Political reform
- Inequality
  - urban – rural; east – west; within city
  - from one extreme to another extreme
Team project

- Student Pairs
- Project idea and ppt (not graded)
- Project proposal and ppt (10%)
- Project draft report and ppt (10%)
- Project final report (20%)
## Team project deliverables

<table>
<thead>
<tr>
<th>Project Proposal</th>
<th>Project Report (Draft and Final)</th>
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<tbody>
<tr>
<td><strong>Project Title</strong></td>
<td><strong>Project Title</strong></td>
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<tr>
<td><strong>Highlights</strong></td>
<td><strong>Highlights</strong></td>
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<tr>
<td><strong>Abstract (250 words)</strong></td>
<td><strong>Abstract (250 words)</strong></td>
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<tr>
<td><strong>Key words</strong></td>
<td><strong>Key words</strong></td>
</tr>
<tr>
<td>1. Introduction</td>
<td>1. Introduction</td>
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<tr>
<td>2. Objectives / Research questions</td>
<td>2. Objectives / Research questions</td>
</tr>
<tr>
<td>2. Literature Review</td>
<td>2. Literature Review</td>
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<tr>
<td>3. Methodology</td>
<td>3. Methodology</td>
</tr>
<tr>
<td>1. Data</td>
<td>1. Data</td>
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<tr>
<td>4. Expected results</td>
<td>4. Analysis results and interpretation</td>
</tr>
<tr>
<td>5. Expected impact and policy implications</td>
<td>5. Discussion</td>
</tr>
<tr>
<td>6. References</td>
<td>6. References</td>
</tr>
</tbody>
</table>

Please use mendeley or zotero for references. Follow the APA style. I’ll provide two examples papers for you to learn about the formatting.
Team project

Both draft and final reports are COMPLETE documentation of your projects.

• Draft: the best you can do **before** my comments
• Final: the best you can do **after** my comments
Recommended Books

Logistics

- MW 9:30-11:00; 9-450B
- Videotaping of all classes
- Professor: Jinhua Zhao jinhua@mit.edu
- TA: Liyan Xu liyanxu@mit.edu
- Website: http://mit.edu/jinhua/www/china
Next class

Is China an Outlier? China’s Urbanization in the Historical and International Contexts

Liyan Xu

In Class Idea Notes

- Please write ...
Concluding Remarks

- Design of the course
  - Top-down and bottom up
  - Cases vs. theories
- Content and format
- Findings and research methods
- Students, Guest, Liyan and Jinhua
Concluding Remarks II

- Urbanizing China vs. China’s Urbanization
- Urbanizing China as a Conscious Action
Concluding Remarks III

- Typical pitfalls
  - Attribute everything to urbanization
  - Over generalize
Complex
Contradictory
Constantly-changing
Urbanizing China

A reflective dialogue