Dr. Shiuh-Shen CHIEN, associate professor in Development Geography and Planning at National Taiwan University, presented in SMART-ECO Ningbo Project Meeting, 2016/05/12-13

Understanding Eco/Smart Process and Consequences in post-Socialist China
Structure of presentation

- Transnational search of China
  - why foreign actors are so welcome?

- Local process under Chinese party-state
  - And why many eco city projects in China are new town models?

- Smart and Eco consequences in China-
  - How to theorize dynamics between authoritarian and smart/eco
Transnational search
France in Wuhan, Hubei: In March 2014, Chinese President Xi Jinping visited France and signed an agreement concerning the construction of a Sino-French eco-city in Wuhan. The general plan of Sino-French Wuhan Ecological Demonstration City is slated for finalization by August 2015.

Sweden in Caofendian, Hebei: In 2008, China and Sweden launched a collaboration called the Sustainable Urban Development Cooperation for Caofendian Eco-city. Sweden is also involved another eco-city project in Wuxi.

Singapore in Tianjin: The Singapore government made significant investments in the Sino-Singapore Tianjin Eco City (SSTEC) in 2007.

The UK in Dongtan, Shanghai: Proposed by Arup, a British architecture consultant, the 2005 launch of the Dongtan project was attended by British Prime Minister Tony Blair and former Chinese president Hu Jingtao.

In addition, Finland participated in an eco-city project in Mentougou, Switzerland supported a sister-city eco-city partnership program between Zurich and Kunming; China and the USA jointly developed Huangbaiyu Eco Village; other projects include the Sino-Dutch Shenzhen Low Carbon City project and the Sino-German Eco Park in Qingdao.
Self-learning through transnational teaching—a teacher’s perspective

- recursive learning in three dimensions
  - Central fragmentations
  - Local interests
  - Budgeting and scheduling of land development

CHIEN, Shiuh-Shen*; Xufeng ZHU; Tingjia CHEN (2015), Self-Learning through Teaching: Singapore’s Land Development Policy Transfer Experience in China, Environment and Planning C: Government and Policy. Vol. 33, Number 12, pp 1639 – 1656 * as contact author
# Theorizing Transnational Learning—a learner perspective

<table>
<thead>
<tr>
<th>Social Networking Channel</th>
<th>Informal, personal contact relying on personal relationships and networking</th>
<th>Mostly informal, non-binding, low profile transfer of information between individuals based on trust</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corporate Institutional Channel</td>
<td>Formal, contracted and structured co-operation and transfer of knowledge between institutions, local or national governments and firms</td>
<td>Binding co-operation that involves both parties as stakeholders</td>
</tr>
<tr>
<td>Hegemonic Discursive Channel</td>
<td>Transfer of knowledge from institutions, firms, consultancies etc based on prevailing &quot;best practice&quot; and commonly accepted international standards</td>
<td>Non-binding relationship with transfer of knowledge that may not be immediately useful</td>
</tr>
</tbody>
</table>

Wang Shu, a Chinese architect, won the 2012 Pritzker Architecture Prize for his design’s strong sense of cultural continuity and re-invigorated tradition (http://www.pritzkerprize.com/2012/jury-citation).
**Historical legacies in foreignization**

### History:
- The late 19th C: Territorial concessions
- ROC: Big Nanjing project (with Henry Murphy)
- 1949-78: Russia influence, top 10 buildings
- After 78: seeking for foreigners’ consultancies, like Singapore
- After 2000: WTO and Olympics

### Differences:
- Coercive learning v.s. voluntary learning

### Similarities:
- China’s lacking confidence in old knowledge
- China as a solution for the western spatial fix in capitalism crisis
Colonial time

- Western powers need to look for foreign colonies in order to cope with home crisis, like overproduction, under-consumption and trade deficit

Current time

- Singapore uses China for its Regionalization project
- EU embassies are keen to develop the Chinese market after the 2008 EU crisis
**Time: Hastiness in foreignization**

- **Catch-up mentality**
- China in favor of ecological modernization and economic development
  - This explains why eco cities links with industrial zones
- Local cadres are pressurized to present performance soon
  - e.g. 2 years in office in average
Late Qing debate

- Complete westernization
  - 全盤西化
  - 胡適等

- Chinese Knowledge + western technologies
  - 中學為體，西學為用
  - 東南大學 + 浙江大學 (竺可禎 + 張其昀等)
Spatiality: spectacular urbanism

- Sweden’s case
  - Home: 12km²
  - Caifendian: 150 km²

- Singapore’s case
  - Designs in China were not installed at home

- France’s case
  - Skyscrapers not popular in Paris

- Developing countries’ show-off for modernity

- Land finance for local cadres
  - This explains Chinese eco-cities are less retro-fit

- Local limited resistance is not legitimate enough to against foreignization projects
France in Wuhan
Local processes
The ‘low carbon eco city’ strategy has become the third wave of local development fever, followed by the first wave of development zone fever and the second wave of college town fever over the past three decades, to be a dream of almost prefecture-level cities.

- News sources: zhongguo fangdichan bao (China Real Estate Post), 2012 April

Source: Chien (2013), China Information
## Three Fevers

<table>
<thead>
<tr>
<th>Development zone fevers, since 1980s</th>
<th>College towns fever, since late 1990s</th>
<th>Eco Cities fever, since mid 2010s</th>
</tr>
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<tbody>
<tr>
<td><strong>Global context</strong></td>
<td>Economic Globalization</td>
<td>High tech and Knowledge economy</td>
</tr>
<tr>
<td><strong>China background</strong></td>
<td>International isolation, lack of FDI</td>
<td>Crisis of economic restructuring, lack of R&amp;D</td>
</tr>
<tr>
<td><strong>Central discourse</strong></td>
<td>Business market and Attraction of FDI (招商引資)</td>
<td>Revitalizing the nation by science and technology (科教興國)</td>
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# Three Fevers

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<tr>
<td>Local implementation</td>
<td>More than 5,000 zones</td>
<td>More than 60 cases,</td>
</tr>
<tr>
<td>Positive externalities</td>
<td>Export-oriented economy; technology transfer</td>
<td>Human resource, triplex of university, firms and gov’t</td>
</tr>
<tr>
<td>Negative Externalities</td>
<td>Pollution, duplicate construction, isomorphism</td>
<td>Commodification of education, pure land development, forced displacement of university</td>
</tr>
</tbody>
</table>
Central versus local
China’s government revenue and expenditure
As % of GDP, 2009

Total deficit* 6%

Total 27.7

Total 29.4

Source: OECD

*as % of overall spending

Central versus local
China’s government revenue and expenditure
As % of GDP, 2009

Deficit*

Township 8%

County 48%

Prefecture 18%

Provincial 29%

Source: OECD

*as % of overall spending
Outside of Budgetary Revenues

Source: Zhao (2009), speech in NTU
<table>
<thead>
<tr>
<th>economic</th>
<th>decentralization</th>
<th>centralization</th>
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<tr>
<td>political</td>
<td>post-socialist China</td>
<td>Socialist countries, and UK</td>
</tr>
<tr>
<td>centralization</td>
<td>Russia in the 90s</td>
<td>Federal states like US or Germany</td>
</tr>
<tr>
<td>decentralization</td>
<td>Most of the west</td>
<td></td>
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</table>

Local govt.

Central Gov.t

Decentralized economic powers and resources
Development plans; Preferential policies, Infrastructures

Performances reviews: career reappraisal
Economic performances: GDP revenues, employment rates
Non-economic performances: educations, environments,

China’s context

Local citizens

Elections or recall, ‘voting by foot’

Western context

Popularity survey; community participation

Quota/indicators and cadre management

- In terms of personnel management, upper-level authorities have fully rights to change their local cadres at their one level down.

- Target responsibility system- there is a standardized and systematized evaluation of cadre performance on a wide range of functions at the local level,

- Performance-based appointment system- the greater economic growth, the better chances there are for local leaders to get promotions.
Mechanisms of CCP operations

- vertical subcontracting
  - Level by level

- horizontal competition
  - with their previous and current counterparts

- quota territorialization
  - Assigned upward accountability
  - Some quotas are more important than others: 
    \textit{veto, hard, soft}
陝西安康孕婦遭強制引產事件是2012年6月4日因陝西省安康市鎮坪縣曾家鎮漁坪村孕婦馮建梅無法支付超生二胎的四萬元罰款。
Authoritarian/ eco/ smart
## Three kinds of governances

<table>
<thead>
<tr>
<th>Market-driven</th>
<th>Society-driven</th>
<th>State-driven</th>
</tr>
</thead>
</table>
| • Privatization  
• Private ownership  
• capital and corporation  
• neo-liberalism | • Collective actions  
• Public participations  
• Democratic decision-making | • Strong state direct intervention  
• Authoritarian state domination |
<table>
<thead>
<tr>
<th>Weberian Power</th>
<th>Foucauldian Power</th>
<th>STS</th>
</tr>
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<tbody>
<tr>
<td>(power over/ to)</td>
<td>(conduct of conduct)</td>
<td>(politics of thing)</td>
</tr>
<tr>
<td><strong>Smart authoritarian</strong> Grid Management</td>
<td><strong>Authoritarian smart I</strong> Sesame Credit Rating</td>
<td><strong>Authoritarian smart II</strong> Green Dam filtering</td>
</tr>
<tr>
<td><strong>Eco Authoritarian</strong> River Leader</td>
<td><strong>Authoritarian eco I</strong> Green Hegemony</td>
<td><strong>Authoritarian eco II</strong> Nuclear Power, geo-engineering</td>
</tr>
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</table>
The sixth administrative unit below the state
- (0) state; (1) provincial; (2) prefecture; (3) county; (4) town/ township/ street office; (5) village/community-level

Urban Space were divided into “grids” as basic units
- social management,
- Information collection,
- surveillance,
- Services...

http://www.fei123.com/660000/656498.shtml
## Power/Governmentality

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Traditional credit system for finance only

Sesame Credit for online social behaviors:
- Credit history
- Behavior preferences
- Compliance records
- Social status
- Personal networks
## Power/Governmentality

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Filtering internet contents from "problematic sources"

The filter system is established not to restrict block the accessibility of those sources, but to raise the threshold.
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Each river is assigned to each leading cadre (standing committee members of local CCP)

River protection outcome is related to political promotion of these leading party cadres
# Power/Governmentality

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Authoritarian Eco: self-green

- The forming of “green” and “eco” discourse and knowledge

- E.g. “Responsibility for the environment is shifted onto the population, and citizens are called to take up the mantle of saving the environment in attractively simplistic ways.”

## Power/Governmentality

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Chinese scientists preparing to take on Mother Nature

By STEPHEN WADE
The Associated Press

BEIJING — As they prepare to play host to the Olympics — an event whose very purpose is to push the limits of human beings — the Chinese are trying to do what man never has: control the weather.

With five months to go before the Summer Games come to Beijing, Chinese scientists say they are confident they can keep rain away from the opening ceremony, or summon a storm on cue to clear the city’s choking pollution.

It’s a bold — and, according to international scientists, dubious — bit of stage managing, even for a nation that has already shown an outsize ambition to use the Olympics to showcase its development from rural poverty to economic powerhouse.

China is spending US$40 billion to remake the infrastructure of the ancient capital, and it already spends an estimated $100 million a year and employs 50,000 for rainmaking.

At installations like one called Fragrant Hills, outside Beijing, peasants don military fatigues and helmets and squat behind anti-aircraft guns and rocket launchers, blasting the sky with silver iodide, hoping to shock rain from the clouds.

If rain threatens the opening or closing ceremonies, Beijing officials say they will set up several banks of rocket launchers outside the city to seed threatening clouds and cause them to release their rain before it reaches the capital.

“We are now drafting the implementation plan for the artificial rain mitigation for the opening and closing ceremonies,” said Wang Yubin, a Beijing Meteorological Bureau engineer. “This is a very complex process, so we must select the right time and place.”

China, short on water and arable land, has invested some of the scarce resources it has on rainmaking and rain prevention. Its cloud-seeding weapons include 6,781 artillery guns and 4,110 rocket launchers, according to the state-run Xinhua news agency. The China Meteorological Administration says 4,231 flights for cloud-seeding were conducted from 1995 to 2003.

The Chinese scientists say it worked — increasing rainfall during those years by 210 billion cubic meters, enough to meet the annual needs of 400 million people. China has a population of 1.3 billion.

Other scientists aren’t so sure. “I don’t think their chances of preventing rain are very high at all,” said Dr. Roelf Bruintjes, a meteorologist with the U.S. National Center for Atmospheric Research, who was in China several weeks ago and told top-ranking Chinese scientists he was skeptical.

“If there is really a weather system that is producing rain, they won’t be able to do anything. We can’t chance away a cloud, and nobody can make a cloud, either.”

The argument is about much more than precipitation theory. The Olympics, set to run Aug. 8-24, are tightly scheduled, and a rainy day can wreak havoc — particularly if the opening ceremony, perhaps China’s best showcase of the Games, is a washout.

♦ See PROFESSOR / A14

http://usatoday30.usatoday.com/weather/research/2008-02-29-china-weather_N.htm
http://www.orwelltoday.com/chinaweather.jpg
Conclusions

- **Transnational part:**
  - big/small north v.s REALLY BIG SOUTH
  - the new role of China in the world capitalism crisis

- **Process part:** for comparison between the EU and China
  - Look at the quota territorialization, and related evaluation systems (asymmetric decentralization; upward accountability)

- **Consequence part:** theorization on the relationship between the state and eco/ smart
  - Interactive dynamics between authoritarian and eco/ smart: SA, SA1, SA2, EA, AE1, AE2
  - More challenges when these China models to be exported overseas, bringing more cases to re-theorize and conceptualize the state and eco/ smart
Dr. Shiuh-Shen CHIEN, NTU : Understanding Eco/ Smart Process and Consequences in post-Socialist China, presented in SMART-ECO Ningbo Project Meeting, 2016/05/12-13

Thanks YOU