The Gobi: A Space of Flows
Outline

1. History and Background
2. China’s Silk Road: A “Spatial Fix”? 
3. Is the Gobi a Harbor? Logistics and International Trade 
4. Alter-Urbanization: A Space of People and Places
Where is the Gobi?
China’s “Frontier”

Jiayuguan, the furthest West point of the Great Wall of China once marked the frontier of the Chinese empire.
Rare Earth Supply to the World

Europe 23% of exports

Germany

Compute/Electronics Exports

Pearl River Delta

Japan 33% of exports

Cupertino, CA.
Cupertino, CA.
Cupertino, CA.

Neodymium magnets for hard disks and wind turbines, etc.

Cerium Oxide polishes screens for iPhones

Domestic Use 80%

Magnets & Computer Products

Exports 20%

United States 25% of exports

Bayan Obo Mine, Inner Mongolia

Beijing/Tianjin

Yangtze River Delta
Taiwan

China

Rare Earth Supply to the World

Bayan Obo Mine
Baotou, Inner Mongolia

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Inner Mongolia Supplies China’s Coal

- Inner Mongolia Supplies China’s Coal
- 22% No. 2 in China

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Inner Mongolia Supplies China’s Coal
1950-1980: Planned Economies

- 1958: Jiayuguan Complex Founded
- 1966: Lanzhou-Xinjiang Railway completed
- 1979: Deng Xiaoping takes power and begins to initiate "reform and opening up" period which gradually liberalizes the Chinese economy
1980-1990: Reform/Opening
1990-Present: Acceleration of Flows
II. China’s Silk Road: A “Spatial Fix”?
Overcapacity for Production

China’s Extra Steel
After having built up the world’s largest steel industry, China has seen demand growth taper off and now is shipping its excess steel abroad, causing trade frictions.

Chinese steel production
750 million tons

Chinese steel exports
75 million metric tons

Sources: World Steel Association (production); Global Trade Information Services (exports)
THE WALL STREET JOURNAL.
China’s New Silk Road
Infrastructure in the Gobi
Railways, oil pipelines, energy infrastructures (focus on the Gobi region only)
The new infrastructures and associated urban nodes are facilitating increased trade flows, as well as a logistic-based urbanization.
Lanzhou New City
Concentrated Urbanization
Xi’an
Logistics Center, Historic Start of the Silk Road

Xi’an International Port
III. Is the Gobi a Harbor?
Time/Price Factor in Transport

Inland Chinese Cities Move Closer to Europe

Rotterdam to Urumqi Rail

Rotterdam to Urumqi Sea

New Coastline

Rail Shipping

Ocean Shipping
Rail Route: A New Inland Coastline?

Rotterdam to Urumqi Sea
Multinational computer companies have pioneered use of the Trans-Eurasian railway for shipping products from factories in inland China to European consumers. High-value-added products like computers are time-sensitive and transportation is a smaller share of their total end value—therefore it makes sense to ship them by rail.

China's development bank and its sovereign wealth fund are backing the Silk Road Fund, a major backer of China's infrastructure push in Eurasia.

China's rush for natural resources has made it the dominant player in Central Asia, challenging the traditional Russian presence in the region. But Russia's Gazprom and China's CNPC are co-investors in several oil projects in Central Asia.

China Railways and China National Petroleum Corporation are two of the largest SOEs (state-owned enterprises) in China.

Manufacturers in Japan and Korea are using the new rail route to ship products to Europe and Central Asia. The Port of Lianyungang in Jiangsu Province has been dedicated to serving Trans-Eurasian traffic as it is the terminus of the Lanzhou-Xinjiang railway.
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China Railways

China-Pakistan Economic Corridor

Khorgos Port

Urumqi

Gwadar, Pakistan

Russia-China Oil Pipeline

DHL

$L 400Bn$

Khashagan Oilfield

$5Bn$

China-Kazakhstan Pipeline

North Bugaci Oilfield

Samsung Plant

$2 Billion

Xi’an

Chongqing

CNPC 中国石油

China Railways

Silk Road Fund $40 Bn

Investment Flow

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Role of Global Logistics Companies

DB Schenker’s role as a pioneer on Trans-Eurasian corridor

Track record DB Schenker China Train

- 1st train: Beijing - Hamburg 2008
- Test services: Northern and Southern route 2010
- First company trains: Chongqing - Duisburg
- Regular company trains: Leipzig - Shenyang
- Regular trains east and westbound (CN-EU v.v.)
- Regular container shipments from China to CIS countries
- First regular multi-customer train: Zhengzhou-Hamburg
- Various services in place on Northern and Southern Route east- and westbound
- DB Schenker offers transport solutions using all available China Train products
ADVANTAGES OF USING DHL CHINA-EUROPE RAIL

WEST CORRIDOR
FASTEST LANE BETWEEN CHENGDU AND LOZ
14 days
9,862 km

CONNECTING MAJOR CITIES IN CHINA & IN EUROPE

ROTTING

DHL WEST CORRIDOR

-25°C TO 25°C
UNIQUE TEMPERATURE CONTROLLED SOLUTION

STATE-OF-THE-ART TRACK & TRACE SYSTEM VISIBILITY THROUGHOUT THE JOURNEY INCLUDING CONTAINER TEMPERATURE

MEETING YOUR ENVIRONMENTAL RESPONSIBILITY COMMITMENTS

Logistics
Khorgos Inland Port
A Nexus of Electronics and Natural Resources Logistics
Khorgos Dry Port
Transfering Cargo from China to Kazakhstan Gauge
Khorgos: China’s Gateway to Eurasia

Distribution hub opportunities of ICBC “Khorgos”

“New Dubai” on Kazakh-Chinese Border Set to Change Trans-Eurasian Trade

BY ALTAIR NURBEKOV in BUSINESS on 22 OCTOBER 2015

KHORGOS, ALMATY REGION – Some might say this barren spot on the border between China and Kazakhstan is in the middle of nowhere. And they would be forgiven; for there were only a handful of people and cars spotted along the 1,000-km, five-hour train ride from Almaty to the nearby Altyrsk station (that is, once you get out of the heavily populated 40-50 km radius around Almaty beyond Zheltogurt).

Transcontinental Corridor “West China-West Europe”

Others, like Belgian-born Karl Gheysen, Director General of KTZE-Khorgos Gateway, the company charged with developing the place into a modern transport and logistics hub, call it “the new Dubai.”

Khorgos-Urumqi as a Nexus

Oil Pipeline Terminals and Logistics Terminals

2014: Russia-China Oil Pipeline $400 billion investment between Gazprom & CNPC

Khorgos Oil Terminal

Khorgos Logistics Facility
Erenhot (China-Mongolia Border)
Alashankou (China-Kazakhstan Border)
IV. Critique: What is to be Done?

A Proposal for an Alternative Urbanization
Westward Shift of Manufacturing + Mining
2000
An oil tanker traverses a road in the Gobi, flanked by China's Green Wall

From Rosetta Elkin's *Green Wall Infrastructure in China*
Urbanization by Degradation

Water Stress from Oil, Power and Mining

Height indicates areas of local migration (intra-county migration)

Relocation Village in Ningxia Province
“Ecological Migration”

Relocation locations of “ecological migrants” for selected counties of Ningxia Province from rural areas to new towns along the main highway and road through the province.
Expulsion of the Commons II
Relocation of nomadic peoples, villagers, ethnic minorities
Transformed Villages
Gobi: the Space of Flows
Current Relationships and Policies

State Level 国家

"Open up the West"
1999
China's first policy designed to reduce inequality in Western China, massive state-led investment in Xian, Chengdu, and Chongqing to concentrate on creating urban agglomerations to attract foreign and domestic investment.

City-Level 市

Rural-Urban Migration
1999

Ecological Migration
1997-Present
China's first policy designed to reduce inequality in Western China, massive state-led investment in Xian, Chengdu, and Chongqing to concentrate on

Special Economic Zones
Shenzhen 1980
Shanghai Pudong 1992
Lanzhou New Area 1992

Green Wall: 1978-Present
China began its shelterbelt reforestation program to combat encroaching desertification

Desertification

Village Urbanization

New Socialist Countryside
2006
New-Style Urbanization Policy
2014
Gobi: Space for People and Places

Proposed Policies and Interventions

**Village/Town Level**
- Village to Village Linkages
- Local goods shipped internationally through e-commerce sites using new warehouses in the Gobi

**City-Level**
- Urban Tourists Visiting Countryside
- Investment in Village Economies
- Linkage Tax for International Logistics Firms

**State Level**
- Re-Appropriate Logistics Zones
- Use logistics zones for boosting local commerce in the Gobi
- Local goods shipped internationally through e-commerce sites using new warehouses in the Gobi

**International**
- Alliance of Nomadic Peoples

*Nomads without borders*

Instead of the dramatic resettlement of nomadic peoples across the Gobi in order to fuel urbanization and logistics-based infrastructure, we envision a new international linkage between nomadic communities to band together to achieve more visibility on the world stage, establish a common economic zone for local products, and press for the preservation of common lands across national boundaries.

Whereas current village policies in China prioritize the transformation of village life into urban life, or the relocation of farmers to new towns, this policy will allow for a maintenance of rural lifestyles for those who wish to stay in their community.

Currently, logistics companies using the new silk road as well as the companies that ship across this network don’t have to pay anything directly to the localities they pass by. A portion of the customs revenue or export tariffs could be funneled back into local communities in the area to help spur sustainable investment.

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Leveraging Logistics Centers for Village Benefit
Thank You!!