# Population, Industrialization, and Pollution

Social Change in Asia

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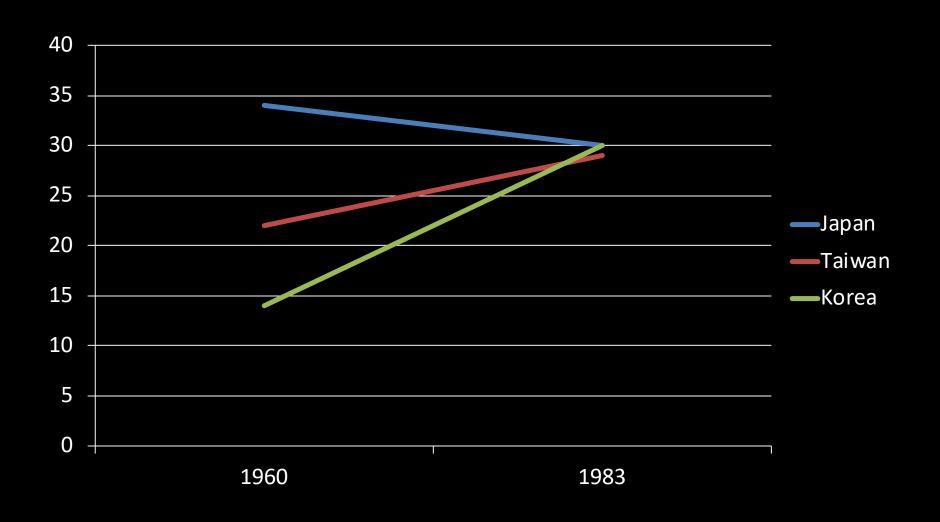
#### Culture and Environmental Action

- Questions (Weller page 106-7)
  - In what ways do people's understandings of nature influence when and how they take environmental action?
  - What are the cultural and social resources that shape their behavior?
- Weller will find that in both Taiwan and the PRC local and national environmental interests may diverge (but in different ways due to institutional differences)

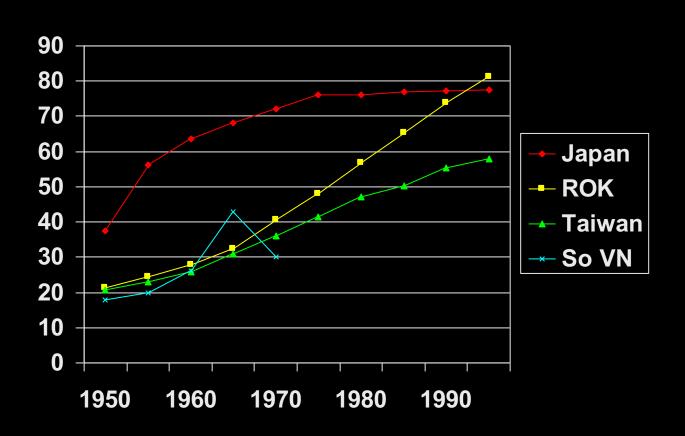
## Garbage a Modern Industry

- Premodern peasant society
  - Most production at home
  - Home the same as work (no commuting)
  - Small entrepreneurs recycle things
    - "honey buckets" gathered for application on fields
    - "rag pickers" pick up and resell garbage that can be converted into raw materials
  - Search for fuel can have serious environmental consequences
    - Air pollution from burning straw, deforestation from burning wood
- Industrial society
  - Most production done in factories, so people consume commodities and then discard the leftovers—i.e. create garbage
  - People commute to work (air pollution)
  - Large firms pick up and dispose of garbage in dumps (can be sanitary landfill or incinerators, but often just dumped)

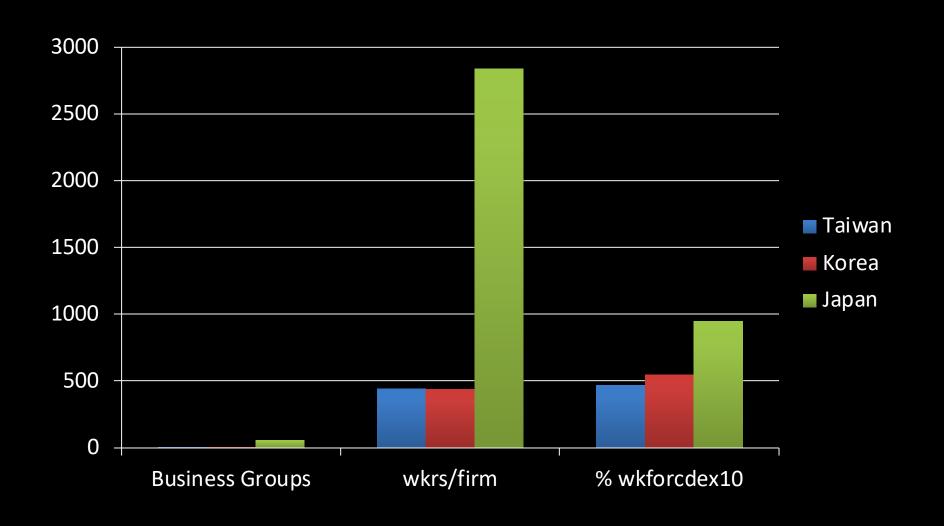
## Share of Manufacturing in GDP



## East Asian Urbanization



## Workers per Firm



## Taiwan Development

- At time of reversion
  - Taiwan twice as prosperous per capita as mainland
  - More than half of the population went to school
  - Japanese had provided good transportation and government infrastructure
- Rapid development with modest urbanization
  - Land reform of 1953 preserved small holder agriculture even for sugar industry (maximum of 3 hectares=7.35 acres=9 city lots)
  - Light industrialization based on small and medium enterprises
    - 以農養工 build industry through agriculture
    - As late as 2003 77.5% of the workforce was employed by small and medium enterprises
    - Especially in mining and quarrying, manufacturing, construction, and transportation (less true in finance and gas and electricity)

#### Taiwan Urban Structure

- Taibei metropolitan region 7 mil 臺北基隆都 會區
  - Gaoxiong 2.7 million 高雄市
  - Taijung 2.7 million 臺中市
  - Tainan 1.9 million 臺南市
  - No other large cities

## Taiwan Map



## Garbage as a Political Issue

- Modernizing state intervenes in waste management as a health issue—smell redefined as a health issue
- Issues
  - Who bears the burden of garbage?
    - Smell? Water pollution? Scavenger animals? Health effects?
  - How are these issues decided?

## Taiwan's Garbage Wars

- Pattern of escalation
  - Local people become aware of a problem
  - People try legal mechanisms (petitions, etc.)
  - People then resort to extra-legal mechanisms
    - Street marches, long-term blockades
  - May ultimately settle for financial compensation
- Pattern of mobilization localized
  - Temples
  - Lineages
  - Neighborhoods
  - Gangster groups
  - Some coordination with national NGOs but not much

## Taiwan Environmental Bureaucracy

- Before 1971—Interior Ministry
- 1971-1982 Department of Environmental Health
- 1982-87 Environmental Protection Bureau
  - Noise and traffic control, air, water, waste management, health
- 1987 to present—Environmental Protection Administration
  - All environment policies, regulations, standards and enforcement (toxic substances, sanitation, monitoring environment)
- However, EPA not really involved in "garbage wars" that were essentially local township issues

## Temple Organization

- Village and neighborhood temples in Taiwan
  - Until 1945 temples tended to be tightly associated with neighborhoods in Taiwan
  - Village temples often interacted with market town temples in a temple hierarchy
    - House Gods (家神), Village Earth Gods (土地公), city wall gods (城隍)
  - Today temple associations maintain temples, and while they may have a geographical concentration, they can have island-wide membership
  - The gods of temples can be various and are related to local history and what deities people think are powerful and can help them

## Temple Activities

- Typical temple activities:
  - Big annual community celebration on god's birthday
    - Lower ranked gods often meet higher ranked gods, sometimes invite opera troops for performance, fortune telling
  - Festivals on calendrical holidays (New Year, Guanyin's birthday 2.19, Buddha's Birthday 4.8, Dragon Boat Festival 5.5 (忠孝節), Feast of the Hungry Ghosts 7.15)
    - Lunar new year stove god reports on family to the Jade Emperor
    - On 7.15 make offerings to hungry ghosts in front of house
  - People can go to temple to consult the god at any time to get fortune telling, or advice
  - In Taiwan 拜拜 involves lighting incense, bowing to the god, and using moonblocks (筊杯) to answer yes/no questions
  - May also use divination sticks that have more complex written answers

#### Moonblocks

- Curved side is yin
- Flat side is yang
- First purify by revolving over incense burner three times
- Kneel, ask the god a question, cast the blocks
- One flat side and one round side up = yes
- Both round sides up = no
- Both flat sides up = "god smiles" or "maybe"



#### Examples of Political Moonblock Use

- Want to borrow the image of the god to parade in a demonstration
  - Have to ask the god's permission with moonblocks first (don't have to ask the temple's permission)
- In one case (beginning of Ch. 5) protestors threw moonblocks to ask whether to settle dispute or to protest, and decided to protest

### Lineage Organization

- Common in Taiwan, Hong Kong, but illegal on the mainland
  - used to be common in Southeast China (Fujian and Guangdong), but not so much in North China
- All the local patrilineal descendants of someone who lived in the past gather for ancestor worship
  - In elaborated cases they will build a family temple with ancestral tablets (it takes a financial contribution to be enshrined)
  - Some temples have endowed lands that they use to support ceremonies, subsidize lineage education, or subsidize members
  - Meetings, ancestor worship, ancestral hall if very large

## China Development

- Under Hu Jintao and Wen Jiabao (2002-2012)
  policy of "Harmonious Socialist Society"
  和谐社会 and "Peaceful Rise" 中国和平崛起
  - This allowed space for civil society groups outside CCP control
  - NGOs, however, couldn't be political
    - Limited themselves to "technical advice"
- Environmental bureaucracy
  - 1972 attended UN environmental conference
  - 1983 environmental protection state policy
  - 1998 Ministry level Environmental Protection Agency

## China More Recently

- Xi Jinping (2012-present)
  - Chinese Dream 中国梦(夢)
    - Prosperity, collective effort, socialism, and national glory Qiushi 2013.5.20
  - Four Comprehensives 四个全面战略布局—comprehensively build:
    - Moderately prosperous society 全面建成/小康社會
    - Reform 全面社會改革
    - Govern nation according to law 全面推进依法治國
    - Strictly govern the Party 全面从严治党

#### China Environmental Protest

- Interaction with environmental bureaucracy
  - Writing letters
  - Calling environmental hot lines
  - Some environmental lawsuits because of environmental laws
  - Situations tended to be solved with compensation (i.e. language of human gains and losses rather than of environmental protection)
  - Attitude seems to be more "anti-pollution" than "environmental protection"

#### Taiwan and China Share

- Big business has close ties to state
- Environmental administration exists, but tends to be quiescent
- Ladder of escalation
  - Letters, lawsuits, blockade → compensation
- Difference
  - Manner of political mobilization
  - Role of national NGOs

#### Central and local

- There are policies from above and countermeasures from below 上有政策,下有对策
  - Much of the conflict comes from competing priorities of higher and local government
- China—big contrast between environmental consciousness of educated urbanites and rural residents
  - Tianjin (prosperous city near Beijing)
    - Make environmental complaints
    - Take measures to protect family and children from pollution
    - Oxygen bars
  - Anhui (poor rural province)
    - Little environmental consciousness despite government campaigns
      - Unaware of meaning of "environmental protection" 环境保护
    - Continue environmentally damaging practices even though illegal

#### China Government

- Tianjin's lowest level of government
  - Neighborhood committees and street committees 居民委员会,街道办事处
  - Now responsible for their own finances so become quasi-NGO's living off fees
    - May charge for registering migrant workers, for example
  - Strong incentive to ignore pollution so as to preserve their income from factories
  - Cadres rewarded primarily according to the rate of economic growth in their area
  - Thus without local political pressure, they have no incentive to enforce environmental laws—even those the central government wants
  - Progress toward rule of law under Hu Jintao is less apparent under Xi Jinping

#### Taiwan Government

- Kending National Park
  - 20,000 people lived within the boundaries in 1993
  - Some land had been nationalized by the Japanese, but is still farmed by residents
  - Other land is privately owned
  - Park cracked down on farmers
    - Prohibited insecticide use and construction of new buildings (similar to Green Belts in Korea)
    - Competition between DPP and KMT in which environmentalists favor DPP even though it does not have an environmentalist agenda

## **Implications**

- Taiwan and China culturally similar but environmental protest takes different forms due to political differences
- Substantial similarities, however
  - United States and United Nations models more similar to each other than to traditional Chinese ideas
  - Market based tourism more syncretic but global influences the same for both

## Variant globalism

- Three Western views
  - Separation of nature from culture
    - Objectifying nature for human progress and enrichment
  - Biocentric valuing of nature for its own sake
  - Pastoral view of humans and nature as one
- These three ideas appropriated as different times and to different degrees, and then reworked into Chinese culture
- Chinese environmentalism?

## Civil Society and the Politics of Pollution Enforcement

- Bryan Tilt (Oregon State)
- Example of interaction of the local with the center
- Villagers understood environment through their agricultural activities that were threatened by factory pollution
- Ministry of Environmental Protection (2008) elevation of older State Environmental Protection Agency

## Rural Industry

- High rate of natural resource consumption
- Lack of investment in pollution-control technology
- Effect on health and welfare of residents of rural areas is not quantified
- Local governments have a great deal of discretion in enforcement of environmental law
  - Environmental-protection target-responsibility system 环境保护目标责任制
  - Control pollution with compensation levies

#### Worked out?

- Smokestack put in according to system
- But air and water pollution above national norms continued
- Local television exposé led to local SEPA inspections and closure of factories
- Investors in factories incensed
  - Saw shut down as failure of rule of law (not 法大于权 but 权大于法)
- Pillars of environmental movement
  - Historical legacy of public protest and mobilization
  - Institutional reform
    - Administrative Litigation Law (1989) allows individuals to bring lawsuits against governmental units and individuals
    - Organic Law of Villagers' Committees (1998) allow election of rural cadres
  - Allow mobilization of NGOs