

INDUSTRIALIZATION ACROSS REGIONS: A GLOBAL OVERVIEW



- Shift to machine-based production and inanimate energy



- Structural change: specialization and new economic order



- Multiple regional pathways, not a single Western template



- Core themes: timing, technology, states, labor, resources, trade



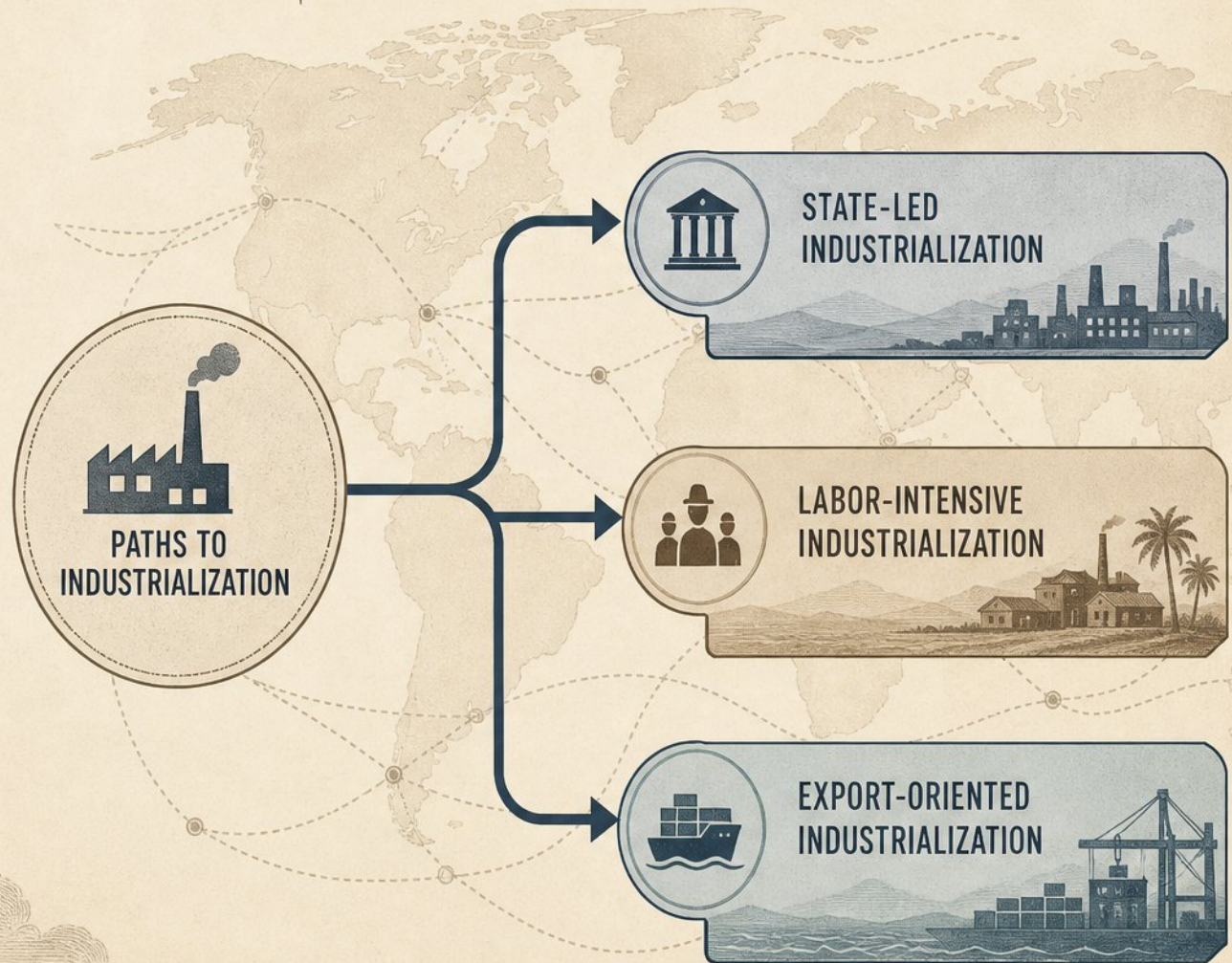
- Explains today's global inequalities and supply chains



Core Concepts and Comparative Methods

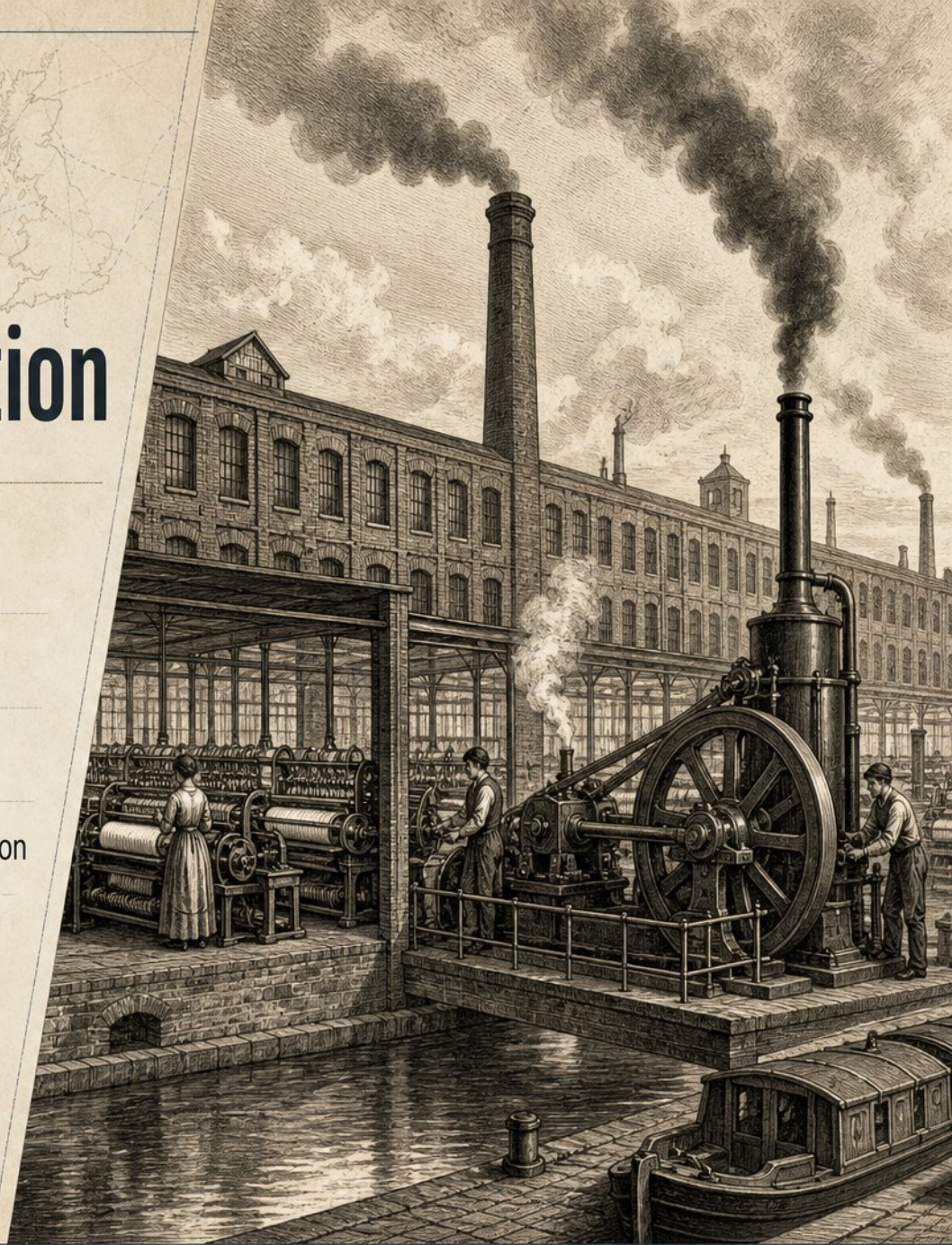


- Industrialization as a process, not a single event
- Compare timing, scale, states, labor, resources
- Britain-first model can distort regional analysis
- Key terms: late industrialization, import substitution, export orientation



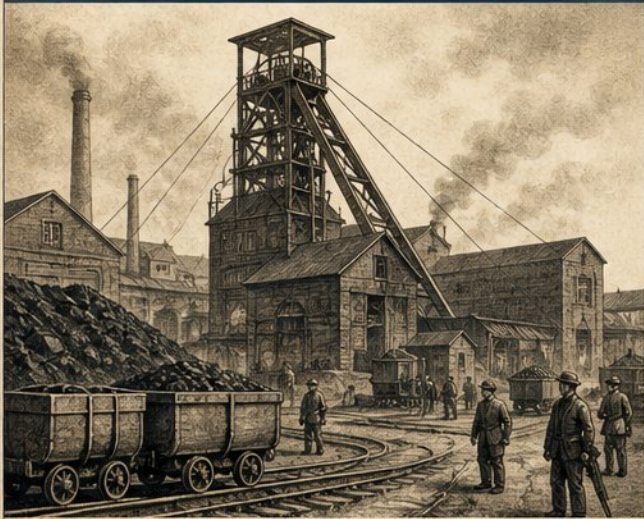
Britain and the First Industrial Revolution

- Began late 18th century; matured through the 19th century
- Key industries: textiles, coal, iron, steam power, railroads
- Enabled by coal, empire, finance, farming output, labor supply
- Distinctive mix: useful knowledge plus institutions and agglomeration
- Not a simple recipe for later industrializers to copy



Western Europe: Multiple National Models

BELGIAN COAL MINES



FRENCH RAILWAY NETWORKS



GERMAN STEELWORKS

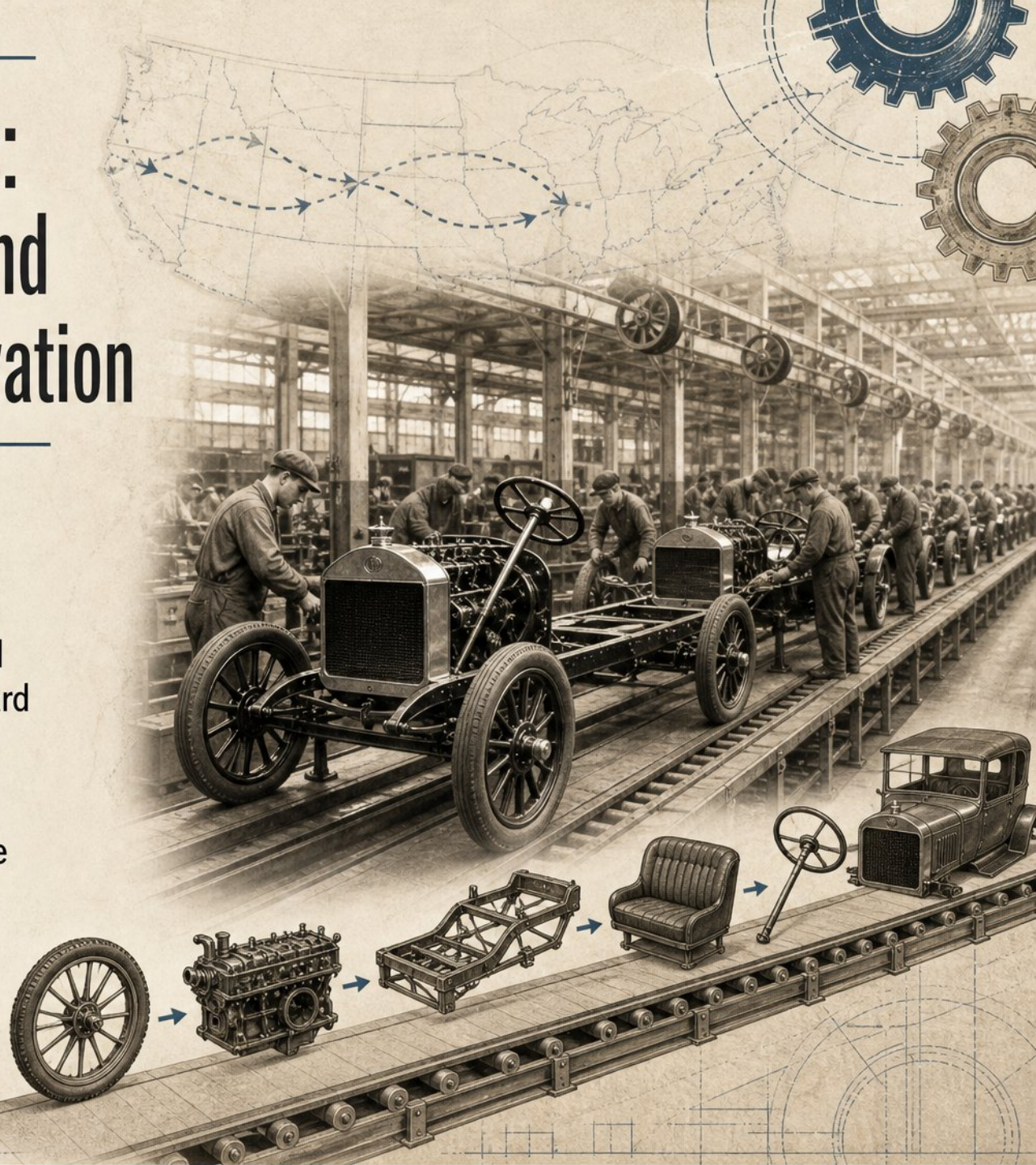


- ⚙️ - Belgium, France, and Germany industrialized at different paces
- ⚙️ - State policy and banking systems shaped national trajectories
- ⚙️ - Technical education and infrastructure built industrial capacity
- ⚙️ - Railroads and coal basins integrated continental markets
- ⚙️ - State-led and market-led development both proved viable



The United States: Resources, Scale, and Organizational Innovation

- ⚙ Early textiles gave way to mass production and large-scale manufacturing
- ⚙ Resource abundance, continental markets, immigration, and westward expansion shaped growth
- ⚙ Interchangeable parts and the assembly line enabled high-volume production
- ⚙ US industrial scale became a global benchmark for productivity



Russia and Japan: Late Industrializers in Comparison

RUSSIA



State-led reforms
and modernization



Witte-era state finance
and heavy industry



Expansion of
railroads

JAPAN



Meiji reforms
and centralization

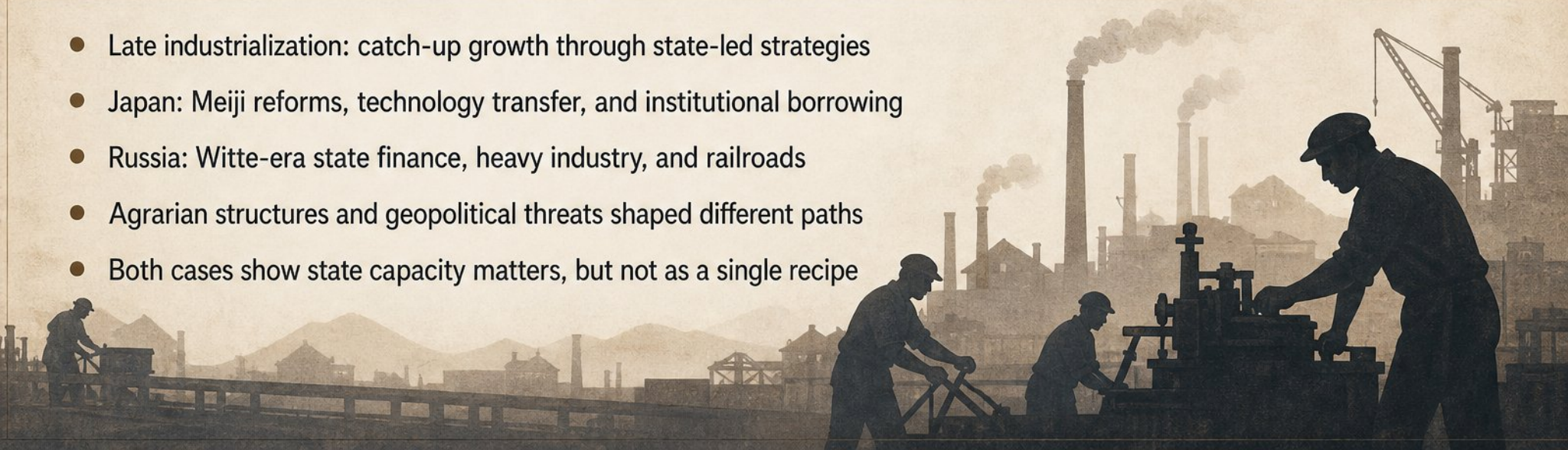


Technology transfer
and institutional borrowing



Industrialization
and infrastructure

- Late industrialization: catch-up growth through state-led strategies
- Japan: Meiji reforms, technology transfer, and institutional borrowing
- Russia: Witte-era state finance, heavy industry, and railroads
- Agrarian structures and geopolitical threats shaped different paths
- Both cases show state capacity matters, but not as a single recipe

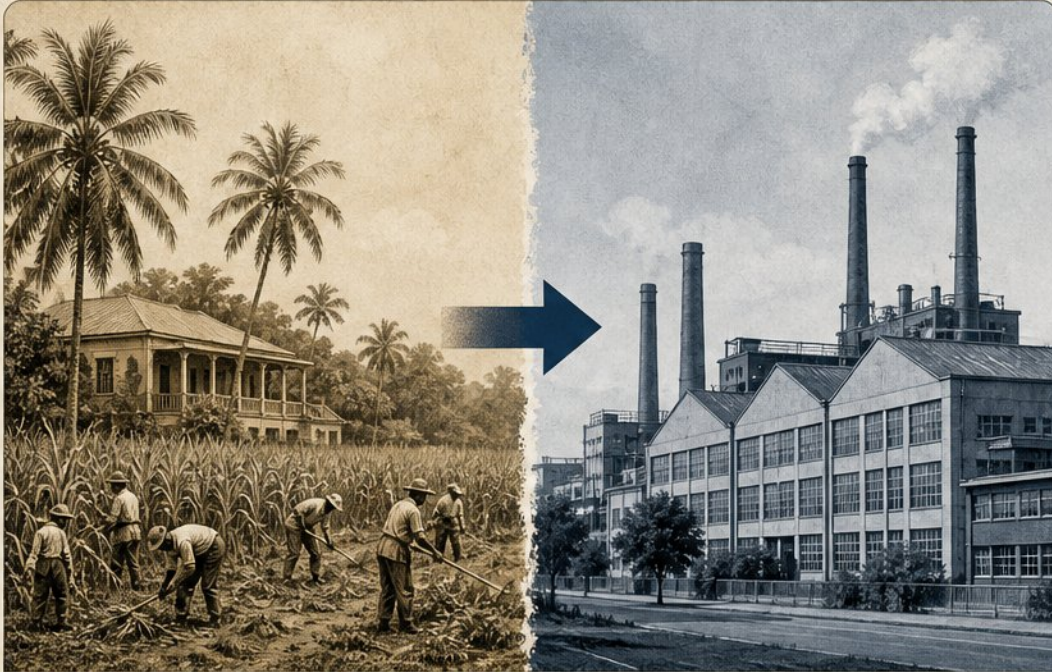


East Asia: Export-Oriented Industrialization

- Shift from import substitution to export-led growth
- States promoted exports and domestic industrial capacity
- Korea and Taiwan pioneered labor-intensive manufactured exports
- Later growth linked to regional production networks and global value chains



COLONIAL AND POSTCOLONIAL INDUSTRIALIZATION

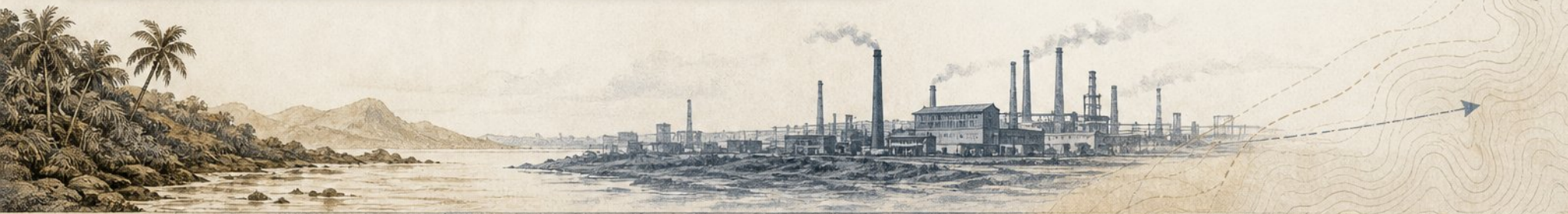


COLONIAL PLANTATION
Export extraction economy



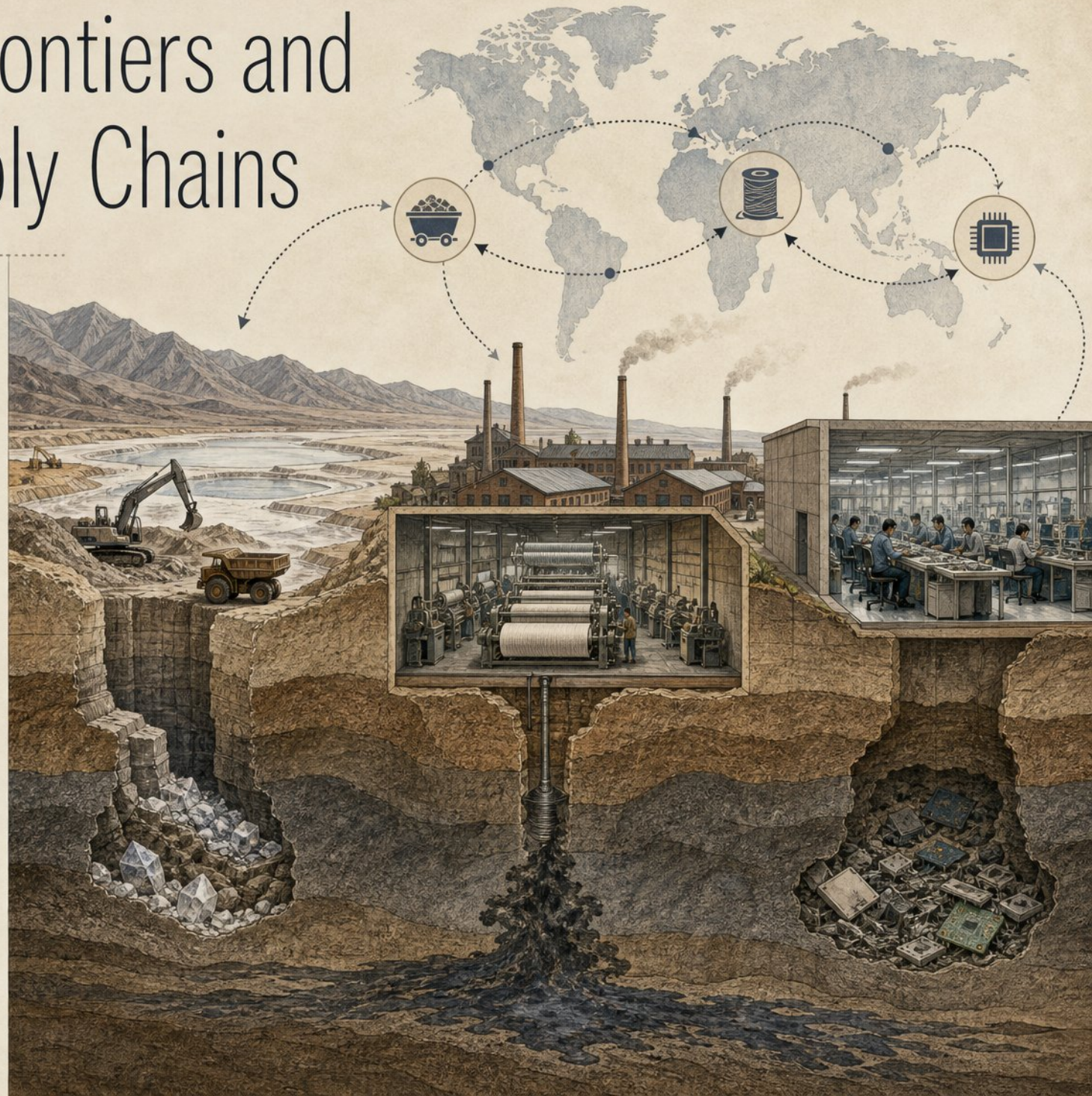
POSTCOLONIAL FACTORY
State-led industrialization

- Colonial rule often blocked local industry and shaped export economies
- Decolonization sparked state-led industrialization across the Global South
- Import substitution aimed to replace imports with domestic manufacturing
- Latin America adopted ISI first; Africa followed but faced stronger constraints
- Outcomes diverged due to state capacity and domestic market limits



Resource Frontiers and Global Supply Chains

- Resource extraction and energy use drive environmental change
- Production fragmentation shifts risks and rewards across borders
- Environmental burdens fall unevenly on lower-income regions
- Examples: lithium, soy, textiles, and electronics supply chains



Patterns of Urbanization, Labor, and Inequality

- Compare migration and city growth across industrializing regions.
- Factory work brought new discipline, gender shifts, and skills.
- Industrialization widened gaps within and between regions.
- Local institutions shaped social outcomes as much as technology.



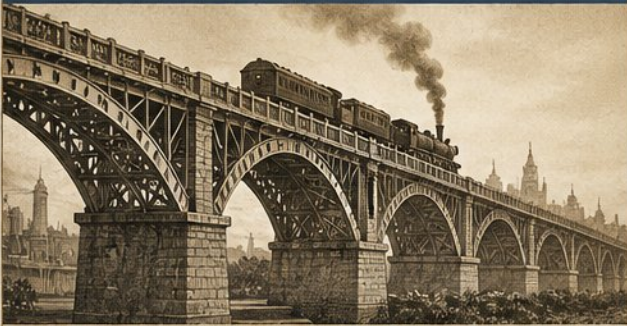
Deindustrialization and Post-Industrial Transitions

- Manufacturing decline as a share of jobs and output
- Shift toward service-sector employment in high-income economies
- Plant closures create lasting social and economic strain
- Post-industrial transitions vary across North America, Europe, and Asia



Legacies and Lessons Across Regions

INFRASTRUCTURE



AFRICA

EDUCATION



SOUTH ASIA

TECHNOLOGY POLICY



EAST ASIA

- ⚙️ - Industrialization reshaped states, societies, economies, and environments
- ⚙️ - Transferable lessons: infrastructure, education, technology policy, institutions
- ⚙️ - Colonial histories and power asymmetries still limit industrial possibilities
- ⚙️ - Connect historical patterns to debates on development and sustainability
- ⚙️ - No single model: path dependency and contingency shape outcomes

Case Study: Comparative Development in Practice



- Compare East Asian export-oriented growth and Latin American import substitution



- Contrast state roles, global market access, and resource endowments



- Identify convergence, divergence, and path dependency in outcomes



- Apply the course framework to two regions



Conclusion:

Teaching Industrialization Across Regions



- Compare trajectories: Britain, US, Japan, East Asia, colonial regions



- Move past single-model and Eurocentric narratives



- Discuss state capacity, resources, trade, and technology transfer



- Explore regional divergence, catch-up, and path dependency



- Use prompts and data sources for continued comparative study



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