

# To imitate or innovate?: Institutional challenges in the governance of rail transit megaprojects – Lessons from India

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# On this study – Governance of megaprojects

- Ballasting, loading, de-ballasting, and sailing ships: An explanation of how work practices emerge in global projects
- Swimming in the Dead Sea and swimming against the tide: Appraising institutional work involved in shaping megaprojects
- **To imitate or innovate?:**  
**Institutional challenges in the governance of rail transit megaprojects – Lessons from India**
- It is not just about being at the centre! Up, down, left and right matter too: A reflection on adaptive governance in megaprojects
- Transforming disruptive practices into innovative exemplars: Evidence from few rail transit projects in India

Inspiration  
behind this  
multi-part study

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# Imitation and Innovation

*The Transfer of Western Organizational  
Patterns to Meiji Japan*

D. Eleanor Westney

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IIT  
MADRAS



भारतीय प्रौद्योगिकी संस्थान तिरुपति  
TIRUPATI

Harvard University Press  
Cambridge, Massachusetts, and London, England  
1987

# Fitting the study in the High-Speed Rail context



## INTERNATIONAL RELATIONS

### India's first bullet train project gets going

Predesign work started, groundbreaking ceremony in 2017

GO YAMADA, Nikkei senior staff writer  
March 17, 2017 19:00 JST

The Japanese consortium expects that expertise amassed since 1998 through helping with the construction of the Delhi Metro Railway can be applied to the soft aspect of the high-speed rail project.



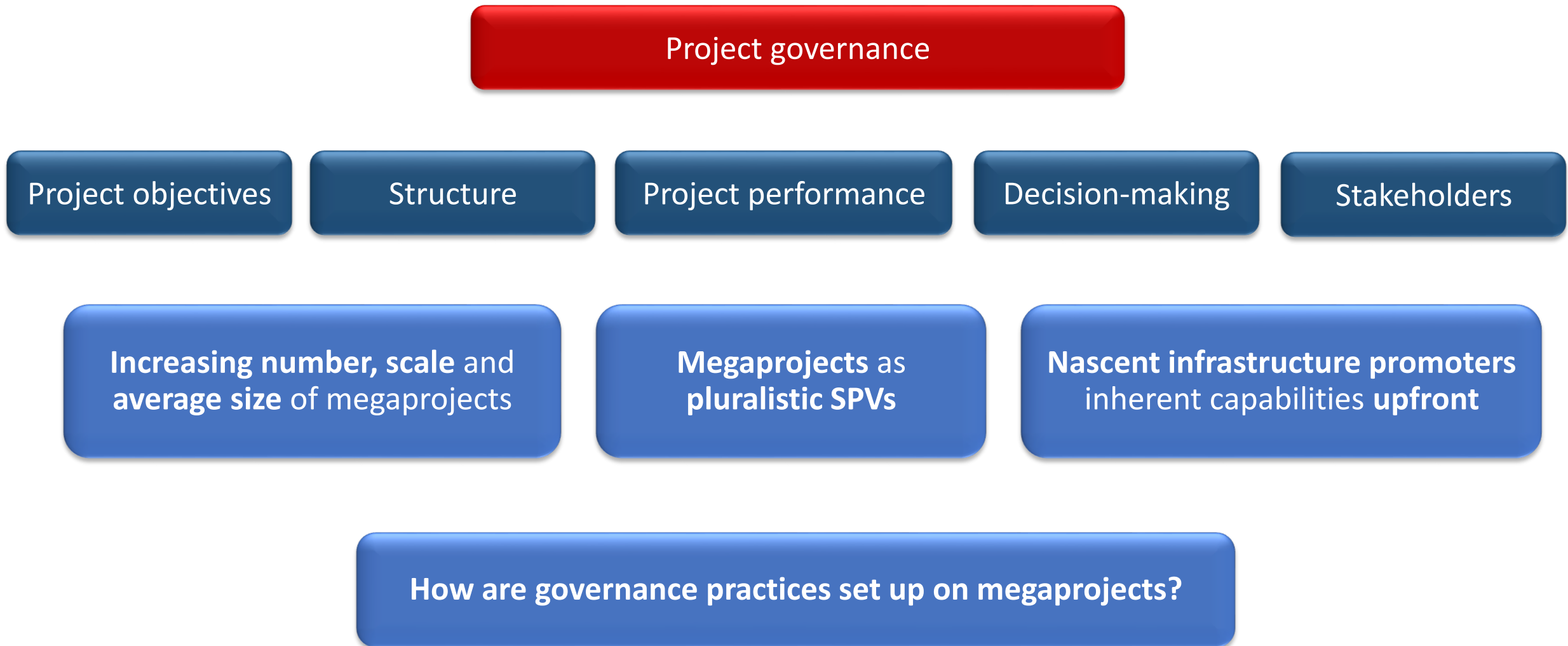
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### Indian PM Modi, Japan PM Shinzo Abe to lay the foundation stone of India's first bullet train in Ahmadabad, Gujarat!

September 14, 2017 Abdul Ruff

JIC stated that the local expertise in India gained from constructing and operating various rapid transit systems could be utilized for the high-speed rail project.



# Governance of megaprojects : Theoretical treatments

## Contingency-based view of governance

Each megaproject is a 'New animal in the block', 'White elephant' & 'Different breed'

**Unique** and **contingent** governance mechanisms are required in each megaproject

Promoters run into the risk of **non-legitimacy**

## Institutions-based view of governance

Ignoring rules, norms and values leads to 'Uniqueness bias', 'Institutional exceptions' & 'Institutional conflicts'

**Overarching** nature of **governance structures** which **condition** the actors

Promoters run into the risk of **isomorphism**

How are governance decisions made in megaprojects?

# Governance of megaprojects – The question at hand

Practice-based lens

Ongoing, situated, and emergent interactions of actors with the governance structures

**Replicate** the widely institutionalized governance practices

**Change** the widely institutionalized governance practices or **create new practices**

How are institutional challenges pertaining to decision-making between the 'imitation' and 'innovation' resolved?

# Research setting & overall methodology

India - huge demand-supply deficit in transportation infrastructure

- Requires US\$ 75 Billion investment by 2022




India's 10th Five Year Plan - metro transit systems in cities with 2 million people or more

**The East Metro** turned out to be a bad precedent

The **Capital Metro**, promoted by the **Capital Metro Rail Corporation**, evolved to be different: Attained break-even in 3 years

**The South-East Metro and South-West Metro** became the 4<sup>th</sup> and 5<sup>th</sup> metro transit systems to be built and operational

# Research setting & overall methodology

- 
- **Induction-based** approach
  - **Qualitative twin embedded case-study** method
- 
- **Empirical objective:** To study how governance decisions were made in the **East Metro** and the **South-West Metro** by the respective promoters
  - **Iterations of governance:** Initial selection, proposition, Phase 1, Phase 1 extension, and Phase 2
- 
- **Primary data** – 40 + 32 interviews, 2 brainstorming sessions
  - **Secondary data** - sources such as **news, online forums, officially published reports**

# Governance decisions

## The South-East Metro

## The South-West Metro

## Factor

Appointment of  
CMRC/CMRC  
personnel

Employing CMRC personnel as DPR consultant/implementing agency/principal consultants/principal advisors/directors/employees

Task  
specificity

Aligning with service  
delivery regulations

Alignment with the Capital Metro Regulations

Engagement with the  
pivotal agencies

JV with the Central & State Government, MoU with financiers, MoU with City Development Authority

Support from  
regulators

Influence of the State  
and State Government

Phasing-in State Government  
& political intervention

State Government's role is  
limited

Power  
contests

Compensation for  
Land Acquisition (Old  
Act)

Market rates, development  
rights, MoU with people,  
rebuilding temples, NGOs

Guideline values, demolition  
of temples, no NGOs

Institutional  
congruency

Empowerment

SEMRL acquires land, High  
Power Committee & Liaisons

State Government acquires  
land, standard initiative

Bureaucracy

# Governance decisions

## The South-East Metro

## The South-West Metro

## Factor

Land acquisition from other public stakeholders

Not consulting people beforehand, design changes, changes in methodologies, favours for stakeholders

People were consulted, no design or methodology changes, no favours for stakeholders

**Idiosyncrasy**

Coordination with defence, railways, utility agencies (charted)

Seeking regulatory change, execution of lease agreements, autonomous utility diversion

Formal coordination

**Boundary spanners**

Appointment of specialists

Alignment consultants & private prosecutors

No alignment consultant, public prosecutors

**Task specificity**

Compensation for Land Acquisition (New Act)

Twice the market rates

Twice the market rates

**Institutional congruency**

Contract for uncharted utility diversion

Reimbursable cost contracts

Lumpsum contracts

**Definability of performance**

# Governance decisions

## The South-East Metro

## The South-West Metro

## Factor

Contract packaging,  
fare collection

Changes in contract packaging in the South-East Metro, PPPs for fare collection in the South-West Metro

**Transaction  
cost,  
functional,  
and aesthetic  
interventions**

Platform screen doors,  
station dimensions,  
train specifications

Platform screen doors incorporated & station dimensions optimized in the South-East Metro, train specifications optimized in the South-West Metro

Other design &  
construction practices

Track standards were retained, roofs were incorporated, PR practices changed, HR practices changed in the South-East Metro

**Task specificity**

Contracting practices

Changes in contracting  
modality, milestone  
schedules

No changes in contracting  
modality, milestone schedules

**Availability of  
desired  
organization-  
set,  
definability of  
performance**

Dispute resolution  
practices, general &  
principal consultancy

Retired employees appointed,  
limiting or terminating the  
contracts

No changes were made

**Availability of  
desired actor-  
set**

# Factors influencing imitation & innovation of practices

## Factor

### Imitation of practices

### Innovation of practices

#### Actor-related

Availability of desired organization/actor set

Non-availability of desired organization/actor set

Low idiosyncrasy

High idiosyncrasy

Boost the support from regulators

Support from regulators does not matter

Power contests are absent

Power contests are present

#### Environment-related

Preserve bureaucracy

Beat bureaucracy

Prevailing institutional congruence

Prevailing institutional incongruence

#### Task-related

Low task specificity

High task specificity

Performance is definable

Performance is not definable

No interventions for transaction cost, functional & aesthetic efficiency

Interventions for transaction cost, functional & aesthetic efficiency

# Insights & scope for future research

- A major quantum of contemporary infrastructure in developing countries is driven by **imitation and translation** from **developed contexts**  
(e.g. Kolkata Metro, Mumbai-Ahmedabad High-Speed Rail corridor)
- The factors identified in this study can help High-speed Rail promoters appraise the project's context and make **governance decisions** whether to **imitate** or **innovate**
- Both **imitation & innovation** are **NOT seamless** – **Institutional work** is required to sustain or change governance practices
- The factors are **inter-related** and can be both **omnipresent** and **dormant**
- Future research can focus on **quantitative methods** for stronger generalization and explore the **inter-relationship** between the factors