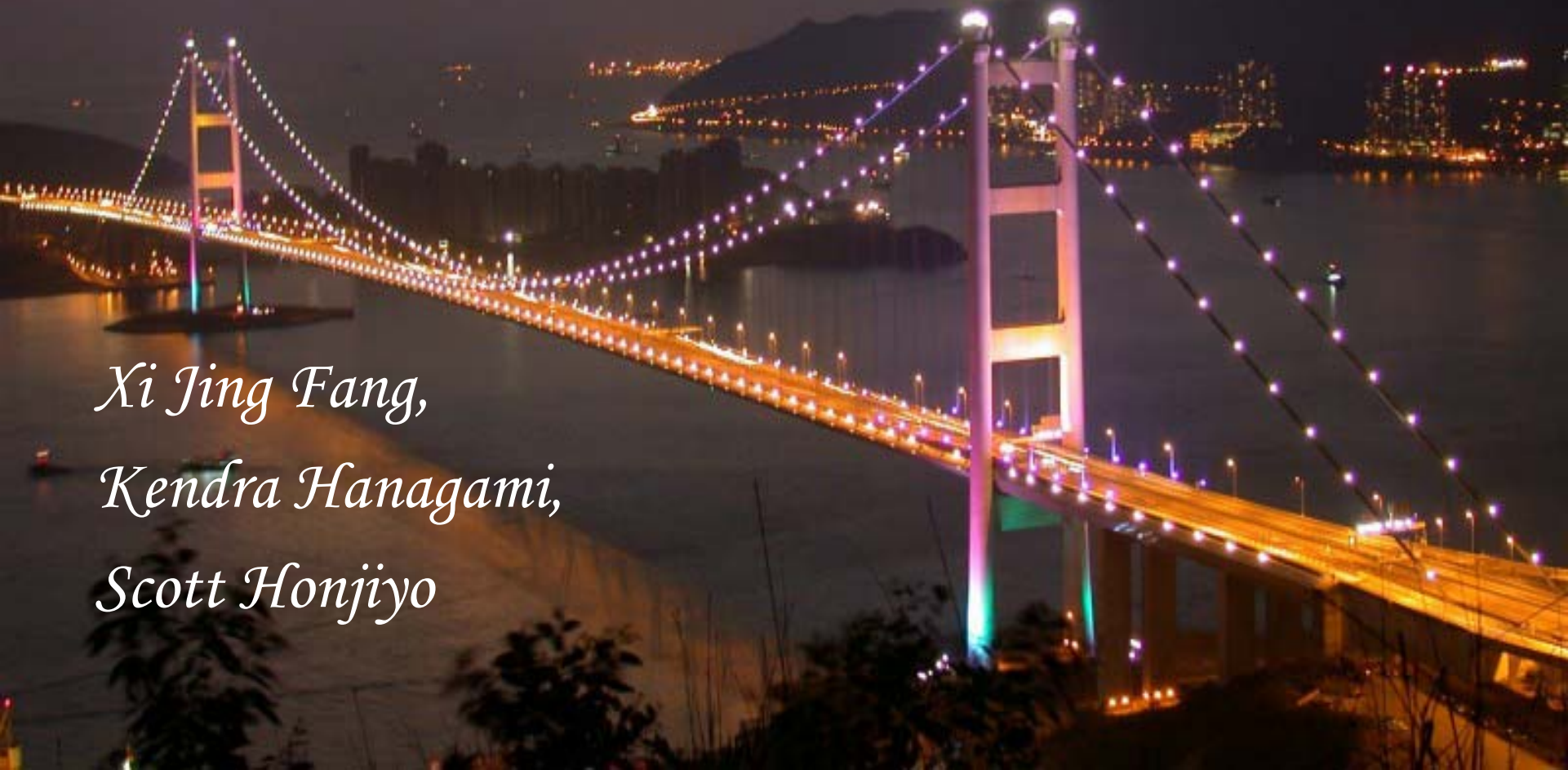


Tsing Ma Bridge

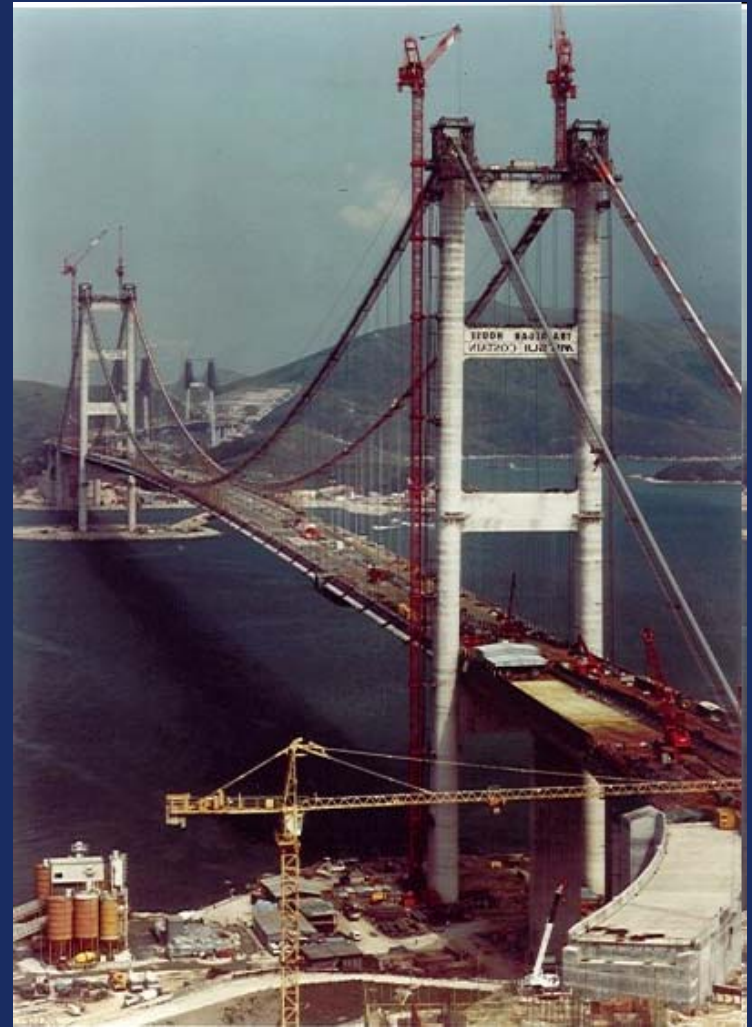
Hong Kong

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General Information

- World's longest road & rail span: 1377m
- Length: 2,200 m
- Opened: April 27, 1997
- Costs: 7.10 billion HKD with construction period of 5 years



Need

- Transport from new airport to main city
- Road & Rail Transport vs. Ferries
- Commercial Development
 - Theme parks on outer islands





Innovations

- Top Level: 6 lanes of automobile traffic, 3 in each direction
- Lower Level: two rail tracks & two sheltered passages

Technical Issues

- 1) Traffic operation under extreme weather conditions → Sheltered carriageways
- 2) Free from impact damage by ship collisions → Positioned piers onshore
- 3) Aerodynamic stability against typhoons



Policy Challenges

- Hong Kong's Air Quality
- Terrestrial & Marine environment



Green Turtle



Romer's Tree Frog

Social and Economic Benefits



- Faster travel routes via bridge

- Jobs & Residential Development

- Tourism

- Emergency Services & Transport of Goods

Social Problems

An aerial photograph of a coastal city, likely Hong Kong, showing a large body of water, a prominent bridge, and several high-rise apartment buildings. The scene is hazy, suggesting air pollution or a misty day. The water is filled with various boats, and the city skyline is visible in the background.

- Impact on residents of Ma Wan Island
 - Crime Rate Increase
- Pollution
 - Disruption on natural habitats