

# Collaboration Across Nations: Context and Dynamics

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# Transnational challenges

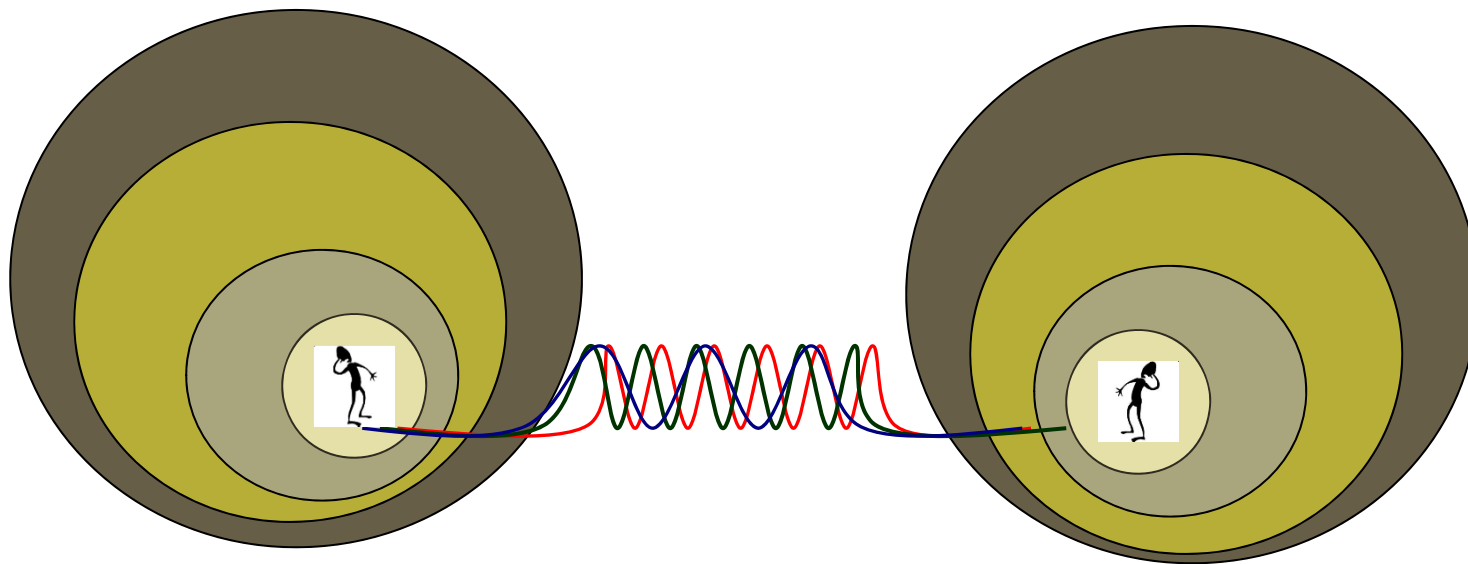
- Financial markets
- Disaster response
- Public health crises
- Environmental protection
- International trade
- Terrorism
- . . . .



# Transnational Public Sector Knowledge Networks (TPSKNs)

- share knowledge, information, and practices across cultural and national boundaries to address international, regional, or global issues and problems
- operate mainly through informal relationships using persuasion and information rather than the formal power of sovereign states

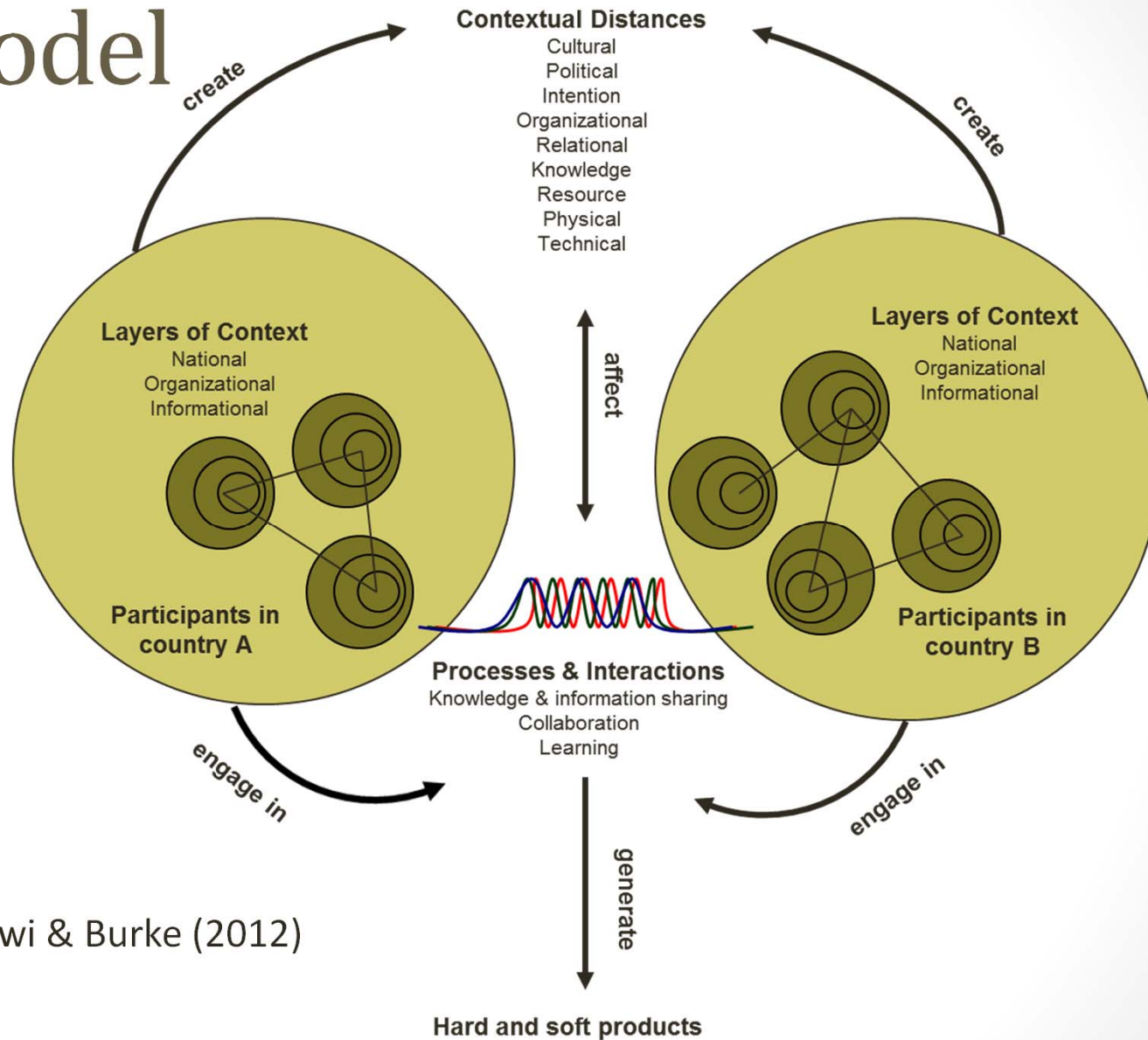
# The fundamental idea



# Contextual distances

- Cultural
- Political
- Intention
- Organizational
- Knowledge
- Resource
- Physical
- Technical

# The model



Dawes, Gharawi & Burke (2012)

# Research questions

Does the model hold up in an empirical case?  
(What do people actually do in these networks?)

What are the preliminary lessons for practice?

What are the questions for further research?

# Method

- Case study method
- Bi-national, multi-lingual research team in US and China
- 13 semi-structured interviews using same protocol
  - 5 US, 8 China, parallel positions in both countries
- Document review
- Transcription, translation, coding using Atlas-ti
- Separate coding by native speakers, translation of Chinese interviews into English
- Comparison and analysis done separately and jointly



# Case: AIRNow-I Shanghai

## Legitimation

- 10-year MOU between China and US

## Primary participants

- US Environmental Protection Agency & Sonoma Technology, Inc
- Shanghai Environmental Monitoring Center

## US goals

- Internationalize US AIRNow system and principles of public access to AQ information

## Shanghai goals

- Strengthen government capacity to monitor and regulate air pollution and thus improve AQ

## Catalysts

- 2010 World Expo
- International Scientific Group on Earth Observations

## Time Period

- 2004-2010

# Findings re: distances 1

Distance type	Findings
Cultural	<ul style="list-style-type: none"><li>• Most participants had no international experience and worked in own language</li><li>• One key person was language and cultural link</li></ul>
Political	<ul style="list-style-type: none"><li>• Emerging and evolving political relationships at national level</li><li>• Many policy differences regarding environmental concerns</li></ul>
Intention	<ul style="list-style-type: none"><li>• Different but compatible goals</li><li>• Differences were not well understood</li></ul>
Organizational	<ul style="list-style-type: none"><li>• Major differences in organizational cultures and processes</li><li>• Invented processes for working together</li></ul>
Relational	<ul style="list-style-type: none"><li>• A new relationship</li><li>• Trust had to be built from scratch</li><li>• Very limited data sharing</li></ul>

# Findings re: distances - 2

Distance type	Findings
Knowledge	<ul style="list-style-type: none"><li>• Shanghai: more knowledge of local needs and conditions</li><li>• US: more advanced technologically</li></ul>
Resources	<ul style="list-style-type: none"><li>• Both sides had to find funding from non-traditional sources</li></ul>
Physical	<ul style="list-style-type: none"><li>• Large geographic separation</li><li>• Many time zones</li></ul>
Technical	<ul style="list-style-type: none"><li>• Well-established Shanghai monitoring network and development capability</li><li>• Good technical capability on both sides</li><li>• Network performance issues</li></ul>

# Conclusions - 1

- **Overall model is tentatively confirmed**
- **History matters.** Different development paths result in different goals within the same policy domain
- **Culture and language** matter a lot –they reflect spoken and unspoken values, norms, and beliefs and therefore shape interactions in obvious and hidden ways.
- **Political distance** shows up most in definition of the problem and priorities and strategies for action.
- **Intentions** need to be clear and compatible, not necessarily the same. The smaller the distance, the better the prospects for sustainability.
- **Organizational distance** presents many chances for misunderstanding and wrong assumptions. The longer and more intimate the shared history, the less this is a problem.

# Conclusions - 2

- **Relational distance** is closed by familiarity and trust – but both have long gestation periods, probably measured in years. Individual leadership and risk-taking plays important roles.
- **Resources** need to be diverse, appropriate, and commensurate with capability –actual funding need not be equal or pooled.
- **Physical distance** can be bridged by multiple modes of communication and interaction. Face-to-face engagement is essential.
- **Knowledge distance** diminishes when participants convey, assimilate, and generate knowledge through communication and mutual learning. Some distance is a good thing.
- **Technical distance** can be a substantial challenge especially regarding infrastructure and legacy systems – but technology can also be a common language.

# Three phases of development

## Phase 1

- **Readiness and initiation**
- MOU, policy-level discussions, shared scientific interests

## Phase 2

- **Building capacity to collaborate**
- Scientific exchanges, visits, personal interactions as foundations for trust, internal negotiations and search for resources

## Phase 3

- **Actually collaborating**
- System development, project management, communication, problem-solving, trust building, mutual commitment to results

# Future work

- **Additional cases to test the model**
  - Involving countries at same level of development
  - Not involving the US
  - Involving more than two countries
- **Patterns of TPSKN formation and operation**
  - Associated with the observed phases of development
  - Relative strength, order, or relationships among distances
- **Time dimension**
  - How does time affect each distance, historical trajectories of the participants, different generations of participants, etc?
- **Measurement**
  - Can measurement of distance be quantified or at least standardized?

Thank you

