

# Comparing Climate Change Policy Networks (COMPON)

Fourth International Workshop

Public Conference

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# Climate Change Impacts

- Icecaps melting much faster
- Storms and desertification
- Heat wave deaths . . . . .
- Tipping Points (permafrost, ocean)
- Need 50 (% GHG reduction) by 2050 (30/80)
- No effective counter-measures
- Weakness of global agreements

# What is to be done?

- Stabilization & reduction of global GHG
- Requires unprecedented global cooperation.
- Problem of *multi-level governance*
  - (what game will elicit mutual cooperation?)
- But also of *multi-level mobilization*
  - (social movements and advocacy coalitions)
- To change national institutions
  - (politics, economics, society, culture)
- Not known how to accomplish these

# Social Science Role

- Crucial need to identify *facilitating conditions*
- For more effective responses
  - (GHG reduction/sinks)
- At national and at global levels.
- Interactive system of global, national
  - (also regional, sub-national)
- Results for social theory and methods
- Results for policy-making and social mobilization

# How Conduct Soc Sci Research?

- Use social science methods to gather
  - equivalent data on varying national cases.
- Compare national cases
  - in global context
- Policy network analysis reveals
  - mid-level dynamics
- COMparing Climate Change POlicy Networks (Compon)

# Compon Outline

- 15 national cases + international arena
  - *Japan, China, Taiwan, Korea, New Zealand,*
  - *Canada, United States, Brazil*
  - *Sweden, Germany, Austria, United Kingdom, Greece,*
  - *Russia, India, international arena.*
- Research teams in each case set up.
- NSF Grant – 3 years, 5 cases + PI role
- Other national grants

# Additional Effects of Compon

- Set up many national (area) teams
- Generate comparative insights in each one
- They produce learning & research centers
- Produce International research community
- Circulation of scholars and students.
- Establish public-use data base.
- Continue with panel survey every 5 years
- Open to new cases and participation

# Today's Case Presentations

- Four main actors in
- Global climate change:
- United States
- Brazil
- India
- China

# Compon Data

- Media Analysis
  - Time Line of Media Attention
  - Main issues in news
  - Main actors in news
- In-depth interviews
- Policy Networks Method
  - List of actors (organizations/individuals)
  - Organizational attitudes
  - Major policy making events
  - Important networks among actors

# Policy Network Research Background

- Network Analysis movement (Moreno, White)
- Laumann and Pappi, *Networks of Collective Action* (1976)
- Laumann and Knoke, *The Organizational State* (1987)
- Knoke, Pappi, Broadbent and Tsujinaka, *Comparing Policy Networks: Labor Politics in the US, Germany and Japan* (1996)
- Broadbent, *Environmental Politics in Japan: Networks of Power and Protest* (1998)

# Change through Learning & Action

- Learning process:
  - Accept dominant scientific consensus (DSC) (IPCC)
  - Assess a very high level of risk
- Action process:
  - Aggregate sufficient support for DSC
  - Make and implement effective counter-measures

# Figure 3: Two Levels of Process Analysis

Ideas, Stances,  
Frames (Clusters)

**Discourse  
Networks**

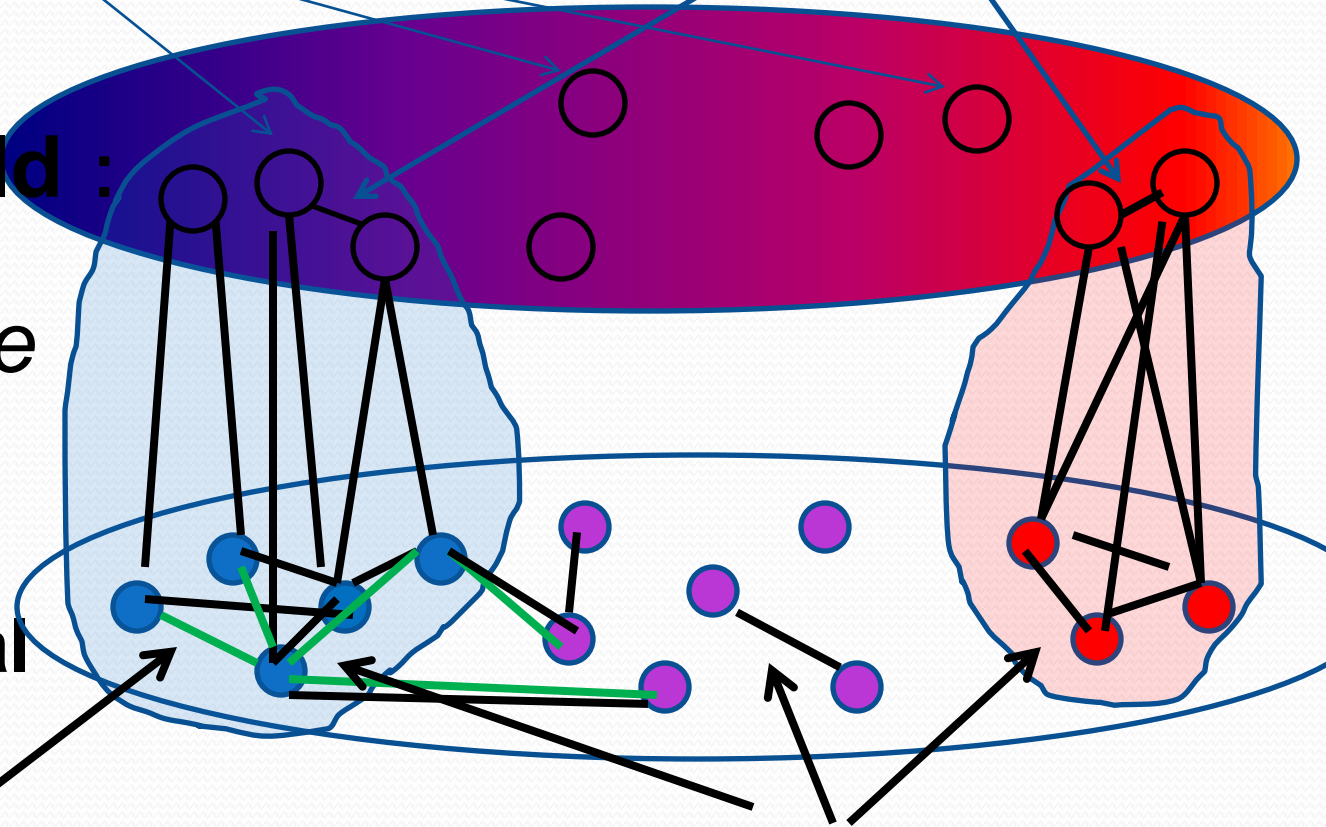
**Discourse Field :**

*Actor-Discourse  
Clusters*

**Actor Field:  
Social & Political  
Behavior**

**Persuasion of others:  
Expand Discourse Nets**

**Mobilization of Allies :  
Action Networks**



# Potential Discourse/Action Factors

- From outside the nation
  - International regime (information, norms, rules)
  - World political-economic system position
- National level qualities
  - Geophysical factors (resources, vulnerability)
  - Population size, total & per cap GDP, carbon use, . .
- Occurring within the nation :
  - Mobilization of movements/coalitions
  - Relational patterns for learning, mobilization
  - Political institutions/parties
  - Interest groups/classes
  - Discourse & Cultural orientations
  - Connections to international regimes

**Interaction**



# General Theory Approaches

- *Ecological Modernization Theory* (Janicke, Mol)
- Persuasion/Learning change behavior/policy
- *Treadmill of Production Theory*
- (Schnaiberg, Gould)
- Actors pursue fixed material interest,
- Use power to block/control opponents
- *Cultural Theory* (Jasanoff, Latour, Bourdieu)
- General worldview (Scientific/Non) frame CC
- *Interaction of all*

# Specific Hypotheses

- 1) Legitimacy of domestic scientists
  - (Jasanoff)
- 2) Stakeholder participation
  - (Habermas)
- 3) Strong advocacy coalition
  - (Social Learning Group, 2001)

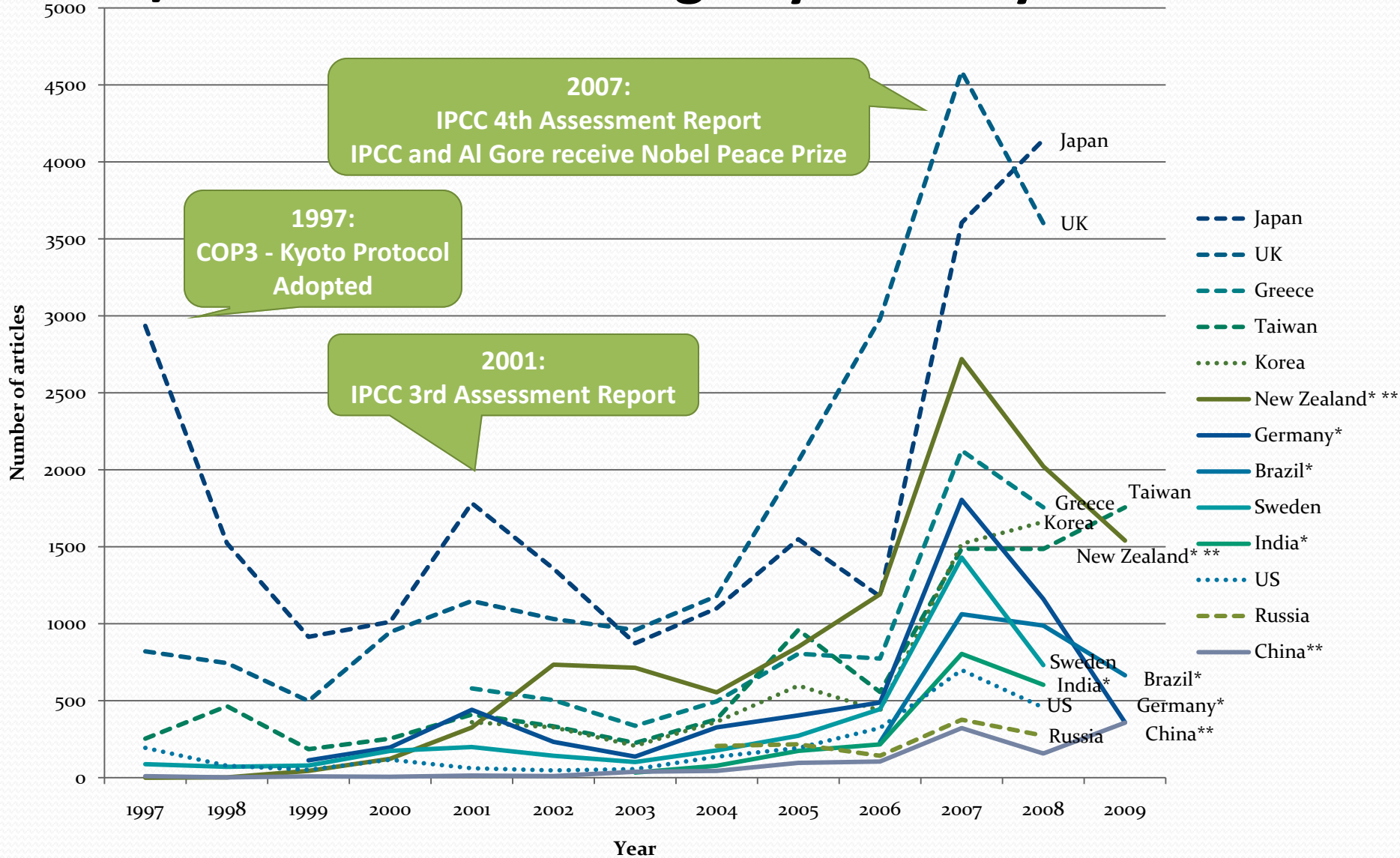
# Specific Hypotheses (cont.)

- 4) Civil society and movement mobilization
  - (Schreurs, many others)
- 5) Corporatist political institutions
  - (versus pluralist or authoritarian) (Janicke).
- 6) strong Social Democratic Party +/- Greens
  - (German, Swedish example, JB)
- 7) Culture trusts scientific rationality
  - (Jasanoff, *Designs on Nature*, extension)
- 8) . . . . .

# Current Compon Media Analysis

- Three major newspapers 1997-2008
- Level 1: Counts of articles mentioning GCC
- Extract and clean media data base (2007-08)
- Level 2:
  - 6 topical frames (science, politics. . .)
  - Categories of major public debates & policies
- Level 3: actors—statement networks
- Can also use with legislative records and other

# Articles Per Year Containing “Climate Change” and/or “Global Warming” by Country



# Interpretation

- High attention in Japan around Kyoto
- Precipitous decline afterward
- Other countries not pay much attention
- Until 2007 FAR – slow upward slope
- Rising attention with 2007 FAR
- Different post-FAR paths

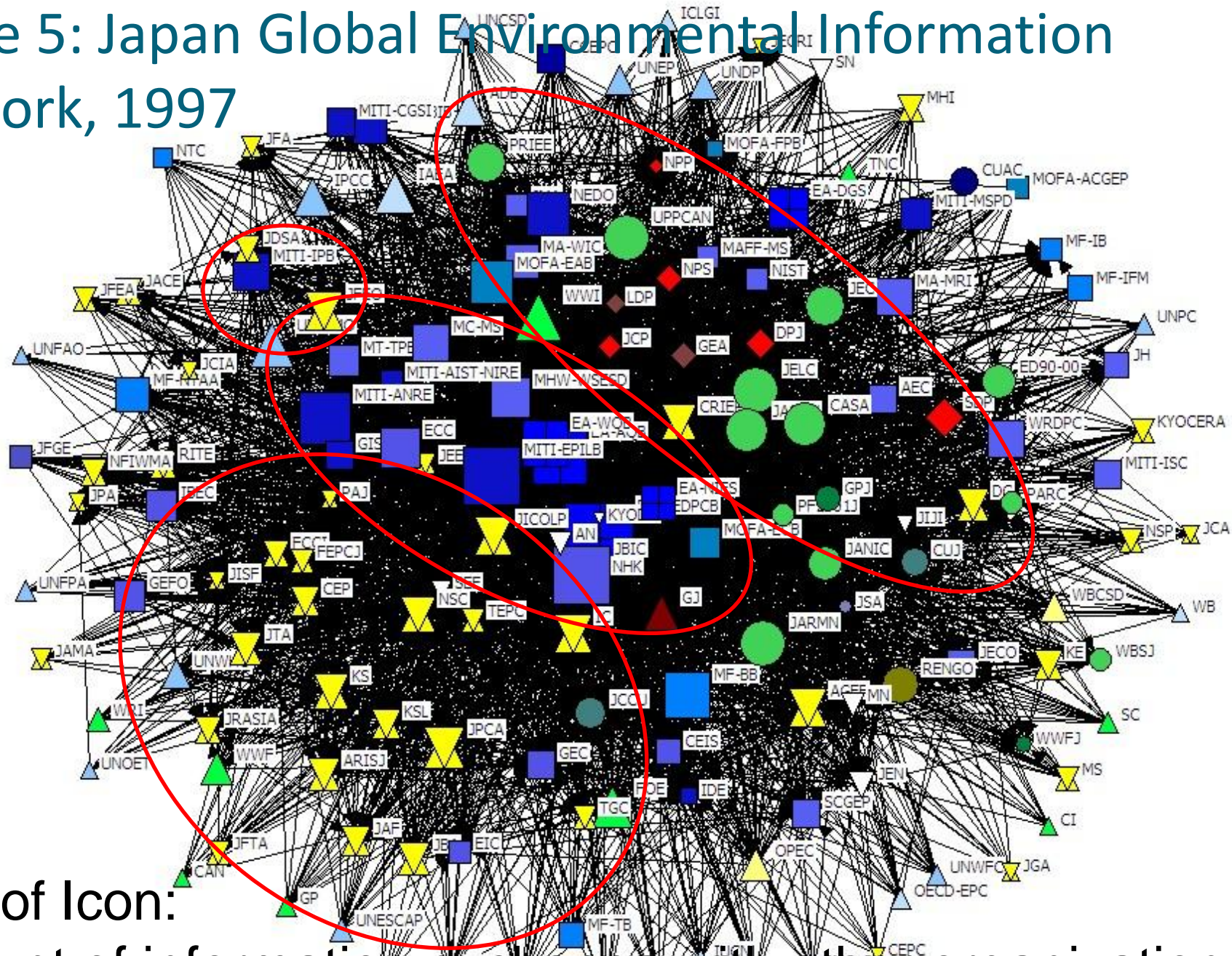
# Action Networks

- Expert scientific information on GCC
- Policy advice on GCC
- Negotiation partners concerning GCC
- Public political support toward issue advocacy
- Who influences your policy position?
- Long-term mutual aid

# Real Data

- GEPON Study
- Global Environmental Policy Networks
- 1997 – Japan, some data from US & Germany
- Japan: 122 organizations
- Networks: vital information (give/get)
- Political support

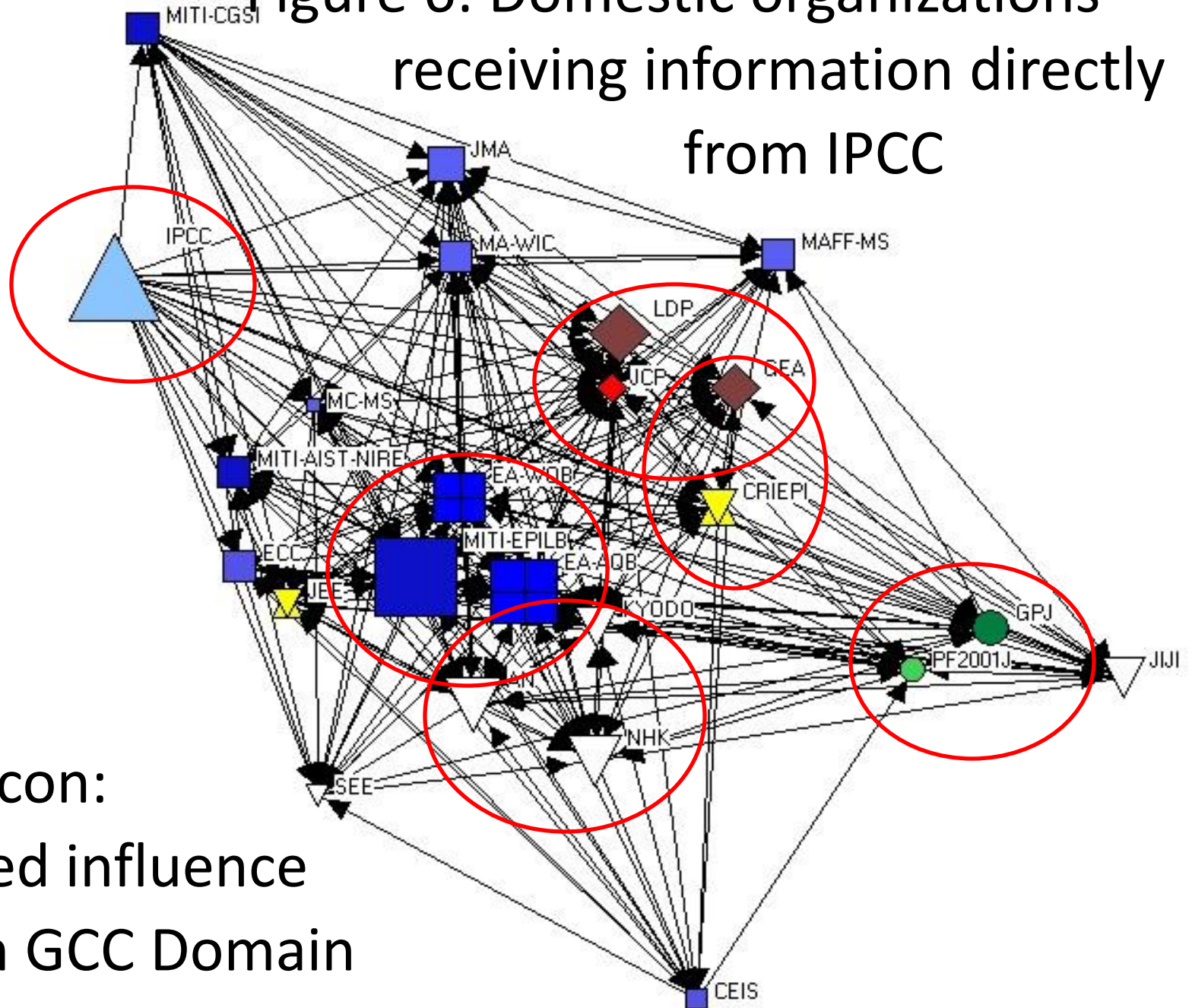
# Figure 5: Japan Global Environmental Information Network, 1997



# Interpretation

- Centrality of Government bureaucracies
- Between Business Cluster and NGO Cluster
- Performs information broker role
- Within cluster flow is dense
- Across cluster flow is weak
- Mass media receive much information from GOV
- All parties close indicates information exchange
- Probably due to legislative process

Figure 6: Domestic organizations receiving information directly from IPCC



Size of Icon:  
Perceived influence  
in Japan GCC Domain

# Interpretation

- Surprising influence of IPCC on domestic domain
- Direct receipt of IPCC information mostly GOV
  - Largest influence MITI-Min of Industry & Int Trade
  - Environmental Agency is second。
- Mass media receive a lot of information from GOV
  - Transfer information to society, strong influence
- Business and NGO hardly receive any directly
- In NGO sector, only Greenpeace Japan
  - Performs strong information bridge role
- In Business, CRIEPI (Res Inst of Elec Power Industry)
  - Close to dominant political party & its institute

# Japan Data applied to hypotheses

- Japan dominated by GOV bureaucracies.
- Japan has business-labor corporatism
- But participatory forums not central here.
- Very weak role of civil society, movements, etc
- Great sensitivity to international agencies
- Due to concerns over position in
- Global political-economic system
- Weak role for scientific research institutes
- Result in hosting Kyoto Conference 1997
- But dismal failure in meeting own Kyoto goals.

# Many other network analyses

- Actor centrality
- Inter-network correlations
- Mobilization clusters

# Using this data

- For each case (by case team)
- Reconstruct important dimensions of process
- Bearing upon hunches/hypotheses
- See what hunches explain own case
- Then compare across 2 to 15+ cases
- Process comparisons
- Qualitative Comparative Method
- Broader generalizations
- Reach goals of policy relevance and theory meanings



Fini