A Political Framework for Arctic Change: Science, Policy, and Interdisciplinary Investigation

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Project 4.7: Science to Policy Makers and People
Introduction to Research

- **Context:** My research was conducted towards the completion of a M.A. degree in political science.
- **Purpose:** The purpose of my research was to assess the role of government in formulating policies that increase the capacities of communities and regions to adapt to environmental changes.
- **Cases:** Northern Canada (Nunavut) and Atlantic Canada (Newfoundland and Labrador).
Introduction to Research

- **Question:** Can we learn anything about adaptive policy development from government reactions to the collapse of the northern cod fishery that might give us some important insight for dealing with Northern/Arctic change?

- **Methods:** Analyses of political climate(s), scientific knowledge, flows of information, and policy development

- **Relevance:** To gain a greater understanding of 1) adaptive policy, 2) flows of information between experts and policymakers, and 3) to frame the issue of a changing north in new ways, drawing new connections
A Political Framework for Arctic Change

- The relationship between science and politics is not static; science’s influence in the policy process varies case by case (depending on political, social, economic circumstances).
- A political framework is a lens through which one can analyze the flow and impact of information produced by ‘policy actors’ (scientists, policymakers, citizens) in order to attempt to understand their relationship as it pertains to a given case/policy.
- There are many ways by which such a relationship can be analyzed: Institutional, structural, societal, conditional, comparative, etc.
Public Policy: Cycles and Discourses

Public policy can be thought of as intentional action or inaction.

Public Policy’s 3 Components

1) Problem definition
2) Policy goals
3) Policy instruments (normative, legal, logical, empirical analyses)

*From these, ‘policy tools’ are chosen

(Pal, 2006)
Science-Based Policy

- Science-based policy is,

“…policy and regulatory decision making where scientific knowledge and personnel constitute significant inputs into, or are distinctive features of, the relevant decision making process.”
- Bruce Doern and Ted Reed

- For some policies, science’s influence is quite apparent (Montreal Protocol); while for other policies, science’s influence is less apparent (Kyoto Protocol)
Adaptation and Public Policy

- Adaptive policies can be thought of as **measures taken by government to facilitate changes in peoples’ practices so as to lessen the overall vulnerability of the public** (to environmental, socioeconomic, political changes)

- In a rational sense, policies that aim to build adaptive capacity can be difficult to justify

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### Proactive Policies vs. Reactive Policies

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Building Adaptive Capacity in Northern Canada: 3 Arguments

1) Science and knowledge
   (scientific assessments and TEK)
2) Citizenship
   (Land claims agreements and the Charter)
3) Legal Obligation
   (UNFCCC and *Project Green*)
1) Science and Knowledge

- Documented changes and scientifically-produced projections
- ACIA, IPCC Assessment Reports, Field Research
- NTI Workshops, ITK Workshops, Field Research
- ‘Traditional Ecological Knowledge’ or ‘Local Knowledge’
2) Citizenship

- Land claims agreements and the Charter
- Section 25(b): “…any rights or freedoms that now exist by way of land claims agreements or may be so acquired,” are not to be overrode by other rights set out in the Charter of Rights and Freedoms
- Land claims in the north: Nunavut, Nunatsiavut (Northern Labrador), The Yukon Land Claim, among others
- Example of Nunavut (NLCA) – Rights to ‘ownership of lands and resources’, rights to harvest wildlife, rights to participate in decision making in these areas
- Can environmental change infringe on these rights?
3) Legal Obligation

- Under the UNFCCC, Canada is obligated to, for example, “cooperate in preparing for adaptation to the impacts of climate change.”
- This argument depends on interpretation
- Are party states to provide appropriate business climates that allow greenhouse gas intensive industries to adapt to new technological and environmental demands, without compromising economic gain?
- Or, are states to work to ensure the adaptability of communities and regions, as well as industries?
Where have we seen adaptive policies?

Moving forward, we can learn from the past…
Why compare northern and Atlantic Canada?

- **Similarities:** Spatial, livelihood, scientific (un)certainty
- **Difference:** Cause of problem
- **Policies were developed to help Atlantic Canadians**
  ‘adapt’ to life without a commercial cod fishery
The Case of Atlantic Canada

- July 2, 1992: Fisheries Minister John Crosbie announced a ‘moratorium’ on the northern cod fishery.
- This interrupted the livelihoods of tens of thousands of fishers.
- Despite the existence of scientific evidence suggesting a collapse was likely, the federal government waited until the fishery was decimated prior to acting (actions were reactive, rather than proactive).
- Issue: Environmental change raised economic and cultural vulnerabilities.
Adaptive Policy Responses

- **5 Reactive Programs:**
  - 1990: Atlantic Fisheries Adjustment Program (AFAP)
  - 1992: Northern Cod Adjustment and Recovery Program (NCARP)
  - 1993: Atlantic Groundfish Adjustment Program (AGAP)
  - 1994: The Atlantic Groundfish Strategy (TAGS)
  - 1998: ‘TAGS II’
What was learned?

- Provision of funding does not promote sustained adaptation, although it does help in the short term.

- A failure to differentiate between sustenance and adaptation.

- Scientific evidence (see for examples, Keats et al., 1986; Sinclair, 1987) gathered in the decade prior to the collapse suggests that changes were imminent; yet policies were not initiated until the 1990s, when it was too late.

- **Proactive strategies are desirable**
ArcticNet Goals, Revisited

An Overarching Objective:

“To translate our growing understanding of the changing Arctic into impact assessments, national policies and adaptation strategies”
Some Questions to Consider

1) What do the subtle differences between **adaptation** and **adaptive capacity** mean in the context of public policy development?

2) What does risk assessment tell us? Which risks are simply too much to bear? Can we justify formulating **proactive** policies to deal with changes that have not yet occurred? Do we need to contemplate an alternative form of policy analysis that somehow incorporates ‘incalculable’ costs? (human lives, cultures, etc.)

3) Are there policy areas in the north for which **adaptive capacity** can be built in to address both projected environmental changes and present day needs?
Some Final Thoughts

- Scientific information is not always paramount in the public policy process. It is in competition with other interests and information (economic, political, societal, etc.); however, good science is of the utmost importance to building adaptive capacity.

- A good starting point is to evaluate policies that are currently ‘on the table’ in/for the north, and assess them on bases of ‘adaptability’?

- We need to streamline policy analysis specific to adaptation (integration, communication, identification)
The End, Or The Beginning...

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