IVM Institute for Environmental Studies

VU UNIVERSITY AMSTERDAM

Learning by Experiment:

how the institutional design of a policy experiment can influence policy learning.

Delta in Times of Climate Change II- 24-26 September, 2014

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Presentation

- Use of experiment in policy making for adaptation governance
  - What are experiments?
  - How can they be effective?
    - How can we produce learning from experimentation?
- Present conceptual framework
- Initial results

Research context

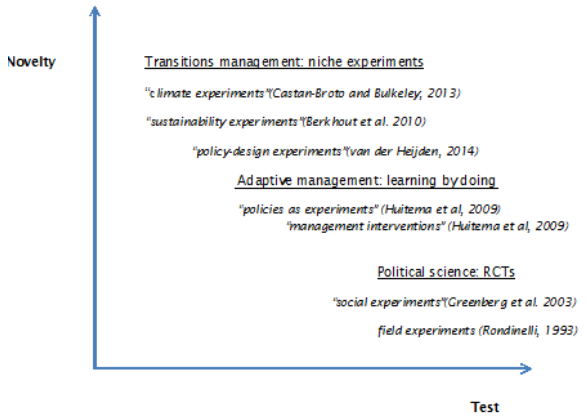
- Knowledge for Climate: "Climate proof the Netherlands"- governance arrangements
- Adaptive governance: polycentric, participatory, **flexibility and learning**

Testing prescriptions for use in adaptation to climate change.

Knowledge for Climate

So, what is policy experimentation?

- **Proof vs Novelty**



- Outside *status quo* vs
- Protected space vs
- Impact assessment

- Definition: *a temporary, controlled, field trial of a policy-relevant innovation that produces evidence for subsequent policy decisions* (McFadgen and Huitema, *in press).*

Worth supporting experimentation?

Benefits

- Temporary implementation to see what works
- Unearth unexpected consequences
- "Shadow network" to pave way for transitions

Disadvantages

- Tactic to delay decision making
- Cost, time
- FAILURE

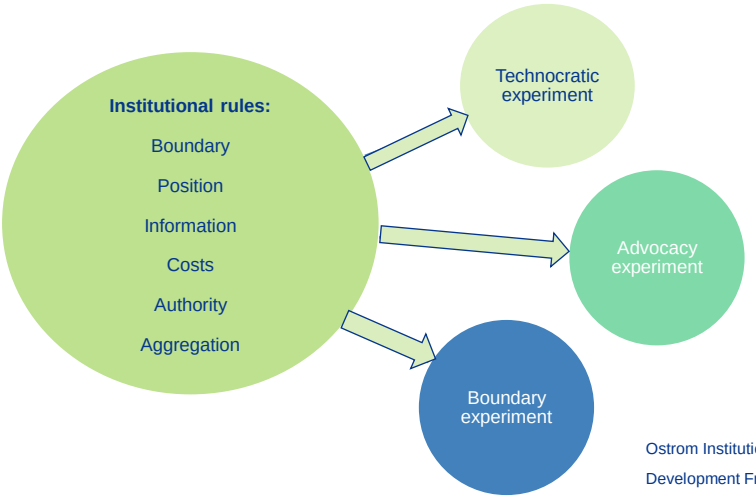
Wanted: Policy Learning

Relatively enduring alterations of thought or behavioural intentions that result from experience and that are concerned with the attainment (or revision) of public policy (Sabatier, 1987).

Variable	Dimension
Cognitive learning	Gain new knowledge
	Restructure existing knowledge
Normative learning	Change in perspectives
	Build common interest
Relational learning	Increase understanding of each other
	Increase trust/cooperation

Typology of policy learning (from Haug et al 2011)

Analytical framework



Ostrom Institutional Analysis and Development Framework, 2005.

Ideal Types explained

indicator	technocratic	boundary	advocacy
Actor types involved	Pre-dominantly expert	All types	Mainly policy actors
How enter experiment	Invited	Request involvement	Organiser/obliged
Openness to new participants	Marginally	Open	Closed
Group members already met	Some	No	Yes
Role types	No stakeholder	Interested parties	Few stakeholders
Use of facilitator	Not used	Used	Used for select parties
Who initiates experiment	Experts	Collaboration	Policy actors
Contribution to goals	No one	All actors	Few actors
Lay knowledge contributed	None	A lot	Some
Scientific knowledge contributed	A lot	Some	A little
Decision power	Expert initiators	Shared power	Policy initiators
Amount information received	Sufficient	Very sufficient	Insufficient
Opps for personal contact	Sometimes	Often	Rarely
How costs distributed	Partially shared	Fully shared	Paid by initiator
How decisions made	Experts by consensus	Everyone by consensus	Majority by policy actor

Hypotheses

	Learning		
Ideal Type	Cognitive	Normative	Relational
Technocratic	+++	-	+
Advocacy	++	-	-
Boundary	++	+++	+++

On the experiment hunt…

The Economist | World politics | Business & finance | Economics | Science & technology | Cultur

Special report: Biodiversity

Amsterdam's wild side

A Dutch experiment recreates nature red in tooth and claw

Sep 14th 2013 | From the print edition

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IN WINTER AND early spring commuters on the fast train between Amsterdam and Vlissingen are sometimes confronted with the sight of emaciated and dying cattle, horses and deer, and the carcasses of earlier victims being picked over by scavengers. The railway line skirts the edges of the Oostvaardersplassen, 56 square kilometres of Dutch soil that constitute one of Europe's most remarkable conservation efforts.

The Oostvaardersplassen is the world's most visible example of Pleistocene rewilding, the idea of reintroducing the megafauna that man wiped out as he spread across the globe. The idea is more popular

Skinny as nature intended

← Example of conceptual confusion.

Case selection

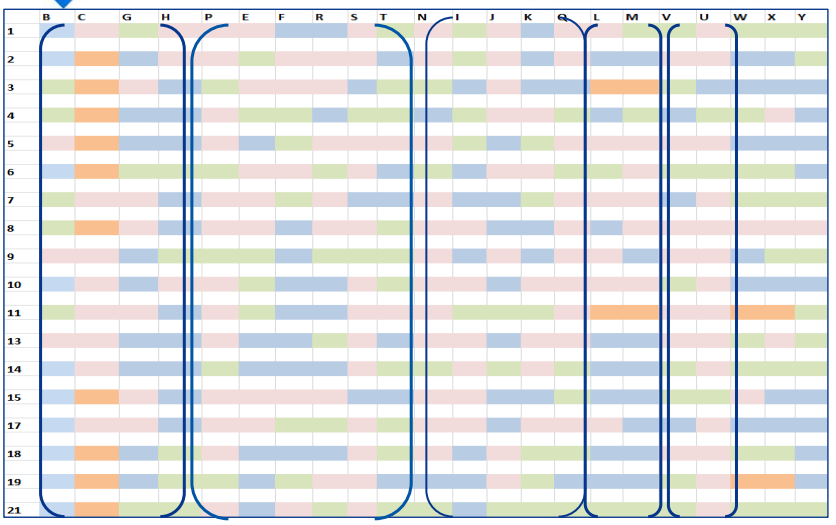
- Review of 157 projects in water management / climate adaptation.
- Relevance for the project:
  - Elicit an ecosystem response;
  - Adaptation relevant.
- Criteria to identify experiments:
  - Innovative
  - Testing
  - Policy relevant
  - State involvement

Cases and data collection

- Found 18 cases that fit criteria in coastal and inland defence, flooding, and drought related issues. Dating 1997 – 2012.
- Interviews with project leaders. Online, closed question survey sent over six weeks with three reminders.
- Survey sent to 265 respondents, received 170 back. 64% response rate.

Map of sites and water issues being addressed:

Ideal Types calculation



Ideal Types and learning

TIT	CL	NL	RL
4	+	+ /-	++
6	+	+	+
9	++	-	+ /-
14	+	+	+
21	++	-	+
AIT			
3	+	+	++
15	+ /-	+ /-	++
18	+	+ /-	+
19	+ /-	+	+
BIT			
1	++	+	++
2	+	-	++
5	+	-	++
7	+	-	++
8	+	-	+
10	+	-	++
11	++	+	++
13	+	+ /-	++
17	+	-	++

	Learning		
Ideal Type	Cognitive	Normative	Relational
Technocratic	+++	-	+
Advocacy	++	-	-
Boundary	++	+++	+++

Curious facts…

learning type	actor learnt most	actor learnt least
C1	business actor	policy
C2	NGO	individual
C3	individual	business
C4	business actor	expert
C5	individual	policy
C6	individual	policy
N1	individual	NGO
N2	NGO	business
N3	individual	expert
N4	business actor	policy
R1	expert	individual
R2	NGO	expert
R3	policy	individual
R4	expert	NGO

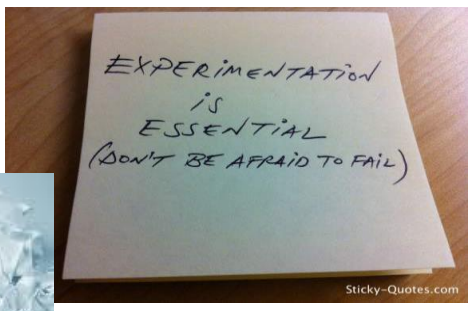
Conclusions

- Does the model perform?
  - Needs work, other types of analysis planned
- Impact assessment or shadow networks?
  - Not very controversial or urgent
  - Involvement of non-state actors: farmers
- Learning variable contrasts
  - Gain new knowledge but does not enhance complexity of existing understanding;
  - Common goal emerges but perspectives do not change;
  - Trust and cooperation strong but less development of others' mind sets.

Conclusions

- What does it mean for policy making?
  - NL climate adaptation response gearing up,
  - Recent experiments taking place…

Last thoughts:



Model of analytical framework

Factors that influence learning	Indicators
Participant diversity	Dominant actors; whether potential critics involved.
Accessibility	Ability to enter experiment available to anyone.
Independent facilitation	Independent facilitator involved.
Information diversity	Types of knowledge in experiment; whether ordinary knowledge was solely contributed.
Reflexivity	Discussion about goals; contribute opinion about goals; whether project was societally relevant.
Openness inside experiment	Personal contact; face-to-face; open sharing
Sufficient information shared	Satisfied with amount information received
Authority distribution	Influence over process/ joint planning
Decision making	How consensual was the process; how decisions to amend and terminate the process were made.
Costs	Whether the costs were shared or paid by one party (extent of buy-in)
Intervening factors	
Media attention	The extent of media attention
Leadership competency	How motivating and competent the initiators were.
Demographics (age, sex)	Percentage of participants that were male; what age bracket they fell into.

Discussion- learning

- What learning patterns?
  - Cognitive and relational learning apparent
  - Normative learning low

    hard to capture and increase

		type of actor involved					
		policy actor	expert	business actor	NGO	individual	
Contribute discussion goals	yes	59	21	14	11	6	111
	no	20	18	4	2	6	50
Difference:		3	1,2	3,5	5,5	1	161

Results: experiment dynamics

Societal Dynamics	Input of citizens; openness to outside; awareness of society.
Bureaucratic Dynamics	Openness of goals; knowledge types being utilised; legal barriers; extent of innovation.
Political Dynamics	Urgency of results; possible conflict; impact on policy network