INSTITUTIONS AND INSTITUTIONAL DESIGN
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Part XIII: Policy and design II

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Literature

- Chapter 6 in

  Ostrom, Elinor 1990 "**Governing the Commons. The Evolution of Institutions for Collective Action**", Cambridge, Cambridge University Press,
- Chapters 2 and 6 in

  Goodin, Robert E (ed.) 1996 "**The Theory of Institutional Design**", Cambridge, Cambridge University Press

Modelling for policy purposes

- Models used out of range
- Models used metaphorically
- Models of static structures

- We need models saying what individuals can do to shape or reshape the situations within which they must make decisions and bear the consequences of actions taken on a day-to-day basis

Some problems

- Credible commitment and
- Mutual monitoring

Are solved in a mutually reinforcing fashion

  - By commitment contingent on others doing the same
  - By seeing and experiencing a monitoring system tailored to local circumstances and local perceptions of justice

- Supply of institutions
  - Is a problem poorly understood

Design principles (Ch 3, p.90)

1. Clearly defined boundaries.
2. Congruence between appropriation and provision rules and local conditions.
3. Collective-choice arrangements
4. Monitoring
5. Graduated sanctions
6. Conflict resolution mechanism
7. Minimal recognition of rights to organise
8. Nested enterprises (for CPR's that are parts of larger systems)

Current theory says it is increasingly difficult to achieve collective beneficial action with increase in

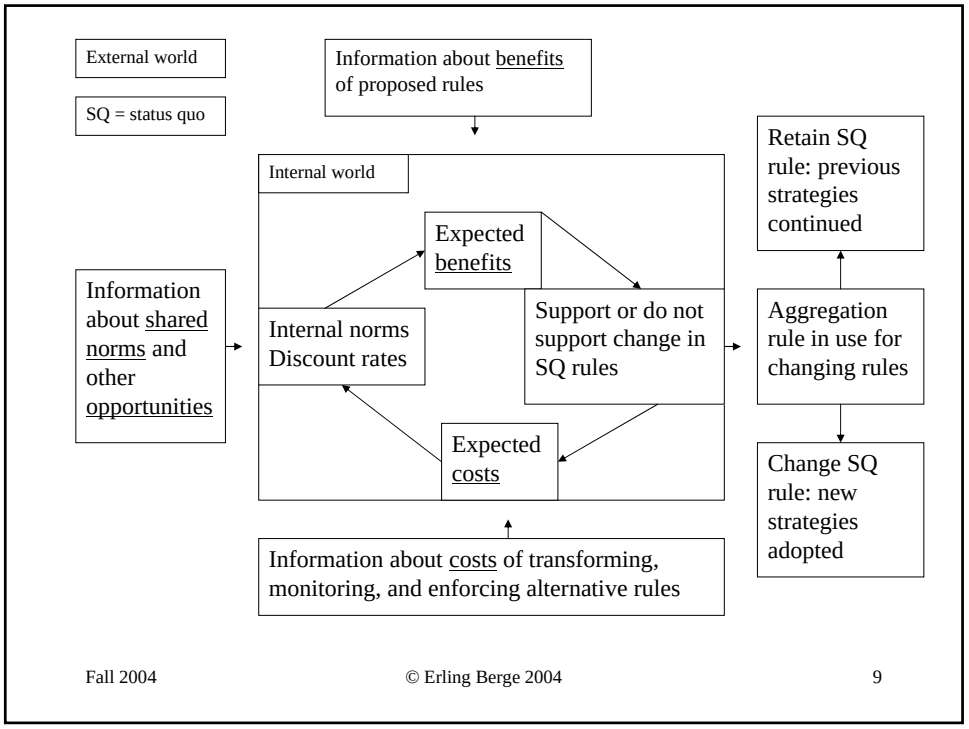
- The total number of decision makers
- The number of participants minimally necessary to achieve the collective benefit
- The discount rate in use
- Dissimilarity of interests, and
- The absence of participants with substantial leadership experience or other assets

Hence, new theory must

- reflect the incremental, self-transforming nature of institutional change,
- include the importance of characteristics of external political regimes in an analysis of how internal variables affect levels of collective provision of rules, and
- include information and transaction costs

Frameworks supply questions

- ”Consequently, instead of building a specific model of institutional supply, I shall develop a framework to summarize the lessons to be learned from examining successful and unsuccessful efforts by CPR appropriators to change their institutions.” (Ostrom 1990:192)



Benefits: (page 197)

1. Number of appropriators
2. Size of CPR
3. Temporal and spatial variability of resource units
4. Current condition of CPR
5. Market conditions for resource units
6. Amount and type of conflict
7. Availability of data about (1) through (6)
8. Status quo rules in use
9. Proposed rules

Transformation costs: (page 199)

Ex ante net costs of transforming SQ rules

1. Number of decision makers
2. Heterogeneity of interests
3. Rules in use for changing rules
4. Skills and assets of leaders
5. Proposed rules
6. Past strategies of appropriators
7. Autonomy to change rules

Past institutional decisions of local appropriators

Requirements set by external authorities

Monitoring and enforcement costs (page 203)

Information about ex post costs of monitoring and enforcement

1. Size and structure of CPR
2. Exclusion technology
3. Appropriation technology
4. Marketing arrangement
5. Proposed rules
6. Legitimacy of rules in use

The role of shared norms and discount rates

Situational variables

- Appropriators live near CPR
- Appropriators involved in many situations together
- Information made available to appropriators about opportunities that exist elsewhere

Discounting the future: The future does not matter much unless r is close to zero

$$b_t = (1+r)^{-t}$$

t = no. of time periods

Equilibrium vs transitional outcomes

- Most commons in ”equilibrium” social conditions manage CPRs sustainably (or way below MSY)
- Disruptions of commons organisations or destruction of CPRs may come from
  - Changes in relative prices of resources (markets appear where none existed)
  - External shocks (environmental change, war, conquest, governmental intervention)
  - Changes in technology

An interdisciplinary approach calls attention to

- Ecosystems **and** societies
  - Evolutionary dynamics
  - Complex interactions
- Technology
  - History and cultural dynamic
- Resource benefits to humans as individuals or groups? Distributional struggles
  - Cooperation and conflict in resource appropriation

Judging complex processes

Instead of maximizing profits, judgements of uncertain costs and benefits is a better approach.

Known biases in the choice of new rules

- Losses are felt to be more important than gains
- Immediate up-front costs more important than future costs
- Frequency dependent probabilities are difficult to estimate, recent events are given unreasonable weight

Predicting institutional change

Change comes **easier** if most appropriators

1. share a common judgement that they will be harmed if they do not adopt an alternative rule
2. will be affected in similar ways by the proposed rule changes
3. highly value the continuation activities from this CPR; in other words, they have low discount rates
4. face relatively low information, transformation and enforcement costs
5. share generalised norms of reciprocity and trust that can be used as initial social capital, and if
6. the group of appropriating from the CPR is relatively small and stable

External governments are crucial

- The role of external governments are crucial. But not by imposing central governance and control. Their positive role is by providing incentives for the local development of solutions. By providing low cost information, arenas for institutional choice, and agencies for low cost conflict resolution.

Assumptions for design

1. Behaviour of agents are sensitive to available opportunities and incentives
2. Opportunities and incentives varies and can be varied by design to affect aggregate behaviour
3. There are some accepted criteria for what one wants to achieve by the design intervention

Two basic ways of intervening

- Designing sanctions to alter opportunities and incentives
  - Sanctions are positive as well as negative
- Designing filters to create or eliminate agents or opportunities
  - Removing or awarding powers to agents
  - Creating or removing opportunities

Design strategy 1: deviance control

- Deviance-centred strategies aim at making compliance the self-interested alternative for everyone, also the pure egoists (aka "the knaves strategy")

Problems:

- "Quis custodiet custodes"
- May create knaves of non-knaves

Perhaps it may do more harm than good?

Design strategy 2: complier reinforcement

- The complier-centred strategy aim at reinforcement of the behaviour of the non-egocentric thinking persons
  - Screening before sanctioning
  - Sanctioning in deliberate support of non-egocentric thinking
  - Structure sanctions to cope with occasional knaves. Sanctions should be motivationally effective