Resource Management:
INSTITUTIONS AND
INSTITUTIONAL DESIGN
Erling Berge

Classification of rules

NTNU, Trondheim
Fall 2007

Literature

Ostrom, Elinor 2005, *Understanding Institutional Diversity*, Princeton University Press, Princeton, Ch 6-7

– Why classify generic rules
– Classifying rules

Using the grammar

- Disentangling formal laws, informal institutions and ordered behaviour
- Legitimacy and compliance <note a printing error: b^e should be δ^{be} >
- Basic normative assumptions
  - Sign, size and interpretation of deltas
    - Warm glow, reputation, honour, duty, sanction
  - Types of players and numbers of conforming reflected in deltas
    - Selfish, zealot, everyday Kantian, elite, mass, fairness
  - Creation and maintenance of deltas
    - Eroding or strengthening with use?, impact of external agents?
- Freedom and constraint (Ulysses and the Sirens)
- Institutional configurations (systems of rules, norms, etc.)
- Field studies:
  - Listen for normative discourse (prudence or obligation?)
  - The "know and use" condition
  - Precision of institutional statements and scale of problem

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Why classify generic rules?

- Solve babbling equilibrium problems: meaning
- Needs of policy analysts in reforms: semantics
- Moving beyond slogan words in descriptions
- Coping with the diversity of rules
  - Diversity needs trial-and-error approaches to rule change
  - Reversion levels, default rules, lack-of-agreement rules determining outcomes of negotiations
- Rules as information/transformation/ transmission mechanisms
- Universality of rules structure in action situations

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Classifying rules

- The horizontal approach:
  - Using the direct AIM for classification
- The vertical approach:
  - J. R. Commons: authorised vs authoritative relationships
  - Levels of authoritative relations (operational, collective choice, constitutional choice)

- The ADICO formula for a rule suggests that classifying by the AIM might be most useful
  - "[ATTRIBUTES of participants] who are [OBLIGED, FORBIDDEN, OR PERMITTED] to [ACT in a certain way or AFFECT an outcome)] under specified [CONDITION], [OR ELSE]"

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Rules affecting action situations
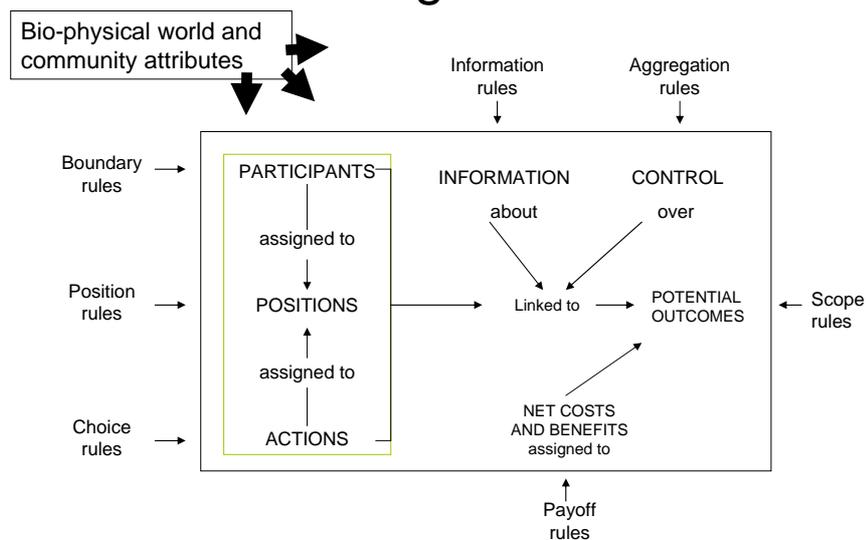
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The AIM component of each type of rule

Type of rule	Basic AIM verb	Regulated component of the action situation
Position	Be	Positions
Boundary	Enter or leave	Participants
Choice	Do	Actions
Aggregation	Jointly affect	Control
Information	Send or receive	Information
Payoff	Pay or receive	Costs/Benefits
Scope	Occur	Outcomes

The classification is not exhaustive and one type of rule may have impacts on more than one component of the action situation as well as indirect impacts

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Types of rules (1)

- Position rules
  - Creates positions to which participants are assigned and where sets of actions are authorised
  - Number of participants: limits?
- Boundary rules
  - Specify who may or must enter positions, the process of determining eligibility, and how to leave
  - Rules related to multiple positions
  - Succession rules
  - Exit rules

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Types of rules (2)

- Choice rules (of actions)
  - Says what a participant in a particular position must, must not or may do under specified conditions
  - Actions (AIM) relating to Position, Boundary, Aggregation, Information, Payoff, or Scope rules are not included in choice rules
  - Choice rules create power that may be distributed equally or unequally

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Types of rules (3)

- Aggregation rules when joint decisions are required
  - Non-symmetric aggregation rules (expert/ dictator, oligarchy, weighted votes)
  - Symmetric aggregation rules (unanimity, majority, anyone)
  - Lack of agreement rules (continue as before, no one receives any outcome, assign state variables at random, external decision maker). Type of no agreement rule heavily affects outcomes in experiments

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Types of rules (4)

- Information rules
    - Channels of information flows (required, prohibited, permitted)
    - Frequency and accuracy of information
    - Subject of communication
    - Official language
- Payoff rules
- Scope rules (define the set of outcome variables that must, must not or may be affected by actions (including their permitted rang of variation) taken within the situation)
    - Rules with AIMs tied to positions, boundaries, information, payoffs or aggregation are not counted as scope or choice rules
    - Rules with action AIMs are choice rules,
    - Rules with outcome AIMs are scope rules
    - In the real world choice rules are more used and studied than scope rules

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The default condition when no rules exist: The Hobbesian "state of nature" (the "snatch" game)

Default Position Condition	**One position exist.**
Default Boundary Condition	**Anyone can hold this position.**
Default Choice Condition	**Each player can take any physically possible action (this requires default aggregation).**
Default Aggregation Condition	**Players act independently. Physical relationships present in the situation determine the aggregation of individual moves into outcomes.**
Default Information Condition	**Each player can communicate any information via any channel available to the player.**
Default Payoff Condition	**Any player can retain any outcome that the player can physically obtain and defend.**
Default Scope Condition	**Each player can affect any state of the world that is physically possible.**

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## Rules defining property rights for exchange of agricultural commodities

Position Rules	There exist two positions:
	(1) an eligible exchange participant and (2) a judge
Boundary Rules	**(1) All farmer households are permitted to become exchange participants or else those refusing their entry may be punished**
	(2) The judge must be elected on the basis of merit and integrity by the households in the community or else the other rules will not be in effect.
Choice Rules	**(1) All exchange participants are permitted to offer to exchange goods they own for goods owned by others or else those forbidding the exchange must be punished**
	(2) If a household's goods are snatched, the household can report to a judge or else those preventing the report may be punished
	(3) If a judge finds that a household has snatched goods illegally, the judge must ensure that the illegal household returns the goods and forfeits its own commodities or else the judge will be sanctioned.
Aggregation Rules	**All parties to an exchange must agree before a legal exchange can occur or else the exchange does not occur.**

Transforming the snatch game
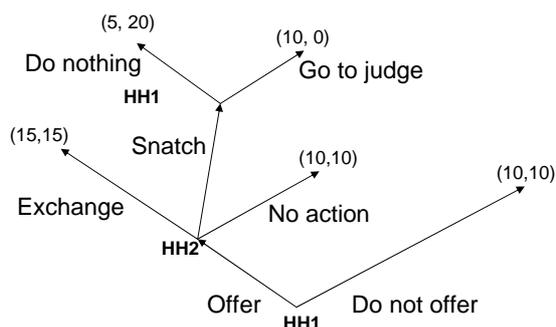
1. In the absence of any rule directly affecting an element of an action situation, the relevant rule in place can be described by a default rule.

2. **When all rules are in their default, the attributes of the physical world generate all aspects of the structure of the action situation. This is the Hobbesian "state of nature".**

3. **Rules operate together with the attributes of a physical world to create a structure**

The vertical dimension of rules

Authorised relationships occur by using
- Operational rules created by
- Collective choice rules crafted by
- Constitutional rules accepted by all

Collective choice and constitutional choice create authoritative relations

Policy implications
- Changing rule configurations to achieve agreed upon policy objectives is no simple task.

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