#### Resource Management: INSTITUTIONS AND INSTITUTIONAL DESIGN SOS3508

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Explanations and mechanisms

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#### Actors and Systems

#### Actor models must generate

- Distributions of actors
- Variation in motivations and actions

#### Systems models must comprise

- Institutions and actors (organisations)
- Mechanisms generating meanings and identities
- Levels of analysis
- Dynamics of change
- Mechanisms of non-ergodicity

   A non-ergodic system do not repeat itself

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#### Explaining social behaviour

Such as

- Why do preferences sometimes change through the sheer passage of time?
- Why are people unwilling to break self-imposed rules even when it makes little sense to follow them?
- Why do military commanders sometimes burn their bridges (or their ships)?

The aim is to inculcate scepticism to

- Functional explanations, and to
- Some kinds of rational choice explanations

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#### Explanations (1)

- Agents perform actions
- · Agents may be rational or irrational
  - If agents are irrational, one must take care in explaining the mechanisms involved in actions
  - If agents are rational, actions rely on choices informed by reasons, motives, desires, and/ or interests

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## **Explanations (2)**

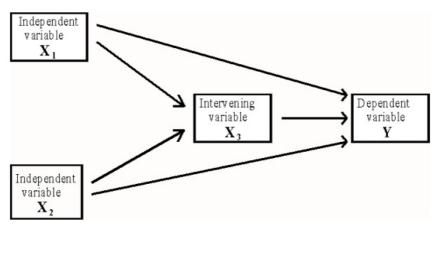
- Explanation of actions is causal
  - Intentional explanations (including rational choice of means to obtain ends)
  - Explanations by consequences, rare in social science
  - Explanations by laws, strong laws rare in social science
    - Deterministic
    - Statistical explanations rely on intuitions about mechanisms

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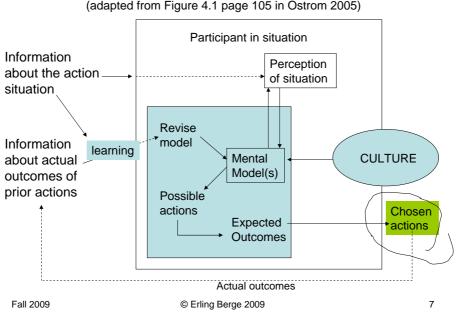
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# Illustrating causal explanations



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Information, action-outcome linkages, internal mental models (adapted from Figure 4.1 page 105 in Ostrom 2005)

## Explanations in general

- Explaining events by prior events
  - Give an account of why explanandum (event) happened by pointing to an earlier event as cause
  - Events vs facts {events events, facts facts, facts events, events facts}
  - Explaining differences and variation rather than "brute events" (absolute sizes or numbers)
  - Explaining variety
  - Explaining non-events (Kitty Genovese)

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# Ideal principles

- Event event explanations
- Methodological individualism
- In practice
  - We use facts as explanandum and as explanans
  - We explain non-events and non-facts
  - We explain differences and variation rather than sizes and variety
  - We talk about families and communities and nations as if they were similar to individuals

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# Structure of explanations

- Using beneficial consequences as explanans is difficult. It requires that the loop linking consequences to event is established
- The usual structure of explanations
  - 1. Theory
  - 2. Hypothesis
  - 3. Derive consequences and rival explanations
  - 4. Refute rival consequences
  - 5. Strengthen the explanation by deducing novel facts and demonstrating their existence

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## Good explanations

- Support from below if more than the explanandum is observed and explained
- Support from above if the hypothesis is derived from a more general theory
- Lateral support if alternative explanations can be refuted (be the devil's advocate!)

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#### Explanations are not

- True causal statements
- Correlations
- Necessitation
- Storytelling
- Statistical generalisations
- Answers to "why" questions
- Predictions

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### Strong and weak Laws

- In social science there are few if any good examples of strong causal laws
- The law of the relationship between income and demand is a weak law, it tells about the direction of a change, nothing about the magnitude

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Mechanisms instead of laws

- Ideally we want to specify a causal chain
- Practically speaking we look for mechanisms:
  - Mechanisms are frequently occurring and easily recognizable causal patterns that are triggered under generally unknown conditions or with indeterminate consequences.
  - They allow us to explain but not predict
  - Mechanisms involving aggregates points to a need for methodological individualism

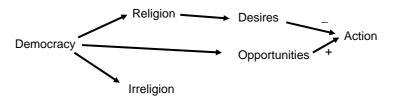
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#### Molecular mechanisms

 Elementary psychic reactions as atomic mechanisms to build molecular mechanisms



# **Case: impact of democracy on dangerous and licentious behaviour (from Tocqueville)**

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# Mechanisms and laws

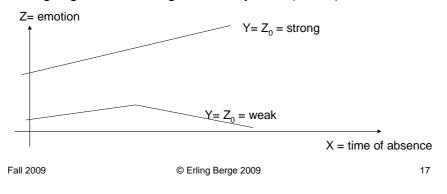
- If we are able to specify the triggering conditions of a mechanism we may be able to specify a law, usually a weak one
- · Example: Groups asked to rank music records
  - Group 1 rank 4 records, reward get one picked at random
  - Group 2 rank 4 records, reward choose one yourself
  - Next day redo it based on the unavailability of the one ranked as no 3
  - Result: G1 displays "sour grape" reaction; G2 displays "forbidden fruit" reaction
  - The control group were not told it was unavailable and did not change its ranking
  - Triggering: G2's freedom of action encountered an impediment that G1 did not

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- Default assumption: additive effects
- Interactions: low values of z at time 0 may give decreasing value of y while high values of z at time 0 might give increasing levels of y as x (=time) increase



#### Interpretation (Verstehen)

- Interpretation is one kind of explanation
  - To decide among conflicting interpretations interpretative hunches or hypotheses needs to confront experience including novel facts
- Rationality and intelligibility (interpreting action)
  - What are the beliefs and desires (motivations)? Are they intelligible?
- Also irrational behaviour may be intelligible

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### Understand irrational behaviour

- If rational decision making is truncated for example by strong emotions
- If rational decision making is short-circuited by the agents desires
- If rational decision making is confounded by inconsistencies in the beliefs and desires of the agent

Unintelligible are actions based on phobias and obsessions, actions like anorexia, self-mutilation

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#### **Understanding Civil Wars**

- Why are young Palestinians willing to give their lives in suicide missions?
- In general obtain or defend the homeland
  - Poverty and illiteracy?
  - Relative deprivation?
  - Comparisons and interactions inducing feeling of inferiority and humiliation
  - Induced religious and ideological fervour at the right moment for triggering the bomb

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#### A hermeneutic dilemma

- How do we establish the desires and beliefs motivating action?
  - Oral and written professions by the persons?
    - Public or private context?
    - What is the cultural hierarchy of motives?
    - Self-serving bias in professed motives
  - Objective interests
    - Religion, power, and money may be involved
    - Investigate actual consequences
  - Look for sources least likely to be biased: letters, diaries, conversations, drafts, etc.
  - Asking questions in a way that creates an artificial "veil of ignorance" to bolster the promise of anonymity
  - Do agents put their money where their moth is?
- Sometimes 'always telling the truth' is the greatest subtlety

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A short summary of institutions seen as

- Social facts by agreement (Searle)
- Thought worlds/ subjective models (Douglas)
- Rules of the economic game (North) shaped by
  - Transaction and information costs
  - Subjective preferences and learning
  - Increasing returns and political processes

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#### Institutions are

Humanly devised rules with some Humans mandated to monitor and sanction rules

- Created to aide in collective actions problems to safeguard life and livelihoods
  - Avoid conflicts, create justice
  - Allocate legitimate benefits and duties, profits and costs
  - Economize on transaction costs
- Not created to achieve efficiency or optimise economic performance(of the neo-classical model)

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Property rights institution

Tells that some person(s) have legitimate

- Rights and duties to be exercised in relation to
- · Particular goods and services subject to possible
- Limitations on times and durations,
- Limitations of technology, and
- Limitations on organisation of exploitation

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#### The construction of social institutions

For example

- Property rights regimes
  - Public property
  - Common property
  - Private property
- Regulations regimes
  - Governing externalities
  - Protecting unitary/ universal values
- Bureaucracies

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The construction of social institutions

Informal institutions

- -Conventions
- -Customs
- -Values, Preferences
- -Norms, Standards of conduct
- -Beliefs, Ideologies, Morals

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#### The dynamic of Institutions and organisations

(organisations)

- Rules of the game (the law)
- Guardians of the rules (the judge)
- Players
  - Owners,
  - Local users,
  - Workers,
  - Professional managers, and
  - Firms of resource industries

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Strategies of the players

Our theory requires by assumption that players

- Optimise their returns from resource use activities by conforming to and exploiting the existing institutional environment, or to
- Change the resource policy in a desired direction if the expected outcome of a political effort is seen as cost effective.

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# Lock-in of institutions and organisations

- Mutual interdependence institutionorganisations
- Institutional changes by public initiative or revolution creates counter-forces
- Economic performance is **PATH DEPENDENT**
- Change occurs at the margins

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