INSTITUTIONS AND INSTITUTIONAL DESIGN

Erling Berge

Part V: Cooperation and transaction costs

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Literature

- Williamson, Oliver E. 1996 "The Mechanisms of Governance", New York, Oxford University Press,
- North, Douglass C. 1990 "Institutions, Institutional Change and Economic Performance", Cambridge, Cambridge University Press,

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Neo-institutional economics

- Studies how alternative social rights and organisations affect behaviour, resource allocation and equilibrium outcomes
- Studies the variation of organization in various types of economic activity
- Studies the logic of political and social rules governing production and exchange

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Transaction and information costs

Implies

- Optimality (Pareto/ Kaldor-Hicks) is no longer an interesting criterion
- Efficiency is no longer an interesting criterion
- Assignment of **property rights is paramount**, introducing economic organisation, and making political institutions a key to understanding economic growth

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Transaction costs

- "The fundamental idea of transaction costs is that they consist of the cost of arranging a contract ex ante and monitoring and enforcing it ex post, as opposed to production costs, which are the costs of executing a contract." (Matthew 1986)
- When information is costly, many exchanges give rise to transaction costs

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Measurement

- Measurement cost will affect systematically the structure of contracts and the organisation of economic institutions.
- State regulations are often directed at lowering measurement costs, not only redistribution.
 Sometimes the goal is better measurement of the tax base: redistribution and growth are not necessarily opposites.

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NIE extends the economic approach

- 1. Investigating the equilibrium outcomes resulting from constraints posed by property rights and transaction costs
- Trying to endogenize the organization of markets and the structure of contacts
- 3. Seeing social and political institutions as outcomes of exchange between individual agents. Competition for survival among institutions leads to equilibrium institutions.

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	Property rights
– Use rig	
– Incom	
	tion rights
	orms may lower substantially
	s of exclusion
	s of enforcement
– Private	e property
– State p	property or communal property
– Comm	on property or open access
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Th	e theory of agency
• Agency is est right to an ag	ablished when a principal delegates some ent bound by a contract to represent the
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Contracts

- The structure of contracts depends on the legal system, social customs, and technical attributes of assets involved in the exchange
- Introduction of new contractual forms may be compared to technical innovations in production
- The firm as a nexus of contracts. Alternatives:
 - Direct contracting consumer and input owners
 - Self-governance of input owners (bypassing the entrepreneur)

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Competition among contractual arrangements

- Contractual form that give rise to positive profits survive, other forms disappear
- Instead of modelling rational individuals and trace the consequences of their choices, we should start by assuming complete uncertainty and irrational behaviour and then add elements of foresight and motivation (Alchian 1950)

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Theory of the state

- The state sets and enforces the fundamental rules that govern exchange
- The power of small groups in democratic polities: interest weighed by consequences, multiplied by power, and governed by information and transaction costs
- The logic of collective action: free riding

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Equilibrium political institutions

- Condorcet's paradox (Arrow' impossibility theorem) is empirically suspect
- Voting and decision making in legislative assemblies are controlled by elaborate procedures that yield equilibrium outcomes
 - Structure induced equilibrium (Shepsle and Weingast 1981): committees with their own jurisdictions and agenda setting power

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Problems in NIE

- Rational choice models do not work when ideological beliefs are unstable.
- Therefore, NIE needs a theory of ideology.
- Other problems include
 - -Strategic interaction
 - -Non-economic motives

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Cooperation: game theory says

Difficult when

- · Games are not repeated
- Information about other players is lacking
- Number of players is large
- Ratio of costs to benefits is large (Hardin)
- "Community" is lacking (Taylor)
- "Group oriented" preferences (Margolis)

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Neoclassical behavioural assumptions

- assumptions

 1. The economic world is reasonably viewed as being in equilibrium
- Individual economic actors repeatedly face the same choice situations or a sequence of very similar choices.
- The actors have stable preferences and thus evaluate the outcomes of individual choices according to stable criteria
- Given repeated exposure, any individual actor could identify and would seize any available opportunity for improving outcomes and, in the case of business firms, would do so on the pain of being eliminated by competition
- Hence no equilibrium can arise in which individual actors fail to maximize their preferences
- Because the world is in approximate equilibrium, it exhibits at least approximately the pattern employed by the assumptions that the actors are maximizing

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- Empirical problems with standard expected utility theory
 - Violation of transitivity
 - Framing effects
 - Preference reversals
 - Problems with subjective probabilities in uncertain choices
- · Need to understand
 - motivation
 - perception of environment

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Motivation

- · Wealth maximising
- Altruism
 - Family
 - Free riders, fairness, justice
- · Self-imposed standards of conduct
 - Ideology

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Deciphering the environment

- · Real world
- Actor's perception of the world
 - Ideology: the "thought world" of the actor
- Uncertainty in choice situations
 - Personal and routine: small uncertainty
 - Impersonal and non-repetitive: large uncertainty
- Institutions exist to reduce uncertainty in human interactions

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Transaction costs and exchange

- Production costs consist of resource inputs (labour, capital, land) needed for both transforming and transacting
- Transforming the physical attributes of a good
- Transacting: defining, protecting and enforcing property rights
 - Measurement costs
 - Enforcement costs

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Measurement costs

- Asymmetric information
 - Adverse selection
 - Moral hazard
- Variety of characteristics and costliness of measuring attributes implies a variety of ownership rights
 - Ex: fruit and vegetable sellers leaving several valuable margins in the public domain

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Asymmetric information costs

Adverse selection

 occurs when different principals use different measures. The one with the least accurate measure will get the persons with the lowest qualities. (ex: seller of life insurance knowing less than buyer)

Moral hazard

 measurement by proxy (or asymmetric information: agent knows more than principal) gives rise to temptation to shirk

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Enforcement costs

- Negotiating agreements
- Policing performance (measurement costs)
- Enforcement
 - Self-enforcement (internal codes of conduct, socially sanctioned norms)
 - Second party retaliation
 - Third party retaliation

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Institutions and transaction costs

• "Because with any property rights structure transaction costs are positive, rights are never perfectly specified and enforced; some valued attributes are in the public domain and it pays individuals to devote resources to their capture." (North 1990:33)

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Development history

- Personal exchange in small scale production and local trade were based on repeated dealings, cultural homogeneity, lack of third party enforcement.
- Increasing scale of production and division of labour leads to impersonal exchange where parties are constrained by kinship ties, bonding, exchange of hostages, and merchant codes of conduct. Frequently exchange is also constrained by being embedded in elaborate rituals and religious precepts. (in history the state at best was an ambiguous player by often increasing insecurity and transaction costs rather than being protector and enforcer of property rights).
- Impersonal exchange based on third party (state) enforcement.

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Institutions determine

- "Institutions provide the structure for exchange that (together with the technology employed) determine the cost of transacting and the cost of transformation." (North 1990:34)
- "..., effective third-party enforcement is best realized by creating a set of rules that then make a variety of informal constraints effective."
- How to do this is our main design problem.

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Informal constraints

- "Culture provides a **language-based conceptual framework** for encoding and interpreting the information that the senses are presenting to the brain." (North 1990:37)
- The cultural filter provides continuity
 - Making informal constraints an important source of continuity in long range social change

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Case I: No formal rules

- Exchange is not simple
- Order depends on dense networks
 - Kinship very important
- Threats of violence (feuds)
- Compensation rules (between tribes)
- (also Eggertsson on Icelandic Commonwealth)

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Case II: Modern states

Informal rules are important also here, as

- 1. Extensions, elaborations, and modifications of formal rules
- 2. Socially sanctioned norms of behaviour
- 3. Internally enforced standards of conduct
 - Meaningful only in terms of informal constraints, altering choices when individuals give up wealth or income for some other value

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Explanations of institutions

- Conventions to solve coordination problems
- Making exchange viable by lowering transaction costs trough organisations supporting norms of cooperation and instruments lowering measurement costs
 - Altering discount rates
 - Increasing information
- Positive payoffs to honesty, integrity, and living up to a reputation

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Formal constraints

- Formal rules can complement and increase the efficiency of informal rules by lowering T-costs
- They may also be intended to replace informal rules, but that is difficult.
- Hierarchical (constitutions, statute law, common law, specific bylaws, contracts)
- Their function is to promote certain kinds of exchanges, but not all kinds of exchanges

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Devising rules

- Rules are in good part devised in the interest of individual well-being rather than social wellbeing
- Rules are in general devised with compliance costs in mind
- Changes in technology or relative prices will alter the relative gains from devising rules

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Developmental history

- Simple state: ruler as discriminating monopolist selling protection and justice
- Adding a representative body facilitating exchange between ruler and constituent groups. The ruler needs an administration.
- Democratic states and complex polities: how do credible commitments evolve to cover future payoffs on completely different issues?

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Democracy

- Reduces the legislative transaction costs (per exchange) but
 - Number of exchanges increase
 - Agency costs between constituent and legislator, and between legislator and bureaucrat are substantial
 - Rational ignorance of constituents increases the role of subjective perceptions for choices

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From political to economic rules

• "But the high transaction costs of political markets and subjective perceptions of the actors more often have resulted in property rights that do not induce economic growth, and the consequent organisations may have no incentive to create more productive economic rules." (North 1990:52)

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Enforcement

- Is not perfect and not constant, it is variable
 - Because of variable measurement costs of contract performance
 - Because of personal agenda's of enforcement agents
- Contracts are self-enforcing when it pays the parties to live up to them, that is when parties know each other and dealings are repeated
- In a world of specialization where exchange needs to extend through space and time self-enforcing contracts are not possible in theory

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Impersonal exchange without third party enforcement

- Game theory: it is possible if games are played forever between the same players and compliance by other parties is observable
- In the real world such conditions do not obtain.
 Impersonal exchange does not seem possible without third party enforcement
- Are voluntary third party systems too costly?
- Can a state behave like an impartial third party?

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The State as third party

- Third-party enforcement means the development of the state as a coercive force able to monitor property rights and enforce contracts effectively
- No one knows how to create such an entity
- In a wealth maximizing model those who run such a state will use the force of the state in their own interest at the expense of the rest of society

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Transaction and transformation costs

- Costs of transforming land, labour and capital to goods and services depends on technology employed and institutions
- Contracts are written with enforcement costs in mind, and will therefore be incomplete and open to informal constraints (reputation, standards of conduct, conventions based on repetitions)

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Rights and constraints in an exchange: three levels

- Single straightforward exchange
 - Ex: buying real estate in the USA
- Transaction costs in a production process
 - See discussion of problems in third world
 - Institutions affect choice of technology
- Transaction cost at the level of society
 - Ex: capital market

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Buying a house

- Institutions affect the costs of buying a house. The costs are among others
 - Measuring the physical and legal attributes of the house
 - Policing and enforcing an agreement
 - Uncertainty discount reflecting the imperfections in measuring attributes and policing the agreement
 - Depends on asymmetric information (contact specific), effectiveness of crime prevention (community specific), and stability of prices (nation specific)

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Implications

- Institutions are a complex web of formal and informal constraints. This provides a basic stability, and also a host of margins where incremental changes may accumulate
- The higher the formal transaction costs, the more one will rely on informal rules (self-enforcing)
- Hard-to-measure costs such as time to acquire information, queuing, bribery, etc, losses due to imperfect monitoring and enforcement, imply that total transaction costs are hard to measure

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