

Planning and implementation in a non-linear world

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Approach

- Models of the world (worldviews, thought worlds, habitus,
 - Linear causal structure (statistics of averages)
 - Non-linear causal structure (statistics of strange attractors)

Modelling: top-down or bottom-up?

- Methodological individualism
- Ontological holism

Model elements

- Structure: material and social
- Process: material and social
- Environment: material and social

- Time - dependence on history
- Duality of structure and process
- Degree of embeddedness in environment

Institutional structure

- Social environment
 - Rules
 - Acts, regulations, norms, conventions
 - Guardians
 - Mandated to monitor and enforce rules
- Dynamic elements (actors /players)
 - Self-organising entities exploiting the rule system to generate profits

Process-elements

- **Incentives** from structure shapes co-operation and competition in exploitation of rules
- **Activites** directed at exploitation of productive margins or rent extraction
- **Generates flows** of
 - Materials
 - People
 - Symbols

"The primacy of perception"

- The Thomas theorem
- If people believe something is real, it has real consequences regardless of the "real" reality
 - Perception of rules (and guardians)
 - Perception of relevant other actors (behavioral modalities)
 - Perception of "causal structure" in the world (worldview/ thought world/ etc)

The problem of coordination

- Hierarchical control of processes
 - Anti-market processes
- Self-organising processes/ meshworks
 - Market processes

Similarity and Complementarity

Stratified systems

- Differentiation: sorting out similarities creating strata
- Integration of stratified elements creates hierarchy

Self-consistent aggregates

- Differentiation: creating complementarities
- Integration of complementary elements creates meshworks

Cooperation: two modes

- Hierarchies: organisation, coordination by command systems
- Ecologies: meshworks, markets, complementarities, symbiosis,

Competition

- Scarce resources
 - Materials
 - Workers&skills
 - Knowledge&technology
 - Markets
- Investing in knowledge and skills to improve on profit margins of productive activities
- Investing in rule maintenance to retain rent extraction margins

Collective action

- First order dilemma: why participate in a mutual regulation scheme? (individual vs collective rationalities)
- Second order dilemma: why participate in the creation of a mutual regulation scheme? (the creation of institutions)

Problems of governance

- Cost of information
 - Measurement costs,
 - Search costs
- Enforcement of contracts
 - Monitoring
 - Sanctioning
- Monopolies and cartels

From incentives to goals

- Institutions and environment circumscribes which types of skills and knowledge will be profitable
- Perception of incentives and other actors is conditioned by the thought world of each player

The institutional matrix

- Economies of scope
- Complementarities
- Network externalities

Results in

- Path dependence
 - "Strange attractor"
 - Torus
 - Bifurcation

Goal directed actions

- Historical conjunctions
- Unintended consequences
 - Including regressive effects
- Interaction effects
- Externalities
- Emergent properties

Simple emergent properties

Threshold effects

- Scale (size of hierarchy) effects
- Agglomeration (size of aggregate) effects
- Density dependent effects
 - Crowding effects
 - Thinning effects
- Transition (time dependent) effects

Elements of complex processes

- Feedback
 - Positive
 - Negative
- Catalysts
 - Facilitating
 - Inhibiting

Complex emergent properties

- Autocatalytic loops
 - Generates its own attractor
 - Develops by drift, limited by internal consistency requirement
- Evolving systems: the probe head
 - Replicates itself
 - Replicas go through a sorting process

Replicators: genes, memes, norms, routines

Driving forces I

- Demography
- Technology
- Globalisation

Driving forces II

- Division of labor in an organisation
 - Management, rule systems, technology
- Division of labor in a social ecology
 - Probe head (replication and sorting)
 - Complementarities develops into autocatalytic loops
 - Drift by adding new specialities to the loop
 - Bifurcations

"Globalisation"

- Profit margins from scale effects (increasing division of labor)
 - In production
 - In markets
- Profit margins from current incentive structure
 - Rewards size
 - Rewards monopolies and cartels
 - Rewards inside information
 - Rewards rentseeking

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If the state refrains from governing, the biggest players will govern according to their own goals. There is no such thing as a free market, meaning a market without rules.

Evolutionary drift

- Learning and organisation designed to exploit the incentive structure?
- Learning and organisation designed to exploit scale effects?
- Drifting onto the wrong path?

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Network externalities:

North(1990:7) “The resultant path of institutional change is shaped by (1) the lock-in that comes from the symbiotic relationship between institutions and organisations that have evolved as consequence of the incentive structure provided by those institutions. And (2) the feedback process by which human beings perceive and react to changes in the opportunity set.

The increasing returns characteristics of an institutional matrix that produces lock-in come from the dependence of the resultant organisations on that institutional framework and the consequent network externalities that arise.”

The mutual dependence of organisations and institutions produces an institutional matrix or organisational network with **increasing returns to scale and network externalities**. Profitability of some or most organisations will depend on particular characteristics of the institutional matrix. If entrepreneurs in business or politics perceive that they could do better with different institutional rules, they will devote time and resources to alter the institutional framework and thus contribute incrementally to institutional change.

The process of perception is crucial. Actors have incomplete information and interpret it by means of mental constructs that may deviate more or less from how the true world works. The result often is persistently inefficient paths.

Transaction costs in political and economic markets make for inefficient property rights. The imperfect subjective models used by players in attempt to understand the problems they confront can lead to persistence of inefficiency.

Global trends?

- Growth of hierarchies
 - Centralisation of power in productive activities
- Growth of meshworks
 - Adaptive rentseeking behavior
- Not exclusively, of course.

Planning and implementation

- Local state
 - Incentive structure
- Planning profession
 - World view
- Third part effects
 - Externalities

Interventions: internal dynamic

Mutual adaptation

- Progressive specification
- Successive approximation

Inadvertent slippage

- Reconciliation
- Mutation

Interventions: regressive effects

- Functional disruption
- Exploitation
- Goal displacement
- Provocation
- Classification
- Overcommitment
- Placation

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Source: Sieber, Sam D. 1981 "Fatal Remedies. The Ironies of social Intervention", New York, Plenum Press

Some examples

- Transportation
- Public services in declining populations
- Predators and utilisation of Norwegian nature
- Property rights and land use regulations
- Legitimacy of public policies

"Public policy prayer"

- Give me strength to work on those problems in the world where I can make a difference
- Give me courage to leave alone the problems I cannot solve, and
- Give me wisdom to see the difference

Ref.: Franz of Assisi