



Problems with Regulation

- Intrusive
- Inefficient
- Easily subverted
- Counter-productive
- Frenzy
- Interference

Regulation Frenzy

# Regulatory Sadism

- Regulators inflict burdensome and superfluous requirements on regulatees
- Repressed sexuality (Robert Chatov).

# Regulated Paranoia

 Regulator as enemy or persecutor - "out to get us" Interference

## **Basic Notion**

- Failure of simple addition / composition between two components.
  - Example: interaction between two beams of light
- Implications for the composition of large complex systems from autonomous components and services.
  - Example: feature interaction
- Implications for predicting / testing the emergent properties of large systems.

## Relevance to CBB

- Information Interference
  - Epistemological Interference
  - Ontological Interference
- Management / Regulation Interference
- Interference between multiple attempts at sensemaking

Regulation: Structure or Process?

- Regulating structure through management of topology
  - Imposed boundaries (cuts) around open/closed sets.
- Regulating process through management of pleasure and pain.
  - Imposed distribution of cost / benefit / risk

# **Topology**

## **Basic Notions**

- · Access, Availability
- Boundary, Barrier, Interface
- Inside / Outside / Neighbourhood
- Structural Coupling / Connection
- Compact, Cohesion, Cluster
- Open / Closed
- Fold, Layer, Envelop, Complexity

## Relevance to CBB

- Network Architecture Design & Business Strategy
- Market Regulation & Governance
  - Barriers to entry
  - Barriers to exit
- · Change Management
- Security & Trust
  - Hacking as a game of dungeons and dragons.

# Quick Sketch of Topology

## Open

- An open set contains a neighbourhood of every point.
- Joining any number of open sets together produces a new open set.

## Closed

- An closed set contains its own boundary, and the boundary of every neighbourhood.
- **Intersecting** any number of closed sets together produces a new closed set.

Open and Closed are not opposites.

- Some sets can be both open and closed.
- Some sets can be neither open nor closed.

Self-Regulation

## **Claimed Benefits**

- Promote good practice
- Reduced compliance & monitoring cost
- Quick & cheap problem resolution

and perhaps also

- Greater consumer choice
- · Greater industry flexibility

## **Industry Motivation**

- Improve image, promote confidence
- Avoid regulation or litigation

#### **Forms**

- Code of ethics / conduct
- Customer complaint mechanisms and procedures
- Ombudsman

Self-Regulation

## Issues

- Gaps and overlaps continually emerge and re-emerge in dynamic markets
- Self-regulation is a flexible response to market failure, and may fill a gap quickly and efficiently. However, a gap in the market does not necessarily mean that self-regulation is the appropriate solution.
- Some small businesses can have difficulties in participating in selfregulatory schemes, as can consumers.

Source: Australian Task Force

## Mechanisms

- · Penalties and sanctions
- Informal coercion (coercive force)
  - from peers
  - from investment funds
  - from consumer groups
  - from Government
- "Naming and shaming" (normative force)
- Diffusion of best practice (mimetic force)

Source: King & Lenox

Self-Regulation Example: "Responsible

Care" (CMA)

Source: King & Lenox

## **Background**

 Declining public opinion of chemical industry

## **Purpose**

- Improve environmental and safety performance of CMA members
- Improve public perception.

#### **Device**

- 10 Guiding Principles
- 6 Codes of Management Practice
- Expel companies for persistent failure.

## **Focus of Codes**

- Input, not output
- Goal, not implementation
  - inhibited by anti-trust legislation
  - no independent verification
  - no company has actually been expelled

Self-Regulation
Success
Factors

Source: Australian Task Force

## More effective if ...

- Clearly defined problems / market failure
- Active industry association and/or industry cohesiveness. Mature industry
- Competitive market
- Firms acknowledge dependency on customers and wider community
- Incentives. Consumer awareness and recognition.

## Less effective if ...

- High risk of serious or widespread harm to consumers
- Significant presence of rogue traders
- Broad spread of smaller businesses that do not communicate with one another.