Networks, Values and Public Policy in the 21st Century

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What do we mean by ‘social networks’?

- *Can* mean on-line networks
- But is much more general
- ‘Real world’ networks of friends, families, colleagues, interest groups
How does clapping evolve at the end of a performance?

- people differ in their degree of enthusiasm for the performance
- but we all hear what others are doing
- may look bad to stop when everyone else is still clapping
- but few people want to be the last one to stop
- A very complex phenomenon
Typical time path of sound intensity of applause
(concerts on French radio)
How does volatility in financial markets increase (or reduce)?

- traders differ in their enthusiasm for the prospects of a company’s stock or currency
- but they all see what others are doing
- it may be bad to stop buying when everyone else is
- but it may be just as bad to stop selling when everyone else is
- irrational waves of enthusiasm
Economic and social policy since 1945

- Essentially based on a view that decisions are made rationally by people, firms, planners etc. ['agents']

- Agents respond to incentives, and incentives are in turn mainly based on price

- Examples:  
  - energy consumption  
  - corporation tax  
  - interest rates

- A mechanistic view of the world

- Not without some success, but limited in what it can actually achieve
Behavioural Economics and Networks

- Behavioural economics is essentially a smarter and broader way of thinking about incentives.
- But it is still based on the idea of ‘agents’ deciding *in isolation*.
- Networks recognise that agents can be influenced *directly* by what others do.
- A wide variety of behavioural motives for this, but for shorthand description, call this ‘copying’.
Impact of networks

- Can *magnify* the effect of any initial change caused by incentives/nudge

- *Network structure* becomes an additional policy instrument; different types of structure are more/less resistant to ‘cascades’ of value change

- But can also *offset* the effect of any initial change caused by incentives/nudge

- And may increase the *uncertainty* of any change in policy
The music download experiment

- Salganik, Dodds, Watts, ‘Experimental study of inequality and unpredictability in an artificial cultural market’, Science, 2006

- Students downloaded previously unknown songs either with or without knowledge of previous participants' choices
Number of downloads of each of the 48 songs
No social influence
Number of downloads of each of the 48 songs
Strong social influence
Networks, Policy and Values

- Examples:  
  - financial market regulation
  - executive pay
  - environment

- Successful policy making is very difficult

- The first step to better policy making is better understanding

- A key reason for many failures is the failure to recognise that networks, values, are a key driving factor