

**LSE**   

Clifford Barclay Memorial Lecture

**Creativity and Knowledge: managing and respecting intellectual assets in the 21st century**

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Conference and Events Office www.lse.ac.uk/events

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**Creativity and knowledge**

- Why do creativity and knowledge matter?
- Do we properly manage them?
- Why not?
- What to do, going forwards from here?

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**12,000 years of progress**

- Industrial Revolution, like nothing ever before in all of recorded history
- One hundred years of economic progress
- Technological advance from innovation
- Innovation from creativity and knowledge

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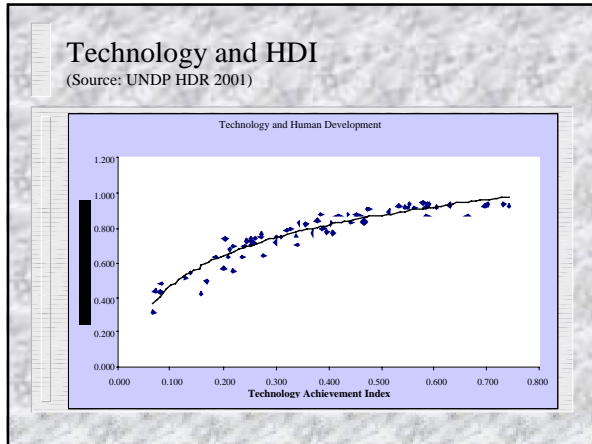
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- ### Ideas
- Animal domestication. The steam engine. Waterworks. Power and electricity networks. The scientific method. Moveable type and the printing press. The Indo/Arabic number system. Anaesthetic. Penicillin. The birth control pill. Electric light. Air conditioning
  - Wood? Or the square root of minus one  
 $i^2 = -1$

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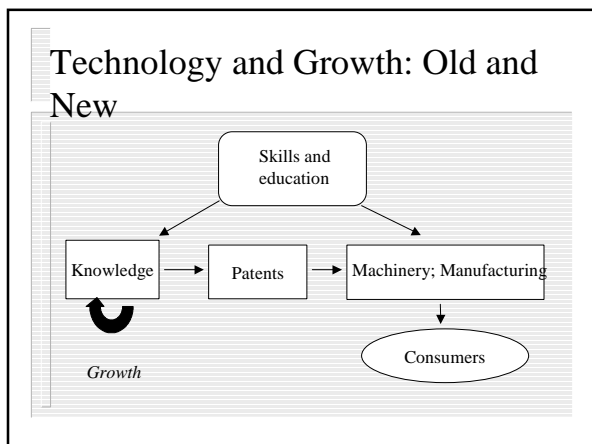
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## Innovation and property rights

“Throughout man’s past he has continually developed new techniques but the pace has been slow and intermittent. ... Typically, innovations could be copied at no cost by others and without any reward to the inventor or innovator. The failure to develop systematic property rights in innovation up until fairly modern times was a major source of the slow pace of technological change.”

[Douglass North 1981]

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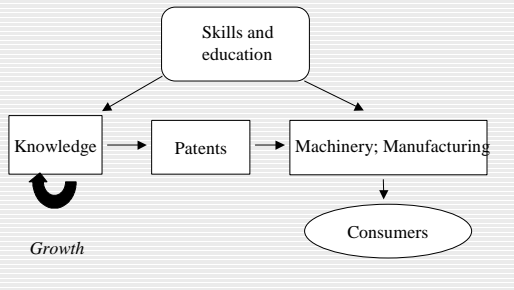
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## Technology and Growth: Old and New



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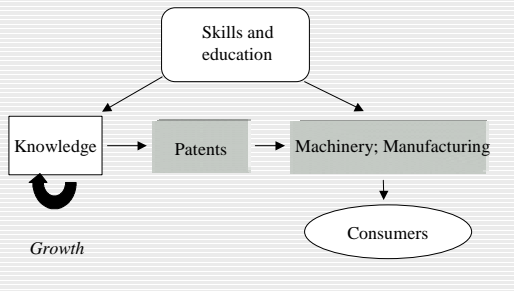
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## Technology and Growth: Old and New



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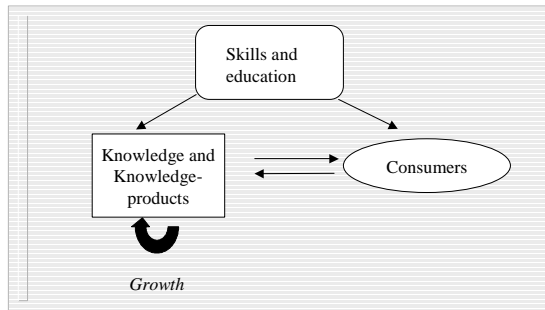
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## Modern high-tech growth



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## A multi-faceted, modern knowledge-based economy

- Corporate R&D sure, but also...
- Computer software and videogames
- Digital entertainment: Music and movies
- ... Internet dissemination
  
- Pharmaceuticals, biotechnology

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## The fundamental theorems of welfare economics

- Property rights and free exchange
  - Automagical revelation of value
  - Social efficiency
- Price = marginal cost
- Knowledge nonrival and infinitely expansible. Copying
  
- Preserving incentive versus efficient dissemination

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## Failures

- Ruthless, giant multinational corporations?
- A reward for being bright and creative? Or for having economic savvy?
- Intellectual land grab?
- A singular honour for failing twice, in theory and in practice

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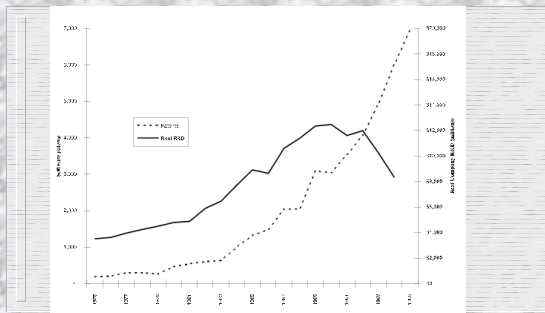
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## Intellectual land grab



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## Alternatives

### ■ Intervention

- Patronage and procurement
- Market segmentation
- Patent auctions for random public domain release
- An ISA?

### ■ “Hands off and let rip”

- Open SourceSourceForge.net, IceWalkers.com
- An Open Source foundry for all ideas

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## Conclusions

- Economic progress. Creativity and knowledge
- Intellectual property rights versus ordinary property rights
  - Trade off dynamic incentive for widespread dissemination
  - Extant schemes fail doubly, working neither in theory nor in practice
- Alternative mechanisms

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