

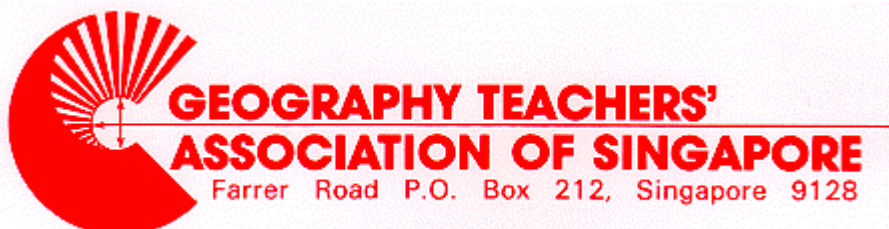
Exploring Geographies of the Knowledge- Based Economy

Dr. Neil Coe

*Lecturer, Department of Geography
National University of Singapore*

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Outline of talk:

(30 minutes; 15 minutes for Q&A)

1. Introducing the KBE: how new is it?
2. Types of knowledge
3. Spaces and scales of innovation
4. Emergent geographies of the KBE
5. KBE as discourse?
6. Concluding comments

Themes:

- Critical examination of KBE
- Appropriate scale for understanding KBE systems?
- Uneven geographies of the KBE

Prologue:

“In the industrial mode of development, the main source of productivity lies in the introduction of new energy sources, and in the ability to decentralise the use of energy throughout the production and circulation processes.

In the new, informational mode of development the source of productivity lies in the technology of knowledge generation, information processing and symbol communication.

To be sure, knowledge and information are critical elements in all modes of development, since the process of production is always based on some level of knowledge and in the processing of information.

However, what is specific to the informational mode of development is the action of knowledge upon knowledge itself as the main source of productivity”

Manuel Castells, 1996, p.17

A contested vision? E.g. Hudson, 1999

Key components of the KBE?

1. Qualitative changes in the nature of goods and services and their production processes
2. Use and transfer of knowledge is becoming more extensive and important for economic activities
3. Increasing reliance on specialist and idiosyncratic skills
4. Growing importance of economic activity focused on knowledge itself
5. Incorporation of the creation and implementation of change itself into the role of economic actors ('innovation')
6. Increasing uncertainty in economic life

Related terms:

Post-Fordism, Post-Industrial Society, Informational Society, The 'New' Economy, The Service Economy, Globalisation, The Learning Economy, Flexible Production

Types of knowledge

Know-what: commonly known as information, i.e. knowledge of facts

Know-why: scientific knowledge of laws and principles, often important for technological change

Know-how: skills, the capability to do things. Typically created within organisations, but increasingly between them

Know-who: social skills to enable individuals and organisations to gain access to the know-how of others

Knowledges are produced in institutional structures which are embedded in wider sets of economic, social & political relations

Contra neoclassical economics, availability and ability to process information are not uniform

Uneven distribution of knowledge between institutions and across geographies

Mobility of different types of knowledge:

Spaces and Scales of Innovation

- Innovation as the mobilisation of knowledge
- Innovation as any change to products, processes or organisational forms

Scales:

1. Global – International Innovation Networks
 - TNC R&D networks
 - Home country embeddedness
2. National Systems of Innovation
 - Distinctive national character
 - Education, law, government, politics
3. Regional Systems of Innovation
 - Sub-national clusters of economic activity
 - Trust, norms, routines, conventions, learning
4. The City
 - Centres of authority in knowledge networks
 - Centres of interaction, sociability

5. The Sub-Urban Scale: Science Parks

- Benefits of proximity to Universities?
- Essentially property developments

6. The Firm

- Firm size: large or small?
- Networks: integrated or disintegrated?

7. The Individual

- Entrepreneurs and personality traits
- Creating an appropriate environment

- Innovation across scales
- Focus on networks and flows
- Not just within corporations
- E.g. mobile experts, and cultural connections

Geographies of the KBE:

- KBE best conceived as enacted through a series of inter-linked sub-national clusters (cities, regions, city-regions)
- Castells: hubs and nodes in a global space of flows
- KBE overlain on pre-existing geographies
 - reinforcing old inequalities
 - new 'innovative' spaces?

Processes involved in the local accumulation of knowledge:

KBE as discourse (2)

- Frameworks of understanding made up of combinations of narratives, concepts, ideologies and signifying practices
- KBE in Singapore as a politically-constructed discourse concerning the desired structure and direction of economy
- Implication 1: feeds through into training policies – ‘life-long learning for life-long employability’
- Implication 2: validates certain types of workers (e.g. foreign talent) over others?
- Challenge is to maintain social cohesion in the drive to become a KBE

Conclusions:

- KBE is one attempt to describe the key dynamics of contemporary capitalism
- Different types of knowledges, with different levels of mobility
- A variety of scales at which the KBE / innovation can be studied / understood
- The uneven geography of the KBE – a global network of interlinked clusters
- KBE as a discourse: hype vs. reality?

Epilogue:

“It is by [the] interface between macro-research programs and large markets developed by the state, on the one hand, and decentralized innovation stimulated by a culture of technological creativity and role models of fast personal success, on the other hand, that new information technologies came to blossom”

Manuel Castells, 1996, p.60