EMERGENCE AND TRANSFORMATION OF CLUSTERS AND MILIEUS

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THE PAPER’S PURPOSE

The paper discusses the question of spatial organization of production from the perspective of economic development. It argues that, given that development takes on different forms in each historical period, spatial organization of production also changes and these changes are affected by territorial strategies of firms and the economic strategies of cities and regions, and this makes them responsible for the emergence and reconstruction of clusters and milieus. Therefore, cluster evolution is a self-organizing process.
QUESTIONS AND ANALYTICAL ISSUES

- Confusion and chaos of analytical approaches?
- Is there a knowledge economy?
- Are clusters evolving? How?
- Clusters’ decline or clusters’ transformation?
CLUSTER’S ANALYTICAL APPROACHES

• Diversity of experiences and views
• Dynamics of spatial organization of production
• The clusters development factors
## DYNAMICS OF SPATIAL ORGANIZATION OF PRODUCTION

<table>
<thead>
<tr>
<th>KEY INNOVATIONS</th>
<th>INDUSTRIAL REVOLUTION</th>
<th>ELECTRICAL REVOLUTION</th>
<th>INFORMATIONAL REVOLUTION</th>
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<tbody>
<tr>
<td>Power loom</td>
<td>Electrical light</td>
<td>Transistor Computer</td>
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<td>Small firms</td>
<td>Large factories</td>
<td>Network of firms</td>
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<td>Small towns</td>
<td>Large cities</td>
<td>Network of cities</td>
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<th>INDUSTRIAL ORGANIZATION AND LOCATION</th>
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<td>Small firms</td>
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<th>TRANSPORT AND MARKET ORGANIZATION</th>
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<td>Canals, early railway, telegraph</td>
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<td>National markets</td>
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<td>Steamship, cars, telephone</td>
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<td>International markets</td>
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<td>Aerospace, internet</td>
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<td>Global markets</td>
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<th>SPATIAL ORG. OF PRODUCTION</th>
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<tr>
<td>Industrial districts</td>
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<td>Industrial complexes</td>
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<td>Clusters, milieus</td>
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<th>INTERPRETATIONS</th>
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<tr>
<td>A. Marshall</td>
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<td>Weber</td>
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<tr>
<td>Porter</td>
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<td>Hoover</td>
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<td>Maillat</td>
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KNOWLEDGE ECONOMY

• The quest for development and innovation
• Innovation, firms and development
• Knowledge clusters
THE QUEST FOR DEVELOPMENT AND INNOVATION

- Fundamentalism of capital
- Endogenous growth
- Knowledge, a multi-use merchandise
CHANGING SOURCES OF WEALTH

• The main source of wealth “has switched from natural resources (notably land and relatively unskilled labour), through tangible created assets (notably buildings, machinery and equipment and finance), to intangible created assets (notably knowledge and information of all kinds) which may be embodied in human beings, in organization or in physical assets” (Dunning, 2001)
Innovation has always been at the core of economic development. Innovation consists in the application of knowledge to the production of goods and services that are commercially relevant. In other words, innovation enfolds the application of new technologies in goods and services that are sold in national and international markets.
The cluster exists because of the advantages that the knowledge generated by the firms that work in an innovative atmosphere, gives. Once the cluster is established, it produces a strong attraction on the newcomers, who in turn strengthen the cluster even more and expand its knowledge base (Maskell, 2001).
CLUSTER’ S EVOLUTION

- Diversity of clusters
- The emergence of clusters
- The role of development forces
DIVERSITY OF CLUSTERS

- **Local Productive Systems**
- **Endogenous Industrial Systems**
- **External Firms Enclaves**
- **Integrated External Firms**

Axes:
- Network Organization
- Hierarchical Org.
- External Chains
- Local chains
CLUSTER’ S EMERGENCE: EXPLAINING FACTORS

- Endogenous factors for industrialization
- Atraction factors for external firms
- The public support
- Strategies of firms and territories
- Formation of networks
THE ROLE OF DEVELOPMENT FORCES

- Public administration and policies
- Organization of production
- Innovation and human resources
- Social capital and culture
- Institutional development
- Urban development of the territory
- Infrastructures for transport and communications
- Social capital and culture
CLUSTER’S DECLINE OR CLUSTER’S TRANSFORMATION?

- Cluster’s growth is not guaranteed by market forces
- Continuous transformation of clusters
- Different paths for cluster’s transformation
- The importance of development forces
The spatial forms of organization of production experience continuous transformation, seeking the most efficient forms of production. This is a self-organizing process led by the most innovative firms of the cluster that react to the changing needs and market competition through responses that modify the cluster network. This is a phenomenon associated with the forces for economic development of cities and regions.
THE ROLE OF DEVELOPMENT FORCES

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OBSESSION FOR THE LEARNING REGIONS

- Learning regions are not a new idea
- The question of regional divergence
- The low and high activity dilemma?