

BUZZ WITHOUT BEING THERE?

Communities of Practice in Context

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Presented at the Cambridge-MIT Institute Forum on Knowledge Exchange,
Networks and Regional Innovation, Cambridge, UK, December 6-7, 2006

OUTLINE: GOALS OF THIS PAPER

- Idea that 'proximity matters' in the innovation process:
 - orthodoxy within economic geography
 - 'buzz' (Storper and Venables 2004)
 - 'being there' (Gertler 1995)
- A recent alternative perspective:
 - role and importance of *non-local* sources of knowledge for the stimulation of innovation
 - Communities of practice: a primary structure for distanced learning
 - 'buzz without being there'?
- Can we reconcile these two views?
 - under what conditions are CoPs likely to be effective means for non-local learning?

‘PROXIMITY MATTERS’: THE CANONICAL VIEW

- Innovation: a social process
 - Learning through interacting
 - Interaction between firms and other firms, institutions of education and research
- Spatial proximity facilitates the sharing of knowledge and the capacity for localized learning by firms
 - Traded and untraded flows
 - Tacit and codified knowledge
 - Verbal and non-verbal communication: F2F, buzz
 - Common conventions, norms
 - Readily available knowledge about reliability, reputation, trustworthiness of potential suppliers, partners, customers

INNOVATION AND KNOWLEDGE: AN ALTERNATIVE PERSPECTIVE

- Local self-sufficiency: unrealistic, undesirable
- Local ‘buzz’ and global ‘pipelines’ (Owen-Smith & Powell 2004; Bathelt et al 2004)
 - Local innovative dynamism (also) depends on local actors’ ability to establish channels, networks to access knowledge from *distant* centres/nodes of knowledge production
 - From an evolutionary perspective, pipelines increase variety of locally available knowledge by linking firms to multiple selection environments, knowledge pools – i.e. *non-local learning has its own advantages*

INNOVATION AND KNOWLEDGE: AN ALTERNATIVE PERSPECTIVE

- Communities of practice: vehicle for distanced learning (Amin & Cohendet 2004)
 - Questions assumption that *spatial* proximity implies *relational* proximity, or that the latter requires the former
 - Relational proximity *is what really matters*
 - i.e. if other social affinities are sufficiently strong, these can compensate for absence of spatial proximity, and enable long-distance learning
 - Shared project, expertise, experience facilitate learning
 - joint production and sharing of knowledge within distanced teams
 - Allows organizations to tap into *distributed competences* (not always feasible to bring parties together in same place)

RECONCILING TWO APPROACHES: A MORE NUANCED ANALYSIS

- Alternative view compelling
- But danger of overstating case?
 - Are CoPs *always* effective substitutes for being there? Limits?
- A new question: *under what circumstances* is distanced learning likely to be
 - Facilitated, effective?
 - More difficult to achieve?

WHEN IS LEARNING POTENTIAL GREATEST?

- Cognitive distance (Nooteboom 2001)
 - Optimal when two parties 'know different things', but have sufficient affinity, absorptive capacity to communicate effectively with one another
- How much cognitive distance is too much for members of a CoP to overcome?
- What are the sources of cognitive distance/proximity?

KNOWLEDGE FLOWS: WHAT AFFINITIES FACILITATE LEARNING?

- Individual
 - Language
 - Education
 - Experience
 - Occupation (= education+experience)
- Organizational
 - Firm-specific, characteristic practices, routines
 - Corporate culture

KNOWLEDGE FLOWS: WHAT AFFINITIES FACILITATE LEARNING?

- Industrial
 - Knowledge base varies by sector (Pavitt 1984, Malerba 2005)
- Institutional
 - National (Varieties of capitalism, NIS, NBS)
 - Regional/local (learning region)
 - Shared norms, attitudes, values, expectations, conventions *facilitate understanding*
- Geographical
 - F2F, being there

DISTANCIATED SOCIAL LEARNING: THE IMPACT OF KNOWLEDGE TYPE

- Some types of knowledge 'travel' more easily than others
 - Tacit–codified spectrum (too simple)
 - Knowledge base
 - Analytical – synthetic – symbolic
 - (Laestadius 1998; Asheim & Gertler 2005; Asheim, Coenen & Vang 2006)

KNOWLEDGE BASES: A TYPOLOGY

Analytical	Synthetic	Symbolic
Know why ; developing new knowledge about natural systems by applying scientific laws	Know how ; applying or combining existing knowledge	Creating meaning, aesthetic qualities; affect; know who critical
Scientific knowledge, models, deductive	Problem-solving, inductive, custom production	Creative process
Collaboration within and between research units	Interactive learning with customers, suppliers	Learning-by-doing, in studio; project teams
Strong codified knowledge content; highly abstract, universal	Partially codified knowledge, strong tacitness more context-specific	Strong semiotic knowledge content; some forms highly context-specific
Meaning relatively constant by location	Meaning varies substantially by location	Meaning highly variable by location
Drug development	Mechanical engineering	Advertising

DISTANCIATED SOCIAL LEARNING: MORE DIFFICULT WHEN PARTIES ...

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- Speak different languages
 - Come from different educational, experiential, occupational backgrounds
 - Work for organizations with different prevailing practices, cultures, routines
 - Come from different
 - national business systems
 - varieties of capitalism
 - national/regional innovation systems
 - Work with synthetic, symbolic knowledge

DISTANCIATED SOCIAL LEARNING: CASE STUDIES

- Advanced manufacturing technologies (Gertler 2004)
 - Producers in Germany; users in N America
 - Linguistic affinity: moderate
 - Occupational affinity: high
 - Organizational affinity: from high to low
 - Industrial affinity: moderate to high
 - Institutional affinity: **low**
 - Knowledge base: **synthetic**
 - **Success in knowledge transfer: low**

DISTANCIATED SOCIAL LEARNING: CASE STUDIES

- Software development (Gertler et al. 2000)
 - Programmers in Germany (BW) and Canada (Ont)
 - Linguistic affinity: moderate
 - Occupational affinity: high
 - Organizational affinity: low
 - Industrial affinity: high
 - Institutional affinity: **low**
 - Knowledge base: **analytical/synthetic**
 - **Success in knowledge transfer: moderate**

DISTANCIATED SOCIAL LEARNING: CASE STUDIES

- Drug development (Coenen et al. 2006)
 - Scientists in Denmark (Medicon Valley) and US (NJ)
 - Linguistic affinity: moderate
 - Occupational affinity: high
 - Organizational affinity: low
 - Industrial affinity: high
 - Institutional affinity: **low**
 - Knowledge base: **analytical**
 - **Success in knowledge transfer: high**

PRACTICES THAT BOOST RELATIONAL PROXIMITY (TEMPORARILY)

- Brainstorming sessions (early in project)
- Longer-term exchange of personnel
- Air travel to periodic team meetings
- ICT-mediated team interaction (e-buzz?)
- Travelling knowledge brokers, enablers
- Global, national company meetings
- Trade fairs (temporary clusters)
- Conferences, conventions

CONCLUSIONS: BUZZ WITHOUT BEING THERE?

- Distanciated learning in CoPs depends on multiple dimensions of affinity
- If institutional affinity is low, this may trump other shared characteristics
- The type of knowledge: also matters
- Temporal dimension key (prior F2F – ‘proto-proximate’ relations)
- Advantages *and* disadvantages to distanciated learning (2nd best alternative to being there?)
- Global networks, but also local nodes