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Recenze/Review

REGION – KULTUR – INNOVATION: WEGE IN DIE WISSENSGESELLSCHAFT

Gertraud Koch, Bernd Jürgen Warneken, *Region – Kultur – Innovation. Wege in die Wissensgesellschaft*. Wiesbaden: VS Verlag für Sozialwissenschaften 2007.

Jiří Loudín*

The anthology "*Region – Kultur – Innovation. Wege in die Wissensgesellschaft*" is thematically directed at the very essence of contemporary innovation studies. The attention paid to cultural and spatial dimension of innovation activities in the last few years is duly justified. It is closely related to the "pathways to the knowledge society" indicated in the book's subtitle. While both mass industrial production and mass consumption are first and foremost tied to material and natural resources (and this, in consequence, also forms a certain structure of labour force and economic space), the knowledge production draws on different resources, especially on the human capability to learn and acquire new knowledge, which is mainly culturally codified. The labour force is being relieved from its earlier commitments and is becoming highly mobile. Together with exu-

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berant global cultural interactions, these changes also reconfigure spatial processes.

The general mobility of people and information developing in globalized knowledge society does not bring only growing interaction, bindings, and diffusion of different cultures, which can be identified horizontally, or geographically – that is local, regional, national, supra-national, ethnic, religious cultures, but also cultures characterized by practices of different segments of modern societies – that means various vertical cultures tied to one place. Such advanced knowledge production is noted for the integration of knowledge, research, artistic creativity, marketing, economic and political strategies – the comprimation and hybridization of yet disconnected cultures and processes. (Gisela Welz refers to a concept of "collaborative engineering" in this book, which describes synchronic and simultanenous collaboration of experts from different fields.) This new need for "cultural synchronization" represents a great challenge for advanced production, since it causes many problems, but, on the other hand, it is also opens new possibilities.

The anthology comprises contributions presented at a seminar on cultural dimension of innovations organized by *Evangelische Akademie Arnoldshain* in Taunus. In addition to the introduction written by Gertraud Koch and Bernd Jürgen Warneken, we can find 8 articles of leading German authors in it. To highlight some problems and concepts crucial to this book, we have to mention different modalities of the culture/knowledge relation (trans-cultural *versus* culture-specific knowledge, tacit knowledge *versus* codified knowledge, transfer of knowledge and culture transfer, etc.). At a more specific level, the book points out the importance of problems of regional cultural diversity (heterogeneity).

The conceptual basis of the topic under examination is elaborated in the article written by Manfred Faßler (*Wissenserzeugung. Forschungsfragen zu Dimensionen Intensiver Evolution*). He argues that there is a plurality of knowledge cultures – a constrained universal concept of knowledge

is nowadays hardly conceivable. Knowledge is now functional in two basic dimensions – as culture-specific programme and as universal programming language. The growth of knowledge competences and the development of global digital network have brought to the end the invariably applicable knowledge stories and, on the other hand, have stimulated the rise of regional knowledge episodes in congruence with global change-sensitive habits of perceiving and thinking. However, Faßler's concept of knowledge is also closely connected to action, learning, and to the production of the new.

Getraud Koch (*Wissenstransfer zwischen Kulturen: Kulturanalytische Anmerkungen zu einer unternehmerischen* Herausforderung) challenges those conceptions, in which culture represents the context of knowledge processes; culture and knowledge, as she claims, are linked together so closely that they cannot be separated or treated independently. Knowledge is the very basis of culture and without culture there is no knowledge. New knowledge is adherent to the production of new meanings and contexts that reformulate cultural traditions, and these are newly interpreted or challenged. The production and diffusion of knowledge – including natural scientific and technical knowledge – is culturally mediated, linked to specific action forms and *habitus* practices. Cultural knowledge plays crucial role in communication processes – it is applied unconsciously and also creates the interpretative framework of perception. On the other hand, cultural determination should not be overestimated – the individual uniqueness is, of course, pushed forward in communication and in other conscious activities.

Gisela Welz concentrates on the dichotomy of codified and tacit knowledge, and chooses IT sector for the explication of this problem (*Lernkulturen regionaler Innovationsmilieus im IT-Sektor. Eine kulturanthropologische Perspektive*). In terms of regional development, tacit knowledge is essentially generated in the form of "localised capabilities", which cannot be formalized or reproduced and are linked to concrete individuals.

IT-Sector is considered a textbook example of a field that is completely free of any confinement to some specific national, regional or local culture. It is supposed to be a clear example of a global professional culture. However, Welz mentions studies that accentuate the need of shared physical spaces and face-to-face communication in IT, as well as the new forms of synchronic and simultaneous collaboration ("collaborative engineering") in this field, in which specific tacit knowledge is being generated, also with the help of – especially local – clients. Moreover, the regional advantage is strongly exercised particularly in the development and production of IT – this fact is symbolized not only by Sillicon Valley, but also by other similar localities. The development of new IT products is successful in those areas, which facilitate strong spatial concentration of developmental, educational and technological production capacities making their intensive cooperation – and valorising of local context knowledge – possible.

Nadine Hoser and Annelies C. Peiner (*E-Learning als Innovation: Analyse einer Popularisierungsstrategie zur Einführung von E-Learning in der Jordan Education Initiative*) are examining the realization of an e-learning project in Jordan as an example of the transfer of culture and knowledge. They claim that there were no serious cultural obstacles during the realization of the project, which had been well prepared and utilised the advantages of e-learning in this respect. The e-learning project was not replacing but expanding existing traditional educational methods, and this aspect usually contributes to readiness to accept a knowledge transfer. "Distant learning" also vests a higher level of autonomy into a learning subject, and it is capable of constructing its own learning environment and its related meaning of learning experience.

Niels Behrmann (*Patente als Quelle von Innovationen*) is examining possibilities to utilize patent documents in terms of knowledge. He ties his analysis to a well-known model of cyclic mutual conversion of explicit and tacit knowledge, with which Nonaka and Takeuchi described the processes of knowledge generation in Japanese companies. Behrmann

constructed his own 3-dimensional model of approaching the knowledge included in patent documents: he recognizes different kinds of knowledge (explicit, tacit), sources of knowledge (internal, external), and levels of knowledge processing (individual, organisational). Behrmann is trying to find an answer to a question why patents as sources of knowledge in the business sector are so rarely discussed and exploited. Given the fact that patents are freely accessible documents worldwide, it is evident that the patent documents constitute a great resource of explicit knowledge. As it is argued in the article, the workers without any tacit knowledge have major problems with utilising knowledge included in patent documents – not only with their understanding and with the language in which they are written, but also with their acceptance as such. The internalization of patent knowledge is dependent on the experience and pre-understanding (*Vorwissen*) of a worker dealing with a patent. The technical experts find concepts, analogies, and models in patent documents that enable them to externalize their tacit capabilities and skills. Tacit knowledge is therefore a precondition of effective work with explicit knowledge in patents.

Alexander Eisenkopf (*Wettbewerb und Innovation – Die Grenzen staatlicher Innovationspolitik*) reminds us that innovation, its production and diffusion is first and foremost a matter of business culture, which is constituted and confirmed by individual entrepreneurs and their ethos and agility. The ability and readiness to undertake venture is a crucial part of business culture as such. In this respect, Eisenkopf is highly critical of various state regulations and politics supporting innovation – they are ineffective and it is much more reasonable to cultivate general culture of competition and risk.

As regards the role of regions as cultural entities, the original concept of regional advantage has been constructed on the homogeneity of the region: spatial proximity also means cultural proximity. Shared values and customs, similar mentalities, and minimal semantic differences should increase mutual trust, facilitate communication and interactions, decrease

transaction costs, and thus generally support the development of knowledge economy. However, a new argument has been elaborated recently that accentuates the heterogeneity of regions – the diversity means the diversification of approaches and perspectives, which is mutually enriching, stimulating, and creative. These values are crucial to Richard Florida's concept of "Creative City" – in this model an emphasis is put on culture of diversity, openness, and tolerance. The authors of a concept of "constructed regional advantage" (Asheim, Boschma, Cooke, Tödling, Trippl) develop a "balanced middle course" approach. A concept of "related variety" forms a significant part of this model: if communication and interaction in the region is to be effective, the actors should be both different and mutually related at the same time, they should be sharing "cognitive proximity" (a radical diversity makes interaction more difficult). In this anthology, these problems are addressed mainly by Ulf Matthiesen and Heike Proff.

Ulf Matthiesen (*Wissensmilieus in heterogenen stadtregionalen Räumen Ostdeutschlands – zwischen Innovationsressourcen und kulturellen Abschottungen*) characterizes current knowledge processes as co-evolution of knowledge, education, innovation, space, and governance and from this perspective he critically challenges the concept of knowledge society. Knowledge society has entered a more advanced level of its development and it is therefore possible to analyze its concrete historical manifestations. The original delineation of knowledge society was too narrow, one-dimensional, and homogenous; nowadays, it is evident that this concept integrates very diverse, heterogeneous, and also completely contradictory processes. Knowledge in knowledge society is first and foremost the ability to act, it creates societal know-how, which is, however, contextualized in its various interdependencies. New peripheries with uncertain future expectations are being generated; the space development is fragmented and produces new disparities and isolated islands. Matthiesen claims that the increase of heterogeneity in the local knowledge cultures is the basic condition for the formation of attractive knowledge space with exciting

learning cultures. However, this process is not unidirectional and unambiguous – actually, the processes of homogenization and heterogenisation take their course not independently, but simultaneously.

Heike Proff *(Kompetenzaufbau, Produktinnovation und der Einfluss von kutureller Vielfacht*) addresses the problem of cultural diversity (heterogeneity) of regions concerning their innovation efficacy. She is recalling that there are two basic approaches to this topic – one preferring the homogenous agglomeration and concentration of the same or similar branches, the other considering the concentration of small firms with highly differentiated branches, activities, and processes innovatively advantageous. The cultural diversity of regions resting in the multiplicity of industrial cultures (branches), professional structures and business cultures is taken as a precondition for successful innovative absorption capacity. Proff employs statistical regression analysis of 29 German regions and comes to a conclusion that the innovation performance is in positive correlation to the heterogeneity of the production structure, in which diverse business, professional and knowledge cultures get together.

A cultural dimension of economic activities – often spatially bounded – is not a new subject of social inquiry. Its analysis was in the centre of interest in the work of classical authors, such as Max Weber. What is persisting is the methodological difficulty with embracing the much ambiguous and multidimensional concept of "cultural dimension" – Gisela Welz justly refers to a predominant conception of culture as a "residual category" in economics. Secondly, Weber and his modern followers paid attention to cultural aspects of economic performance in great national and religious groups, while the globalized knowledge processes accentuate the micro-level, at which the processes of the transfer of knowledge and culture and the processes of cultural homogenization and heterogenization, of conversion of tacit and explicit knowledge, primarily take place nowadays.

Of course, the anthology cannot – and it does not – make a claim to provide an exhausting and complex analysis of the problems under investigation. We can find certain heterogeneity and incomprehensiveness in it, which the authors themselves often find in the very subject-matter of their analyses, but even here it is a dimension of creativity. It is also a sign of the authors' sensitivity with which the often surprising interplay of knowledge and culture is tenaciously disclosed in this anthology. The paradoxes and destructions of expectations are described cogently: the significance of the processes taking place in micro-structures and at the individual level is increasing rapidly in a period dependent on the decision-making of supra-national global actors; the relevance of tacit knowledge is growing intensely in a period of the explosion and general attainability of codified knowledge; new – both geographic and structural – places of despair and oblivion are formed in a period that opens possibilities of educational and personal development. Taken together, this anthology does justice to the current co-evolution of culture, knowledge, and space with its characteristic spontaneous variability, unevenness, unpredictability, and creative chaos. We can find many questions in this book: the authors formulate questions that should be elucidated in subsequent research in successive steps. We can say that they are, essentially, outlining a new research programme. In this phase of asking questions, the research is generally stimulating and provocative in real terms.

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