

Reviews/Comptes rendus

Innovations, Institutions and Territory: Regional Innovations Systems in Canada. J. Adam Holbrook and David Wolfe. Montreal and Kingston: McGill-Queen's University Press, 2000. ISBN 0-88911-891-4, \$22.95.

This book consists of a collection of papers which were presented at the first national meeting of the Innovation Systems Research Network in May 1999. A brief introduction summarises the regional perspective in innovation studies, and the book is then divided into three parts.

The first part, which consists of one paper, justifies the publication of the book and makes it of particular relevance to any student of regional innovation systems. In it Staber and Morrison take a hard look at the literature dealing with industrial districts -- a term which they use widely to incorporate research on territorial systems of production, including the most recent version of this concept, regional innovation systems. They conclude that most research in the area suffers from major flaws: in particular they point out that the research is often descriptive, fails to define its terms tightly, and tends to draw general conclusions from particular cases. In many ways their paper raises similar points to those made by Markusen (1999) in her comment on 'Fuzzy Concepts, Scanty Evidence and Policy Distance' in *Regional Studies*, applying the critique to the study of innovation systems.

The remaining two sections of the book can be read as cases in point of Staber and Morrison's critique. Indeed, despite the interesting cases studied and observations made, one is left with a number of key questions concerning the very premises underlying the articles and the book themselves.

The first of these questions is that surrounding innovation. What is it? This seemingly basic and central question is not addressed. One example of innovation, given in the sixth chapter, is "the contractor in his office trying to figure out how to implement the engineer's or architect's ideas": if this is innovation, then the concept is so wide as to include anything except the most automatic of behaviours, and as such loses its usefulness as an analytical concept and as a lever for policy.

For a concept such as 'innovation' to be useful, it must be recognised that innovation is relative: what is innovative within one company may be routine within another. Therefore much 'innovation' may be normal adaptation of establishments to the on-going evolution of the economy: and although this

adaptation is important, it is mundane -- as illustrated by the example given above. Once this relativity is recognised, a host of problems arise: what is innovation to be measured against? How does one differentiate between adaptation on the one hand, and more radical innovations on the other? From a geographic perspective, can the import of an existing idea into a region be considered innovation -- or is it merely catching up? Is catching up innovation? In sum, the concept central to the book remains undefined -- although in fairness it should be emphasised that this lack of definition pervades the literature. It should also be pointed out that some of these issues are recognised, but remain unresolved: for instance the Oslo Manual (OECD 1997) narrows down the scope of innovation to its technological dimension at the firm level but the concept still remains unclear.

A second key question is that of history: research on industrial districts is generally traced back to Piore and Sabel (1984), and that on regional innovation systems to Lundvall and Cooke (Cooke 1998) in the early nineties. Admittedly some of the key concepts are attributed to Marshall (1890) and Schumpeter (1911/1934), but the failure to integrate the wealth of other analyses on the subject implicitly suggests that the study of innovation, and the inclusion of institutional considerations, are novel. This is not so: in the 1950s, for instance, a rich and well documented vein of research dealt with technological change (Solow's residual, 1956), the role of institutions and knowledge in promoting growth (Lewis, 1955), and the link between social processes and territory (Myrdal 1957). From Toynbee (1884/1962) to Toffler (1970), the last century has been rich in discussions on innovation, institutions and growth. Whilst renewed interest in these matters is certainly not to be deplored, an assessment of what is actually new in innovation studies is called for, lest it be discovered that innovation is, in fact, old hat.

A third and related topic is policy relevance. Bearing in mind the difficulty in defining innovation, and the fact that technological change, institutions and knowledge have been recognised as important conditions for growth on a number of occasions during the last century, is there enough meat on the bones of the new innovation research to justify major policy orientations? Staber and Morrison's results suggest not yet.

Nimjean and Landry (Chapter 5) point out that there is a need for more comparative and comparable research before policies can be formulated, mirroring some of Staber and Morrison's points. They also highlight another key consideration: the culture clash between researchers, who are aware of the need for rigour, and policy makers, who are searching for 'usable' results. In response to this demand for 'usable' results (encouraged by the recently fashionable discourse on the new economy, the knowledge economy and innovation) tentative results pertaining to innovation systems may have been translated -- too hastily -- into policy. The usefulness of a historical perspective is again evident.

A final consideration which underlies the contributions but which is not clearly dealt with is the role of territory. Given that innovation, however de-

fined, is important for economic growth, is there a clear basis for suggesting that territory plays an essential role? It is possible that innovation is a-spatial (it can occur anywhere and at any time, by way of international networks, individual genius, or chance) but that economic growth, facilitated by agglomeration economies, infrastructure, institutions and so on, is to some extent territorial. If this is so, then the study of regional innovation systems may benefit from clearly differentiating between innovation itself (possibly a-spatial) and the exploitation of innovation (to some extent spatialised).

In sum, this collection of papers is an excellent illustration of the current research in Canada on regional innovation systems. It follows in the wake of similar research conducted primarily in Europe, and, for the time being operates on the same assumptions and tends to reproduce the same flaws. The book is stimulating because the first chapter clearly articulates the methodological and conceptual questions which arise, in diffuse form, throughout the rest of the book. It illustrates the dangers which currently inher e in implementing regional development policies on the basis of as yet unsubstantiated hypotheses, and points to some fundamental research questions which remain to be explored.

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References

- Cooke, P. 1998. "Introduction: Origins of the Concept", in *Regional Innovations Systems*. H.-J. Braczyk, P.Cooke and M.Heidenreich (eds.). London: UCL Press.
- Lewis, A. 1955. *The Theory of Economic Growth*. London: George Allen & Unwin.
- Markusen, A. 1999. "Fuzzy Concepts, Scanty Evidence, Policy Distance: the Case for Rigour and Policy Relevance in Critical Regional Studies". *Regional Studies*, 33: 869-884.
- Marshall, A. 1890. *Principles of Economics: An Introductory Volume*. London: Macmillan & Co.
- Myrdal, G. 1957. *Economic Theory and Underdeveloped Regions*. London: Duckworth.
- OECD. 1997. *The Measurement of Scientific and Technological Activities: Proposed Guidelines for Collecting and Interpreting Technological Innovation Data*. Paris: OECD.
- Piore, M. and C. Sabel. 1984. *The Second Industrial Divide*. New York: Basic Books.
- Schumpeter, J. 1934. *The Theory of Economic Development*. Cambridge: Har-

- vard University Press (note: first German edition published in 1911).
- Solow, R. 1956. "A Contribution to the Theory of Economic Growth". *Quarterly Journal of Economics*, 70: 65-94.
- Toffler, A. 1970. *Future Shock*. New York: Bantam Books.
- Toynbee, A. 1962. *The Industrial Revolution*. Boston: Beacon Press (note: first edition published in 1884).