Ph.D. Thesis Review

"Regionální rozvoj a inspirace z jiných disciplin: možnosti aplikace konceptů evoluční biologie na vybraná témata regionálního rozvoje" by Lucie Jungwiertová

Přírodovědecká fakulta Univerzity Karlovy, Katedra sociální geografie a regionálního rozvoje a Université Lumière Lyon 2, École doctorale: Sciences économiques et gestion

Evolutionary biology concepts represent one of the most interesting sources of inspiration for evolutionary and institutional economics. The same phenomenon can be observed also in the field of evolutionary economic geography. However, as stated by the author of this Ph.D. thesis, while economics derives benefit from evolutionary biology directly, evolutionary economic geography relies on intermediary role of economics.

The main objective of this Ph.D. thesis consists in an attempt to apply hitherto not applied evolutionary biology concepts to the selected themes of regional development without intermediary role of economics. The background of this thesis is that direct transfer of evolutionary biology concepts without "economic filtering" can enrich selected themes of regional development.

- L. Jungwiertová's Ph.D. thesis consists of the following parts:
- I.1 Introduction
- I.2 Theoretical framework
- I.3 Application of selected evolutionary biology concepts to the selected themes of regional development
- I.4 Conclusions

Chapter I.1 provides an introduction to the thesis and outlines the goals of this study.

Chapter I.2 presents theoretical framework of the thesis. The author underlines the role of analogies and metaphors for the transfer of evolutionary biology concepts into the domain of regional development. Further, existing applications of evolutionary biology in the field of economics as well as in the sphere of geography are discussed widely.

Chapter I.3 deals with application of selected evolutionary biology concepts to the selected themes of regional development. In essence, the transfer of appropriate evolutionary biology concepts into the realm of regional development was based on the identification of similarities and differences in both examined disciplines.

Individual biological concepts and principles that turned out to be useful for regional development issues were classed under the following complex units:

- (i) adaptation,
- (ii) co-evolution,
- (iii) selection,
- (iv) speciation.

Proposed applications of evolutionary biology concepts are supported by case studies related to regional development. At the end of every subchapter, there are quite lucid tables summarizing the applications of evolutionary biology concepts in regional development.

Chapter I.4 provides the results and findings of this study.

The thesis is well written and well organized and the same applies to ample bibliographic resources. In spite of the fact that this study fulfilled its aims, it should be still perceived as a point of departure for further researches just for the sake of truly complex character of examined problems. Moreover, weak theoretical and methodological background is symptomatic for both evolutionary economics and evolutionary economic geography.

Below are some remarks and questions concerning shortcomings that occurred in this Ph.D. thesis:

- The objective of this thesis is clear, nonetheless the author omitted explicitly formulated hypotheses and research questions.
- As already stated, the key methodological concepts used in this Ph.D. thesis were analogies and metaphors. This provokes the question whether analogies and metaphors are sole concepts suitable for this work?
- Subchapter I.2.2: it is possible to add also increasingly popular conception of noosphere.

- Subchapter I.2.2.1 lacks the coherence.
- Page 68, 2nd paragraph: there is an assertion that we can distinguish neoclassic versus core-periphery conceptions of regional development. This requires a thorough explanation.
- Page 77, 3rd paragraph: territorial and sector perspectives should not be blended.
- Page 90, 3rd paragraph: the whole paragraph deserves further elaboration.
- Page 103, 2nd paragraph: the reference to Nelson (1995) is not included the final list of references.
- Page 113, 2nd paragraph: grammatical mistakes.
- Page 127, 5th paragraph: rather disputable idea about specialized institutions monitoring the quality of environment. Does it hold true for old industrial regions in Central and Eastern Europe?
- Page 136: the proposed matrix serves rather as a starting point for further research.
- The author should be cautious about the classification of barriers related to regional development and sources of these barriers.
- From formal perspective, the numbering of the contents is not ok. There should be
 "I.2.1 Možné způsoby aplikací" instead of "I.1.1 Možné způsoby aplikací" as well as
 "I.2.1.2 Rámcový popis způsobu aplikací vybraných konceptů v disertační práci"
 instead of "I.1.1.1 Rámcový popis způsobu aplikací vybraných konceptů v disertační
 práci".
- From time to time some typographical errors appear.
- Schemes No.4 and No.5 seem to be too simplified.

Above mentioned questions and remarks do not lower the original contribution of this Ph.D. thesis.

In sum, I recommend acceptance of this Ph.D. thesis towards the attainment of a Ph.D. degree in human geography and regional development by Lucie Jungwiertová.

Ostrava, October 30, 2009

Jan Sucháček

Associate Professor

Department of Regional and Environmental Economics

VŠB-Technical University of Ostrava