Innovation pressure: reflections on my PhD studies

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Introduction: my path to innovation studies



Figure 1. The reality of a PhD. student. (source: PhD Comics 2008).

This article is about me and my process of being a PhD. It is about my study field and its relations to the world of research and geography. It is also self-reflection about me as a researcher and a geographer. The aim of this article (and soul-searching) is to tell a story about one process behind the scientific articles and The Thesis. This is a case study and cannot be generalised as such. However, I hope my example shows that it is not always easy to do a research, sometimes it takes time but hopefully in the end, you know what you were doing and what is our identity as a researcher.

My path to the world of geography was not straight. In high school I was interested in everything, and it was quite annoying that nobody said already then that geography is the field for many options. So, I did a short trip to the world of occupation therapy before I ended up in the department of geography, University of Oulu in autumn 2000.

Already at the beginning of the master's studies it was obvious for me that I am going to study applied geography and planning. I was already then interested in society and development of regions. Besides compulsory statistics, my minor subjects were economics and sociology that helped me to define my interests to economical development of regions and societies. Because my goals and targets were clear I finished my studies quite quickly in four years. I started my PhD theses straight after finishing master's studies. Again, my goals were clear: to write my PhD thesis about the subject that I already knew from my previous studies and master's thesis. At that time everything was easy. I got funding and I knew my study field. But then I started to think ... And thinking made things complicated. Now, when I am finishing the Thesis, I have also found some answers to my questions (Table 1). However, there are still things to wonder: my ambitions, my identity as a researcher, my specialities.

Innovation studies and geography: my identity as a geographer

The theme of my PhD thesis sounds like words from a bingo game. I study innovation policies and systems in peripheral (or more nicely less favoured) regions. I am interested in economic development and enhancement of it in Northern Finland. My study is loaded with fancy words like high-tech, innovation, interactive learning, triple helix, cooperation, networking, social capital, trust and competitiveness to name a few. The challenge is to make the words to give more meaning than they in policy discourse do. My ambitious goal in my theses is: to understand the aim of the innovation based regional development policies (why every region is supposed to develop through innovativeness); to increase understanding about innovation policy and systems in peripheral regions (if those regions are developed through innovativeness, what should be taken into account in measures); to find out how innovation policies (based on theories, e.g. RIS, triple helix) are implemented in institutionally thin regions; to discover the strengths and possibilities of peripheral regions in innovation

Table 1. Some questions and probable answers

Question	Probable answer
What is science?	It depends who defines it.
Am I stupid when I do not understand something or my articles are not published?	No, you just feel like it when you are talking to people who have more experience about the study field or research. Publication is another thing – your study might not be suitable for the journal.
Is there any point in doing this?	It depends what are your goals.
What is my contribution to the science and the "real world"?	Hopefully this is clarified in the PhD process. Do not expect too much.
Am I supposed to work 24 hours a day?	Sometimes it feels like it. In the real world, it is not possible.
Am I lazy when I cannot do anything?	It depends. If you are stuck with your research, doing nothing can be helpful. But do not make a habit of it.
Do "real" researches have a life?	Actually they do. Some even have families.
If I am not interested in putting every time I have in research, can I have a job after PhD theses?	If you put all the time you have in research you ended up overstressed before graduation. But, nowadays, you have to be flexible when the deadline is approaching.
Am I over-educated to have a job?	Probably not, I am positive in this point.
Am I not crateful enough to have a possibility to write PhD theses because I ask these questions to my self?	These questions are about you and your research. It has nothing to do with your supervisor or department. If you do your best, respect your supervisor as well as other colleagues and try to make your working environment as pleasant as possible to yourself and your colleagues, you are not in dept of gratitude to any one.
Am I thinking too much?	Yes, just stop thinking and finish your PhD Actually, sometimes thinking too much prevent from doing research. When you are stuck, just do something, even it does make any sense at that point.

based economic development; and to discuss if the theories, based on the examples of "core" regions, are suitable for less-favoured regions. So far I have studied national innovation policies and regions in them (Suorsa 2007), triple helix and Multipolis network in Northern Finland (Jauhiainen & Suorsa 2008), and the role of intermediaries in the innovation activities and product development of high-tech firms in Northern Finland (Inkinen & Suorsa 2008).

My topic sounds to be more about economics than geography. Actually, first time I became interested in economic development of regions was in economics class. However, also in economics class I became aware of my identity as a geographer when a professor criticized that economic geographers did not sufficiently take economy into consideration. That might be true – but I also like to pay attention to society, policies, culture, regional differences, locations etc. that economics does not consider. The distinction between economics and economic geography might be just in my mind, but I like to look at the big pictures and understand phenomena and processes behind them. I do not like to make models where I have to oversimplify things or generalise too much. For me, there are too much uniqueness and coincidences in the world to do such things.

As the reader might already have noticed, my topic is related to economics, especially to evolutionary economics where the idea is that economic as well as other forms of development takes paths ("path-dependency"). This idea makes sense especially in learning: when you learn something from some specific field, it is easier to learn more about it. When your knowledge stock increases, the easier the learning and also creating new ideas become. If you just sit alone thinking to yourself, do not discuss with anybody or read anything new, your ideas do not develop and the result is "lockin". The same processes happen in regions that specialize in certain industries. At first there are firms in certain fields that might cooperate, then education system starts to support local firms. Also research organisations might concentrate on these fields. The stronger the cluster of the industry become, the more attractive the region becomes in the eyes of the actors in the same field. At least, that is the case in theories. However, if the regional actors do not cooperate with actors in other

regions or internationally, the threat is lock-in (e.g. Kautonen & Kolehmainen 2001). Innovation policy, that also use the same fancy words as I do, tries to enhance the learning ability of countries (national innovation policy) and regions (regional innovation policy) (Morgan 1997). However, in policies it is often forgotten that regions are different. If the knowledge stock in certain field or industry (e.g. biotechnology) is missing, the measures targeted to that field are not effective. Therefore regional strengths should be taken into consideration (Oughton & al. 2002).

In this article, I am not going into details of the theories and concepts I use. Of course, they guide my thinking and help me to describe things that I want to describe. Sometimes theories are frustrating because people tend to interpret (what is social capital) or describe (what is regional innovation system) them differently. And what sometimes bugs me is that theories forget the people. Regions are not actors in innovation, firms do not learn, higher education institutions do not cooperate – it is the people in regions, firms and institutions that act.

Balancing between theories, policies and "the real world"

Besides challenges in theories, I have trouble balancing between theories, policies and "the real world" (e.g. the world of enterprises). At least theories and policies use the same fancy words but sometimes they interpret them differently (e.g. "innovation system"). Occasionally, I wonder whether the terms in theories and policies should mean the same things especially when policies are based on theories as in the case of innovation systems or clusters. Sometimes I just think that it does not matter, theories and policies as well as politics are just words.

This leads to another challenge in my research field: whose reality am I talking about; is somebody right? The subject is huge. Therefore I cannot know everything. If I wanted to be perfect in my field, I should know a lot about different industries (their organisation structure, production, products, use of knowledge etc.), different policy fields (how they affect on innovation, regions and economy), research institutes (study and research fields, cooperation traditions), regions (history, industrial structure, culture, social capital) as well as about the people who affect

on the functioning of the innovation systems in my study regions. Of course, this is not possible. Therefore I have selected a narrow field to my studies. I can explain my reasons for defining my research questions or topics. My aim is to get big picture of my study regions but the main goal is to understand a few things deeply.

At the beginning of my PhD studies I had difficulties when my goals were not so clear. I had presentations where I got comments from people who thought my results were wrong or I had talked with wrong people who knew nothing about the "reality". That upset me. However, now I am happy to say that I can take the critique but I can also defend myself and argue why I have selected the topics I am talking about and why I interviewed certain people. Anyway, is there a thing called "absolute truth"? I believe that the aim of research is to bring different aspects to certain topics and open up new ways to think. That can cause innovations - even in the minds of regional developers or decision-makers.

There are also paradoxes in my research. The ones I like most are the idea of "death of distance" because of ICT and in the same time the process of centralisation of economic activities (Morgan 2004). The other thing is the growth of competitiveness and supporting winners (industries, firms, regions) and big units of higher education, on the other hand the emphasis on balanced regional development in national innovation policy (Suorsa 2007). I do not have answers to these issues – sometimes I am just wondering about them.

Conclusions: life after PhD Theses?

At this point when I am finishing The Thesis, it is easy to look back and see the process that I have gone through. Now I know what I have learned about the research (what I should have done), about the study field (what I should have studied) and about me as a researcher (how I learn) and a worker (I need timetables...). I feel a bit frustrated – now I know things that would have helped me at the beginning of the process. But on the other hand, the process continues. The life does not end after PhD thesis. And I know this is not the top of my career because I believe that my speciality is something that helps me become employed in research community as well as in

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regional development.

As I said before, my aim is to bring understanding about innovation related regional policy in peripheral regions. This is something that has not been studied. Finland is an interesting case in innovation discussion - it has been successful in international competition especially in ICT. On the other hand, the regional imbalances grow. There is also a mismatch between balanced regional development and gaining national competitiveness (Jauhiainen 2008). I cannot say which goal is better - to help all regions to develop (no matter what) or to concentrate on successful regions and industries and be competitive in global markets even though this might cause polarized regional development. The aim of my PhD is not to give straight answers - there is not only one truth in these things – but to give something new to think about. The regional development models that are developed in successful regions, like Silicon Valley or Third Italy, cannot be copied in Northern Finland. The challenge in models for successful regions is that they concentrate on technological innovations. In less successful regions, broader understanding of innovation is needed in order to be able to support innovativeness of enterprises that utilize local possibilities and strengths (e.g. nature, local culture, natural resources) in products or services. Therefore, there is a need to develop new models in our conditions. I am sure that research that gives insights into the region and innovation policy measures in it will give ideas to policy-makers as well as regional developers.

References

- Inkinen, T. & Suorsa, K. (2008). Intermediaries in regional innovation systems. Hightechnology enterprise survey from Northern Finland. Submitted manuscript.
- Jauhiainen, J.S. (2008). Regional and innovation policies in Finland – towards convergence and/or mismatch? *Regional Studies*, vol. 42, 1031-1045.
- Jauhiainen, J.S. & Suorsa, K. (2008). Triple Helix in the periphery: the case of Multipolis in Northern Finland. *Cambridge Journal of Regions, Economy and Society*, vol. 1, 285-301.
- Kautonen, M. & Kolehmainen, J. (2001).
 Näkökulmia oppivan talouden alueelliseen innovaatiopolitiikkaan. *In* Sotarauta, M.
 & Mustikkamäki, N. (edit.): *Alueiden kilpailukyvyn kahdeksan elementtiä*, 77-108. Suomen kuntaliitto, Helsinki.
- Morgan (1997). The Learning region: institutions, innovation and regional renewal. *Regional Studies*, vol. 31, 491-503.
- Morgan, K. (2004). The exaggerated death of geography: learning, proximity and territorial innovation systems. *Journal of Economic Geography*, vol. 4, 3-21.

- Oughton, C., Landbaso, M. & Morhan, K. (2002). The regional innovation paradox: innovation policy and industrial policy. *Journal of Technology Transfer*, vol. 27, 97-110.
- PhD comics (2008). Hope. http://www.phdcomics.com/comics/archive.php?comicid=685>.
- Suorsa, K. (2007). Regionality, innovation policy and peripheral regions in Finland, Sweden and Norway. *Fennia*, vol. 185, 15-29.