

RC11 - Science and Politics



Standing Group on Politics and Technology

Berlin, 20 - 23 October 2016

IG Metall Bildungszentrum, Am Pichelsee 30, 13595 Berlin

Diversities of Innovation

This seminar is addressed to researchers engaged in their work on a **doctoral thesis** or working on a **Master's dissertation in the field of innovation**.

Participants will have an opportunity to learn about, and discuss, a range of topics and approaches, as well as freely exchanging ideas about how to make use of different analytical approaches to the understanding of diversities of innovation. Thus, this seminar will enable participants to engage with and draw upon new and additional interpretations of innovation processes relevant to their own research questions, as well as engaging with new areas of research discussed within the seminar programme.

This seminar builds upon leading edge of research and has a close relationship with the work under the umbrellas of the *IPSA Research Committee on Science and Politics (RC 11)*, the *ECPR Standing Group of Politics and Technology (SGPT)* and several research networks of the *Regional Studies Association (RSA)*. It also draw upon the proceedings of several ad hoc international workshops held previously, involving a wide range of international scholars from different countries and continents.

Consequently, this will allow for network building both among the participants and with the visiting professors, and may help to build such working relationships across countries and continents.

The seminar is based on a comparative and interdisciplinary approach, as is indicated by range of visiting professors participating.

Appropriate disciplines for participants are:

- social sciences (political science, sociology, public administration, policy research and some areas of ethnology)
- political economy, economic and social geography and economics
- other areas of research which can demonstrate a clear relationship to the subject of the seminar.

Deadline of application: July 18, 2016 - mail to Ulrich.Hilpert@uni-jena.de

Please send a short description about your academic background, your research work, your previous academic qualifications and diplomas, and how you expect to benefit from participation in the seminar. Limited funding for student accommodation or travel is available, if needed.

Link: http://www.vpw.uni-jena.de/ or http://www.ulrich-hilpert.de



Diversities of Innovation

Innovation is often understood exclusively in the light of economy, but, it is definitely the result of human labour and the relationship among individuals and groups. Some societies and governmental structures are clearly more successful than others: they perform divergently in innovation and employment and they refer to different opportunities of areas of research, new products and education. Thus, innovation fundamentally varies between countries – and public policies can be decided according to the societies' demands (e.g. energy technology, environmental technologies, facing climate change, advancing conditions of life, life sciences). A comparison between countries and continents will help to develop a full picture of innovation and their social basis.

Due to these divergences there are competences in particular areas and processes of innovation vary concerning their orientation in scientific research as a basis for new technologies and products. Innovation may also be based successfully on the application of such new technologies in more traditional industries (e.g. mechanical engineering, medical instruments) by supplying the customers' demand and allowing for new products. Finally, industries allow for a constant modernisation and improvement of products by using new technologies (e.g. automobile industries). Consequently, processes of innovation provide a rich diversity, which are identified in different countries and regions. Metropolises and cultures in addition allow for more opportunities – and may also indicate particular situations which are associated with the individual processes in question. In addition, societies vary and provide for divergences concerning gender and minorities to gain skills and higher education or to contribute creative ideas during their careers.

Such diversities demand for a better understanding based on a systematic discussion of typical processes and the basis they refer to. While governments play a fundamental role in enabling for such processes of innovation, a systematic understanding demands for an interdisciplinary discussion allowing for different analyses and contributions.

Globalisation and Networking

A map which shows where innovation is clustered worldwide is also a map of the location of the highly skilled and talented labour. New technologies, their creative applications or synergy across different areas of scientific research or technology development always create opportunities for the employment of particularly creative labour. This book explores the kinds of institutions and structures which need to exist to make sure that such skills are both offered and employed in particular 'islands of innovation'.

Networking Regionalised Innovative Labour Markets illustrates the theme of how existing concentrations of skills in scientific, technological and managerial elites are reinforced through inter-regional mobility using exemplars from a range of countries and regions. These include the US, UK, Italy, Germany, and Central and Eastern Europe.

Metropolises of Innovation: Motors of change and socio-economic development:

There is an increasing variation among regions and regional development in highly industrialised countries. Such regional division of labour is characterised by divergent types of regions which follow from the demands of different industries and services. The most modern, innovative and knowledge-based industries which propose future development, employment and economic growth are demanding efficient infrastructures regarding travelling, research, education and advanced services. Clearly, locations which are the home of outstanding universities, top research capabilities, well developed airports and a suitable service industry can place themselves properly in a highly attractive situation with regard to regional opportunities. Metropolitan areas in highly developed countries are potential locations where these most attractive processes can take place.

Employment opportunities for innovative labour are to be found predominantly in metropolitan areas. But metropolitan areas are not similarly successful in innovative development because some are oriented in services (e.g. financial, realty or high tech services) some show a strong industrial basis (traditional industries, specialised products or high tech industries).

Social Cohesion and Skill-Based Innovation for Higher Values Added in European Society

Advanced industries have shown strong positive effects inked to innovation and applications of new technologies in a variety of arenas. Such effects, along with high levels of exports resulting from the continuing demand for related products, are provided only from a small number of locations — metropolises and islands of innovation — in today's global economy. Such industries and locations mark growth and development in related countries, some of which represent relatively new economic powers, such as in East Asia, that reflect continuing structural change and industrial modernization.

Advanced industries encompass both new products and new technologies, indicating demands for highly skilled and educated workers. While referring particularly to human capital, such demands clearly indicate the convergence of economic and social processes that include a relatively well-paid workforce and high values added. Moreover, they speak to socio-economic structures reflecting social cohesion and the existence and growth of middle classes that possess such higher education and skills. Indeed, research on advanced industrial development has long indicated societal conditions that facilitate a growing middle class. Furthermore, in addition to a conjunction of techno-industrial innovation and an educated and skill-based middle class, government capacities and budgets have been identified as key forces in growth and development, especially in support of public policies concerning education, research activities, and technological progress.

Opportunities of Techno-Industrial Innovation in Different Socio-Cultural and Historical Situations: Diversities of Innovation

Processes of innovation are widely associated with western industrialised countries and the leading locations within these countries. National strategies were frequently merged with regional policies and opportunities of existing industrial structures. Consequently, there were regional centres of expertise and industrial clusters which did inhibit both the competences and the opportunities for further innovation processes. When such concentrations of capable industries and highly skilled labour force did develop during longer periods there were also advantages of socio-cultural situations, which became beneficial for particular processes and industries. New knowledge and new technologies were implemented in traditional industries (e.g. mechanical engineering, precision engineering, specialized steel and chemicals).

In addition to such technology-based innovation there were processes which were immediately related with new findings and breakthroughs in scientific research. Biotechnology, new materials, electronics generated new areas of innovation through fundamental progress in academic research. Such leading edge research was concentrated at the outstanding universities. Public research and technology programs did support such research and continued the focus on locations of leading universities and research institutes. Geographically this did establish Islands of innovation where start-up enterprises and those which did spin off from public research institutes and universities are forming a close relationship with leading edge research.

Professors engaged in the seminar

- Prof. Dr. Connie L. McNeely, George Mason University, Arlington VA, and American Academy, Washington DC
- > Prof. Dr. William O'Gorman, Director of Research, Waterford Institute of Technology, Ireland
- Prof. Dr. Xiangdong Chen, Beihang University, Beijing, China
- Prof. Dr. Paul M.A. Baker, Georgia Tech, Atlanta, GA
- Prof. Dr. Ulrich Hilpert, Friedrich-Schiller-University Jena and Academy of Social Sciences, London

Programme: October 20 - 23 2016

October 20

- 9:30 Welcome and presentation of visiting professors and participants
- 10:30 Reference to the events held in Oxford 2015 and Berlin 2016
- 11:00 A Rich Diversity of Opportunities for Higher Values Added: There is no best practice but many opportunities of innovation.

An introduction into an interdisciplinary field of research based on a comparative approach. Prof. Ulrich Hilpert

- 12:30 Lunch break
- 13:30 Self-positioning of participants and their research work with regard of Diversities of Innovation – Part I
- 15:00 Coffee break
- 15:30 Self-positioning of participants and their research work with regard of Diversities of Innovation – Part II
- 17:00 End of day one
- 19:00 Dinner

October 21

- 9:00 Innovation Demands for Social Change: The role of education and skills for innovative societies Prof Connie L. McNeely
- 10:30 Coffee break
- 11:00 Presentation of research work (PhD or MA) and discussion of research designs and empirical realisation
- 12:30 Lunch break
- 13:30 *Middle Classes as Drivers of Innovation: Opportunities based on a well-trained labour force* Prof. William O'Gorman
- 15:00 Coffee break
- 15:30 Presentation of research work (PhD or MA) and discussion of research designs and empirical realisation
- 17:00 End of day two
- 19:00 Dinner

October 22

19:00 Dinner

| 9:00 | From Mass Production to Higher Value Added Products: Industrial restructuring and a reorientation of social culture – Prof. Xiangdong Chen |
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| 10:30 | Coffee break |
| 11:00 | Presentation of research work (PhD or MA) and discussion of research designs and empirical realisation |
| 12:30 | Lunch break |
| 13:30 | National Strategies for Innovation: Divergent policies and instruments match existing situations – Prof. Paul M. A. Baker |
| 15:00 | Coffee break |
| 15:30 | Presentation of research work (PhD or MA) and discussion of research designs and empirical realisation |
| 17:00 | End of day three |
| 19:00 | Dinner |
| October 23 | |
| 9:00 | Presentation of Modifications: New hypotheses and new research questions. |
| | Research designs revisited – Part I |
| | Participants ask for consulting |
| 10:30 | Coffee break |
| 11:00 | Presentation of Modifications: New hypotheses and new research questions. |
| | Research designs revisited – Part II |
| | Participants ask for consulting |
| 12:30 | Lunch break |
| 13:30 | Presentation of Modifications: New hypotheses and new research questions. |
| | Research designs revisited – Part III |
| | Participants ask for consulting |
| | Coffee break |
| 15:30 | Networking: New contacts among participants and with professors. Opportunities for collaboration, exchange and publication Participants ask for consulting |
| 17:00 | End of day four |