

The Periphery and its Host Economy

Symbiosis, Exploitation or Burden?

Regional Studies Association Network

Peripherality, Marginality and Border Issues in Northern Europe

Conference

University Centre of the Westfjords, Ísafjörður, Iceland

September 3-4, 2012

Abstracts

Gylfi Magnússon, Professor, Dept. of Business Administration, University of Iceland.

Internal migration and population development in Iceland

This presentation provides an overview of the forces that have shaped migration and settlement patterns in Iceland since the country was settled towards the end of the first millennium. The initial pattern was to a large extent determined by the limited productive capacity of Iceland's farmland leading to small and fairly evenly spread farms on the Icelandic lowland with the interior of the country being uninhabitable. This pattern was then fairly stable until the early 19th century with other industries than traditional farming making little progress. Having more or less missed the industrial revolution the Icelandic economy first started modernizing when the fishing industry started developing beyond its traditional and limited scope towards the second half of the 19th century. This and other developments led to growing urbanization in Iceland with people leaving farms for fishing villages that were scattered around the Icelandic coast. The fishing industry peaked in relative importance in the first half of the 20th century. Subsequently Iceland experienced a second migration pattern, now centered on the capital region that became the national hub for transportation, government and private sector services, trade and manufacturing. At the same time the Icelandic economy experienced dramatic growth, transforming Iceland from one of the poorest countries in Western Europe to a fairly affluent country, by any standard. This continued into the 21st century with the farm population continuously shrinking, both in relative and absolute numbers, and many fishing villages starting to shrink as well, at least in relative if not absolute terms.

Þóroddur Bjarnason, University of Akureyri. Contact: thoroddur@unak.is

Planning for decline? The restructuring of Icelandic fishing communities

In a span of a hundred years Iceland was transformed from one of the most rural countries in Europe to one of the most urbanized at the beginning of the 21st century. While the growth of the Reykjavík capital region is the most impressive feature of this development, urbanization has profoundly transformed all regions of the country. In addition to the introduction of trawlers, the installation of engines in small boats previously driven by oars and muscle power made the fishing and fish processing a potentially year-round occupation for anyone willing and able. In an overpopulated farming society this meant independent living and family formation was no longer predicated on land ownership. Young people all of the country migrated the shortest distance from farm to shore and fishing villages mushroomed where many migrants were able to maintain social relations with family and friends in the farming community. Technological advances in the fisheries provided further growth spurts of fishing towns during the late sixties and early seventies, but overfishing and the eventual collapse of important fish stocks spelled doom. Some fishing towns were abandoned forever while others embarked on a slow course of long-term population decline. The introduction of tough fishing limits and individual transferrable fishing quotas in the eighties and nineties further accelerated this process. Entire villages could lose their right to fish if owners of fishing companies chose to move or sell their quotas in an open market and the amenities of modern society became a powerful magnet for young people and women in particular. In a Darwinian struggle for survival, most larger towns with more diversified economies have grown while closeby small fishing towns are becoming suburbs of larger towns and the more remote villages continue to inch towards extinction.

Sigríður Þorgrímsdóttir, The Icelandic Regional Development Institute.

Contact: sigga@byggdastofnun.is

Communities with long-term severe depopulation. A report of The Icelandic Regional Development Institute on depopulation in Iceland published in June 2012.

The report is based on interviews with local governments and directors of main businesses, and on statistical information about population development, and an attitude survey amongst inhabitants 20-39 of age.

The decline is in the northwest, the northeast and southeast parts of Iceland. The paradigm was 15% decline or more, in 15 years period, 1994-2009. Under those fell 30 municipalities out of 75, with 27 thousand inhabitants.

In many of those communities fishing industry is the most important sector and in some places the communities' existence depends heavily on one big company. Other common factors are problems concerning transport, long distance to the capital and lack of variety in the economy. There is a tension between regional Iceland and the capital area, where 70% of Icelanders live. In most communities outside of the capital there are more men than women and lack of young people.

Hanna Sommer, IRS Leibniz-Institute for Regional Development and Structural Planning, Erkner-Berlin. Contact: sommer@irs-net.de

The recent making of peripheries in German medium-sized cities

In many European countries spatial disparities between growing metropolitan centres and shrinking peripheries intensify presently due to economic and demographic change. Based on six case-studies medium-sized cities it is shown that today's peripheries in Germany are not only sparsely populated, rural areas. While some rural areas off the metropolises are growing, many medium-sized cities especially in formerly industrialized regions get disconnected from economical and demographical development dynamics (Neu 2006). These dynamics are considered based on a new understanding of peripheralization as a socio-spatial process (Kuehn/Weck 2012, Keim 2006). This approach is based on an new understanding of peripheralization which opens a new perspective to describe and explain current spatial development in Germany: Peripheries are not specified by the distance to centres and the population density but by dynamical processes of social spatial production. Therefore the term of peripheralization refers not only to rural areas but also to towns and city regions. As a complementary process to centralization in metropolises, processes of outmigration, economical and demographical dependency and infrastructural disconnection can be distinguished (Vondernach 2006, Herfert/Osterhage 2011). In this paper, the making of periphery is not only analysed by factors of density and geographical position, but also by socio-economical and political factors. The new understanding of peripheralization focuses on the stakeholders' approaches of dealing with it and opens the perspective of de-peripheralization.

Michael Semian and Pavel Chromý, Charles University in Prague, Dept. of Social Geography and Regional Development. Contact: semian@natur.cuni.cz

The barrier of administrative borders to cooperation in inner peripheral areas, North-Western Bohemia

In the environment of Czechia we can recognize three main types of peripheral areas: outer, inner and structurally disabled. They differentiate in characteristic structure and therefore they are dealing with different problems. In this contribution we would like to deal with the inner peripheral areas in context of contemporary discourse of 'soft spaces' in regional planning politics and bring the examples from contemporary Czech practice. The inner peripheral areas in Czechia are differently broad areas usually situated alongside the administrative (NUTS III) borders. The areas on both sides of the border are dealing with the same problems, have very similar characteristics and potentials. The regional planning politics in Czechia are established on the NUTS III level, therefore, there are different attitudes to development planning on each side of the border of the 'same' area. This politics are complemented by other regional initiatives of 'soft space' character such as Local Action Groups or Voluntary Associations of Municipalities, etc. These initiatives should overwhelm the negative effect of regional borders through the cooperation of municipalities on both sides of the border. On the other hand even in the experiences of these initiatives the borders of NUTS III regions are clearly recognizable. Hence, the areas with the same problems and potentials do not experience one joint development plan as would be logical. This contribution is a part of a broader project, which deals with the formation of regional identity in areas with intensively changed landscape and its impact on the development of these areas in North-Western Bohemia region. Therefore, we are mainly focusing on the examples from this region.

Seminar: Community and Identity

Albertína Friðbjörg Elíasdóttir, University of Iceland, Life and Environmental Sciences Dept. Contact: albertina@uwestfjords.is

"Ísafjörður owns me and I own Ísafjörður" - Place attachment and place identity in relation to choosing where to live

Many research projects in Iceland have focused on the causes for the constant migration from the countryside to the capital area. These studies have shown that people seem to be seeking out certain aspects of living that they can obtain easier in the capital area, but little research has been done on why people do not move from the smaller settlements and also why people migrate out of the city.

This research is intended to look at precisely those aspects by researching place attachment and place identity among current and previous inhabitants of Ísafjörður. This site was chosen because of its long history, but also because of the personal relationship the author has to the place. The research is primarily based on research conducted outside of Iceland, as these theories have not been researched in Iceland before.

The research is based on qualitative research methods, but interviews were conducted with thirteen individuals that either currently live in Ísafjörður or have lived there before and live somewhere else today. They were also asked to take pictures of what they thought symbolized their relationship to

Ísafjörður. Interviewees were split up in groups depending on whether they were born and raised in Ísafjörður or had moved there as adults.

The findings show that interviewees show similar place attachments, but those who were born and raised in Ísafjörður have stronger place identity. There is some difference in what interviewees relate to in Ísafjörður.

Those who are born and raised are more likely to relate to nature while those who have moved to Ísafjörður are more likely to relate to the community. Findings show that people seem to feel strong place attachment to Ísafjörður. This research gives an insight into a new way of researching migration in Iceland, and provides a deeper understanding of the way small town inhabitants feel about their attachment to places than previous research in Iceland has.

Lotta Svensson, Swedish University of Agricultural Sciences and Söderhamn municipality, R&D Dept., Sweden. Contact: A.Lotta.Svensson@soderhamn.se

Young people eager to develop the rural areas - how do they arise?

In Söderhamn, a small Swedish town on the east coast - 270 kilometers north of Stockholm, there is a small community of researchers since the year 2000. The common focus is regional and local development, from different disciplines and from a bottom-up view.

I have been there from the start and my focus is young people's perceptions and experiences of growing up in small municipalities. Much of my research has come to deal with the tension between center-periphery related to class and gender - and the impact that the existing norms have to opportunities for young people and for regional development. My research has been incorporated into municipal politics and has partly been the basis for rather innovative decisions regarding youth-related activities in the municipality.

In my recent research project, I will examine the relationship between social sustainability and youth engagement and participation. My first focus is a group of young adults who started a Facebook page with a view partly to spread positive thoughts and knowledge about their municipality and partly to bridge the gap between political decisions and the inhabitants. These young adults are interesting because they differ from the groups of young people I had previously identified as either being perceiving themselves as resources, but plan to move from the municipality as soon as they can - or those who want to stay in the municipality, but neither they, nor the adults, think they have something to contribute in the public arena.

Anna Guðrún Edvardsdóttir, University of Iceland, School of Education.

Contact: age5@hi.is

Place and space for women in a rural area in Iceland

Social sustainability emphasises the interconnectedness of environment, economy and the individual's capacity to contribute to his/her own and the community's well-being, and a community's capacity to engage in collective action in order to improve and sustain a quality of life (City of Vancouver, 2005). More men live in rural areas than women and some research shows that women are more likely to move from a rural area to an urban one.

The aim of the presentation is to explore what happens when women in Iceland try to reinhabit their 'place' in the community by undertaking university studies through distance learning. My argument is that women use education to strengthen their status, place and space in a rural community. The findings show however, that because their study is mostly in the field of the private sphere of life, they only strengthen their status inside that field, not extending their action space within the community. On the surface it looks as if they are studying for themselves, but under the surface, it becomes clear that the area they choose to study fits the needs of the community; that is, a profession that is lacking.

I interviewed eight women all over the Westfjords area, who had taken a higher educational degree through distance learning, living in their hometown, and still living there. I also took interviews with four men to see if there were differences between the sexes. In particular I will consider job opportunities, access to natural resources and to decision-making processes.

Seminar: Economy, Society and Space

Helene Littke*, Olaf Foss & Daniel Rauhut*, *Royal Institute of Technology (KTH), Div. of Urban and Regional Studies, Stockholm, Sweden, **Norwegian Inst. for Urban and Regional Research (NIBR), Oslo, Norway. Contact: daniel.rauhut@abe.kth.se**

Services of General Interest and Regional Development in the ESPON Space

This paper is a spin-off of the ESPON SeGI project and aims at comparing the scientific literature and key EU policy documents on what impact services of general interest have in regional development. The study proposes to answer the following two questions: (1) what services of general interest have an impact in regional development in the scientific literature and in the EU policy documents, and (2) why do they identify different services of general interest as important for regional development? The method used in this study is a qualitative discourse analysis, which relies on scientific literature and official EU policy document.

The results indicate that services of general interest have a different assumed impact on regional development in the scientific literature and in the key EU policy documents. Eight out of the fourteen services of general interest analysed in this study are not mentioned or just indirectly touched upon in the studied EU policy documents.

Stuart Mc Intyre, Department of Economics, University of Strathclyde, Scotland.

Contact: s.mcintyre@strath.ac.uk

Personal indebtedness, spatial effects and crime: a comparison across the urban hierarchy

The recent recession has made understanding the relationship between economic conditions and crime crucial to public debate. In this paper we seek to understand the spatial pattern of property and theft crimes using a range of socioeconomic variables, as well as data on the level of personal indebtedness, for two regions of the UK: London (the capital city) and the North East of England (a peripheral region). Building on earlier, published, work in this area, this paper will contrast the regression results obtained in both of these regions. This allows a comparison of the covariates that are important in explaining the observed pattern of theft and property crimes, including an analysis of the spatial dimension of these covariates, between these two regions.

To understand the peripheral region aspect of this analysis, let's take one example: population density. For property crimes, higher population density is said to be negatively related by increasing the probability of detection; whereas, for personal theft crimes, higher population density is thought to be positively related as it increases the number of potential targets. In the case of a large city such as London, population density might show little variation, and thus population density may not have the impact that theory suggests. In contrast, in peripheral regions it will be the case that the much greater variation in population density compared to a large city such as London, suggesting that population density may play a different role in explaining the observed pattern of theft crimes.

Seminar: Regional Policy

Póroddur Bjarnason, University of Akureyri, Iceland. Contact: thoroddur@unak.is

Taxes, transfers and regional equity: The case of Northeast Iceland

In the span of just over two centuries Reykjavík was transformed from a tiny village with 307 inhabitants in 1801 to a small city of about 120 thousand, surrounded by a suburban sprawl of additional 80 thousand inhabitants. In the process, Iceland developed from the most rural country in Europe to one of the most urbanized countries of the continent with two-thirds of the population living in the capital region and the vast majority of the remaining population living in towns and villages around the coastline. The growth of Reykjavík in the early nineteenth century was triggered by the organized transportation of all institutions of cultural, social and political significance to the small village. The centralization of government, finance, commerce, media, education and culture in the capital of Reykjavík has proven instrumental to the modernization of a small, fisheries-based society. At the same time, the sharp dichotomy between the city and the countrysides has spurred intense public and political debate. The relative contribution of city and countrysides to the national budget as well as the geographical distribution of services and transfers has in particular been hotly contested. On one hand, many proponents of the „city-state“ model have claimed that the countrysides are economically unviable and a burden on the city, while others have argued that the public sector of the city is in fact a burden on the countryside. In this paper, a large-scale empirical investigation of taxes, transfers and public services in Northeast Iceland is presented. Results show that while residents of the Northeast contribute more to public services than they receive, agricultural subsidies and other transfer payments bring total

government expenditures close to parity for this region. The implications of these results are discussed in the context of the Icelandic rural-urban dispute.

Dirk Stelder, Faculty of Economics, Univ. of Groningen, the Netherlands.

Contact: t.m.stelder@rug.nl

European Peripheries: Accessibility Developments 1960-2010

According to the Territorial Agenda of the European Union “mobility and accessibility are key prerequisites for economic development of all regions of the EU” so transport infrastructure improvement is a key policy instrument to promote regional economic development in general. This paper tries to evaluate to what extent infrastructure policy has led to an improvement of the accessibility of peripheral regions relative to the core regions. The recent development of a historical database of European wide roads networks over the period 1960 – 2010 is discussed including the relative changes in accessibility over time for cities and regions in the core and the periphery. The results show that most peripheral regions have gained less from the general improvement of accessibility than the core regions.

Seminar: Regional Policy and Sustainability

Maria Vallström, Swedish University of Agricultural Sciences and Söderhamn municipality, R&D Dept., Sweden. Contact: maria.vallstrom@soderhamn.se

Living in the ruins?

The periphery is produced and reproduced as a mirror of the core, it’s dreams and nightmares, and always from the latter’s point of view. From an ethnographical perspective, however, it is important to search for other stories in the local communities. In my presentation I would like to address the consequences of mediated stories about “abandoned places” and the countryside in Sweden as a deep black hole (in literature it is called country noir). How does it feel, literally, to live in the ruins? I have worked in a research project with a group in Ljusne, Sweden, one of the “abandoned places” depicted by the researcher and photographer Jan Jörnmark and others.

A number of excluding and stigmatizing effects are created by the fact that places and sections of the populations, for example in the kind of postindustrial countryside I am studying, tend to be considered as future winners or losers, for example “far-seeing entrepreneurs” are often put in contrast to the “reactionary industrial mentality” of small communities.

For more than a year, we have worked in a project with a kind of focus-group method, called forskningscirklar, or research circles. We have discussed alternative interpretations of the “spirit of industrial society”, or “bruksanda” as a local story of the place, but of external origin and loaded with “black poetry”, as the ethnologist Per-Markku Ristilampi put it a while ago (concerning suburbs, 1994). But mostly we have been talking about history and thereby redefining the word “spirit of industrial society” as a question of belonging, resistance, coping, cooperation – and hate. All based on one principle – presence.

I would also like to discuss the unspoken political aspects of the relationship between the core and the periphery. How is class, power and resistance woven into stories about a place? Here I would like to include empirical notes from three “storytelling nights” in Ljusne and the nearby society of Norrsundet,

called “Ljugarbänk” (the Liar’s Bench). What stories are being told on this theme if we give the word to the inhabitants?

On the other hand it is important not to romanticize the “authentic” story of local inhabitants. There ARE awkward stories about gender and ethnicity, there are poor livelihoods and real problems, but it is the framing of all this experience in either glory or blackness I want to question. How does the complex story of peripheral postindustrial communities look and sound like, and why is it interesting for the main question of marginality? Or, to put it more in the edge, does peripherality exist outside the descriptions of it?

Ann-Kristin Ekman, Swedish University of Agricultural Sciences, Uppsala, Sweden.

Contact: Ann-Kristin.Ekman@slu.se

Beyond the village: Exploring the Importance of Social Networks for Rural Development

This paper deals with a small Swedish village. It has few residents, but by virtue of its external relations and networks it can be considered far larger. Despite being seen as a “dying village” (also the emic rhetoric), not least because of its small size, its social patterns are in fact rather complex. Temporary visitors, for example, make an important difference to the development and social life of the village. They are included in the extended networks of the village, which I have referred to as “the shadowed village” in this paper. I will show how people from outside the village in many ways have played an important role in the development and regeneration of the village. This will be illustrated with the help of two cases in which there has been attempts to turn the negative value of remoteness and marginality into an advantage. The first is an open-air museum of the logging era and the second the collaboration with a research project.

The core population of the village, made up of those persons most closely connected to the ownership of farms and forests, plays a decisive role in the inclusion and exclusion of certain people. The village balances between this strong core, important for its identity and continuity (stability), and outward openness, allowing people to come and go and new ideas to be integrated for the purpose of attracting economic resources (flexibility). However, control over local resources is a fundamental factor in determining the extent to which new ideas and innovations are developed. The complexity of internal and external social relationships and the relation between the forces promoting stability and flexibility in the village will be discussed in detail in the paper.

Allyson Macdonald, School of Education, University of Iceland. Contact: allyson@hi.is

Zone of sustainability: dream or danger?

Sustainability is a slippery concept and covers a range of phenomena, often place-based. A research approach to sustainability science has been developed at the University of Lund in which it is emphasised that problems of sustainability should be studied both by applying typical scientific methods and by using critical reasoning. Systems thinking is considered fundamental and the way in which the problems are studied has an influence on policy development and implementation. The team at Lund also emphasises that the understanding of sustainability problems can evolve from a multi-disciplinary approach to interdisciplinary and finally to transdisciplinary, in which multiple types of knowledge are recognised. Other researchers have talked of the ‘wicked’ nature of sustainability problems, in which solutions give rise to new problems.

This paper proposes a 'zone of sustainability' and introduces some of the properties of such a zone. The notion of a 'zone' is found in a variety of disciplines. In earlier interdisciplinary work on a project requiring the expertise of nuclear scientists and engineers the idea of a 'trading zone' was developed where a language was needed in order to trade knowledge. The 'zone of tolerance' has been identified as a phenomenon in the service industry, where the quality of service depends both on expectations and perceptions of clients. In education the 'zone of proximal development' was introduced by Vygotsky in the 1930s and addresses the potential for learning by individuals or groups. This concept has informed much research in socio-cultural learning and along with theories of change formed the basis of the idea of the 'zone of feasible innovation' which can be applied, for example, in self-evaluation and change management. Finally, development agencies have warned of the 'danger zone' when attention to reaching goals and establishing new infrastructure may endanger the maintenance of essential existing structures or services.

The value of this analytical discussion lies in further development of the notion of a 'zone' to guide governance and strategic management. The concept of a 'zone' invokes common understandings from different disciplines and facilitates a transdisciplinary approach that incorporates place, relationships, values and evidence. The zone embodies both dreams and danger.

Seminar: Insularity and Development

Anna Maria Pinna and Francesco Pigliaru, Department of Economics and CRENoS – University of Cagliari, Italy. Contact: ampinna@gmail.com

Country Measures of Geography linked to Insularity

In this paper we aim at putting together available indicators with new measures of geography as a first state nature for all countries in the world. We hereby consider geography as the physical and morphological characteristics of the land.

Data on land characteristics along different dimensions are already available since their use in earth science. We referred to the national aggregates of geospatial data collection on population, landscape and climate estimates (PLACE) by the Center for International Earth Science Information Network (CIESIN) in order to identify marginal regions due to extreme geography conditions (<http://sedac.ciesin.columbia.edu/place/datasets.jsp>).

Since such database and similar ones lack information for islands we constructed new indicators linked to the insularity condition. We started with collecting data for each island then we aggregated the available information at the country level. At this stage we decided to exclude from our calculations islands which are completely inhabited.

We can provide six starting measures of insularity: number of islands by country; percentage of the territory of the country represented by island territory (i.e. what portion of the state, consists of islands, in km²); isolation index1 weighted by the island's area (in km²); isolation unweighted index.; coastal index2 weighted by the islands area (in km²); coastal unweighted index.

Such measures can be composed in order to distinguish conditions due to insularity which are completely different, such as being a big island nation or being a group of many small islands composing a state.

In our knowledge all such variables are meant to have influenced economic development at the country level but we can consider them to be completely exogenous. Therefore they can be used as identification instruments in empirical papers on economic development where geography is called to play a role.

Fabio Cerina, University of Cagliari and CRENoS, Italy. Contact: fcerina@unica.it

Insularity and the New Economic Geography

What is the effect of insularity on regional and national economic performance? Does insularity represent a locational disadvantage at the regional and national level? In which sense? And, if this is the case, should the insular region be subsidized by the national government? Or, what is the optimal policy rule for a central planner willing to maximize residents' welfare at the regional and/or national level? We face these research questions from the viewpoint of the New Economic Geography (NEG) literature inaugurated by the so-called core-periphery model by Krugman (1991). We first survey the NEG theoretical and a bunch of papers that provide important insights for our research questions but none of them is able to capture and fully explore the implications of insularity in a NEG context. For this reason, in the second part of the paper we propose an analytical framework which we believe to be better suited to our aims. We then build a footloose capital model with 3 regions where region 3 (the insular region) is able to trade manufacturing varieties towards regions 1 and 2 at a permanently larger trade costs with respect to region 1 and 2 when they trade among themselves. We find that the dynamic properties of equilibria allocations are much richer and that although the insular region might be better-off for some parameters values because large transport costs protect insular firms from mainland firms competition, there is a wide range of parameters' values such that the insular regions enjoy a lower level of welfare with respect to the mainland regions. We also find that the best policy rule for a benevolent central planner will not necessarily be a reduction of transport cost but, rather, a direct subsidy to the industrial firms located in the insular region.

Laura Colini, IRS Leibniz-Institute for Regional Development and Structural Planning, Erkner-Berlin, Germany. Contact: colini@irs-net.de

Beyond the Periphery. Practicing Collaborative Territorial Development.

Although periphery has been usually understood in spatial terms as areas being at the margin of a territory in comparison to a central core, periphery can be a slippery concept and not a stable condition. Periphery can be rather seen as result of a process producing uneven development, being dependent on relational socio-political economic phenomena and dynamics of creation of multiple disadvantages at regional and urban scale (Brenner & Theodore 2005). In a willing to be cohesive Europe, issues of stabilization and equalization (especially in economic terms) have been at the core of the Eu policies. However, the idea of competitive regions as being the core of a supposed healthy development to which convergence regions considered as peripheral should catch up does not live to its promise in face of the current economic crisis: the growth faith from Lisbon Gotheborg agenda was not able to counteract the effect of the financial downturn. Within regions, cities of which some of them affected by actual or perceived peripherality, developed different strategies to counteract dynamics of peripheralization processes through different models of inter municipal cooperations depending on the formal structure of the state, administrative culture, legislation and incentive structures (Hulst R. & van Monfort A. et al., 2009). Moreover, regions have been increasingly associated with less formalized alliances around actors

networks (Clegg, 1997) sharing policy objectives at a particular time (Herrschelm 2009) and thus defining new policies for participative, shared, collaborative forms of territorial government.

The paper challenges the geographical polarization theory of core/periphery examining how different forms of horizontal inter municipal cooperation in actual or perceived peripherality can represent an alternative to improve the conditions of communities in social, political and economic terms beyond the concept of competitive neoliberal development. By looking at three case studies in Europe from Italy, Portugal and Spain, through the lenses of three regional practices of municipal cooperation focusing on ICT, cultural capital development and solidarity economy, the papers questions if those practices are in fact representing an opportunity for local government to engage in more accountable, viable and sustainable forms of governance counteracting processes of territorial peripheralization.

Seminar: Energy and Community

Richard Cowell, Gillian Bristow & Max Munday, School of City and Regional Planning & Cardiff Business School, Cardiff University, Wales. Contact: mundaymc@cf.ac.uk

Wind energy: Might community benefit provisions grow community ownership of renewable energy resources in the Celtic periphery?

The paper discusses the uses of community benefit provisions from large scale wind energy projects. While community benefits from on shore wind have often been used as a means of developing social acceptance the issue of longer term returns developing community resilience is particularly important given that across the UK, large scale wind farm development has often occurred in peripheral areas suffering from various dimensions of economic, social and environmental disadvantage.

Using case evidence from Wales and Scotland we show that there is a fairly common evolving pattern of community benefit provisions arising from interaction between the 'affected community', and the developer. While the flexibility of such schemes makes them popular with most companies and local communities (Cowell et al 2011), they can suffer from problems: arguably a measure of short termism, and with issues concerning the capacity of what are often small peripheral local communities to pursue more significant projects, including attracting match funding, and perhaps the capacity to work towards the development of community capital to develop local renewable resources. These issues have been brought more sharply into focus with the growth in size of community benefit provisions from the largest projects, and the need for larger developers to account for monies committed to such provisions. Finally communities face the challenge that community benefit funds are finite with the life span of larger wind projects around 25 years. One potential future is that benefit provisions leave affected communities with a lower carbon, locally-embedded energy system, supporting local employment. The paper using case evidence discusses whether there is scope for community benefit funds to lever this more strategic vision and the issues that need to be addressed.

Kristinn Hermannsson, Patrizio Lecca, Peter McGregor & Kim Swales, Fraser of Allander Institute, Dept. of Economics, University of Strathclyde, Glasgow, Scotland.
Contact: kristinn.hermannsson@strath.ac.uk

The feasibility and potential of seaweed as a source of bioenergy in a peripheral economy: The case of the Scottish Western Isles

Biomass is already widely used as a low-carbon source of energy. One of the main drawbacks of many bioenergy sources is that the energy crops displace alternative land use, such as for food. Responding to this criticism seaweed has been suggested as a source of next generation bioenergy. In this paper we explore the financial feasibility and potential capacity for using seaweed as a source of bioenergy in the Scottish Western Isles. We summarise available evidence and present scenarios for the local production of biogas from harvested seaweed. We argue that this approach could in principle power up to one fifth of homes in the islands. Furthermore, we explore the possibility of extending capacity through cultivation. The feasibility of the scheme is contingent upon external factors such as energy prices, transport costs of fuel, availability of infrastructure, complementarity with other sectors and subsidies. We analyse conditions in the Western Isles and illustrate how they affect the feasibility of the project.

Kristinn Hermannsson, Patrizio Lecca, Peter McGregor & Kim Swales, Fraser of Allander Institute, Dept. of Economics, University of Strathclyde, Glasgow, Scotland.
Contact: kristinn.hermannsson@strath.ac.uk

Modelling the impact of a macro-algae sector on the Western Isles: A Computable General Equilibrium (CGE) approach

In this work we evaluate the impact of a macro-algae sector on the economy of Western Isles. For this purpose the Social Accounting Matrix (SAM) for the Western Isles is extended to incorporate a macro-algae harvesting and an anaerobic digestion (AD) district heating sectors.

These two new sectors incorporated in the economy are very small compared to the rest of the economy. The Value Added in the Algae cultivation sector is 0.028% of the total Value Added while the Value Added in the Anaerobic Digestion sector is 0.001% of total Value Added. However, in the region there is ongoing local knowledge of macro algae harvesting and an existing set of accounts on which we can build our model. Furthermore the Anaerobic Digestion process is the technology that is closest to being operational at present.

We then calibrate the SAM in AMOS a computable general equilibrium (CGE) model originally developed for the Scottish economy. We run some shocks in order to measure the potential economic benefits, for the local community, of using Seaweeds to generate bio fuel via anaerobic digestion. The model assumes fixed labour supply and wage bargaining.

Only few CGE models have attempted to study the impact of biofuels in small regions. Examples can be seen in Kretshmeer and Peterson, (2010), Dixon et al., (2007) and Ignacuk and Dellink, (2006). Related studies use mainly Input-Output analysis (Swenson, 2006; Hodur and Leistritz, 2008; Cunha and Scaramucci, 2006; Kulišić et al., 2007; Low and Isserman, 2009). However the CGE framework allows for greater flexibility such as the possibility to impose supply constraints, endogenous prices, different treatment of production structures (input substitutions) and market imperfections.

**Kristinn Hermannsson, Peter McGregor & Kim Swales, Fraser of Allander Institute,
Dept. of Economics, University of Strathclyde, Glasgow, Scotland.**

Contact: kristinn.hermannsson@strath.ac.uk

Joint work with Eveline van Leeuwen (Department of Economics, Free University of Amsterdam) and Graham Clark (Department of Geography, University of Leeds)

The economic impact of bioenergy production in a multi-settlement island economy: A combined Input-Output and microsimulation approach

Due to a convergence of natural, economic and social factors the Scottish Western Isles are uniquely placed to pioneer the adoption of local bioenergy production from seaweed. Using an Input-Output model we estimate the employment, output and GRP impacts from the resulting substitution of imported energy with locally produced energy. The benefit of the Input-Output model is that it allows a clear identification of inter-sectoral and household linkages within the economy. This permits us to identify, not only direct impacts, but also subsequent rounds of indirect and induced impacts, as the new bioenergy sector sources inputs from other local sectors and workers' consumption expenditures increase.

The limitation of the IO-model is that it is a-spatial. This is a particular challenge in a geographic setting like the Western Isles, where the population is spread across several islands, with weak transport connections, which limits the possibilities of inter-island commuting. An established solution to this problem would be to spatially disaggregate the IO model to create a multi-regional model. This approach, however, has well known drawbacks. We propose an alternative solution, to link the IO-model with a spatial microsimulation model, which reproduces the known household attributes, especially those related to employment. By constructing a journey to work model, we are able to link those households to key-employers and employment centres. Thus it is possible to disaggregate the effects of job growth from the region, i.e. the outputs of the input-output model, back to the localities, through this employment household link. The paper concludes by illustrating the power of the methodology through a presentation of key-outputs, at different spatial scales.

Seminar: The PEMABO Network and Associated Research

Mike Danson* and Peter de Souza. *European Studies, University of the West of Scotland, Paisley, Scotland, **Economics Institute, University College of Hedmark, ÖSIR, Norway. Contact: michael.danson@uws.ac.uk, peter.souza@hihm.no**

Peripheral and marginal regional studies: a prolegomena