

## Abstracts

H. HALL AND P. HALL: "Decline and No Growth: Canada's Forgotten Urban Interior". During the 1996-2001 census period, almost half (45.0%) of the 140 urban areas in Canada witnessed population decline. Small urban areas were the hardest hit, while large urban areas all grew. Given this uneven pattern of growth, our research examined the English-language literature in eight Canadian journals to determine whether the issues of decline and no-growth in urban areas in Canada are being confronted in academic urban geography, planning and policy-related literature. Our approach and findings are reported in four sections. We start with a brief overview of the increasing unevenness in the Canadian urban system. We then discuss the journals selected for this research and our methodology for classifying the 275 articles obtained. The third section presents the results of our classification and identifies the key patterns and trends in the literature. We show that while implicitly recognizing the uneven geography of contemporary Canadian urban development, Canadian urban research is fixated on large metropolitan areas, with an emphasis on Southern Ontario. In the fourth and final section, we conclude with a description of the small number of articles that do discuss urban decline and no-growth either implicitly or explicitly. These articles recognize that most Canadian urban places will not grow in the future; they form a starting point for policy-making and planning that distances itself from the growth mentality. Our overall conclusion however, is that when policy-makers and planners seeking solutions for urban areas facing stagnation and decline turn to the literature they may be told why they are in decline, but they are offered no guidance beyond denial. The near total absence of explicit attention to decline and stagnation in the academic writing indicates an urgent need for further policy and research attention.

K. DELUSCA: [Marées de tempête et communautés à risques dans le sud-est du Nouveau-Brunswick : Cas de la communauté de] "Storm Surges and Communities at Risk in South-East New Brunswick : The Case of the Community of Pointe-du-Chêne". It is largely accepted that climate change resulting from human activities will most likely have severe impacts on natural and human-made systems. Among these systems, coastal zones have been considered very vulnerable. Most recent studies on the impacts and vulnerabilities of coastal zones to climate change have examined the average values of sea level rise. This

approach however does not take into account the potential damage due to extreme events such as storm surges. The objective of this project was to identify localities in the community of Pointe-du-Chêne, New Brunswick, that were flooded during the exceptional storm surge of January 2000 in order to develop new risk indicators of such events. The methodology included the integration of a high resolution digital elevation model coming from data generated from the Light Detection and Ranging (LIDAR), with flood scenarios, and cadastral and demographic information. The flood damage indicators generated from this study confirm that a large part of the community of Pointe-du-Chêne was effectively affected by this 2000 storm surge. The results confirm not only the incredible damage claims requested for this extreme event but also the need for the integration of climate change and especially the occurrence of extreme events in vulnerability studies of coastal zones.

L. J. LOPPACHER, W. A. KERR and R. R. BARICHELLO: "Regional Management of Diseases and Pests to Facilitate Canadian Exports". The rapid expansion of Canadian agri-food exports in recent years has provided significant opportunities and benefits for the sector but also resulted in vulnerability due to the possibility of loss of international market access in the event of a disease or pest outbreak. The beef industry's experience with BSE provided dramatic evidence of this vulnerability. One option for reducing the cost of disease-based trade disruptions is to create sub-national regions within Canada that are recognized as disease/pest free and, hence, able to export. Members of the WTO agreed to managing international trade in this way in 1995. However, effective implementation has proved to be difficult. This article explores the domestic efforts Canada has made to implement regional disease management systems and the international negotiations regarding importing countries' recognition of regionalisation.

P. GINGRAS, M. CARRIER and P. Y. VILLENEUVE : [Les coopératives forestières dans le développement économique et social des régions périphérique.] "The Involvement of Forest Co-operatives in the Economic and Social Development of Quebec's Peripheral Regions". Given that the economic and social spheres are increasingly being pitted against each other in modern societies, it has become imperative to evaluate the social impact of regional development strategies with the use of precise indicators. Forest co-operatives in Quebec represent a regional development strategy because they are considered a response of forest communities to economic insertion and to economic innovation. By using an novel approach centred on quantitative methods, this article measures social cohesion generated by Quebec forest co-operatives within their community, according to their level of economic innovation.

This article is divided into four major parts. The first explores the relation between social cohesion and economic innovation. Our methodological approach enabled us to create an average index of social cohesion according to the economic level of innovation of our sample forest co-operatives. The average

indices of social cohesion reveal that the more innovative forest co-operatives generate greater social cohesion than traditional co-operatives. This leads us to reassess the apparent contrast between the economic and social spheres within a regional development dynamic.

The second part identifies the social cohesion dimensions commonly shared by Quebec forest co-operatives according to innovation level or category. The interest of our statistical approach comes from its capability to define the nature or aspects of social cohesion observed among Quebec forest co-operatives according to their innovation level. We identified seven social cohesion dimensions commonly shared by all different innovation categories: the legitimacy of co-operative governance authorities, the strategic participation of members within their co-operative, the usual participation of members within their co-operative, equity among members relating to economic insertion, the insertion of members within the co-operative, and the mutual involvement of the co-operative and the community in community development. The third part of our research shows which social cohesion dimensions characterize each innovation category.

Finally, the fourth part measures the impact of each social cohesion dimension on the forest co-operatives' capacity to innovate. To this end, it appears that the members' capacity to be substantially involved, or to take an active role in the co-operative, particularly through committees and decisional and administrative authorities, constitutes a significant variable influencing forest co-operatives' capacity to innovate. The strategic participation of members within their co-operative shows greater involvement in key functions. Thus, with respect to the definition and direction of their common business organization, members in more innovative co-operatives play a more active role than members in traditional co-operatives. Concerning this last point, an ordinal regression analysis illustrates that the strategic participation of members within their co-operative has the greater impact on the capacity to innovate. This variable sets apart the more innovative forest co-operatives.

P. HANEL, S. LAROCHELLE, J.-P. LEBLANC and D. S. GBAGUIDI : [Effets économiques du Pôle universitaire de Sherbrooke, 2003-2004.] "The Economic Effects of the Sherbrooke University Pole, 2003-2004". The Sherbrooke University Pole draws together nine institutions of higher learning, university hospitals and research institutes. The extent and the quality of their services attract the majority of their students, many patients and important research funding from outside the region. The annual expenditures of the SUP surpassed one billion dollars in 2003/2004, of which about 64% was spent in Sherbrooke, 8% in the surrounding region of the Eastern Townships, and the rest in Quebec, Canada and abroad. In this study, we estimate the economic contribution of the SUP to Quebec, Canada and the metropolitan region of Sherbrooke. The economic impact of SUP's expenditures is estimated in three different ways. The first simulates in an input-output model the value added generated in Quebec and Canada by expenditures of member-institutions, their employees and students. The next two

estimate the economic impact of those expenditures on the economy of Sherbrooke. The first of the two (2a) evaluates the effect on the local economy of expenditures of member-institutions, their employees and students as observed in 2003/2004.

More than half of the students of the three colleges and two universities are attracted to Sherbrooke from the rest of Quebec, Canada and abroad. Similarly, many patients treated in the university hospitals and medical centres come from outside the region to receive specialized treatment. Research funding is obtained in competitive bidding from sources almost exclusively outside the region. In order to find the economic impact of those activities that provide services outside the region, we compare the existing level of services with a hypothetical situation in which the level and scope of educational and health services and research activities would be required to satisfy the needs of the regional population only. Thus, the second estimation (2b) simulates this hypothetical situation in which the post-secondary education facilities, hospitals and medical and research centres would provide services only to the population of the surrounding region. The comparison of the two scenarios gives an idea of the importance of the economic base constituted by knowledge services exported outside the region. Estimation of the multiplier effect by the "Minimum Requirements Approach" evaluates the contribution of SUP to the economy of Sherbrooke both in terms of additional revenue and employment.

Activities of the SUP and their direct, indirect and induced effects generated in the fiscal year 2003/2004 a gross static economic impact of \$1.027 billion to the GDP in Quebec and an additional contribution of \$130 millions to the GDP in the rest of Canada. Expenditures associated with activities of the University Pole bring an important contribution to the local economy. One dollar of expenditures related to activities of the SUP generates about 50¢ in the Sherbrooke economy. Three jobs in SUP maintain or create four additional jobs in the local economy. About half of the SUP revenues would not have existed if the quality and the scope of educational and health services provided by the SUP had not attracted students, patients and research funds from outside the region. Without these exports of knowledge services, the expenditures in Sherbrooke and their economic impact would be reduced by more than half.

C.J. MITCHELL: "Counterurbanization and the Growth of Canada's Rural and Small Town Municipalities: 1996-2001". Although population loss is the norm for many of Canada's rural and small town municipalities, approximately 41% did grow during the 1996 to 2001 period. This paper seeks to describe and interpret the contribution of "counterurbanization" to the growth of settlements that lie beyond Canada's urban areas. A custom tabulation of Statistics Canada data is analysed to describe spatial variations in the importance of this migration stream. Results reveal that although the movement of residents from Canada's largest (CMAs) and smaller (CAs) urban centres is occurring, it is not the sole migration path driving population growth in rural and small town municipalities. Moves between rural settlements are found to be the dominant form of migration taking

place in some of Canada's provinces and territories. Spatial variations in the relative importance of these migration types are attributed to disparities in population, economic conditions and environmental amenity. Comparison with the 2001-2006 census data will reveal if trends documented here have continued into the present millennium.

A. TORRE and B. ZUINDEAU: [Économie de la proximité et environnement : état des lieux et perspectives.] "Economics of Proximity and Environment: Current Situation and Perspectives". Understanding environmental questions using the theoretical tools of the economics of proximity dates from the end of the 1990s, with contributions that renew recognition of the spatial dimension in the analysis of environmental problems. This article aims to provide a review of current research carried out in this area, and tries to outline some perspectives with regard to the respective roles of geographical proximity and organised proximity in the creation and regulation of environmental problems. The first section deals with the issue of 'geographical proximities and land use conflicts', which nowadays groups together the most successful studies, and the second deals with the role of organised proximities in relation to the regulation of environmental problems. The third section concerns the link between the uncertainty content of environmental problems and the relationships of organised proximity. The fourth section suggests some avenues of research, placing particular emphasis on the roles played by geographical proximity as a means of regulating environmental problems, and by organised proximity in creating these problems. The concluding section assesses the ruptures and developments that result from taking account of environmental dimensions in the economics of proximity paradigm.

A. MACKINLEY: "Industrial Ecology: A Review with Examples from the Canadian Mining Industry". In this paper a major theoretical framework that pertains to geographic study, Industrial Ecology, is reviewed through a detailed literature review which seeks to define the field, examine its genealogy, summarize popular critiques, and situate this area of thought in relation to the closely related fields of Industrial Symbiosis, Industrial Metabolism, and Corporate Social Responsibility. Next, the potential for meaningful Industrial Ecology fieldwork to be conducted in Canada is illustrated by a brief example of the Industrial Ecology type phenomenon in the Canadian Mining Industry, as exemplified by the recycling activities of two of Canada's largest mining firms -Falconbridge and Noranda. It is argued that the potential exists to expand upon the sparse Industrial Ecology literature which examines Canadian case studies and that such research could make a meaningful contribution to this field.

