From Regional Development to Local Development: On The Life, Death and Rebirth (?) of Regional Science as a Policy Relevant Science*

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In the following paragraphs, I shall attempt to describe briefly how and why regional science, both as a field of study and a policy science, has changed since its founding in the 1950s. Regional Science has gone through a period of profound change in recent years -- some would say through a period of crisis and decline. The term "Regional Science" is used here in a generic sense to cover the broad range of social science inquiry devoted to issues of regional development in various forms. The analysis that follows is in part a personal journey, influenced by the author's personal experience, first as a student of regional science at the University of Pennsylvania in the 1960s, and after that, as a practitioner and scholar of regional economic development in Canada and, more recently, in Latin America.[1]

However, before beginning, let me define what I mean by regional economic development and regional development policy. In my arguments below, I make an implicit distinction between regional development and regional equity or interregional income transfers. Regional development, as used here, refers to the capacity of a region to produce (and sell) goods and services, and thus the capacity of its

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1. Thus, I hope that the reader will forgive me my overly generous references to my own writings.

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inhabitants to earn income. Regional development disparities thus refer to differences among regions in their capacity to provide earned income opportunities to their inhabitants. Regional development policies seek to reduce such disparities, essentially by seeking to promote increased development in lagging regions. Interregional income transfers, on the other hand, can reduce income disparities (a pure equity objective) but will not necessarily reduce regional development disparities. From a policy perspective, it is chiefly the latter which is addressed in this essay.

The Birth of Regional Science

Regional Science, as a distinct field of study, has gone through many lives since its founding in the United States in the 1950s with Walter Isard as its father. The roots of regional science go back to Europe, especially Germany (Polèse 1995), where most of the pioneers of early classical location theory were born (such as Christaller, Lösch, Von Thünen and Weber). Much early work in what was to become the field of regional science, most notably Isard (1956), may be seen as attempts to introduce the German spatial economic tradition, *Raum wirtschaft*, into North America and the larger English-speaking world. Ponsard (1955, 1958) tried to do very much the same thing for the French-speaking world, but without attempting to create a separate field of inquiry.

It is important to recall that regional science, although a European transplant (like so many post-war immigrants), grew up in the United States in the 1950s and 1960s. It is also of some consequence that its early parents were economists. The effects are visible at various levels. The post-war period in the United States was an era of unbridled optimism. Economic growth was strong and seemingly unending. The American Way of Life was the envy of the world. This was also the golden age of Keynesian economics. Whether called "fine tuning" (in its U.S. version) or *planification indicative* in France, most economists were confident that national economies could be wisely managed and recessions avoided, if only the right tools and models were applied.

This newfound optimism also infected thinking about economic development. With Harrod (1939) and Domar (1946) among the principal pioneers (very much in the Keynesian tradition), a school was born promising the end of underdevelopment, again if only the right tools and models were applied. Furtado (1970), Lewis (1966) and Rostow (1960) are among the classics in that tradition. The interventionist optimism of economists was similar on both sides of the ideological divide, despite the Cold War. Indeed, many of the economic planning tools used, of which Leontieff's Input-Output framework is perhaps the prime example, were common to economists on both sides of the Iron Curtain. Such tools, often in the form of complex interregional input-output tables, were to become a mainstay of early regional science. I well remember my surprise, during my studies at the University of Pennsylvania in the 1960s, at the number of East Europeans in my class. Early regional science, at least as taught at the University of Pennsylvania, was proudly mathematical, quantitative, positivist and optimistic. This was a hard social science. If only we could get our coefficients right.

The Golden Age of Regional Science as a Policy Science

Regional Science, as a field of study, came into being at a propitious moment. Perhaps for the first time in modern history, "regional" issues, specifically issues of regional economic development and underdevelopment, were in the process of becoming major policy issues in many nations. It was a field that opened up doors and careers to promising young scholars. During the 1950s and 1960s, most industrialised nations, with the notable exception of the United States, created ministries and bureaucracies whose mandate it was to oversee equitable regional development. Italy created its *Casa di Mezzogiorno* to fight underdevelopment in the Italian South. France created the D.A.T.A.R.[2] to ensure a more balanced development of the nation outside Paris. Canada created the Department of Regional Economic Expansion to promote the development of Canada's traditionally lagging regions in the East. The ascent of "regional development" as an area of policy concern was, in essence, a normal outgrowth of the rise of the post-war welfare state with its emphasis on social equity and redistribution of wealth.

Various factors were behind the new-found awareness of regional issues. Rapid economic growth in Western Europe and North America during the post-war period brought home, perhaps for the first time, the existence of lagging regions that did not share in the general prosperity. The term "regional disparity" came into being. Most nations were also undergoing a rapid (and sometimes traumatic) process of urbanisation. Cities were exploding and expanding at unprecedented rates. With urbanisation equally came a need for spatial planners and urban specialists. This was the great era of suburbanisation in most industrialised states. Urban and regional affairs are closely intertwined in both the academic and policy worlds, and the strength (or weakness) of one also tends to strengthen (or weaken) the other. The 1950s and 1960s (and perhaps also the most of the 1970s) was also the heyday of city planning and housing studies. All these concerns, whether labelled "urban" or "regional", were profoundly *territorial* (or spatial). All Western nations were undergoing profound spatial changes in the distribution of population and employment, captured in Karl Polanyi's seminal work, *The Great Transformation,* first published in 1944 (Polanyi 1944). Policy makers were increasingly aware of the need to comprehend and master these territorial changes. The spatial and regional ordering of society had become an important policy concern in most nations.

The new-found awareness of regional issues also had its roots in the new

2. *Délégation à l'Aménagement du Territoire et à l'Action Régionale.*

availability of statistics. The existence of reliable social and economic data at spatially disaggregated levels is a fairly recent phenomenon. In most Western states, the capacity of national statistical agencies to produce such data only became effective after the Second World War. In those cases, such as Canada, where regionalised data were published before the war, their public impact was largely overshadowed by the impact of the Great Depression and the war.[3] However, after the war the increasing availability of data on regional income, employment and development disparities necessarily had an impact on public awareness and on policy makers, not unlike the impact on national differences of statistics published by the United Nations or World Bank (all post-war institutions). The voters and their representatives in the Italian *Mezzogiorno*, the French Auvergne, the English North or the Canadian Maritimes now all had access to documented evidence showing their relative state of underdevelopment compared to other regions. Clearly, national governments should be called upon to act.

Much of the early academic work in regional science was linked to the new availability (and demand for) regional statistics and the analytical tools to interpret and use them. Important resources were devoted to the building of regional economic accounts and input-output tables and, in turn, churning out regional income and employment multipliers. Students or scholars with the right technical skills had little problem in finding employment or research funding. The demand for regional economic impact studies seemed almost insatiable. But, more important still was the demand for normative policy recipes to cure the perceived ills of regional underdevelopment, spatial economic concentration (generally in the national capital) and attendant regional income disparities. Regional science or regional development analysis (or whatever one wishes to call the field), as an area of academic endeavour, could not have arrived at a better time. There could be little doubt of its policy relevance. The *Zeitgeist* was ripe for regional science and specialists claiming to hold the key to successful economic development and the reduction of regional disparities. Add in a few touches of post-war American optimism, academic positivism and Keynesian (not to mention Soviet) assurance in economic management, and the result was a very heady mixture of policy-making and academia.

It is not useful to detail at length the full "toolbox" of concepts, principles, and policy instruments in vogue at the time, many of which survive to this day. The central idea behind much normative work on regional economic planning was the concept of growth poles (initially formulated by Perroux 1955; with growth stimulated by a combination of programmed inter-industrial multipliers and induced agglomeration economies.[4] Among the classics of the period are Hirschman (1958), Isard (1959, 1961), Boudeville (1966) and Friedmann (1966, 1972). France, for example, had its *métropoles d'équilibre* to counter the pull of Paris.

3. In Canada, regional (i.e. provincial) economic accounts have been available since the 1930s, with 1926 the base year for most time-series.
4. For a good recent review of the growth pole concept, see Parr (1999).

The promotion of industrial complexes, both in the Soviet Union and in many Western states, was very much based on the same conceptual framework. Lagging regions could be uplifted if only public and private investments were correctly channelled. In most nations, this lead to a mix of policy instruments: location subsidies to private industry; public infrastructure investments; public direct investment in industry in selected locations. Canada, from the 1960s through to the end of the 1980s, practised a generous policy of location subsidies and regional income transfers. The fundamental premise underlying most such regional policies (leaving issues of regional equity and income re-distribution aside) was the belief that national governments could fashion the spatial structure of the economy and in turn significantly affect the economic fortunes of lagging regions. Regional development disparities could be reduced by central government policy.

In sum, the period from approximately the 1950s to the middle of the 1980s was indeed a golden age for social science scholars concerned with regional development issues, at least in North America and perhaps also in most (industrialised) Western European nations. Governments were, on the whole, willing to finance policy-oriented research in regional development issues. The new young field of regional science held out the promise of providing the tools and knowledge needed to combat regional disparities and promote regional development. With the right tools, regional disparities could be eliminated and poor regions developed. The author well remembers the relative ease with which he obtained funding, during 1970s and early 1980s, from the Canadian Government for the various activities and events of the Canadian Regional Science Association.

The Decline of Regional Science and of National Regional Development Policies

Since those days, much has changed. Today few people talk of regional economic planning, certainly not in North America. The term "growth pole" has fallen into disuse. The founding flagship of regional science (the Department of Regional Science at the University of Pennsylvania) is no more. In Canada, the Department of Regional Economic Expansion was closed down in the mid-1980s.[5] In many other Western states, notably the U.K., central government departments devoted to regional development have either been entirely abolished or, at best, greatly reduced in importance. Most governments have abandoned the use of location subsidies to entice firms to locate in lagging regions. Regional development is in general no longer seen as a burning national policy issue -- i.e. a policy issue that should be primarily addressed by national (as opposed to local) governments. On a broader scale, a general consensus seems to be evolving that national govern-

5. Its provincial counterpart in Quebec, the *Office de planification et de développement du Québec (OPDQ)* equally succumbed in the early 1990s.

ments have, in fact, very little power to alter the basic spatial patterns of national economies, at least in market economies. Stated differently, regional economic development (or more recently, local development -- see below) may be an interesting field of academic endeavour (somewhat like economic geography), but its policy usefulness is doubtful.

What has happened to explain this almost complete turnaround from a policy relevant social science to an academic pastime? I shall argue that regional science, as a policy science, has in most industrialised nations fallen victim to both the failures and successes of past regional development policies. I shall equally argue that the current infatuation with the concept of local development, increasingly used as a substitute for regional development, is in fact an indirect admission of failure and a recognition of the limits of national regional development policies. Equally, I shall argue that the ascent of local development, as a field of study, has brought scholars full swing back to an era pre-dating the founding of regional science when scholars in all social sciences scrutinised the stars to understand the meaning of development and modernisation.

On the Limits of Regional Development Policy

What happened in the last decades to provoke the current sceptical attitude of national governments towards regional development policies? We shall begin with the negative side of the equation, the apparent ineffectiveness of past policies.

The Failure of Location Subsidies

There is now an almost universal consensus, at least among economists, that location subsidies are inefficient and have only a marginal impact at best on the location behaviour of firms. Numerous studies in France and in Canada in the 1980s concluded that such subsidies have had no measurable impact on the overall location of industry (Anderson 1988; Deves and Gouttebel 1988; Lithwick 1986). Location subsidies are now deemed wasteful by most governments and are hardly applied any more except in special (often politically motivated) instances. The emergence of international treaties of economic integration (e.g. the European Union, NAFTA and GATT) has also significantly reduced the power of national governments to use such subsidies. Finally, the current trend to fiscal conservatism and public cost-cutting only further reduces the incentive of national governments to subsidise industry. In the Canadian case, public transfers to private industry have almost entirely disappeared from the national budget.[6]. Stripped of the

6. To get a feeling of the mood of the times, a Canadian Member of Parliament during the 1980s (from a left-wing party) famously referred to firms that were the object of public generosity as "corporate bums".

possibility of subsidising industry, there is not all that much left to do for central government agencies supposedly concerned with regional development.

The Limits of Decentralisation

The decentralisation of national governments has become an almost universal trend in recent times. The trend, in most cases, is motivated both by fiscal considerations on the part of national governments (to shift the fiscal burden to lower levels of government) and by calls for greater local autonomy in previously centralised states such as France, Spain and Italy. In many cases, the national government has simply chosen to abandon direct involvement in regional economic development to lower levels of government. In Canada, the Federal government has openly advocated that regional economic development be primarily a provincial responsibility.

At a different level, the spatial decentralisation of national functions was often proposed in the past as a possible policy instrument for reversing national spatial trends and helping lagging regions. The most ambitious experiment along these lines was undoubtedly the transfer of the capital of Brazil from Rio de Janeiro to Brasilia in 1960. Here again, as in the case of location subsidies, the results have been disappointing. Whether in Brazil or elsewhere, the spatial transfer of government departments or agencies to other regions has not significantly altered the spatial structure of national economies. In Brazil, Rio de Janeiro and São Paulo continue to dominate the national economy. Today, few scholars or policy makers would argue that lagging regions can be significantly developed by decentralising the location of government departments or agencies. Evidence in United States and Canada even seems to point in the opposite direction. Neither Washington D.C. nor Ottawa is a significant commercial pole. Most state or provincial capitals are of little economic significance. Neither Los Angeles, San Francisco, New York nor Chicago are state capitals.

The Limits of Infrastructure Investment

Certainly one of the most powerful policy instruments for helping lagging regions is public investment in infrastructure -- e.g. roads, harbours, water, energy and schools. It would be an exaggeration to say that spatial policies of public infrastructure investment have failed. Such investments (unless frankly political) will usually have positive development effects, if only to improve local living conditions. However, experience has again taught us that infrastructure investments will rarely be sufficient to reverse broad spatial trends. Roads promote trade and traffic in both directions; there is no assurance that better roads will necessarily improve the comparative competitiveness and capacity to export of a lagging region. The medium-term effect might even be the opposite under some circumstances. Equally, better schools might simply increase out-migration. The development impacts of infrastructure investments are by no means easy to predict.

At the political level, there are few things more embarrassing to national governments than empty industrial parks or underused airports and harbours in some outlying region, especially when voters in the national capital are complaining about the sad state of public infrastructure in the capital. The leeway of national governments is not unlimited, particularly in times of fiscal constraint. Infrastructure investments will only show positive long-term development results if the private sector follows. In market economies, the basic private investment decisions remain beyond the reach of the state. Even the most generous public investments cannot alter geography or the historical legacy of marginalisation which is the lot of many lagging regions. Perhaps the most useful (but perhaps also the most difficult) truth that development economists have painfully learned over the last few decades is that development is not only a question of brick and mortar. Were it so, there would be no more poor nations or regions. There is much more to development than roads, factories and investment in physical capital.

The Failure of Growth Poles, Regional Multipliers and the Lot

Many of the policies mentioned above were justified at the time on the basis of growth pole models, in the hope of provoking new dynamic growth poles in lagging regions. I must admit, with perhaps the exception of the former Soviet Union, that I know of no important example where growth pole-inspired policies were clearly successful. Indeed, the failures have received far more publicity, e.g. the rusting industrial complexes in Southern Italy and failing petrochemical complexes in Eastern Canada.[7] The failure of growth poles as a policy instrument has its roots both in politics and in economics. The principles behind growth poles, assuming for the moment that the model is valid, are rarely politically feasible except in dictatorships. The application of effective growth pole policies requires concentrated and sustained public investment at a very limited number of locations. Political pressures in a democracy will rarely allow this, where each region and constituency will clamour for its "fair" share of the national cake. In most cases, regionally-targeted financial aid will end up being spread out over a large number of constituencies to please the maximum number of voters.

However, the main fault with growth pole theory was that its economics was not sound. With its Keynesian faith in planning, capital investment and multipliers, growth pole theory suffered the same fate as all development models built on purely physical relationships. What we have said (above) about the limits of infrastructure investment equally holds here. The mere presence of concentrated industrial investments, inter-industrial relationships, scale economies, and planned agglomeration economies (however elegant on paper) is not as such sufficient, we

7. One of the most celebrated cases in Canada is the now bankrupt petrol refinery complex in Come-by-Chance (Newfoundland) in which the Federal Government sunk a small fortune.

now know, to insure autonomous and dynamic development. In almost all cases, the chief obstacles to development are not insufficient physical capital but rather institutional, sociological, cultural and geographic.[8] These fundamental factors are difficult to change by state planning, and if change does come, it will often be a matter of decades or generations. In sum, growth pole theory and the hope of scientifically planning the development of lagging regions have met the same unhappy end as most national economic planning models promoted during the post-war period. The fall of the Berlin Wall only served to confirm their demise.

On the Questionable Necessity of National Regional Development Policies

Perhaps the final irony is that the fatal blow came not from failure but from the apparent success of most industrial nations in reducing regional income disparities. An increasing literature is appearing that documents the convergence of (per capita) incomes among regions in almost all developed nations (Barro and Sala-i-Martin 1995). Income convergence among the nations of the European Union is equally undeniable -- the recent rise of incomes in Ireland is perhaps the most stunning example of this. The snag, however, is that these success stories have, it would appear, little to do with the presence of regional development policies. The trend to convergence occurs whether or not a nation has applied such policies. In Canada, the trend toward regional income convergence has been most dramatic since the abolition of the Department of Regional Economic Expansion and the reduction of central transfers to industry and to poorer provinces (Coulombe and Lee 1995; Polèse 1996). Perhaps the most damning result (against regional development policy) comes from the United States where the trend towards regional income convergence is clearly manifest since the Second World War, this despite the total absence of any centralised regional development policy.

The neo-classical equilibrium model would seem to be vindicated. Over the long run, the free flow of labour, goods and capital does indeed appear to favour regional income convergence. These results are also coherent with earlier models (Kuznets 1955; Williamson 1965) that posited a bell-shaped relationship between development and regional income disparities, where after an initial increase in disparities (in part due to urbanisation pressures) incomes will in time converge as the national economy matures and becomes integrated. If true, these results suggest that the best long-term remedy for regional development disparities is economic integration together with the elimination of all barriers to the free movement of people, capital, goods and ideas. We are then only one step away from equally suggesting that, despite everything, continental integration (in Europe or in America) and global economic integration remain the best hope for combating

8. Landes (1999) emphasizes the importance of culture, stressing transmitted values such as: trust; thrift, honesty; a strong work ethic, respect for learning and the rule of law. Few would argue with this list, but where does this leave regional science?

regional (and national) development disparities.

This is a far throw from the regional development perspective of the 1960s. In this New World, national regional development policies (or E.U. policies in the European case), if they are to exist at all, become temporary "adjustment" policies to help specific regions cope with the shocks of integration as regions move along the predicted path to income convergence. There is no longer any aspiration of reversing market trends or of shaping (from above) the spatial configuration of national economies. Quite to the contrary, regional policies become handmaidens of the market, ensuring that the necessary regional adjustments to the ever-changing market can occur with maximum efficiency and, hopefully, without undue pain. But, such policies remain temporary, to be lifted once the adjustments have been made.[9] Have we come to the end of regional development policy?

Rebirth?: Fom Regional Development to Local Development

The last two decades have seen an impressive outpouring of writings on what has come to be called "local development" with Stöhr (1981) among the earliest; in the United States, Perry (1987) has perhaps had the most profound policy impact. In English, other expressions are also employed to convey the same general idea such as development from below, endogenous development and community development. In French, expressions such as *milieu* or *milieux innovateurs* are also found in the literature (Maillat 1992; Pecqueur 1989, Perrin 1991). All these terms and their variants refer back to the same central idea: development is also a *local* process. Development can, and should, be locally initiated. Some of author's writings during the 1980s were heavily influenced by this perspective (Coffey and Polèse 1984, 1985). For a recent review of the literature see Lamarche (1995).

At the risk of oversimplifying, the basic premise underlying the local development perspective may be summarised thus: the success of a region will in the end depend on the capacity of local actors (firms, individuals, policy-makers, etc.) to take matters in hand, to organise various parties around common goals, to adapt and to successfully adjust to outside pressures. Thus, the ultimate sources of development lie in the region itself, in its people, its institutions, its sense of community, and, perhaps most important of all, in the spirit of innovation and entrepreneurship of its population.

Of Communities and Entrepreneurs: When the Left and the Right Meet

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9. Equity objectives that remain (i.e. income re-distribution and poverty alleviation) will normally fall under the umbrella of social policy and need not necessarily have a regional dimension. In Canada, the abandonment of regional development policies has not necessarily meant an end to income transfers, although their scale has been reduced.

How should we view the rise of local development as a field of policy study in light of the previous sections? First, we may, somewhat negatively, interpret the ascent of local development as an admission of failure. By emphasizing a local development perspective, are we not implicitly recognising the ineffectiveness of traditional regional development policy (from above) and the incapacity of the central state to address regional development issues? Indeed, many of the earlier writings defended the need for a (new, alternative) locally-based approach on the basis of the past failures of traditional regional development policies: growth poles, regional multipliers and the like.

The new emphasis on local initiatives also represents an implicit recognition of the contradiction between national regional development policies, based on subsidies and planning from above, and internationally integrated markets. This also helps explain the apparent (parallel) contradiction of the combined success of the terms "local development" and "globalisation" in many academic and policy circles. In a globalised world with internationally integrated markets and free flows of capital, communities must, in the end, learn to fend for themselves since most of the classical development tools of the central state will have fallen into disuse.

Stated thus, it is not surprising that "local development" has found advocates both on the right and on the left of the political spectrum. The political right finds its pay-off in the new emphasis on local initiative, entrepreneurship and small business, and on the implicit mistrust of central state interference. It also provides a convenient conceptual base for fiscal conservatism and for a state less pre-occupied with redistribution. Taken to the extreme, a society in which all development tools (and taxing powers) are transferred to the local level would, in time, develop into an atomised and probably very unequal society.

The political left, or at least its new offspring, often embraces local development because of the promises of community, solidarity, and co-operative development that the new ideal seems to hold out. With the fall of the Berlin Wall and the end of the socialist dream at the national level, the dream is now transferred to the community (local) level. Indeed, many gurus of the new-left seem to see "local development" (with emphasis on "community") as the harbinger of some form of alternative development, ecologically sound communities removed from the nefarious influences of big multinationals and the overpowering capitalist state.

However, the author cannot help but feel that "local development", as a policy ideal, is in the end closer to a silent surrender, an implicit admission that the central state really cannot do much about unequal regional development and regional disparities.

On the Limits of Local Development Policies[10]

We are probably nearing the end of the glorious period of local development; that is, of local development as the answer to regional development. In this respect, it is useful to make a distinction between "local development" as a generic term (i.e. the development of localities) and "local development" as a new policy option for solving the problems of peripheral, poor, or otherwise disadvantaged communities and regions. It is the latter that concerns us. After some two decades, "local development" has, I feel, failed to develop a coherent and original corpus of effective policy tools. Numerous "how-to" books have been produced; for example Blakely (1994) in English and Tremblay (1994) in French. However, the policies which are found today under the heading of local development (depending on the author) cover the whole possible range of economic development initiatives: community activism; manpower training; local economic development corporations; enterprise zones; techno parks; boosterism; small business banks; incubators; and so forth. None of this is necessarily bad, but none is really new either, except perhaps for the packaging. Much of what is proposed could be called common sense: the need to build self-esteem, cooperation, and an entrepreneurial spirit. All this is fine and dandy, but what to do when faced with the real world problems of a Newfoundland outport whose traditional fish (cod) stock is depleted or a community in the Gaspé whose only pulp mill has just closed down? We must admit that our tools remain limited; we are still searching.

However, this admission is not an entirely 'bad' thing for public policy research. The ascent of local development as an area of academic inquiry has brought scholars back to fundamental development questions pre-dating the optimistic positivism of 1960s regional science. Trying to understand why certain communities succeed economically and others do not, and to make the findings policy relevant, is in many ways more challenging than programming regional input-output tables. This is not to belittle the usefulness of input-output analysis and similar tools, but rather to remark that research on the conditions of local economic development is by nature messy and multi-disciplinary. In many cases, the contributions of sociology, anthropology or political science will be as (if not more) important than that of economics. Hopefully, this new-found academic humility will bear positive fruit. However, this means that regional science, as a policy relevant science, must move to a new stage, accepting that some regional development issues are not amenable, and probably never will be, to purely economic logic or mathematical modelling. This does not mean, however, that we need necessarily abandon the traditional tools and theories that have shaped regional science. Quite to the contrary, as we shall now see.

10. For a more in-depth explanation of the author's more recent (changing) views on local development as a policy option, see Polèse (1994; 1995a). I easily admit that my earlier writings were overly optimistic, and probably naïve.

A Return to the Origins of Regional Science

The ascent of local development, or rather the realisation that development issues are and will remain complex, has also meant, in other respects, a return to the pre-1950s origins of regional science. Industrial location theory, the core theoretical heritage of regional science, posits an integrated world without barriers to trade, migration, and the flow of capital. In this respect, the modern world (at least North America and the European Union) is moving closer to the world posited by earlier location theorists. The failed attempts in the past to manage national economies spatially via location subsidies and other regional policies can in part be interpreted as the striving to overcome (to alter) the "laws" posited by classical location theory. In retrospect, we may see this as hubris. Indeed, the same label might be applied to over-optimistic proponents of local development, who promise to reverse the "laws" of economic geography by sheer force of will power and community solidarity. However, there is also a certain irony here since it suggests that the relevance of early regional science (*avant la lettre*) has in the end been vindicated. Let me call this the revenge of location theory.

An increasing body of evidence is being produced, some of it in mainstream economics publications, which reaffirms (or rather rediscovers) the role of classical variables such as agglomeration and scale economies, distance, and transport costs in explaining the location of economic activity (Anas et al. 1998; Glaeser 1998; Hanson 1996; Henderson 1988, 1997; Lee 1990; Quigely 1998). Much of this literature, unsurprisingly, deals with attempts to explain the continuing spatial concentration of economic activity and the concomitant growth of cities of various sizes. However, the "predictability" of location patterns runs like a general *leitmotif* through these writings, with the authors often stressing the universality of location models. Whether in Mexico or the U.S., the apparel industry will show certain locational regularities (Hanson1996); ditto for other industries in other countries (Henderson 1988, 1997; Lee 1990). Our own work for Canada and Mexico supports similar conclusions (Polèse and Champagne 1999). Classical variables such as distance and city-size (the latter a proxy for agglomeration economies) revealed themselves as powerful predictors of the location of economic activity. Cities of similar size and locational characteristics tended to specialize in similar activities. Service activities (banks, for example) exhibited comparable hierarchical patterns of location, whether in Canada or in Mexico; the automobile industry generally located in comparable cities in both nations.

Returning to the issue of regional development, let us thus temper our humility with a small dose of pride. Policies in the future can draw on a powerful tradition of theories, analytical tools, and conceptual models. However, future policies, if they are to have any chance of success, must start from a more solid (and realistic) base than has too often been the case in the past. It is no use trying to induce automobile plants to locate in Northern Saskatchewan or raising false hopes by incantations to the healing powers of local development. In the end, there is no real substitute for hard knowledge of local conditions, technical competence, sound judgement, and a realistic understanding of the forces that shape the economic geography of nations. In a globalised world, the policy relevance of location theory and continued empirical research on industrial location will, I argue, be even greater than in the past. In that sense, we can truly speak of a rebirth of regional science as a useful policy science.

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