Interdisziplinäres Institut für Raumordnung
Stadt- und Regionalentwicklung
Wirtschaftsuniversität Wien
Vorstand: o.Univ.Prof.Dr.Walter B. STÖHR
A-1190 Wien, Hasenauerstraße 42/8, Tel. (0222) 34-43-19

1981

W. STÖHR

STRUCTURAL CHARACTERISTICS OF PERIPHERAL AREAS AND THE RELEVANCE OF THE STOCK-IN-TRADE VARIABLES OF REGIONAL SCIENCE x)

I I R - DISCUSSION 13 1981

x) erscheint in: Papers of the Regional Science Association, Volume 49

Walter B. Stöhr x)

Structural Characteristics of Peripheral Areas and the Relevance of the stock-in-trade Variables of Regional Science xx)

Like in any science, so also in Regional Science, the variables selected for analysis are among the key determinants for outcome, relevance, and practical usefulness of research. Calls for a re-orientation of Regional Science to more relevant topics and variables have been made at various stages in its evolution.

The present paper is concerned with the variables used for analysing the development of peripheral areas. After defining peripherality and its relation to development, the paper first describes some of the major mechanisms which in recent decades have been used to "develop" peripheral areas by integrating them into the world system, and then examines the relevance of the stock-in-trade variables used by development economics and regional science for measuring

---

x) Professor and Director, Interdisciplinary Institute for Urban and Regional Studies (IIR), University of Economics (Wirtschaftsuniversität) Vienna, Hasenauerstr.42/8, A-1190 Vienna, Austria

xx) Paper presented at the XXI.European Regional Science Congress in Barcelona, August 1982, to be published in Papers of the Regional Science Association, 1982

"progress" in the development of these areas.

It will be shown that both the mechanisms for developing peripheral areas and the variables used for measuring the success achieved have essentially been borrowed from neo-classical economics, a theoretical body which does not permit the explicit interrelation of economic with socio-cultural and political-institutional variables. While in the short run, growth of traditional aggregate quantitative variables may appear to indicate development, over the medium and long term sustained development depends on socio-cultural and political-institutional variables as much as on economic ones. These two groups of variables are substantially influenced by the integration of peripheral areas into the world economy. The failure to include them explicitly into analysis and policy formulation is considered a major reason for the failure of traditional development policies to facilitate sustained development of peripheral areas at the national, continental, and world scale. Sustained development requires the interrelation of economic, socio-cultural, and political variables at each of these spatial scales. Regional Science therefore could make a major contribution towards overcoming this deficit by developing theory and methods for formally interrelating these groups of variables in a constructive way.

Calls for a re-orientation of Regional Science

World-wide development strategies have changed their emphasis in different stages, and so have calls for a re-orientation of Regional Science. Retrospectively one can say that world-wide development strategies in the First U.N.Development Decade of the 1960's had focussed mainly on aggregate national economic growth, in the Second Development Decade of the 1970's other major targets were added related to broader social development, including human resource development and problems of social and spatial distribution (Stöhr 1975), while in the present decade of the 1980's the structural determinants of international and geographic disparitites of development as well as changes in the international and territorial distribution of power seem to come to the forefront in the context of the search for a New International Economic Order and the increasing political weight of the developing countries, e.g. in the United Nations.

Regional Science seems to have gone through similar phases and - at least concerning the demands made for its re-orientation - at similar points in time. The trend also went from an emphasis on aggregate quantitative economic variables to demands for a greater consideration of social and qualitative variables, and finally to demands for more systematic analyses of the structural, political and power relations underlying spatial systems. The difference is that little political pressure for such changes has become manifest and that even in developing countries traditional regional science paradigms are still en vogue. Following are examples of calls for a re-orientation of Regional Science in the course of its evolution which the author considers typical and important, without however aiming at anything like completeness.

At the end of the 1960's, Torsten Hägerstrand in his Presidential Address to the European RSA-Congress at Copenhagen in 1969, which he entitled "What about People in Regional Science ?", pleaded for Regional Science to go beyond quantitative economic analyses of the chances "to earn money and to find desirable things to spend it on" and to address problems of integral "livability" with "a large political science component ... which does not hesitate to look into the micro-manifestations of power ... (and explore)... the direct links between the macro and micro realms, links which have been largely unexplored by regional scientists". (Hägerstrand 1970, pp.8,19).

In the latter half of the 1970's then John Friedmann - pointing, as he so often does, to developments still lying some time ahead - postulated in his Concluding Remarks to the European RSA-Congress at Cracow, in 1977, entitled "The Future of Regional Science", that "the problem-formulation of Regional Science is ultimately social and political" and pleaded for a "critical self-examination ... (of whether)

... our work, far from helping to improve 'the general welfare' or the life of 'the poor Majority' ... is helping to reproduce conditions of social inequality and injustice". In this context he demanded a systematic comparative study of regional planning doctrine, including "its origin and methods, ... its links to the political institutions of the (respective) country, ... the specific substantive and procedural theories which 'feed' the doctrines of Regional Planning, and ... the ideological/institutional frame of reference within which planning occurs." (Friedmann 1979).

In 1979 then, although not necessarily interrelated with the former pleas, Walter Isard and Christine Smith (1980) in their paper "Elementary Location Analysis in Political Space", at the Los Angeles RSA-Congress made what seems to be the first systematic effort to deal with political space applying to it the instruments of neo-classical space economics. The rationally behaving consumer and producer is substituted by the rationally behaving voter and politician whose assumed objective is to find a location in "policy space" where he can maximize voting support (in place of profits). This method however is not only restricted by the inability of the neo-classical approach to explicitly interrelate changes in political space (defined as the attitude towards specific non-spatial policy issues) with changes in economic and geographic space, but also by the fact that it is based on the assumption of pure rationality which in political space is still more unreal than in economic space (from this follows e.g. that if politicians and voters take an ideologically determined position in policy space - a fact almost always present - the model's "support curves" would become horizontal and thereby irrelevant).

At about the same time, however, structural relations in a centre-periphery framework increasingly entered systematic discussion, and for the British situation were pulled together for the first time by Doreen Massey (1979) in a paper which she provocatively entitled "In what Sense a Regional Problem ?". There she refutes the assumption that regional inequality were "purely a question of geographical distribution" which was a position "reflected in the methodology for assessing regional policy, in statistical techniques, in policy formulations, etc.".
She argues that spatial inequalities stem to a considerable extent from "a developing spatial hierarchy of ownership and control, and ... its consequences for employment-type" (p.236) ... and that in addition to "the 'indices of inequality' to which we have become accustomed ... it may be necessary to devise others to capture the effects of this form of differentiation, ... (such as) .. disparities in skill, control, and wage-levels" (p.238).

Work along these lines was then extended by theoretical studies (Gottmann 1980; Carney et al. 1980) and empirical work which often emerged independently from each other (e.g. Glickman & McLea 1981, Stöhr 1981, Tödtling 1981, IIR forthcoming and the literature quoted therein).

Peripheral Areas in the Social System

Peripheral areas have been defined elsewhere by this author (Stöhr 1981) as areas of low accessibility to large-scale (national, continental, world-wide) interaction centers regarding access to markets, to production factors (including technological innovation), to private and public services, cultural facilities, to sources of social innovation and of economic and political power.

Peripheral areas in this sense exist at various scales, particularly at the national, the continental (e.g. European) and at the world scale (Seers 1980).
At each of these levels, the respective peripheries tend to have lower living levels, less broadly developed economic structures, a higher share of declining industries, a lower share of capital and technology intensive industries (for the EEC see e.g. Keeble et al. 1981), a higher share of routine activities, predominant social downward mobility compared to their respective core(s) (for these and the forementioned indicators at the national scale see e.g. Tödtling 1981, IIR forthcoming), and phenomena of socio-cultural and political-administrative disintegration (Sunkel, 1973); they also depend on the latter for key economic inputs (capital, technology), cultural inputs (films, TV-programs etc.), defence inputs (military material, etc.) and political and

economic decisions as Seers et al. (1979) have shown in the European context. These peripheries are essentially of three types, namely (1) agriculturally oriented primary product suppliers (in Europe e.g. the "Southern Periphery"; Seers et al. 1979), (2) mineral resource frontier peripheries (in Europe e.g. the "North-Western Periphery", Seers et al. 1979) and (3) "Old Industrial Areas" which once were core regions but since have become peripheralized due to the exhaustion of local resources, technological advances, and related changes in the international division of labour. The common characteristic of all these "peripheries" is - apart from being materially less developed - that their development is unilaterally dependent upon factors, processes and decisions taken in other parts of the respective national, continental, or world-wide system. Instead of a mutually "interdependent" development, theirs is a unilaterally "dependent" one.

The unilateral external dependence of the "life-space" (Friedmann, 1981) of these peripheral communities has lead to a situation at various spatial scales in which the traditional <u>class</u> conflict of a Marxian type is complemented or even supplanted by an intrinsic conflict between <u>territorially</u> organized peripheral communities and core-areas (Esman 1977, p.11).

An expression of this fact is the increasing wave of regionalism, i.e, of uprisings of territorial solidarity at the regional or national levels against transnational economic, class or governmental influence both in the West and East. Examples in the West are the numerous movements of regionalism particularly in the Western and Southern European periphery (Hechter 1975, Esman 1977, Tarrow et al. 1978, Hechter and Levy 1979, Gerdes 1980); in the East the most telling example is the recent uprising of "Solidarnośč" in Poland, an essentially territorially organized movement of between-class solidarity at the local, regional and national levels for self-management and against interference from the respective higher levels. In most of these cases this territorially organized solidarity in fact is a defence mechanism against unwanted unilaterial dependence from external - economic, ideological or political - processes and decisions occurring at higher scales and, although affecting their daily lives, being outside the sphere of influence of the affected territorial communities. The situation becomes most grave when territorially manifest problems are subject to a hierarchy of such dependencies at various (e.g. national and international) scales, as is the case in many large power blocks, empires, and (former or present) colonial settings.

As these problems have an essential spatial dimension, [x)] Regional Science, if it wants to be relevant, must try to deal with them in a useful manner.

---

x) historically this was shown on a world scale by Wallerstein (1976) and for the contemporary period at the national scale by Esman 1977 and Tarrow et al. 1978.

Economic Theory , Regional Science, and System's Maintainance

Each society establishes the theory which helps to explain the functioning of its internal and external relations as well as to consolidate these within the existing socio-political context. As history is predominantly written by - or for - those in power, so is most economic theory (de Vroey, 1980). In spatial systems this is usually done from the point of view of the core regions.

Classical economic theory, the derivatives of which still form the major body of knowledge which guides the functioning of the world economic system, typically originated in England at a time when this country set about to penetrate a major part of the world with its trade relations, subsequently also with its capital investment and power relations. In this context and thereafter classical economic theory and its derivatives fullfilled the functions mentioned above, as we shall show later. It focussed on the emerging economic relations which seemingly benefitted both cores and peripheries (under the paradigm of comparative advantage), but excluded social and political considerations from formal treatment. Similar assertions apply to Regional Science.

Let us envisage neoclassical economics and Regional Science withi broader framework of societal integration and differentiation such as that of Rokkan (1980), the theoretical basis for which was laid in his earlier paper on "Cities, States, and Nations: A Dimensional Model for the Study of Contrasts in Development" (1973). In this model, Rokkan distinguishes between three types of differentiation and integration, namely economic (penetration of commodities/services), cultural (penetration of messages/codes), and military-administrative (penetration of officers/bureaucrats through army, police, and administrative agencies). In a broad empirical framework Rokkan then shows how these three dimensions interacted with each other in history. Our propositions, made in the last section of this paper, are related to the sub-processes developed in Rokkan's model and are shown in Diagram 1.

(I N S E R T   H E R E   D I A G R A M   1)

In contrast to such a broad framework, classical economic theory and most of its derivatives isolated the economic dimension and attempted to formulate equilibrium models, essentially excluding socio-cultural as well as political-administrative relations and variation within and between systems as well as their consequences. In this narrow context it models the conditions under which a spatial reallocation of production factors and/or commodities will introduce a trend towards the equalization of factor and commodity prices over space and subsequently also of income levels. Flows are essentially postulated to take place from low price/productivity areas to high price/productivity areas until changes in regional supply and demand equalize these variables over space, with net economic benefits to both. With reference to the classical production factors, this means that natural resources and labour should flow from peripheral areas to core regions, while capital and technology should flow in the opposite direction from core regions to peripheries (Stöhr & Tödtling, 1978); the liberalisation of commodity flows furthermore is postulated to help change terms of trade in favour of less developed peripheral areas. While all these quantitative variables are normally analyzed in detail in regional science, the concomitant changes in structural relations, in socio-cultural and in political conditions have also here been virutally excluded from formal treatment.

Major mechanisms for spatial development via core-periphery integration in practice

In practice, the major mechanism explicitly or implicitly promoted by development policy and analyzed by development economics and Regional Science essentially conform to this neoclassical model. This is shown by way of eight examples of strategy elements which have traditionally been used to integrate and "develop" peripheral areas. They have been applied at all the three integration scales mentioned, namely the national, continental (e.g. European), and world-wide scale.

The purpose of this paper is to indicate some of the major "side-effects" of these "strategy elements" in structural, socio-cultural, political and environmental terms, dimensions which in part follow the "sub-processes" defined in Rokkan's (1973, 1980) model of societal integration and differentiation, to which we have added an environmental one. Empirically we are basing our arguments on case studies like the ones contained in Seers et al. 1979, OEDC 1979,

Glickman and McLean 1981, and IIR forthcoming, as well as on hypotheses derived from general observation. Considerably more empirical work on these issues will have to be done and the major objective of the present paper is to help stimulate such work in Regional Science or related disciplines.
We shall proceed by the classical production factors mentioned above although in practice often several of these strategy elements are combined.[x)] The start is made with the two factors usually abundant in less developed peripheral areas, i.e. natural resources and labour (strategy elements 1-4). These will be discussed in more detail. For each of these factors one strategy element focusses on it's (out-)transfer, the other one on the creation of internal multipliers based on the respective factor. The remaining strategy elements (5-8) are related to factors usually scarce in less developed peripheral areas and consist in their transfer from core-regions to peripheries, namely of capital, technology, infrastructure investment and public transfers. These will only be briefly summarized.

All these "strategy elements" for the development and functional integration of peripheral areas are supposed to represent "spread effects" (Myrdal 1957) for the latter. This is only the case in quantitative economic terms and in the short run, however, while in the medium and long term this process erodes important socio-cultural and political administrative preconditions essential for the sustained development of peripheral areas. We shall indicate these as "side-effects" in the following (see also Diagram 2).

---

x) A preliminary analysis with similar objectives has been attempted in Roemer (1978), although with more complex development strategies which would seem more difficult to quantify.

The two natural resource based strategy elements are

(1) primary products (agricultural and mineral raw materials, staple commodities, etc.) export, and

(2) tourist resource development.

These two strategy elements usually represent the first interaction between cores and peripheries at all three geographic scales mentioned. As for primary products exports on a worldwide scale "low-income" countries still earn 81 % of foreign exchange from merchandise exports of primary commodities (World Bank 1980, p.126; data for 1977). But even from countries of the European Periphery, a sizeable percentage of exports to individual European core countries consist of food stuffs and raw materials: 52 % of Portugal's and 17 % of Finland's exports to West Germany, 58 % of Ireland's exports to the U.K., (Seers et al., 1979, p.319/20; data for 1975).

As for tourist resource development at the European scale, for instance, countries of the Southern European periphery gain a major proportion of their foreign exchange earnings from tourism: In proportion to receipts from total exports of merchandise, receipts from tourism in 1970 amounted to 68 % in Spain, 32 % in Greece, 25 % in Portugal (Seers et al. 1979, p.6)

The expectation is that multipliers derived from these natural resources will speed up the development of the respective regional or national unit. Multipliers of these two strategy elements on quantitative variables such as gross internal product, foreign exchange earnings, employment etc. are therefore usually analized in great detail. Very few systematic analyses however are usually made on "side-effects" such as those mentioned in Diagram 2:

With regard to economic (structural) side-effects and leakages, both these strategy elements usually lead to an increased exposure of the respective areas to external economic shock (reduced resilience), to a reduction of internal functional relations due to the emergence of economic mono-structure, and to increased import propensity for the provision of the required inputs for these strategy elements. At best some of these effects are included in traditional analyses. - With respect to environmental side-effects, either of these strategy elements can lead to a disintegration of the natural resource base, and particularly the first one often to considerable environmental pollution. Both are usually included insufficiently in current analyses and policy formulation. - Primary product export strategies furthermore usually lead to considerable political-administrative side-effects through the external acquisition of endogenous resources, external political/administrative/legal penetration and the debilitation of endogenous political-administrative capacity. - Large-scale tourist development on the other hand usually leads to considerable socio-cultural side-effects via the accelerated introduction of external value systems, the disruption of endogenous socio-cultural relations, and a social/spatial concentration of the benefits derived from this development.

Some of these side-effects are particularly pronounced at the scale of world-wide peripheries, others at that of the continental or national one, or at all scales of peripheries: the differentiation of entries in Diagram 2 in this respect is in part hypothetical and needs to be tested further. To incentivate more systematic research along these lines is a major objective of this paper.

The two labour based strategy elements are

(3) labour out-migration, and

(4) migrant labour savings remittances;

Labour out-migration from less developed areas essentially corresponds to the neoclassical economic hypothesis that labour should migrate from low income to high income areas in order to equalize wage levels, and consequently also living levels over space. While this hypothesis holds reasonably well for the migrating individuals, it has proved erroneous with regard to the equalisation of living levels between the regions concerned. The theoretical reasons have been discussed widely ever since Myrdal (1975), and essentially lie in the qualitative selectivity of labour migration by which average productivity in less developed areas declines (thereby reducing average wage levels) while in highly developed areas productivity (and average wage levels) increase, thereby augmenting rather than reducing disparities in wages and living levels.

As for the quantities involved at the European scale, e.g. according to OECD (1979) the number of migrant workers from the European periphery to the more industrialized European core countries in 1974, -i.e. past the peak year of 1973 - amounted to about 6,8 million workers. In some of the sending countries, out-migrating workers made up for as much as 31 % (Greece) of the national unemployment rate, 26 % (Yugoslavia, Spain), and 19 % (Portugal, Turkey). Migrant workers' remittances amounted to as much as 90 % (Greece) of sending countries' commodity exports (corresponding figures for Portugal 59 %, Greece 51 %, Yugoslavia 49 %).

Apart from these economic and quantitative aspects there are important socio-cultural and political-administrative consequences of labour migration which for the European context are well resumed in the already quoted report of the Expert Group, chaired by Prof.Charles P.Kindleberger on "Migration, Growth, and Development" for the OECD (1979):
This report states that "migration is more than a movement of factors of production, it is a movement of people, and as such it has an essential social component. The process generates externalities - social costs which are born not simply by migrants or their employers - for both sending and receiving country populations" (p.29).
For receiving countries "migration implies a mixing of cultures, with at times, serious social tensions which can completely reverse net economic profits and turn them

into net social losses " (OECD, 1979, p.29/30).

As to the effects on migrant sending, i.e. the usually less developed peripheral areas/countries, the report cites two groups of contradicotry opinions, on the one side "those who argue that the sending country's loss of human capital clearly outweighs the presumed benefits of large-scale migration and that in the long run the industrialized (receiving) countries have gained a significant trading advantage at the expense of migrant sending countries due to migrant exposure to the goods and services available in host countries". On the other hand "counter arguments would be that the opportunity cost of exporting labour which would otherwise be unemployed is zero or negative, regardless of the degree of human capital embodied in that labour, and that remittances are an indispensable source of foreign exchange, whether sending countries actually channel them into capital formation or allow them to support the importation of consumption goods " (p.30). This makes it clear that there is a very close interrelation between economic and socio-cultural consequences as well as between private and social costs and benefits, varying not only from country to country but also between the three scales of peripheries mentioned above. They will therefore have to be analyzed separately from case to case.

As for the economic consequences or side-effects for less developed peripheral areas the report (OECD 1979, p.31) stresses contradictory effects on foreign exchange (migrant remittances vs.increased import propensity caused by introduction of foreign consumption patterns), on labour productivity (outflow of unemployed/under-employed labour vs.loss of "cream" of domestic labour force), and on public finances (reduced demand on public capital stock vs.increased inflationary pressure). Socio-cultural consequences consist mainly in the introduction of external value systems and consequent social tension, as well as the separation from relatives, friends and the local community (disruption of endogenous socio-cultural relations).

The side-effects of the <u>remaining examples of strategy elements</u> for the development of less developed peripheral areas, namely

(5) Capital transfers,

(6) Technology transfers,

(7) Transfer of infrastructure investment,

(8) Fiscal transfers,

will not be dealt with here in detail but are only indicated in Diagram 2. As they constitute transfers from highly developed to less developed areas/countries, they were initially considered to only have beneficial "spread effects" upon the latter. Although this is usually true in the short run with regard to aggregate quantitative variables (gross internal product, rate of industrialization, etc.), it is usually not true in the medium and long term, particularly due to side-effects on qualitative variables and structural relations (Glickman and McLean 1981) most of which are however related to the socio-cultural and political-administrative penetration of peripheral areas by their respective cores. This manifests itself by the adquisition of, and control over, peripheral resources and production facilities by core-region enterprises and an increased dependence on them, as well as by the external political/administrative and sometimes also legal or military penetration of peripheral areas and their increasing dependence on core regions in these respects (Seers et al. 1979). It not only leads to a weakening of the endogenous political-administrative capacity and of endogenous technological creativity, but also to transformations in the emergence of dependent economic sectoral and organizational structures with a predominance of routine activities (depending on core region key functions such as research and development) and of branch plants (depending on core region head-offices) and to a consequent deskilling on the labour market (IIR forthcoming, Tödtling 1981). In general terms these processes have been outlined in Stöhr and Tödtling 1978.

The potential contribution of Regional Science

Whereas the structural economic, socio-cultural, political-administrative and environmental phenomena were for a long time considered as unavoidable "side-effects" of economic and spatial development, they are now increasingly taking the position of explicit developmental objectives in their own right. These have been resumed by Seers (1977) as "The new meaning of development".

Examples are: structural economic objectives such as a higher degree of regional/national economic self-determination, endogenous control over natural resources, increased resilience against external economic shocks, retention of economic key functions such as entrepreneurial decision-making, research and development, etc.; socio-cultural objectives such as the reduction of external cultural dependence, the retention of regional/national cultural identity, a smooth transformation of social networks, etc.; political-administrative objectives such as regional/national political sovereignty, the retention and development of autochthonous institutional forms, etc..

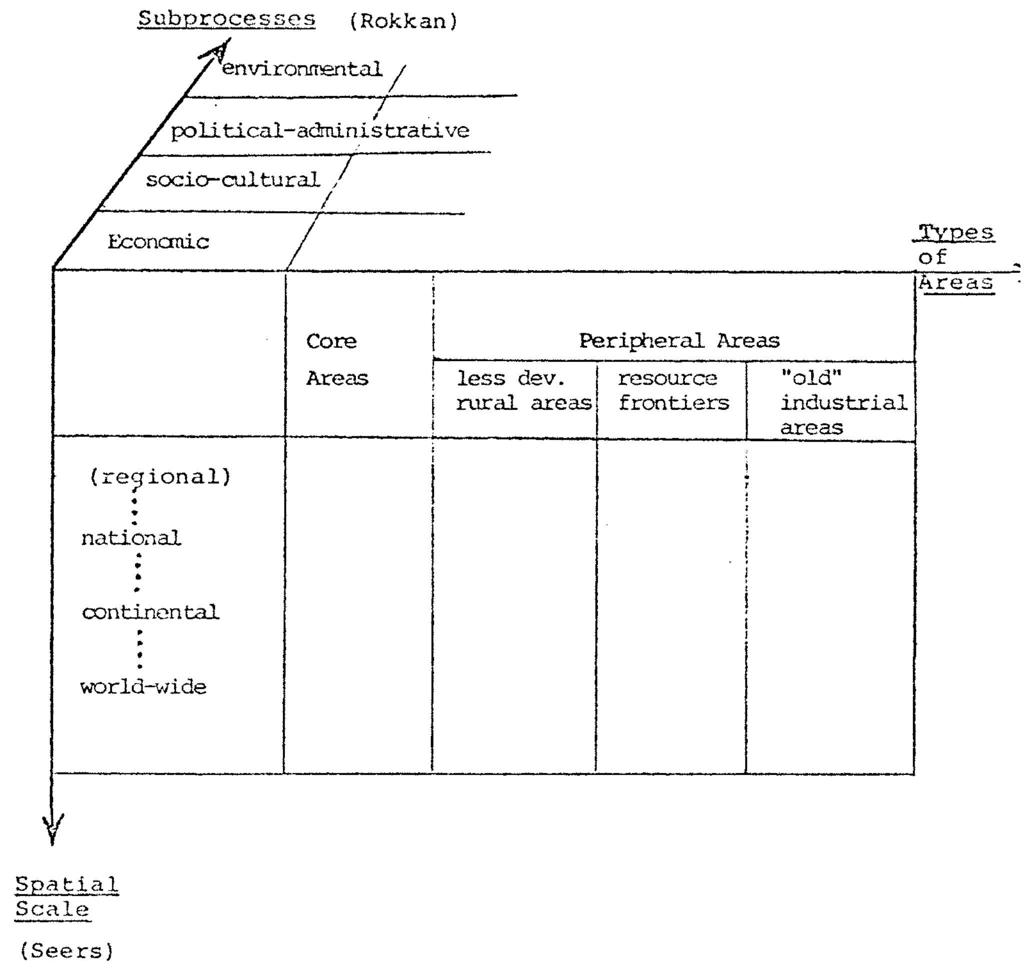
Relevant questions to be analyzed in this context would be how such objectives (see also vertical axis of Diagr.2) are functionally related to the traditional flow variables constituted e.g. by factor flows (horizontal axis of Diagr.2) and to the traditional economic stock variables such as regional product, employment, savings, investment, technological innovation, etc..

To which extent are these "side-effects" related to physical, economic, social or political distance between the regions/ countries concerned ? To which extent have organizational arrangements or institutional integration/barriers influenced these "side-effects" ?

It seems important to develop operational methods for formally interrelating such variables among each other. Only then a sufficient basis for an informed multi-level decision-making process between local,regional,and national levels also for peripheral areas would be feasible. It might also be that such informed opinion on the processes occurring in and vis-a-vis peripheral areas will also be instrumental for mobilizing effective political pressure towards more self-sustained or self-reliant development (Stöhr & Taylor, 1981).

Diagr. 1: Scales and sub-processes of spatial integration and differentiation

(based on Rokkan 1980 and Seers 1980)



Diagr.2: Qualitative and structural side-effects of traditional economic "development mechanisms" on peripheral areas (examples)

Scales of periphery referred to:
W = world-wide
E = European (continental)
N = national
A = all scales

Hypothetical side-effects in peripheral areas (examples)	Economic "development mechanisms" or "strategy elements" (examples)	1. Primary products export	2. Tourist resource development	3. Labour outmigration	4. Migrant labour savings remittances	5. Capital transfer	6. Technology transfer	7. Infrastructure investment	8. Fiscal transfers
Environmental side-effects	- Environmental pollution	W,E	E			A	A		
	- Disintegration of natural resource base (depletion and alienation of biological, land, mineral and energy resources)	A	A	A					
	.								
Political-administrative side-effects	- External aquisition of endogenous resources (land, property, capital)	W,N	A			A			
	- Dependence on external economic decision-making (e.g. via branch-plants/"extended work-benches" of transregional/national firms)					A	A		
	- External political/administrative/legal penetration (debilitation of endogenous political-administrative capacity)	W,N						A	A
	- Dependence on external political-administrative decision-making								A
	. . .								
Socio-cultural side-effects	- Accelerated introduction of external value systems		A	A	A				
	- Disruption of endogenous socio-cultural relations		A	A	A				
	- Weakening of endogenous technological creativity			A			A		
	- Social/spatial concentration of benefits (emergence of externally oriented elite)		W,E						
	. . .								
Economic (structural) side-effects and leakages	- Trend towards sectoral monostructure (reduction of resilience)	A	E,N						
	- Increasing share of stagnating sectors					E,N			
	- Reduction of share of key functions (decision-making, R+D)					E,N			
	- Increased regional social downward mobility			?		E,N			
	- Reduction in average reg'l productivity			?					
	- Establishment of low value-added/high social costs activities (routine act., polluting act., etc.)					A	A		
	- Reduction of intra-regional functional economic relations	A	A			A	A		
	- Deterioration of region's terms of trade	N			E				
	- Increased import propensity	W,N	A		E			A	A
	. . .								

R e f e r e n c e s

Carney, J. R.Hudson and J.Lewis (eds.) 1980, Regions in Crisis: New Perspectives in European Regional Theory, London: Croom Helm

De Vroey, M., 1980, "The Transition from Classical to Neoclassical Economics: A Scientific Revolution", in: Samuels W.J. (ed.), The Methodology of Economic Thought, London: Transaction Books, pp.297-321

x) Friedmann, J., 1979, "The Future of Regional Science", Concluding remarks at the Eleventh European Congress of the Regional Science Association, Cracow, Poland, August 23-26, 1977 in: Regional Dynamics of Socioeconomic Change (Eds.A.Kuklinski, O.Kultalahti and B. Koskiaho), Tampere:Finpublishers.

Friedmann, J., 1981, "Is a new regional theory necessary ?", paper given at the Meeting of the European Periphery Group (EADI, 1981, Lulea, Sweden), in: Seers, D. and K.Östrom (eds.), Regional Problems on the Periphery of Europe, MacMillan (forthcoming)

Gerdes, D., (ed.), 1980, Aufstand der Provinz, Regionalismus in Westeuropa, Frankfurt: Campus Verlag

Glickman, N.J. and E.McLean Petras, 1981, "International Capital and International Labor Flows: Implications for Public Policy", Paper read at a Conference on Structural Economic Analysis in Time and Space at Umea, Sweden, June 1981

Gottmann, J. 1980, (eds.) Centre and Periphery, Spatial Variations in Policies, London: Sage Publications

Hägerstrand, T., 1980, "What about People in Regional Science ?", Papers of the Regional Science Association, Vol.XXIV, pp.7-21

Hansen, N.M., 1981, "Development from Above: The Centre-down Development Paradigm" in: Stöhr W. and D.R.F. Taylor (eds.), Development From Above or Below ? The Dialectics of Regional Planning in Developing Countries, Chichester: J.Wiley & Sons Ltd., 1981

Hechter, M., 1975, Internal Colonialism: the Celtic Fringe in British National Development 1536-1966, London: Routledge

Hechter, M. and M.Levy, 1979, The comparative analysis of ethnoregional movements", in:Ethnic and Racial Studies, Vol.2, No.3 (July 1979), London: Routledge & Kegan

IIR, forthcoming, Development of Peripheral Areas in Austria: the dichotomy of large-scale functional specialization vs. integrated regional development,IIR, Wirtschaftsuniversität, Vienn

Isard, W. and Ch.Smith, 1980, "Elementary Location Analysis in Policy Space", Papers of the Regional Science Association, Vol.45, pp.17-44

x) Esman,J.Milton,1977, Ethnic Conflict in the Western World, Cornell University Press, London

Keeble, D., P.L.Owens and Ch.Thompson, 1981, "The Influence of Peripheral and Central Locations on the Relative Development of Regions". Centrality, Peripherality, and EEC Regional Development Study.Sponsored by the Commission of the E.C. and by the U.K.Dept. of Industry. Dept. of Geography, University of Cambridge (mimeo.

Massey, D., 1979, "In what Sense a Regional Problem ?", Regional Studies Vol.13, pp.233-243

Myrdal, G., 1957, Economic Theory and Underdeveloped Regions,Londón: Gerald Duckworth & Company Ltd.

OECD, 1979, Migration, Growth, and Development, Report of an Expert Group, chaired by Prof.Charles Kindleberger, Organisation for Economic Cooperation and Development, Paris

Roemer, M.,1978, "Dependence and industrialization strategies", Development Discussion Paper No.37, Harvard Institute for International Development, Harvard University, Cambridge, Mass. (mimeo.)

Rokkan, St., 1973, "Cities, States, and Nations: A Dimensional Model for the Study of Contrasts in Development", in: Building States and Nations (Eisenstadt, S.N. and St.Rokkan, eds.), Beverly Hills: Sage Publication

Rokkan, St., 1980, "Territories, Centres, and Peripheries: Towards a Geoethnic-Geoeconomic-Geopolitical Model of Differentiation within Western Europe", in Gottmann J. (ed.), Centre and Periphery: Spatial Variations in Politics, London: Sage Publications, pp. 163-204

Seers, D., 1977, "The New Meaning of Development", International Development Review, Vol.3, pp.2-7

Seers, D., B.Schaffer and M.L.Kiljunen, 1979, Underdeveloped Europe: Studies in Core-Periphery Relations, Sussex: Harvester Press

Seers, D., 1980, "Theoretical Aspects of Unequal Development at different spatial levels", in: Integration and Unequal Development (Seers,D., C.Vaitsos and M.L.Kiljunen (eds.), London: MacMillan, pp.9-23

Sunkel, O., 1973, "Transnational capitalism and national disintegration in Latin America", Social and Economic Studies, Vol.22, pp.132-76

Stöhr, W., 1975, Regional Development, Experiences and Prospects in Latin America, The Hague: Mouton

Stöhr,W. and F.Tödtling, 1978, "Evaluation of Regional Policies - Experiences in Market and Mixed Economies", in Hansen, N.M., (ed.), Human Settlement Systems, International Institute for Applied Systems Analysis, Ballinger, New York

Stöhr,W. and D.R.F.Taylor (eds.), 1981, Development From Above or Below ? The Dialectics of Regional Planning in Developing Countries, Chichester: J.Wiley & Sons Ltd

Stöhr,W., 1981, "Alternative Strategies for Integrated Development of Peripheral Areas". Paper presented at the Meeting of the Working Group on the "European Periphery", European Association of Development Research Institutes (EADI), held at Lulea, Sweden, March 1981, in: Seers, D. and K.Östrom (eds.), Regional Problems on the Periphery of Europe, MacMillan (forthcoming)

Tarrow, S., P.J.Katzenstein and L.Graziano (eds.), 1978, Territorial Politics in Industrial Nations, London: Praeger Publishers

World Bank, 1980, World Development Report 1980, International Bank for Reconstruction and Development, Washington, D.C.