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## INNOVATIONAL PERSPECTIVES – CONTRIBUTIONS TO THE NATIONAL CONCEPTION FOR REGIONAL DEVELOPMENT IN HUNGARY

**Abstract:** The primary aim of this study has been to provide a contribution to the National Conception for Regional Development towards working out a regional policy in Hungary which takes into account the innovational potentials of individual regions, strengthens potentials or, as far as possible, creates them wherever they are lacking.

**Key words:** regional policy, diffusion of innovation.

### 1. INTRODUCTION

Innovation concepts used both in science and everyday language are heavily loaded with values associated mainly with the concepts of modernisation and dynamics. The descriptive scientific terminology suitable for grasping the regional nature of innovation is rather undeveloped, its formulation is still very much in embryo, not only in Hungary but in other countries as well.

The following questions are set out:

1. How far has the international scientific community gone in theoretically clarifying the relevant issues, categories and methods? As regards the analysis and assessment of these issues, what kind of conceptual/theoretical initiatives and experiences have been accumulated?

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2. In order to describe and assess the present situation in Hungary, what starting points can be found in the available, limited and in a certain sense fortuitous, data, experiences and results of earlier inquiries?

3. What sort of 'fundamental' ideas can be formulated for regional policy, ideas which might be regarded as starting points as closely connected to the available theoretical instruments as to the already accessible data and personal experiences, ideas which render further progress possible and eventually engender such elements which are feasible in the fields of administration and regulation and effectively contribute to a regional policy conducive to innovation and modernisation?

## **2. DEFINITION: INTENSIFICATION OF COMMUNICATION AS THE PARADIGM OF GOOD INNOVATION**

Schumpeter's descriptive definition is the epitome of traditional and traditionalist definitions of innovation. Being of a descriptive nature, this definition of traditional economics is intended to be devoid of values, one respect in which it is in line with the spirit of the 1950s and 1960s. It was during a series of debates (commonly known as the 'debate on positivism') in the 1960s that adherents of the so-called 'Frankfurt School' effectively proved that social science can never be rid of values. Schumpeter's definition (according to which innovation is the engenderment of new, unprecedented combinations) is absolutely traditional and neutral. However, in terms of science it is not quite illuminating; for instance, it does not give a clue to even such simple, everyday issues as how we should distinguish between new combination on the one hand and dissolution or ruination on the other, since the latter may just as well be called 'new combinations'.

Innovation in the Schumpetrian tradition is normally restricted to the engenderment of new combinations in terms of technology and organisation. Such an interpretation does not go beyond the product life cycle, nor does it consider qualifying, in any sense, the fact and the consequences of a given innovation as good or bad to be an adequate basis of evaluation.

Since the present study is meant to be utilised in a social policy document intended for regions, it necessarily bears the mark of being a preliminary to political decisions, and, due to its being so, it is just as necessarily bound up with values; it must tell politicians what is good and what is bad, in other words, it must define, with significance, what good innovation is.

By way of an application of this definition, an attempt will be made to explore the present situation in Hungary. First of all, however, an endeavour

will be made to justify, and then formulate succinctly, our value-orientated definition.

The justification consists mainly in operationalising the concept of good in relation to innovation. This can be done by tracing it back to another concept.

This other concept of good is the idea of an open societal system, the reverse of which is a closed one. A closed system allows for disorder at the highest possible level, and tends towards the most probable state of affairs; thus, in principle, it will not allow for anything new. An open system tends towards order at the highest possible level, and allows for the least probable eventuality; thus, in principle, it will accommodate all sorts of novelty. Seen from without, a closed system, as well as any of its subsystems, behaves like a black box, an inanimate object, and, in principle, has no connection to the world outside. An open system, in contrast, as well as any of its subsystems, behaves like a structured organism, a living being, in fact, which maintains, in principle, the highest possible number of connections with the world outside, indeed it extends that number all the time in the fastest possible way.

In our definition, good innovation is a new combination which increases the number of connections between agents within and without the (sub)system, in other words, it increases the density of the communication network, while bad innovation reduces the number of connections and thins out the communication network.

### **3. WEST EUROPEAN MODELS AND THEIR APPLICABILITY**

#### **3.1. Methodological considerations**

Due to its inherently positive content, innovation in a broader sense, and particularly in a regional aspect, is very often interrelated with the concepts of modernisation, civilisation and integration. This allows one to operationalise, in a broad sense, these concepts on the theoretical as well as the practical level, instead of restricting them to innovations in strictly scientific and technical terms. Innovation so understood means the continuous renewal and transformation of the whole societal, economic, and also, of course, regional, system.

In accordance with our perception of man as a collective rather than individualistic entity, a communicative being to be found at the intersection of different groups, the units under scrutiny as well as those to be created are seen as constantly changing, overlapping complexes. In our view, then, the units to

be scrutinised range from local communities to regional units extending over national boundaries.

In modern political theory, the rights of the individual are set out in four concentric circles as civil (human), political and social rights, plus the right to communication. This model is only taken to be valid in the event of complete legal awareness; however, we think most of the phenomena to be dealt with are below this level. In our view, the crucial criterion consists in the nature of communication, which may be hierarchical or network-like, because hierarchical, non-innovative intra-group and intergroup communication generates a public opinion of masses, while densely woven, innovational, network-like communication generates a tested public opinion. In the case of the former, there is no question of legal awareness; various forms of manipulation, however, bring about and conserve negative crisis phenomena characteristic of the fundamentalistic cycle, while the innovative cycle comes to an end or never comes into existence at all; in the case of the latter, on the other hand, such negative crisis phenomena never appear, or else they lose their significance, while innovation develops and/or accelerates. In real life, of course, one will always have a certain mixture of these two extremes.

### **3.2. 'Reorganisation of the social space'**

This phenomenon is induced by the technical and organisational innovation of economising on space. The patterns and forms of the territorial division of labour become altered, the condition of being 'bound to the soil' is extenuated. Space is a time-consuming variable; 'to gain space is to gain time'.

The roles of mesosphere, regionality and the network organising which operates within the former two have been marked up. The main rule for the integration of national economics is not to start out from the top, but rather the other way round. Networks are created at the local level, then expand into the region, and, eventually, interregional networks appear. The integration of meso-zones, regions and networks is the shape which new forms of domestic and international co-operation take. The main trend is regionalism with its organisation at fundamentally grass-roots level; the central government's regional policy should be aimed at supporting this.

Each technical innovation is a reproduction, on a smaller scale, of the social mode of production. Thus, regional development aims at developing the 'social mode of production', where the central role is played not by the government or its relevant department, but, rather, by the social bearers of technology and economy, the real agents and originators of transactions.

The survival and reproduction of the population depends, on the one hand, upon material resources, which are present in the environment and can be obtained by the society through technological means; on the other hand, it requires adjustment to the so-called ecological pressure by means of adaptive equilibrium and collective action. The population of a given territory survives as long as it is able to continuously reconstruct its adaptive equilibrium. For the purposes of regional development it is advisable to introduce into the planning process a broad term of technology encompassing the material systems, the co-ordinated forms of social and economic operativity, and also the spheres where people live, work, are engaged in politics, and create law and ethics.

A new measuring philosophy is required in applying the known (West European) patterns. The new measuring philosophy which is intended to be put forward is aimed at obtaining and arranging in an organised form such data which are the pointers of social integration or social cohesion. Account should be taken of the fact that there is always an operative community (the agents of real processes in the territory) and another, interpreting community (experts, politicians, planners and agents of administration). Regional planning should always take as its starting-point the interests, the actual movements, the initiatives and the values of the operative community, rather than those of the interpreting community.

### **3.3. The revaluation of regions**

The notion of 'development' should be reassessed. This is necessitated because new forms of social integration have appeared, forms which hardly fit in traditional economy or society: informal economy, deviant forms, non-legal and semi-legal sources of income, social ostracism, marginalisation, isolation from the flow of communication.

Technical development requires a structure of behaviour as well. There is an extremely close connection between technical innovation and the human sphere. From this point of view it is very important to note that discoveries and innovations have always thrived better in mixed cultures than among homogenised populations. Creative/adaptive initiatives, the innovation of technical management, the problem-solving style, the capability of utilising resources sensibly etc., may all be regarded as new elements of social and cultural diffusion. The issues relating to the development of the social sphere are also resolved in the regions, in the fields of research, education, the sensitivity of the media, and political support.

A new approach to regional development is recommended, wherein technical, social and organisational techniques are treated in conjunction with

institutional modifications. The new regional policy to be developed should promote the intensification of communication and connective relations (networks), and, as a result, foster co-operation between regions and countries. Such policy sets high value on the promotion of cultural variations in the form of migration patterns, the autonomy of ethnic and linguistic communities, the flow of information and resources, the availability and obtainability of news, etc.

### **3.4. The approach of Hungary to the EC**

In order for Hungary to approach the space and territories of Europe, it is important to know how ever denser networks of co-operation, especially in the fields of science, technology and innovation, come into existence in Europe. It is crucial to study what is called network integration. On the one hand, there is the development of 'flow spaces' of an ever increasing density with ever increasing disregard for the geographical and institutional boundaries of local communities, regions, countries or the EU. Within these spaces there is a flow of interaction, communication, co-operation and information between socio-economic agents and institutions. These spaces are parts of the general processes of globalisation and internationalisation. On the other hand, one may speak of 'the spaces of loci' where participation in the integrative process is anchored. Expanding is the process of regionalism with the recognition of the importance of regional economy, local production and innovational systems, industrial and technological belts.

The following four elements should be integrated to a large extent into regional policy in Hungary:

- 1) European integration is being developed as a result of cohesion of regional spaces between nations.
- 2) network integration requires that the density of the space of information flowing among the agents should be increased;
- 3) regions increasingly benefit from European integration, but this capability has actually developed only in some key regions of Europe;
- 4) some of the regions which take part in regional co-operations within the European Community are not parts of the cohesive space between nations or of the common territory characterised by ethnic or linguistic criteria.

Regional co-operation seems to be the predominant ingredient of European integration, a component valorising the different cohesive belts within the Community and enhancing the ability of weaker regions to benefit from the integration process.

## **4. THE SITUATION IN HUNGARY**

### **4.1. Scenarios and models**

It is advisable to confront capacity building strategies with respect to regional innovation in Hungary with three comprehensive scenarios, namely:

a) the conventional scenario: economic decline comes to a halt, but stagnation (with low growth and high unemployment) is basically prolonged within the foreseeable future (at least for 5 to 7 years);

b) the free flux scenario: significant growth of one sort or another takes place, but it results exclusively from (external?) market trends with no specific attention paid to the issues of development and innovation; the latter exist wherever market rationale substantiates them, otherwise they wither away;

c) the interventionist state scenario: there is revival, but a major role is played in it by the accidentally integrational commitment of national and local/regional public policies.

Possible alterations of the innovational space structure have been modelled. As a result, four significant versions emerge:

1. The model of external, local control is, in fact, the continuation of the existing trend, that is, new local centres mainly develop in connection with activities of non-domestic interest. Thus, an 'acceptor' growth centre in Northwest Hungary may come into being as, principally, a cheap supplier of the Austrian market or the low-cost subcontractor of Austrian principals for the Hungarian market, just as a centre in Northeast Hungary may play the role of supplier for the Romanian and Ukrainian markets. In these new centres, there is no high technology present, nor is any other type of intensive development in progress; however, the centre in western Hungary adapts imported technology and new products to a greater extent, just as the eastern centre may also offer location for industrial developments which 'process' technology and products for their own markets.

2. The model of arrangement around a strong centre accentuates, in fact, the existing role of the Budapest region. This version takes as its starting point the proposition that the primary link for the European periphery to join up with the centres is to be found in its metropolises (and later on, it is first of all through this connection that the intellectual potential of other regions in Hungary will be oriented towards global markets). In Hungary there is only one metropolis, Budapest. In order for this city to gain relatively full membership in the European network of metropolises in terms of research, universities and industrial development, the resources of this poor country need to be concentrated to a great extent, which necessarily drains resources away from other regions. Such an internal redistribution does not even require state intervention, since these processes may take place by means of market mechanisms as well.

3. The model of a new zone of development anticipates a new industrial corridor to be established between Budapest and Vienna. This corridor will be extended to include the whole northern region along the Danube with Bratislava and Sturovo on the Slovakian side and the Komárom industrial area in Hungary. Industrial activity in the region will be made up of a mixed lot ranging from export-oriented businesses to plants assembling western products for the local markets, or from simple technology based on the cheap local labour to high-tech islands. This new region will, with the inclusion of three metropolises in the Carpathian Basin, undisputably become the centre of innovation, in relation to which new peripheries will arise.

4. The model of dispersed centres consists of local centres loosely connected with each other. The resources available in the country are dispersed among 7 to 10 centres, which do not maintain a very high profile in terms of innovation, however, in at least half of them academic refinement will be in one way or another convertible to economic success.

#### **4.2. Spatial extension of innovation and its analysis**

The task of studying the spatial emergence and spread of innovation in the Hungarian society and economy going through the phase of transformation is made relatively easy by concentrating on the appearance, frequency, existence or non-existence of certain features and forms, of which especially important is the presence of the civil sphere, of democratic institutions and of modern, private patterns of economy. This is because the former society and economy, which was mainly characterised by redistribution and direct control before the systemic change, 'managed' to prevent the organic development of organisations, methods, technology and networks characteristic of modern societies. The importance of such features of modern societies is also demonstrated by the fact that Hungarian sociological analyses did, already in those times, measure modernity and innovation by reference to the spirit of enterprise shown by certain regions or societal groups as well as in terms of the strength of the civil sphere and the markedness of non-subservient features of behaviour.

Organisational, behavioural and technical devices, which are typical of developed societies but still unusual in Hungary, have made their appearance forcefully, although spasmodically, in an economy and society under transformation. Their spread is an almost unambiguous measure of the extent of innovational attitudes, aptitudes and capabilities, and thus it can appropriately reflect the latter in spatial terms.

The study of innovation in spatial terms is of recent occurrence in Hungary. More intensive research was kicked off in the mid-1980s, and really gathered

momentum only around the change of system due to the explosive growth of different types of innovation. Of course, such a recent emergence of radical changes gives rise to numerous problems.

It requires endless, tiresome work to obtain data, even, all too often, rather inaccurate data. Information is normally stuck with the primary data collector, instead of being transferred to non-profit organisations, the necessary agents if the data are to be used for scientific research. The identity and role of the organisations in possession of data is rather unclear, as well as their obligation to provide (or withhold, as the case may be) information. The civil sphere and the different trade associations are just as unaware of the fact that they would also benefit, if the information was made public, from the development of economic and social networks.

Further questions arise if it is asked, 'Which of the numerous changes that occur simultaneously may we regard as innovations, novelties, new combinations?' The highest degree of uncertainty is, however, the one which surrounds the value content of novelties. Are such 'modern' (novel) structural-connective solutions which generate serious unemployment crises or, for that matter, introduce less environment friendly technology in the region, to be regarded as innovations? Is the boost of enterprises to be appraised in the same way in every region? To what extent, for example, does the creation of modern regional associations based on co-operation represent the innovativity of the region, or is it rather the product of conscious ambitions at the macropolitical, regional political level?

For the time being, one is rather hard put to answer these questions, but continuous analysis, data collection and the stabilisation of the economy will make it increasingly easier to do so. In other words, one's contention is that the only way in which one can ever hope to form a relevant picture of innovative processes of a positive value content as well as of their causes and effects will be by means of an iterative process of examination, which will enable one to enhance step by step, as one goes along, both the results and methods of one's investigations.

#### 4.3. Territorial, spatial processes

**Spontaneous, incidental.** According to researches performed and international experiences gathered up until now, in the incubation period (in which Hungary happens to be now) the spread of innovations is mainly characterised by neighbourly relations. Research has shown, among other things, how 'unconsciously', spontaneously the pioneering action (innovational attitude) of an enterprise is normally disseminated. Two ways of diffusion have been discovered, both of which have to do with the above mentioned neighbourly relations. One is the emulation of dominant firms in the environment in order to

earn prestige; the other is the practice of following patterns set by sector-related companies (e.g. by virtue of vertical structure, or in the case of independent members of the same holding organisation etc.).

**Conscious, generated.** Given that the speed and character of the spread of innovation (the process of diffusion) largely determine the intensity and pace of modernisation in a given community (settlement, microregion, region, etc.), it is important to understand these factors and thus contribute to the formulation of the state support strategy as well as to the establishment of means susceptible of serving as catalysts speeding up the diffusion of actions which bring genuine novelty.

#### **4.4. Innovation and distribution of settlement**

It is only the existence of an urban network which is capable to provide the focus of, and the driving force behind, the spread of regional modernisation and innovation. Towns and cities are not only recipients of 'NOVELTIES'; they also play an important role in the diffusion of new combinations and their appearance in different settlements.

The formerly developed and still existing hierarchy which prevails in the urban network is very markedly manifested in the diffusion of innovation and the innovational environment of regions and settlements. In many respects Budapest and its sphere of attraction represent the only centre of innovation in the country, but the role of larger traditional cities and county towns is also important.

It is to be noted in passing that on the evidence of data the role of Budapest is very specific, but it is also endangered. As mentioned above, the capital is in many respects the only 'real' centre of innovation in the country. Given the existence and operativeness of a rigid hierarchy of the urban structure and the high-level Budapest-centredness of the country, this privileged role would require a centre functioning in a much more balanced way, and having a more homogeneous metropolitan structure, than is the case at present. With its existing heterogeneity and its administrative system, Budapest is increasingly unable to fulfil the role it has been 'designated' to play in the urban network of Hungary; in addition, this may also intercept the development of other towns which may, as yet, be regarded as dynamic.

The highly developed state of the capital and its further development is important in other respects as well. If the long view is taken and the whole region is considered rather than just Hungary, one may perceive that there is fierce competition between cities of macroregions for the main role to be played by the centre of modernisation. As a consequence, Budapest 'competes' and is weighed not at the domestic level, but in a much wider environment, against very tough competitors.

On a smaller scale, the links of the diffusion of innovational processes inside the country are represented, similarly to Budapest, by the units of the existing urban network.

#### **4.5. Regional innovational strategies**

On the basis of the previous analysis, in accordance with our experiences concerning regional development and also with the view of experts and professional organisations involved in the topic, certain general propositions may be formulated as a contribution to framing the strategy of innovational diffusion.

Islands and centres of innovation are the agents and catalysts of the spatial diffusion of 'novelty', with the basic structural framework being possibly provided by the existing urban network. According to their deeper traditions, and also as a result of pro- or, as the case may be, anti-development influences they received in recent decades, individual units of this network have differing capabilities for this desirable role. (A remarkable number of Hungarian cities have had their development broken off, or have gone through enforced development, with the result that they now have defective urban functions.)

A key element of the interventionary strategy aimed at strengthening the regional innovation potential may be the factor of differentiation according to the most prominent specific difference. In other words, cities which already possess superior innovational environment and innovation potential require different treatment from their more peripheral counterparts with broken development and limited capability to fulfil their region-organising function.

In the first case, state 'intervention' strategy should be focused on 'non-intervention', which means that programs controlled and sponsored by the state should be kept at a minimum, while local actors should be given a lot more opportunities (i.e. they should get increased access to locally generated resources and obtain an ever increasing number of local tasks). Already existing and dynamically developing towns and cities should be allowed to replace remote control development with organic development generated by themselves and their environments.

In the second case, locally generated resources are insufficient to meet local needs. This is where direct state intervention is needed. Resources to build up various urban functions should be furnished by inviting tenders, or even by direct distribution.

If the above principles are wished to be put into practice one will have to confront several difficulties. One problem is the fact that the existing and only very slowly changing fiscal thinking is prone to accord very meagre funds for the planning and realisation of spontaneous development, even where this

would be the most efficient and feasible developmental model. (This obstacle, by the way, only aggravates the quandary of an urban network struggling with structural problems. Cities with larger and easily cashable assets at their disposal will be in a better position, and thus, maintaining their initial advantage, reinforce the existing framework.)

On the other hand, the pursuit of independence, which is rather strong among towns and cities, does not promote association, co-operation or the improvement of relations. Quite frequently, the breaking of relations between settlements was either a backlash of compulsory relations, financial or other, enforced on them in the past few decades, or a response to the challenge coming from the Municipality Act to form independent settlements (villages or towns).

#### **4.6. Operationalising**

In taking a snapshot of the present situation, it is necessary to rely on occasional instruments suited to high-speed measurement. What follows is an attempt to offer some sort of explanation, justification, as to how these are related to our theory and methodology as well as to the scales and variables which will be used later; knowing, of course, that the pointers are not free from possible sources of errors, contingencies which subsequent research might advisably verify, rectify or supplement. This paper also contains some proposals for these actions.

Further operationalising of the notions of social integration, cohesion and inclusion may lead one to start measuring simpler notions or pointers such as communication, the development of new forms of organisation and the presence of infrastructure required for this development, the existence and level of knowledge, skills and qualifications as well as, conceptually distinguished from these, the level of knowledgeableness (i.e. the possession of information), and, last but not least, all the skills and knowledge necessary for the maintenance of contacts between different cultures. The latter thus presuppose the existence of norms and habits which are not identical with the potentials required as presuppositions of making and maintaining contact.

**The connections.** Evidently, one of the most important components of integration is the network of connections, the medium by which a particular person, company or region is connected to the environment. In the context of different definitions of environment, one can speak of different types of connections as well, such as connections of neighbourhood, connections to the vertical (economic, administrative, political) centre, etc. It might be said, as a preliminary, that all data pointing to a higher number of intensive connections of actors in a given territory with other actors in or outside the same territory should definitely be regarded as positive factors from the point of view of innovation. As



also the infrastructure of service and administrative institutions such as the administration of duties and taxes, clubs, associations, societies, all sorts of civic organisations, the services they provide, etc.

**Knowledgeableness.** If the actors are to follow patterns, they should have access to appropriate information on 'patterns'. This is especially true with regard to adaptation, the establishment of common interfaces; that is, the possession of data which provide the starting point for the activation of a certain process is a prerequisite for that process to actually start. Information is the crucial content of the above mentioned connections, and it is conveyed from one actor to the other by means of communication and infrastructure, its underlying medium. What one has in mind, in this context, is factual rather than specialist information (e.g. one should say that market information belongs to this type, whereas technical information does not). To measure this, one could principally rely on examining the density of information networks or groups, the number of their members, the volume of data and the rate of information turnover.

**Knowledge, technical knowledge, qualifications.** Another important component of the readiness to integration is all that is normally defined as qualifications in the broad sense of the word, that is, not only the level of education as primary, secondary, technical or higher education, but also whatever may be ranked as special qualifications including short-term in-service training courses in entrepreneurship, accountancy, agriculture, etc. The availability, frequency and attendance of such forms of education, as well as the number of employees in this sector may provide useful indicators to measure their probable effectiveness and the extent of their diffusion.

**Connective culture, contact readiness, PR skills.** An important criterion should be identified, namely, the existence or non-existence of skills needed for individual actors to maintain connections, including the relevant norms and customs of different cultures and subcultures in various cases of oral, personal communication as well as in the fields of written, contractual communication, the media, PR, etc. This point of view is regarded to be very important, its measurement, however, may sometimes pose significant difficulties. It is probably not susceptible of direct measurement, but might, at a later date, be approached by indirect means such as measuring the frequency and duration of certain types of connection and surveying the actors' opinion.

**Development of unambiguous, formalised, conscious activities.** These observations lead to the conclusion that an important and more or less measurable prerequisite to connections and co-operation in economy and science is the necessity for the documentation of activities and results to take place within a structured framework which is in accordance with the standards accepted by the given sector. This is just as true of the approval of scientific products as of the economy, the money market and services, and, perhaps even

more specifically, of the accreditation of companies and the publicity for regional or company potentials.

**The validity of agreements, property (material or intellectual) and civic norms.** Last but not least, the maintenance and extension of connections requires the validity of certain rules (not in the legal or administrative sense of the word), which are no less important components for the 'contact-intensive' operation of consolidated, independent actors as are the aspects mentioned before (such as appropriate infrastructure, etc.).

## **5. INNOVATIVE REGIONAL POLICY: FROM AUTOMATISMS THROUGH CONTACT GENERATION TO INTERVENTION, THE CENTRE-PERIPHERY SYSTEM IN HUNGARY**

It may be observed as a preliminary result that the employment of methods based on automatisms, contact generation and intervention is in fact restricted to areas where:

- a) the relations between the population and local government, state organs or companies have become critical;
- b) the investor insists on it, or the municipality/company insists on the preparation of a strategic plan which also includes a preliminary conflict-potential study in order to avoid subsequent difficulties.

### **5.1. Legal, institutional environment**

At present, legislation is lagging far behind the problems of the actual state of affairs. The Regional Development Bill is repeatedly facing the same problems as so many of its 'profile-alien' counterparts.

In international terminology, 'regional development' is distinguished from 'regional policy'. The former term refers to all sorts of intervention with a view to starting up organisations/institutions/processes; the latter, however, is applied to the method, in general, of handling actions/problems/conflicts/crises.

It should be made absolutely clear right at the outset that any model of political decision-making which takes a one-centred, hierarchically structured network as its starting-point is to be regarded inadequate. A four-pole model containing four different approaches to decisions on handling actions/problems/conflicts/crises is recommended. Each decision-making institution should take account of the fact that decisions are made, in this model,

within a four-pole political field with four ways of approach, each according to one of these four poles, as follows: planning/providing the initiative; regulation/corporate decision; strategy preparation/action; restriction/control.

These four approaches represent four different types of institution, whose establishment and renewed statutes the new law is expected to guarantee. The four types of institution are as follows: the public as the institution for planning/providing the initiative; a sort of second, regional chamber of parliament, invested with regional development powers, serving as the institution of regulation/corporate decision; the regional executive authority, i.e. the municipality (since the government plays this role in the case of national issues only) as the institution for strategy preparation/action; and, finally, another new institution (still to be established) to perform the function of administrative court as the institution of restriction/control. The still non-existent two institutions, the second chamber of Parliament and the administrative court is at present substituted for by the Ministry for Environment and Regional Development and the Interior Ministry; however, the true function of these government departments would be, in this respect, to institutionally guarantee co-ordination on the one hand and the continual renewal/improvement of executive orders on the other, rather than *de facto* exercising jurisdiction and, in consequence, vying with each other. For lack of a regional chamber, an administrative court and the appropriate mandates, the Ministry for Environment and Regional Development and the Interior Ministry were forced to assume the roles of legislative and juridical power respectively, functions actually opposed to their own statutes.

In the first parliamentary cycle following the change of system, municipal and regional policies were based – witness the Municipality Act – on the assumption that citizens' autonomy, that is to say, their freedom (from the socialist state party) hinges, in terms of the regional division of society, on the system of municipalities.

The system of municipalities, on this view, is actually the local application of representational democracy; it prevails over, indeed, it suppresses direct, participatory forms of democracy.

Government measures aimed at rectifying regional polarisation do not go beyond the municipality or the company at the lowest level, while at the highest the issue is regarded to be the responsibility of government or its departments.

Since no alternative – in the form of something like a second chamber of Parliament – has been created at the national level to deal with issues of regional social polarisation, nor have participatory adjudication/decisional mechanisms been set up at grass-roots level, it is not currently feasible to establish an alternative at the level in between (county/region/capital), that is, an appropriate balance of power for the control of innovation; this is so because, at

the top, central power does not possess sufficient legitimacy with regard to these issues, whilst, at the bottom, municipalities and companies are efficient institutions of power solely for groups capable of asserting their interests.

Two basic problems may be pointed out with regard to the theoretical foundations of urban and regional policy:

a) the approach does not go beyond flow analysis and decisional simulation of closed systems, nor is it capable of dealing with transitive, low-probability processes, which are especially typical of the current period of transition;

b) in the theoretical foundations applied during the planning process, social communication, that is, the participatory induction and approval of decisions by the society is left out of account.

Urban and regional policies, just as innovational policies, are therefore rather indifferent to alternative views of the future, uninterested in mapping alternative perspectives, and also neglect structural problems, viz. the conditions of maintaining societal reproduction.

In consequence of what was said in earlier paragraphs (and as evidenced by both Ministry for Environment and Regional Development and Budapest municipal documents), current urban and regional policies

a) are, in terms of theory, bombastically holistic on the one hand, and unimaginatively taxative on the other;

b) in terms of methodology, they follow the rule of the necessary minimum, that is, only encompass whatever is absolutely necessary;

c) in terms of scope, they conform to power policy, i.e. only recognise pressure groups which are able to define themselves as lobbies in the political or economic sphere;

d) in terms of praxis, they are of a strictly posterior/corrective character and thus they lack conceptual foundations and objectives, in other words, they necessarily strive to maintain their functioning and postpone the solution of structural/reproductive/perspectivical issues;

e) finally, as regards the consequences, due to the lack of theoretical sensitivity to open systems as well as the refusal to accept planning and decision making on a basis of participation, they are insensitive to, or at least unable to prevent, crisis situations in the ecological, economic, social and political sense, and unable to promote regional innovation processes.

## **5.2. Centre-periphery**

There exists in Hungary a centre-periphery system which was revealed and analysed a long time ago, but actually it has never in fact been taken into

account from the point of view of regional innovation policy. In what follows, the main features of this system will be briefly summarised and some hints would be made at what should be done.

**Stock and flow (consecutive phases of production, outworker network/putting-out system).** In economic processes distinction should be made between stock-type and flow-type factors. As was already demonstrated by studies carried out back in the eighties, flow-type activities (services, commerce, communication, transportation, information technology) are concentrated in Budapest and at main junctions of communication/in major foci of transport. On the other hand, stock-type activities (the manufacture of agricultural and industrial commodities as well as other related activities) are to be found dispersed in the country in a diffused structure. In the course of modernisation and privatisation (the latter being the legal aspect of the former), which make innovation feasible, it goes unnoticed that enterprises primarily focusing on flow destructure the spatial structure of production; R&D (which is, by tradition, attached to stock) loses its basis because in the course of privatisation stock is sold but consecutive phases of production and outworker networks (particularly their spatial structures) are left out of account. Foreign capital is based on flow; it purchases stock while destroys consecutive phases of production and outworker networks as foreign bodies. Enterprises are far from playing a balancing role; rather, they are dependent on foreign capital. Regional innovation policy should strive at asserting these viewpoints.

**Local and singular spaces (segmented labour market, semi-peripheral capital market).** Since the introduction of the market economy in Hungary, inadequate attention has been paid to the fact that all markets are segmented, i.e. organised on a local, or at least regional, scale. As was already demonstrated by studies carried out a long time ago, the labour market is approximately of a magnitude between district and county, and the capital market for businesses familiar with the area is not bigger than this either. The capital market is semi-peripheral, i.e. the price of capital is different on local markets from that in the centre; an access cost is to be paid in order to get admission to sources of capital closer to the centre. At the moment these so-called local spaces are neglected, while there is a predominance of singular, that is, simultaneous economic spaces (banks, distribution networks, communication systems) of a merely financial-informational nature, unrelated to geographical space, and the access cost charged for admission to sources is ever increasing. Regionally oriented innovation should have local spaces as its starting point, and should thus be integrated into singular spaces (receptibility and accessibility). This is the West European standard. Otherwise, innovations become rootless and innovational resources emigrate from the territory (country).

**Implementation (multiplier- and trigger-effect).** It is important to be aware of the fact that an innovation is worth nothing in itself; it should also be implemented (applied) in the phases of production, distribution and replacement. Consequently, regional innovation policy should strive to ensure that implementation takes place during the innovational process, preferably in such a way as to bring about the maximum possible multiplicative effect, that is, to permeate the highest possible number of connected activities to the highest possible extent. Regional innovation policy should also provide for the maximum possible optimality of the trigger-effect of state-subsidised innovations, i.e. ensure the possibility of tilting spontaneous innovation processes in the desired direction with minimum state intervention as effectively as possible.

**Institutions.** At present the following innovation(-type) institutions are to be found (mostly rather sporadically and only in centres) in Hungary:

- incubation centre,
- industrial park,
- innovation park,
- technology transfer centre,
- regional advice centre,
- capital risk association,
- national and regional R&D base.

These institutions are, most of the time, renamed versions of the old, inherited structures in old industrial areas, characterised by old networks and an emphasis on technology. A certain number of activities imported from the West may also be encountered; however, these function as foreign bodies as their implementation (their adaptation to domestic conditions) has been ‘saved’.

In order to make the functioning of these innovation-assisting institutions more organic (i.e. to implement them) another three types of institutions should be evenly spread throughout the country:

a) conflict management, which makes it possible to minimise the cost of territorially localised development of business/innovation and also to strike the right balance between the new situation and the prevailing conditions;

b) communication policy, which is crucial for the application of adequately translated new procedures/ways of thinking/solutions (translated not simply in linguistic terms, but in terms of their adaptation to domestic conditions); otherwise, due to their misunderstanding the innovational development, local entrepreneurs, managers, workers and consumers will resort to conflict;

c) training in long-run calculation – as was demonstrated by surveys, the majority of present-day enterprises in Hungary do not essentially go beyond the type of casual, short-sighted, serendipitous small ventures tolerated by the former system, but differ from these in form only; enterprises in possession of long-run calculation will be enabled to accept the idea of long-term return on

investment instead of striving for immediate, short-run profit at all costs; long-run calculation makes it possible to orientate innovational investments in the long term and also in a territorially relevant way.

**Territories.** In present-day Hungary four types of territory may be distinguished from the point of view of territory oriented innovation, namely:

1. Budapest, the national centre, the main repository of innovation potential, flow, singular market, implementational developments and innovation-assisting institutions. The connective functions with regard to the rest of the country are performed by the southern belt of the capital and its southern conurbation.

2. The national semi-peripheral belt may be ranked two grades lower than the national centre as home to the innovation factors listed under (1), and includes the towns of Veszprém, Székesfehérvár, Dunaújváros, Kecskemét, Szolnok and Salgótarján. It is, in fact, identical with the belt of settlements immediately beyond the outermost conurbation of Budapest.

3. The situation of the national semi-peripheral enclaves is similar to that of the belt described under (2), with the difference that these towns – Pécs, Szeged, Debrecen, Miskolc – are territorially isolated, and thus occasionally have poorer prospects. Old productional-economic regional centres (potential regional NUTS-II centres).

4. The quasi-innovational category is constituted by the belt of commercial gates on the national borders. The Győr-Sopron and Záhony areas are the two most clear-cut such gates at present. There is a danger that they may become completely dependent, alienated from their regions, with the commercial and marketing activities of multinationals becoming potentially preponderant. Győr and Sopron supply Austria with cheap labour, while (in principle) the Ukrainian regions at the other side of the border may play the same role with respect to the capital potentially invested in Záhony.

The regional innovation policy of the country should be worked out in terms of these four zones plus the fifth, non-innovative portion.

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