## THE GROUNDS FOR CHANGE IN THE PARADIGM OF POLAND'S SPACE ECONOMY

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It is a fairly widespread opinion that the character and mechanisms of Poland's space economy must change (Kukliński 1989). This opinion is justified by both, far-reaching changes in the socio-economic system and the democratisation of the country, as well as the need to reconstruct the economic structure on the basis of new organisational and technological trends.

Like in the other spheres of activity, the mechanisms of a centrally directed economy had a negative impact on the actual state of Poland's space economy and have brought things to a crisis. Its manifestations are: an increasingly chaotic spatial development of the country, its regions and localities, a rapidly advancing deterioration of the environment, a colossal waste of natural resources, and an insufficient development of the technical infrastructure. The necessity to change this state of affairs means treating these problems as threats to the very being of society and hence as issues of much social significance (Chojnicki 1990b: 203).

What this situation calls for is a change in the paradigm of the space economy, i.e. in the conception of its character and operation.

The aim of this paper is to present two issues related with this problem: (1) new determinants shaping the space economy, and (2) the main elements forming it. What I shall not go into are issues concerning the very nature of the space economy. I would only like to stress that what distinguishes the space economy is its principal target, namely the achievement of spatial order. It is the theoretical-normative core of an activist conception of the space economy.

Spatial, or better spatial-ecological, order is the spatial organisation of a socio-economic system and its performance in spatial-ecological terms meeting the criteria of social rationality. We should distinguish between:

- (1) a model of spatial order, i. e. a postulated state of spatial organisation and way of the system's performance and
  - (2) a concrete spatial order, i. e. the actual state of the system.

The criteria of social rationality underlying the model of spatial order are functional, i. e. they express some social values and aspirations, as well as multi-

dimensional, i. e. they are not limited to the economic aspect only, but must also take into account the ecological, cultural, political, aesthetic and other aspects. The criteria should optimise certain functions, e. g. the quality of life, economic performance, etc.; they should also lessen disfunctions, e. g. spatial and ecological conflicts.

Thus, the nature of the space economy consists in the proper spatial and ecological organisation. It is not a separate system, for example in the form of an "economic spatial system".

## 1. NEW DETERMINANTS OF THE SPACE ECONOMY

My reflections on the new determinants of Poland's space economy will be restricted to three sets of factors:

- 1) changes in the economic system, viz. the transition to a market economy,
- 2) changes in the political system, especially the introduction of territorial self-government, and
- 3) the formation of new organisational and technological trends in the world economy.

Naturally, they do not exhaust the system of factors acting on the space economy, but they are of cardinal significance at present and in the nearest future.

## 1.1. CHANGES IN THE ECONOMIC SYSTEM

Changes in the economic system, especially the transition to a market economy, play a fundamental role in the transformation of the character and functioning of the space economy, because they alter mechanisms shaping spatial order. It is the central problem of an activist model of the space economy.

The building of the system of a market economy is extremely difficult because it takes place in the conditions of a social and economic crisis brought about by the Communist system. Moreover, there are no social experiences or theoretical and practical solutions to rely on in effecting this type of systemic change (Chojnicki 1990a, Krawczyk 1990, Kacprzyński 1991).

When considering this transformation a distinction should be made between changes in regulation by law and actual ones. Of course it is difficult to characterise them in a few words.

Regulations by law in the form of parliamentary acts have done away with institutions and mechanisms of the command economy and central planning, and have introduced the principles of a market economy. However, the list of issues still awaiting regulation by law is quite a long one. Of fundamental importance is the regulation of the privatisation of stateowned enterprises, which is crucial especially for industrial production where state property predominates.

Realistically speaking, the system of a market economy has not developed yet and is still in the making.

Other real factors obstructing the correct performance of the market economy include: system inertia, lack of managerial personnel, lack of a number of well-functioning institutions, especially a capital market, the huge state-owned sector in industry and difficulties with its privatisation and restructuring, and finally the economic crisis manifesting itself in a decline in industrial output, rising unemployment, a fall in national income, and an unbalanced state budget.

The question that comes to mind at this point is, what is the influence of these changes on the space economy? It seems that due to its specific properties it does not automatically benefit from the transition to a market economy; rather, the transition defines the necessary, though not sufficient, conditions of its change (Wróbel 1990). R. Domański (1990: 5) claims that these conditions include:

- (1) the freedom to undertake economic activity,
- (2) re-organisation of large enterprises and the establishment in business of their former member plants,
  - (3) privatisation of state property,
- (4) new principles of price and tariff formation, including land prices, charges for using the environment, and transport fares,
- (5) the creation of two government systems: local and central, interdependent but not hierarchical, and
  - (6) liberalisation of foreign economic relations.

The experience of countries with efficient market economies shows that they do not automatically lead to a harmonious spatial development. These countries have not avoided spatial conflicts engendered by such factors as the growing deficit of space, wrong land-use patterns, wide differences in land rent, glaring inequalities in regional development, and others.

Thus, market mechanisms alone will not lead to spatial order in Poland, especially so that they do not operate fully yet. This situation calls for specific regulations by law encouraging steps towards establishing spatial order, particularly in spatial planning, and the elimination of potential conflicts. Hence, it is necessary to:

- (1) provide theoretical foundations of controlling spatial order in the new conditions.
  - (2) provide principles of spatial planning at the regional and local scales,
- (3) establish the foundations of shaping economic development at the regional and local scales, and
- (4) work out the principles of solving spatial conflicts. This situation also requires the central and regional governments and local authorities to carry out an active spatial policy, protective and reconstruction-oriented.

## 1.2. CHANGES IN THE POLITICAL SYSTEM

Changes in the political system are also an important set of determinants of changes taking place in the functioning of the space economy. A special role is played by newly created, or rather reconstructed, territorial self-government (local governments). A territorial self-government act has been passed which has made towns and communes independent. Local governments serve primarily to democratise public life through the decentralisation of the power of the State; they also open up possibilities of promoting the interests of local and regional communities.

Although there is a marked tendency to extend the competence of local governments, a sharp controversy has arisen over the scope of their authority, especially in the fields of finance and taxes, and over their level — local only, or also regional. It is also postulated that a new level should be created between the State and local governments, namely an autonomous region that would take over some authority from the former and some from the latter.

It is assumed that the performance of territorial self-government will have a great impact on the formation and functioning of the space economy and may lead to a change in the spatial economic structure, especially in the fields of location, environmental protection and harmonising local interest (Domański 1990: 6). It depends, however, on the final model of operation of local governments: on their fuller financial independence, greater authority in spatial planning, and competent staff (Kołodziejski 1990).

# 1.3. THE FORMATION OF NEW ORGANISATIONAL AND TECHNOLOGICAL TRENDS

When looking for new determinants changing the space economy, attention should also be given to the formation in the economies of highly developed countries of a new organisational-technological production model named post-Fordism. Its development is connected with the introduction of high technology and highly diversified products and ways of manufacturing them, which leads to transformations in the organisation of production and the labour market.

While it is fairly difficult to give an unequivocal definition of the very essence of post-Fordism, it seems correct to see it in a new concept of control. According to A. J. M. Roobeck (1990: 140, 154):

In the transformation process the new core technologies can be seen as the main catalysts that hasten the conceptualization of a post-Fordist regulation. (...) The new core technologies are partly dependend on each other, but at the same time reinforce each other. Common characteristics of the new core technologies are a higher degree of control of the production and labour process by management, more flexibility, higher productivity and cost reduction. Their combined application will have a kind of multiplier effect for the labour process, the production process, (inter)industrial relations, the national economic structure and the related political power relations as established in the institutional structure, as well as for the international trade

in energy, commodities and raw materials and the international division of labour. (...) In contrast to the massproduction concept which was so characteristic of Fordism, other features are now appearing: flexibility, deregulation, dualization and polarization and segmentation.

The realisation of this model is expected to exert a strong influence on the character of the space economy; hence, analyses are made of the directions of forthcoming changes (Jałowiecki 1991). It may be assumed that the influence will manifest itself in:

- 1) changes in the criteria of location and the rebuilding of location theory that will accommodate such factors as: the natural, social and technological environments, the life cycle of a commodity, and the innovative environment;
- 2) changes in the structure and character of areas of economic activity, especially the creation of centres of technological activity (technopolis);
- 3) the growing importance of local and regional economic centres following from their high innovativeness; and
- 4) the creation of new economic organisations of regional and local development like regional development corporations or industrial incubators (Kukliński 1991).

In order to break out of the crisis and ensure a further effective development of the Polish economy, it is necessary to scrutinise these conceptions and work out their applications.

## 2. THE CHARACTER OF THE MAIN ELEMENTS OF THE SPACE ECONOMY

Let me now briefly characterise the main elements of the space economy in the activistic approach. They are:

- 1) subjects of the space economy,
- 2) its targets,
- 3) objects, and
- 4) ways and means of operation.

Thus, what we are looking for are answers to the questions of

- (1) who runs the space economy,
- (2) what for,
- (3) what is being shaped, and
- (4) how.

Naturally, the answers to some questions determine the answers to others (Dziewoński 1988).

It should be emphasised that what we deal with here is not the actual state of affairs, but what is socially desirable considering the general drift of things in Poland towards the restoration of society to its subjectivity and the adaptation of the space economy to the new conditions.

## 2.1. SUBJECTS OF THE SPACE ECONOMY

We should start with answering the question of who should shape the space economy. According to K. Dziewoński (1988: 25), the simplest answer is: "the space economy in each area (irrespective of its level) should be run by the resident community". Hence, in principle, this should be the task of the whole of society. The answer should be enlarged. We know that in the systems with a command economy and highly centralised planning there was also a high concentration of decisions in the form of the so-called central planner. However, when making decisions concerning large-scale industrial enterprises, the central planner often disregarded social and natural conditions, or the costs of such activities, which made them utopian and ineffective.

In the conditions of a free-market economy decisions shaping the space economy will be made by economic units on the one hand, and by various central, regional and local authorities on the other. The former strive for individual effectiveness, while the latter for social effectiveness whose manifestation is spatial order. In the period of transition to the market economy the former might be feared to dominate over latter. In order to ensure the society a full and competent share in decision — and policy making in the domain of the space economy, it is necessary to decentralise these processes and shift them from the central authorities onto local governments. That is why it is also important to establish their rights in such a way as to considerable increase the share of the society in the shaping of the space economy.

The scope of activity of a local government should cover not only everything that directly affects the level and quality of life of the residents of its area, viz. providing and maintaining broadly understood services for these residents (the local economy, education, culture, health care), an ecologically oriented conversion of industrial production, and the approval of the location of new industrial plants. This scope should also include promoting economic development, e. g. in the form of regional development corporations and active participation in economic restructuring. For a local government to function properly, it must be independent of the state authorities in its performance, and socialised through endowing them not only with certain rights, but also giving them the possibility of enforcing their decisions through independent sources of financing, access to information, and competent executive bodies.

What is of great significance for an effective space conomy at the local and regional levels, apart from these institutional elements, is the need for spatial order and the understanding of its role in determining the standards of living and the quality of life that are connected with specific local and regional patriotism.

## 2.2. TARGETS OF THE SPACE ECONOMY

The second question is about the targets of the space economy. The adoption of spatial order as a basic conception defining the spatial organisation of an

economic system does not directly determine the intermediate goals that are supposed to lead to this order.

Thus, the definition of these targets is not unequivocal and gives rise to disputes. Their fullest description is that of Malisz (1984: 90), who presented them as follows:

- 1) protection against all aggression to secure the biological development of society,
  - 2) the creation of conditions for socially rational management, and
- 3) the effort to equalise the standards of living of the population in all the regions and localities of the country.

The concept of spatial order cannot imply merely protection and conservation, but also creation and development. Hence the necessity to give this concept a new activist definition and ascribe it a consistent set of targets to attain.

Fundamental difficulties in attaining this or the other set of goals arise from three sources:

- (1) obviating spatial conflicts,
- (2) social acceptance of the goals, and
- (3) including them in socio-economic mechanisms.

When talking of spatial conflicts we to not mean the inconsistency of principles, but a conflict of interests, of course in a broad sense of the word. Spatial conflicts are manifestations of spatial disorder; they reveal themselves when particular subjects, or their complex systems, try to fulfil their different functions and attain their different goals.

At a macro-scale, these are conflicts between the economy and the natural environment; settlement and industry; the town and the countryside; industry and agriculture; advanced regions and poorly developed ones, etc. Such conflicts cannot be solved to promote the interests of a single economic subsystem, e. g. the urban economy, but the solution must accommodate general social criteria.

Another difficulty is the social acceptance of specific goals and ways of attaining them. Of course I mean conscious acceptance, not just verbal. This may also be connected with the fact that we can hardly anticipate the consequences of achieving or abandoning certain goals. At the same time historical experience shows that both some principles and their implementation can be wrong and irrational.

What is important, then, is a proper formulation of goals and winning social acceptance for their implementation. One of the examples is the issue of the building of nuclear power plants, another — environmental protection in underdeveloped countries where it is treated as a tendency to restrict industrialisation.

The most difficult matter, however, is the incorporation of the realisation of the targets of spatial order into the mechanisms of an economic system. But this is part of the answer to the fourth question concerning ways and means of arranging the spatial organisation of the economy.

## 2.3. OBJECTS BEING SHAPED

The third question, about what or what objects are shaped in the space economy, can be answered generally: all those components of an economic system that yield themselves to spatial organisation.

Recently, these objects are often described as geographical space, or the space of the country. Without going into a critique of this conception, let us note that:

- (1) this approach assumes a substantial nature of space as a layer or set of objects, which does not accord with the generally accepted understanding of space, and
  - (2) it is hard to talk of a spatial structure or spatial organisation of space.

However, other definitions are not accurate, either. The components concerned are first of all those that make up the natural and the artificial environments, the latter including technical infrastructure. This formulation is too narrow and refers to the field of spatial planning which cannot be identified with the space economy.

Other difficulties arise with the determination of what is to be the object of the space economy at particular levels. The solution of this issue depends on solving the problem of who is to be the decision-making subjects of the space economy. I think that a still valid answer to this question is supplied by K. Dziewoński (1988: 26), who says:

Without doubt, almost every issue in the space economy has aspects corresponding to different levels: local, regional, or national. However, the weight of decision-making should rest with the lowest level at which key decisions should and can be made. This statement allows the determination of objets of the space economy and spatial planning specific to particular levels. What seems to be an object specific to the local level is housing estate management (including land management); at the regional level — all those problems of regional development that are capable of autonomous solution under the present circumstances, and the co-ordination of interestate matters; and finally, at the national level — problems in the development of the whole of the country plus the co-ordination of inter-regional actions and links.

## 2.4. WAYS AND MEANS OF SHAPING THE SPACE ECONOMY

The most difficult answer is one to question four, about how to implement the established and accepted targets of the space economy. This implementation requires specified ways and means of their accomplishment to be built into the socio-economic system.

The means can be divided into theoretical and actual. The former include theories and models for the solution of problems in the spatial organisation of an economic system. They describe the state of this system, tendencies in the change of natural and social regularities determining its operation, diagnoses and forecasts, and optimising solutions. From the practical point of view, what is most important is their usefulness in solving real problems.

Actual (which does not mean effective) means, in turn, are tools of practical

activity helping to attain specific goals. Their effectiveness is not complete and rather limited because they involve the whole complexity and richness of socioeconomic life with its states of uncertainty and indeterminacy and a changing degree of variability. In achieving spatial-economic targets, this kind of means can be divided into:

- means of direct impact: coercive means, means of the material shaping of spatial structure, means of control, and spatial planning (Malisz 1984: 154);
- means of indirect impact: economic incentives encouraging certain enterprises or discouraging from them, and information means.

Here are short explanations.

Coercive means are established in the form of legal norms restricting the freedom of decision of all economic subjects to the extent that they may influence spatial development, the condition of the environment and living conditions. These norms have the form of prohibitions (e. g. waste discharge) and prescripts, and fall under sanctions (e. g. financial). It is generally believed, however, that these sanctions are unsatisfactory in our country, e. g. fines are too low.

The means of the material shaping of the structure of space include a previous preparation of land and the installation of technical and social infrastructure (e. g. a road network, communal facilities, parks, etc.). In our country they are used too moderately.

The means of control are based on observations of the state and changes in (especially) the natural environment, and on suitable sanctions.

Finally, spatial planning, which used to be a synthetic tool for the shaping of the space economy at all the three levels: of the national plan, regional plans, and local plans.

It should be noted, however, that under the centralised command economy it was not spatial plans that had a decisive influence on the space economy, but socio-economic plans, which did not aim at spatial-economic targets but at the so-called branch goals. These plans were the principal tool of shaping the country's space economy, because they were obligatory for socialised economic units. They were directly obliged to fulfil directives from above, and financial means were distributed centrally. Hence, the influence of economic plans on the space economy was mainly at the national level. The poor efficiency of these means, especially of exacting fines, requires them to be restructured and made more realistic. This refers to the role of spatial planning in particular.

The means of indirect impact have a significant role: they encourage economic subjects, through an economic policy and economic incentives, to engage in certain activities in the domain of the space economy, and discourage them from some others. They must be components of economic mechanisms, but their operation is effective only under a moneyed market economy. They include: a spatial diversification of taxes, financial help with investments or change in the interest on credits, a spatial diversification of transport tariffs, and others. Thus far, such measures have been used very sparingly in our country.

In this connection, there arises a fundamental problem of setting in motion

self-regulatory mechanisms of the space economy analogous to certain parametric methods. Such mechanisms, however, must be part of an efficient economy, which is hard to realise in the present conditions. Still, attempts to solve this problem should be made, although they should be based on a holistic model of the space economy, still awaiting to be worked out.

This model should comprise spatial planning as its integral element which, despite the elimination of directive planning from economic life, remains an irreplacable tool in the space economy, as proved by its importance in Western Europe. However, it, too, requires remodelling and efficient performance, especially at the local level.

It is impossible, of course, to present the complexity of the issue in a few sentences. I would like to close, however, with some reflections on the role of planning in the shaping of the space economy.

Planning, especially economic planning in the command economy, was the main tool for changing social reality on a large scale. The authorities used planning to introduce overall changes by transforming social mechanisms, often disregarding natural and social regularities, or even going against them. Hence, these plans were utopian in character, involved huge social and economic costs, and were mostly unsuccessful.

Such planning was a component of a totalitarian social engineering which tried to radically transform the whole of social reality on the basis of social utopias. Planning, however, can have a different function, not decision-making but anticipatory, showing the effects of intended enterprises, and corrective. This type of planning must be incorporated into the mechanisms of a moneyed market economy, and must express social interest at least consistent with people's aspirations. The damages that the space economy has suffered are the result of inefficient, social engineering being applied to it. Changes in this respect are only possible on condition that such a model is abandoned altogether.

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