

Stanisław M. Komorowski

INDUSTRIALIZATION AND URBANIZATION*

Industrialization is understood here as a process of change in the mode of production, particularly substitution of live labour for machines, and in the organization of production, particularly change in the division of labour; these changes imply changes in production relations. Industrialization processes are going in all sectors of the economy.

Urbanization is understood here as a process of spatial concentration of people and their social and economic activities; thus, these processes are related to the formation, development, and integration of societies which result in creation of settlement units — of different size and having different functions — which form a settlement system with a structure and organization changing over time as an expression of the society's development and technological progress.

Industrialization processes are inherent in the economic sub-system, whereas the urbanization processes in the settlement sub-system of the social system understood in its broadest context, i.e. defined as a set of interacting elements (and their relations) distributed within a well-defined geographical space. Both above-mentioned processes reflect the tasks performed by the said sub-systems which together combine into the implementation of the social system's goals, namely society's goals. Relevant, however, are the differences in kind of tasks performed by these sub-systems. If the settlement sub-system realises the basic (or direct) tasks of the social system, i.e. those which satisfy the society's needs, the economic sub-system realises the subsidiary tasks, the implementation of which conditions the realisation of basic tasks by the settlement sub-system.

It is difficult, if not virtually impossible, to consider industrialization and urbanization processes without introduction of the concept of effectiveness (social and thus, of course, implicitly economic). Both these processes should lead to continuous improvement in the standard of living

* This is an abbreviated version of the paper written with the intention to present it to the Polish Austrian Seminar held in Wrocław on 22—29 September, 1984. The original paper, although written in a very concise way and although it does not go into details, is much larger (some 50 pages). Thus the present paper should be regarded as its abstract which gives only a very rough idea about its contents.

of the whole society and its members in conditions of declining inputs of live labour (i.e. through increasing social effectiveness of labour). Both processes are in this respect complementary conditioning the implementation of their common task, i.e. finding the extremum of the social system's objective function simultaneously minimizing the system's entropy.

The settlement sub-system's tasks may be generally reduced to: (i) satisfaction of the society's needs, and (ii) accommodation of the economic sub-system. The accommodation is understood here as creation of possibly best conditions for the effective functioning of the economic sub-system from the locational viewpoint. It should be pointed out that we are considering here the whole settlement sub-system and its individual settlement units of which this sub-system is composed, i.e. its whole structure: elements and their relations.

The structure of the social system is distributed within the well-defined country's geographical space. The way in which this structure is distributed in respect of place, time, and function, i.e. its organization (often regarded as the system's organisation) is limited by the characteristics of the geographical space: abiotic, biotic as well as man-made elements located in it.

The system's task is to maximize the degree up to which the society's growing needs are satisfied. The system's objective function (vector of tasks) is continuously growing and thus requires undertaking of activities which will assure not only its current but also its future fulfillment. These basic tasks of implementation belong to the settlement sub-system which should thus have the priority in shaping its structure and organization.

Granting such priority to the settlement sub-system — in relation to its basic tasks — it is necessary to observe that its freedom to shape the structure and its organization is constrained by: (i) the characteristics of the geographical space, and (ii) the obligation to accommodate the economic sub-system in a possibly favourable way in respect of both: the geographic space and the settlement sub-system.

This latter requirement stems from two specific tasks of the settlement sub-system, namely: (i) to satisfy the society's members' need for work (i.e. gainful employment), and (ii) to satisfy the economic sub-system's demand for labour. In this context particular attention should be given to the relation „job — household” (in the locational sense) because its parameters sharply constrain the freedom to shape the organization of the social system. These constraints, however, are changing in time and lose their sharpness with the development of the technological and organizational progress.

On the other hand, the settlement sub-system accommodating the economic sub-system should respect the factors conditioning its effectiveness and thus its efficient functioning. These requirements stem from the relations characteristic of the economic sub-system's, particularly their relations with the geographic space (i.a. natural resources) and their external relations, and with the settlement sub-system (as labour market, as an outlet for final goods and services etc).

Certainly, the two sub-systems have relations with the natural environment and exert certain impact on it. These problems are, however, beyond the scope of the present article.

*

Historically, both urbanization and industrialization processes have been leading to concentration of people and economic activities in settlement units (at least in Europe, because not in Southern and Southeastern Asia). It is often held, and it seems rather correctly, that industrialization was the main cause of accelerated urbanization, particularly in the period of spontaneous development of capitalism — in the late 18th and early 19th centuries — and that it was chaotic and unplanned creating disordered complexes of accomplished facts which today make their modernization difficult and are responsible for many undesirable social pathologies. These processes have been governed by the spatial behaviour of entrepreneurs seeking locations which observed only one subjective criterion: short-term maximization of net profit in given conditions.

These processes paralleled the society's proletarianization, a process subordinated to the goals and interest of capitalists — at the time of competitive capitalism development — as well as to the process of the concentration of capital followed by further evolution of capitalism toward new forms of its activities, e.g. contemporarily „transnational corporations" (TNCs). Against a background of these processes there appears scientific, organizational, and technological progress which currently expresses itself in the „Third Industrial Revolution" which will have a tremendous impact not only on the production activities but also on the sphere of consumption and will very thoroughly change our way of living. The settlement systems are already facing new requirements; however, more and completely new are coming and will cause drastic changes in people's—households—spatial behaviour.

Parallely, changes in the organization of production and in its technology, as well as changes in the production patterns have caused basic changes in the spatial behaviour of enterprises. This behaviour became

also importantly influenced by multiplying relations which directly or indirectly constrain the freedom of location of enterprises, including regulations concerned with environmental protection.

Against a background of these changes there largely looms the inability of the settlement units—settlement systems—to cope with the contemporary requirements of the society and its economy.

There exists a viewpoint that massive migratory movements, particularly of the type „countryside-towns”, have been caused by the industrialization processes or by the growing demand for labour generated by town-located manufacturing industries. A closer look at the historical data does not confirm this viewpoint; industrialization processes developed always in conditions of unemployment resulting from people's proletarianization process, in situations which W.A. Lewis described superficially as „unlimited supply of labour”.

One may point out that at some instances of industrial development some areas, countries, and even regions understood as parts of continents, suffered shortage of labour supply. A closer analysis, however, invariably explains easily such cases by inadequacies in international division of labour. The presence of *Gastarbeiters* marks the crisis of international division of labour (often called „structural obsolescence of output”), the real cause of the world-wide economic and social recession which started in the 1970s.

However, this is not the end of the world-wide labour and employment problems. The Third Industrial Revolution and the so-called „re-employment” of productive capacities all over the world—readjustment of the international division of labour—introduces new factors in play. There will be an overall decline of absolute number of employed labour caused by rapid increase in productivity and effective market saturation by goods and services.

These are new problems to which there is still no proper answer. However, it is possible to explain the past after revisiting it in an unbiased manner. The oversupply of labour in urban centres was not caused by unsatisfied demand for labour by non-agricultural activities but by the proletarianization process combined with rapid and continuous increase in agricultural labour productivity. The released labour was pushed out of the countryside and submitted to economic pressures threatening its survival.

This was leading directly to the creation of a virtually monopsonic urban labour markets and to the marginalization of the price for labour

— of the wages and salaries — in the way described by W.A. Lewis. However, this explains only a part of the problem: why does the industry let the people migrate toward urban centres instead of locating themselves in the countryside? Moreover, why urbanization, to the extent which we observe, much beyond anything explainable by complementarities, co-operation, externalities, economies of scale, beyond the limit up to which urbanization per se does make any sense. In the more remote past there were such constraints as transportation, energy, etc. However, they do not exist for already more than one hundred years. Nevertheless, till the middle of the 20th century there was a very close symbiosis of the non-agricultural economic activities with the urban centres—maybe except for mining, agro-aliéd, and forest-aliéd industries. Why? An important factor has been overlooked in the analysis — the so-called communal policy, and one particular element of it, namely the fact of subsidising urban development under the pretext of stimulating economic development by creating favourable conditions and the pretext of social assistance to working masses. The model of thus functioning mechanism and its purposes are well known from the developing countries where the so-called „foreign enclaves” develop in urban centres and play the key role in the process of plus value expropriation-appropriation. And it did play the same role in developed countries so long as urban centres have been subsidized and the subsidies, i.e. a part of the plus value, were channeled through urban markets into the capitalists' pockets. However, the costs of large towns have been growing exponentially with their size, and the whole operation became economically ineffective; subsidies have been reduced and eventually discontinued in all highly developed countries. Economic and living conditions started deteriorating and caused important changes in spatial behaviour of both people and enterprises, which have been first observed by B.J.L. Berry and called „counter-urbanization”. However, further research corrected his first impression demonstrating that the processes observed should be considered rather as „re-urbanization”, i.e. of continuing urbanization — in the sense of spatial concentration — combined with thorough changes in spatial distribution of people in favour of medium-size settlement units.

The said re-urbanization processes have been accompanied by a very thorough restructuration and re-organization, including spatial, of the economic sub-system. Many industries did localize themselves in the rural areas and thus the new behaviour came to be called „ruralization of industries”, although such pattern should be regarded as extreme and cannot be regarded as omnipresent.

Thus the popular myth that „industries create towns”, invented in

the past by architects and urbanists in service of the communal policy of yesterday, became a relict. It was born as a reflection of the early capitalist chaotic industrialization for which, as already explained above, the towns created suitable conditions, at the core of which was the creation of an outbalanced imperfect labour market which guaranteed unlimited supply of cheap (at marginal cost) labour. Simultaneously, and this is also important, the towns in their chaotic process of absorption of newcomers from the countryside did not integrate them into communities which could be for these people a substitute of the rural communities from which they had been extracted. For the employers such alienation was a positive feature—and till recently nobody was interested in its tragic consequences. Trade unions can in this respect be only a partial and one-sided substitute.

The achievement of capitalists' goals required, *inter alia*, a supply of cheap undemanding labour. This should be reflected by low living costs, and the towns were supposed to reduce them. However, together with the growth of urban agglomerations the costs of their development and operation increased—following the threshold theory—exponentially. This contradicts the requirement about keeping the labour costs at a low level. As explained above, this difficulty was in the past resolved by subsidies granted to communal budgets. However, such expenditure became unmanageable for governmental budgets and thus was consequently reduced and in many cases discontinued.

Large urban centres became a relic, a social and economic nonsense, witnessing lack of planning and desorganised development. Also a village, in its traditional shape, became a relict unable to satisfy the needs of its inhabitants. The settlement sub-system became anachronistic in its structure and organization, unable to satisfy the social needs or to accommodate properly the economic sub-system. The reaction came by itself in the shape of the re-urbanization process—again unplanned, chaotic and incidental.