

# MISCELLANEA GEOGRAPHICA

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## EVALUATION OF THE GENERAL ECONOMIC MAP IN EUROPEAN ATLASES FOR SECONDARY SCHOOLS

General economic maps appearing in contemporary school atlases have become, along with general geographic maps, the most important means of presentation of various areas on the globe.

The purpose of the general economic map is to show in a graphic way comprehensive characteristics of the area presented, giving thereby the basis for describing the relations essential for the economy of a given territory. Such a map should also make apparent the corresponding proportions among the most important sectors of economy as well as the degree of economic differentiation among particular regions of the territory.

First efforts aiming at introduction of economic maps to school atlases, the 18th century atlas of J. Bertuch put aside, took place in the 1840s. Economic maps, including general economic maps, could, though, appear in school atlases only when the socio-economic and civilizational development in Europe attained adequate level, entailing a need for this type of maps.

Economic maps appeared in the 1840s, first in the atlases for professional (trade) school, while they were introduced in general profile schools only in the 1880s, and this was only to a limited degree. Such maps did not become common until the beginning of 20th century.

Differentiation of the time of appearance of economic maps in various types of atlases has been conditioned by the two-line development of economic geography as science. One stream was the trade geography, taking shape already in the first half of the 19th century, regarded as practical knowledge and taught in professional and high schools. The second stream, on the other hand, consisted of anthropogeography, which developed at the end of 19th century, and was regarded as science and introduced to curricula of the general profile schools.

In the atlases for professional schools economic maps played, besides the general geographic maps, the role of main maps, and both these

types of maps have been usually presented on the same scales. On the other hand, in general profile schools economic maps have been treated as complementary, and presented on scales several times smaller than the general geographic maps. The shares of economic maps in atlases was there very limited. Such a complementary role — similar as for other special-subject-oriented maps in atlases for general profile secondary schools — persisted until the '50s of the 20th century.

First economic maps to appear in atlases for general profile schools were the maps of home country, then maps of the world were introduced and, in a few atlases, maps of other countries. Maps of the fatherland presented usually raw materials being the fundamentals of economic activity, and distribution of industry; some of them, for instance maps of European Russia in atlases of Ilyin Publishing House, represented also the main plant cover zones and cultivation areas. The first world maps in atlases for general profile secondary schools presented the transport network, and some —very few — of them presented also distribution of cultivated plants and livestock. In the maps of the particular countries, drawn on very small scales, selected raw materials, crops and industries were shown, with details kept to a minimum. Such maps, though, as well as some maps of home country, in spite of the fact that they showed only a number of selected elements of economy, could be considered as general economic maps.

At the beginning of the 20th century the contents of these maps was **enriched owing to the increase of the number of distinctions** (number of raw materials, industry branches or crops). Further enrichment of the contents of these maps, during the period between the two world wars, caused that they had to be replaced by sets of maps of sections of economy, or even, with more details allowed for, separate maps of the most important branches of economy, crops and livestock breeding directions, **as well as transport**. Thus the **contribution of general economic maps to school atlases importantly diminished** in the period between wars.

Likewise, at the beginning of the 20th century small-scale maps with general economic contents started to appear in school atlases, showing in a synthetic manner the forms of economic activities of man. Appearance of such maps resulted from the level of development of geographical sciences. Geographical knowledge gathered by then made it possible to perform a variety of syntheses on the global scale, and one of such syntheses was classification of the forms of economy elaborated by E. Hahn. In the period between the world wars school atlases contained synthetic general economic maps elaborated for all continents, usually on the uniform scale. These maps, developed according to definite, uni-

fyng principles, made it possible to compare the levels of economic evolution of the particular parts of the world.

After the Second World War, the publication of new editions of school atlases started the period which should be regarded as the proper phase of shaping the general economic map in its present understanding.

Since the 1950s, the general economic maps have been elaborated on larger scales, and their rank has increased to become equal to general geographic maps, with which they often have been juxtaposed to form pairs. The increase of significance and share given the general economic maps in school atlases resulted not only from the increased emphasis on economic questions in school curricula of geography, both in socialist and capitalist countries, but also from the rapid development of subject-oriented cartography. Besides, the significance of general economic maps gained wider recognition in view of the fact that these maps give a typically comprehensive view of problems considered and facilitate the reasoning as to the relations which are essential for the economy of a given area.

Larger scale of maps, improved technology of their elaboration and printing, as well as the increase of the contents of source data, permitted a widening of the scope of the subject-matter and introduction of new solutions, both in the way the contents is presented and in its graphic expression. Thus, for instance, graphic magnitude distinctions have been introduced for denoting the significance of the industrial centres presented. Two separate categories of graphical signs have been adopted — one for mining industries and the other for manufacturing.

During this period quite new types of maps have been introduced to atlases, according to two genetic groups: of the analytic and of analytico-synthetic nature.

It is characteristic of Western European atlases to apply the analytical approach, showing e.g. types of crops against land uses, or spatial distribution of selected branches and kinds of industries.

In atlases of socialist countries, except for the German Democratic Republic, two main divisions of economy are shown in a more synthetic manner (agricultural regions and spatial distribution of industrial centres with characteristics of their branch structure).

This differentiation into two types of approaches in general economic maps had its source in the methods of perceiving the economic problems. In the Soviet Union and in other countries of Eastern Europe the emphasis placed upon the development of industry implied a need for greater exposure of industry in general economic maps. On the other hand, presentation of agriculture through regions was a reflection of research conducted before the Second World War in Soviet Union

devoted to agricultural and economic regionalization, and related to the needs of central planning. In Western Europe agriculture has been presented in general economic maps through demonstration of land use forms, often against the background of natural plant cover, and this manner of presentation corresponded to domination of landscape orientation in regional studies.

During the 1970s, under the influence of new didactic currents and new education programmes introduced in many countries, emphasizing the problem aspect of contents and the exemplification method of program presentation, new editions of school atlases have been published. These new atlases, especially in German-speaking countries had, when compared to previous editions, changed their subject-matter structure, with significantly increased share of socio-economic maps and so-called example presentations, and featured often new types of general economic maps.

In the same period contents of general economic maps in analytic approach were further enriched by adding a shaded image of surface sculpture and more detailed distinction of natural plant cover types. Both these elements make it possible to reach conclusions regarding relations between economic activities and fundamental components of natural environment, which is not possible on the basis of synthetic-analytical maps presented in school atlases of socialist countries.

During the 1980s attempts are being made at accounting for the service sector, and in particular for trade, crafts and tourism, through designation of the dominating function of the particular localities.

Changes occurring over the recent years into the manner of presentation, graphic form and contents of general economic maps in school atlases may constitute already a basis for formulating observations concerning development tendencies of these maps:

1. It is increasingly frequent to present agricultural economy through land use forms within the framework of general economic maps. Such an approach is considered especially useful at lower levels of schooling, since it is much less abstract in comparison with the synthetic approach, and being more analytic it permits the author's search for relations and for conclusions.

2. The scope of contents of general economic maps is as a rule limited to presentation of two fundamental sectors of economy: industry and agriculture. There have been, during the eighties, some attempts of accounting for other sectors of economy, first of all service — and such further attempts are certainly to come. Spatial, and as yet unused possibilities with this respect exist in the domain of wider presentation of

transport, for instance through characterizing transport flow magnitudes over the main transport axes.

3. Selection of the contents of general economic maps should correspond to current problems and tendencies in economic development to the particular countries, world regions and world as a whole. The diverging levels of technology and effectiveness of economies of various countries are not reflected in traditional, commonly utilized indicators of economic development, shown in maps. Appropriate demonstration of the above mentioned questions will not be possible until new indicators, more comprehensively reflecting the modern economic phenomena, will have been elaborated. An essential problem to be accounted for in general economic maps is the question of environmental pollution and disruption, and of exhaustion of environmental resources presented for instance through images of the degree of pollution of the seas, coastal areas and inland waters.

4. Graphic form of general economic maps in schools atlases of various countries is very differentiated, and these particular forms result from experiences, traditions and technical levels of publishing houses involved. There is, as yet, relatively little influence exerted upon these graphic forms by the research into the ways of utilization of maps. It is only in recent years that we observe certain efforts of direct application of studies conducted specially for a concrete elaboration of a map in cartographic practice.

