

*Włodzimierz Kurek*

## **DEVELOPMENT CONDITIONS OF POLISH SECTOR OF THE CARPATHIAN EUROREGION**

*Abstract:* The author presents conditions, opportunities and barriers to transborder co-operation development in the Polish sector of the Carpathian Euroregion. This is the area very important due its nature, rich and differentiated folklore and numerous historic monuments. The demographically situation of the region (considerable share of young and well-educated population), the abundant natural resources and the great tourist attraction are factors of its further economic development. Disadvantageous is the agricultural structure (a land fragmentation and a low productivity), incompleted infrastructure, low level of life quality and the population income.

*Key words:* Carpathian Euroregion, socio-economic situation, development priorities

### **Introduction**

The socio-economic transition in the Central – and East European countries in 1989 made possible new various forms of transborder co-operation. The highest form of it is that of Euroregion creation. Along Poland's borders there are 14 – the first ones were organised in 1991.

During the short period of those structures functioning, considerable advantages in their Polish parts are seen – in spite of financial and legal barriers, making the co-operation difficult in some aspects. But the local population and authorities show the considerable will and initiative to enlarge the mutual contacts.

The author deals with the Carpathian Euroregion, showing conditions, opportunities and barriers to the transfrontier co-operation within Polish sector of this new spatial structure.

### **General characteristics of the Carpathian Euroregion**

The discussed Euroregion was created in 1993, according to a treaty signed in Debrecen by local administration representatives of Poland, Hungary, Romania,



Ryc.1. Polska część Euroregionu Karpackiego

Fig.1. The Polish part of the Carpathian Euroregion

Slovakia and Ukraina, all lying within the Carpathians. This mountain area shows rather unpolluted environment, the considerable tourist values and the well developed agriculture and industry, too.

Polish sector of the Euroregion lies in the southeastern Carpathian part of Poland. There are 180 communities of the Małopolskie (Cracow) and Podkarpackie (Rzeszów) voivodeships, covering 18,686 km<sup>2</sup> and populated by 2,376 thousand. (*Euroregiony...*, 1999). Forests cover the considerable share of the region. Of the natural resources, oil and natural gas are the most important. This is the zone of the glass, food-processing and wood industries, and of the oil mining. Agriculture plays also an important role. There is the transport axis from Western Europe to Ukraina.

Basic aims of the co-operation developed in the Carpathian Euroregion are as follows:

- co-operation activation, exchange of experiences and information,
- backing of the regional development,
- economic development, and that of trade,
- growth of the tourism in the areas adjacent to the State borders,
- protection and amelioration of the natural environment,
- co-operation in spatial planning,

- co-operation in education,
- cultural exchange and the protection of common cultural heritage,
- exchange of professional groups and those of youth,
- general amelioration of mutual relations.

In the short period of the Euroregion functioning, many examples of co-operation in various spheres can be listed. Under the Euroregion guidance organised are cultural, sport and economic events, seminars, trainings, etc. In many cities fairs are organised in order to present the socio-economic potential of the given zones and to the easy the economic contacts. A traffic through frontiers became easier. For example, in 1999 4 new borders crossings for pedestrians and cyclists were opened on Poland-Slovak border – these are: Roztoki Górne–Ruskie Sedlo, Balnica–Osadne, Czeremcha–Czertizne and Ożenna–Niżna Polianka.

## Diagnosis of the state of Polish sector of the Carpathian Euroregion

*Nature.* South-Eastern Poland is known as the area of the exceptional natural values. The clean environment, an abundance of vegetation and that of fauna, with numerous species rare or perishing, the considerable number of natural ecosystems – all those let classify this part of Poland to the most precious natural regions of Europe. The most important areas are protected – these are 2 National Parks (Bieszczadzki and Magurski), nearly 70 nature reserves, 11 scenic parks and other classes of protected areas. All those cover over 50% of the Polish part of the Euroregion.

*Cultural heritage.* The heritage of material and spiritual culture, shaped during several centuries, is important for present culture-forming process. The discussed Euroregion contains areas populated by various nations and ethnic groups, which were mutually enriched in their culture and co-operated. The cultural variety of the area is also due to Roman-Catholic, Orthodox and Uniate rites, and those of Judaism. But some old ethnic groups disappeared or are vanishing, because of the civilisation pression and the unfavourable historic events. The author means Łemkos, Bojkos, Dolinians, Pogórzans and others. But the folklor is cultivated in many villages – old traditions, rites, customs are transmitted to next generations. Folk groups continue traditional dances, songs and customs. There is the considerable number of folk artists, continuing the traditions of ceramics, weaving, painting, sculpture, embroidery etc.

There are numerous churches representing the Roman-Catholic, Orthodox, and Uniate rites, and synagogues, too. Roman-Catholic churches are usually brick constructions, seldom the wooden ones, sometimes with rich inner decoration. The oldest and the most precious object of this kind, of an international significance, is the wooden church at Haczów.

For the mountains of Beskid Niski, Bieszczady and the Przemyśl Foothills typical are the wooden and brick churches of Uniate and Orthodox rites. Another group of monuments of the region are Jewish temples (synagogues) and cemeteries – often ruined, or neglected.

**Population.** The Carpathian Euroregion shows in its Polish part the demographical dynamics indices over the national average, thus the demographical youth. The natural increase index amounts about 2,6 per 1000 population (Poland: 0.3). The rural areas of Euroregion concentrate 60% of the total population (Poland: 38%). According to actual estimations, about a half of the local population lives on – pensions or disability payments, the rest – on agriculture or work out of it. Farmers are poorly educated – the half of them have completed only the primary school. The Polish sector of the discussed region is emigratory. The unemployment rate is much over the national one, because in particular districts of the Euroregion it amounted in 2000 17-22%, while in Poland: 15.1% (Powiaty w Polsce, 2001). The share of young and poorly educated people among unemployees is considerable. There is also the so-called “hidden unemployment” in the rural zones. Another negative phenomenon is an excessive concentration of employment in the great privatized plants which have various difficulties in fitting to the market economy conditions. Therefore the indices describing the level of living are below the national averages. That of the population income is also lower – i.e. in 2000 an average salary amounted in the Euroregion districts 1500-1700 zł per month, while in Poland – about 2000 zł (Powiaty w Polsce, 2001).

**Agriculture.** A relic of the past, difficult socio-economic conditions is the obsolete agrarian structure of the region, are observed all over South-Eastern Poland. The farms are fragmented, the man power resources are excessive and the market productivity of local agriculture is low. A disadvantageous phenomenon is the considerable dispersion of plots in the particular holdings and their small size. The average holding covers less than 4 ha (Poland: 7 ha) and is composed of over ten plots.

Such the disadvantageous spatial structure is stable also during the period of actual socio-economic transition. The land turnover hardly exists because the farmers are not interested in the enlarging of their holdings. This size stability is due to functions of those small holdings. Produced food is mostly used by the owner and his family (having also other income sources), treating the farm as the secure if the owner loses the work outside the agriculture. The agriculture is neither market orientated, nor specialised, thus various crops are planted. These are mostly cereals and potatoes, but their yields are much below the national averages. This low productivity is due to poor soils and the low use of fertilizers. As regards the animal sector, the important role is that of milk cattle, sheep and pig breeding. The considerable horse number is typical for the discussed region. Although there are zones showing a defined specialisation (i.e. in horticulture), the production structure is not fit to the small holdings and the considerable man power surpluses. In the market economy conditions the local agriculture becomes more extensive, by the cost reduction, i.e. that of the production means. The fertilizer use index is therefore below the national level.

Basic branches of the food-processing industry are those of meat, mill, fruit and vegetable, milk and sugar. Hoped is the development of labour-consuming production orientations – those of healthy food and food processing. Beside the production fragmentation also the food trade is fragmented. Due to the reintroduction of the market economy, previous trade system was liquidated and the food market became dispersed,

which is unfavourable for local holdings, small and economically weak. But a restructuration of the food market in order to create structures similar to the West-European ones have been continued for several years. The author means the professional wholesale trade centre in Rzeszów and the joining of the producers into the productive-marketing groups. Such action in circumstances of the dispersed offer should activate the food market and ameliorate the functioning of local canals of the food distribution. It is important also to use the existing and planned border crossings for the activation of the international food trade (*Strategia ...*, 2000).

**Forestry.** Forests cover about 36% of the Polish sector of the Carpathian Euroregion – over the national average (28,2%). The greatest forest concentration is observed in its southern part: the district of Bieszczady – 70%, that of Sanok – 50%. Due to continued afforestation, the forest area grows. Areas disadvantageous from the point of view of agriculture are to be afforested. In those forests the game resources are considerable, rare species (elk, fallow deer stag) included, thus they are used as traditional hunting areas, by Polish and foreign hunters. Also live in this part of Poland unique animals, under legal protection, i.e. bison, bears, lynx, beavers, wolves.

**Industry.** The greatest share in the total production value is that of the food-processing industry, next the chemical industry and the electroengineering one. Such the structure reflects distinctly the economic character of the whole region, where dominate well-developed food-processing enterprises, great chemical plants (Jasło, Dębica, Sanok, Nowa Sarzyna) and the electroengineering ones (Rzeszów, Sanok). At present the production of furniture and various wood objects is developed. This positive trend is due to the growing demand in Poland and abroad, satisfied by numerous small specialized plants.

The main cause of economic difficulties observed in the local industry is the lack of flexibility, which could fit their offer and structure to the market demand. The obsolete and inefficient technology, a low quality of products, the excessive employment and the difficulties in sell (also because of the crisis of the East-European markets) deepened the economic problems of those plants and caused the mass hiring of their employees.

The privatised enterprises and those with the predominated foreign capital participation get along the best with requirements of the market economy. Especially the latter ones show much higher income growth dynamics, in comparison with that registered in basic sectors of Poland's national economy. A good example is the tire factory in Dębica, the greatest company with the predominating share of foreign capital in the region (the share of the Goodyear company capitals amounts some 112 mln USD). Other important plants are: Alima-Gerber (some 30 mln USD) and ICN Polfa (51 mln USD) in Rzeszów, sugar plant in Ropczyce (16 mln USD), the United Biscuits (25 mln USD) and Owens Illinois (17 mln USD) in Jarosław. But the discussed region needs the green field investments (*Strategia.....*, 2000).

Both the volume and the dynamics of the foreign investments in the Euroregion are too small, thus its economic growth is too slow. The discussed companies share in the export is small – due to the low attractiveness of the region, because of its underdeveloped market and transport infrastructure.

There is no strong economic units representing the innovative branches and those of high-tech industry, using the modern technology and know-how, which should use the high scientific and technical potential, existing in some branches of the industry of the discussed Euroregion.

Therefore main actions undertaken in order to make this region more attractive for investors are: the development of transport and economic infrastructure, the greater activity of self-governmental bodies in the searching of such the investors, the use of European funds and the creation of the attractive image of the Euroregion abroad.

**Transport.** The basic network is consisted of national and voivodship roads. Their density is satisfactory, but not their state, if one considers road functions and the traffic intensity. Most of those roads shows the poor state of their surface and the bridges they pass, the intensive building along the roads causes the necessity of the traffic velocity restrictions. Due to the highways lack, the national road network are crucial for the national and international transport. The most important ones are the international roads Germany–Wrocław–Cracow–Rzeszów–Ukraina (Lvov, Kiev) and Warsaw–Rzeszów–Slovakia (Košice).

The poor state of road is one of the basic barriers to the economic growth of the region. The new north-south and east-west roads and those surrounding the main cities should ameliorate the traffic conditions - also should do new bridges on basic rivers, especially on the San.

The rail road pattern and density are sufficient. The main axes of the international importance passes from Western Europe to Ukraina. Its technical state is good, but this railway is underused. Of several important good stations, the most important one is that of Medyka–Żurawica, close to the Poland–Ukraina border, with standard – and wide-gauge lines. The local lines have the infrastructure much worse, thus the general competitiveness of railway transport is poor.

Along Polish-Ukrainian border there are numerous crossings for railway and road traffic, both local and international ones. The greatest is that of Przemyśl, on the international railway line Cracow–Rzeszów–Lvov–Kiev, with the terminal infrastructure for passenger and good transport. In the 90s two railway crossings were opened on this border, and one on Polish-Slovak frontier, too. The greatest road crossing are situated at Medyka (to Ukraina) and at Barwinek (to Slovakia), both serving the passenger and good road traffic and the pedestrian one, too.

Air transport has an airport near Rzeszów, adopted to foreign passenger service. Actually this airport is underused, in spite of reserve of land, possible to be used in its enlarging.

**Tourism.** Polish sector of the Carpathian Euroregion is widely known owing its tourist values. The natural environment, clean and less transformed, the natural landscape, and numerous monuments form the base of the tourism development. The mountain zones are favourable for hiking and skiing. Waters, especially the artificial lakes, are used for sailing, canoeing and fishing. Famous are the spas of Iwonicz-Zdrój, Rymanów-Zdrój and Horyniec. Since several past years riding and biking have become popular. The sightseeing development is due to the monuments of architecture – the city historic cores, castles and manors, Roman-Catholic churches and monasteries, Uniate

and Orthodox churches, several Judaic synagogues. It is worth to mention wooden churches (some of them built in the 15-16<sup>th</sup> c.) and the folk building presented in open air museums (skansens).

But the tourist infrastructure of the discussed region is underdeveloped. The lodging base contains mostly by the low class objects – private rooms, shelters, campings. Actually the agrotourism develops fast. Most of this base is concentrated in the principal tourist zones, those of Bieszczady Mts., Beskid Niski Mts., the spas of Rymanów-Zdrój and Iwonicz Zdrój. All the region is covered by the dense network of signed tourist paths. There are several ten ski-lifts - but rather short. Sanatoria and holiday centres still belong to various enterprises, thus they are not used rationally. The considerable part of lodging base is decapitalized. Sometimes site of those objects, their sanitary level and the use menace the natural environment - this the case of those lying around the Solina Reservoir. The general and technical infrastructure is weak, thus tourist service quality is unsatisfactory and the image of the tourist centres and of the whole region is disadvantageous. Due to de location near the Ukrainian and Slovak borders, the region can develop the local, transit and business tourism, and also the recreation facilities for foreigners.

For the time being, the basic mass of the tourists are Poles. The share of foreigners in the total tourist traffic within the Carpathian Euroregion is minimal. They come mostly from Ukraina, Russia, Slovakia and Germany.

The above presented diagnosis of the actual level particular sectors of the discussed area is completed by the list of its advantages and handicaps, marking the orientations of the further development.

#### *Advantages.*

- natural environment, rather clean,
- tourist attractiveness (both natural and anthropogenic),
- abundant natural resources, the balneological ones included,
- favourable demographical structure (the share of population in the pre-productive age over the national average, the high birth index, the positive migration net),
- underused man power reserves,
- attractiveness for investors,
- population economically active and ingenious.

#### *Handicaps:*

- the high share of population working in agriculture, the lack of alternate jobs for rural population,
- the agriculture fragmentated and showing the low productivity,
- incompleted transport and communal infrastructure and that of the environment protection,
- the low urbanization level,
- the low level of self-government incomes,
- excessive inner disproportions of the economic development level,
- insufficient number of companies with predominated foreign capital participation,

- the low level of life quality and that of the GNP per capita,
- weak promotion of the region.

## **Development priorities for Polish sector of the Carpathian Euroregion**

Taking into consideration the natural conditions of this area, its economic and demographical potential and the economic links of the whole Euroregion, the author points out the basic orientations which should be undertaken to guarantee its further socio-economic growth. These are as follows:

- polyfunctional development of rural areas (creating of new jobs in the food-processing services, in industry, trade and other tertiary activities, the tourism included),
- development of private economic units, especially small and low ones,
- development of tourism, based on the natural values and the cultural heritage of the region,
- growth of investments, financed by national and foreign capital,
- modernization and development of transport infrastructure,
- protection of the natural environment,
- cultural activation of the region,
- international co-operation.

To realize the polyfunctional development of rural areas, the improvement of the technical and social infrastructure is necessary – that of roads, waterpipes, sewage treating plants, etc. The tourism, especially the agrotourism, is one the non-agricultural activities which can be practised by the rural population – using the natural values of the countryside. The agrotourism is based not only the local lodging infrastructure (rooms to let in farm houses), but also on the holding products, i.e. the “ecological food” produced on the spot. But the considerable condition of the rural area development (that of the tourism included) is the preventing the natural environment degradation. The development of agriculture and that of the food processing requires the agriculture modernization, especially the improvement of the agrarian structure. The holdings economically strong should be backed, they should be enlarged, the number of holdings and that of population active in agriculture – reduced, the food-processing plants and the food trade enterprises – developed. The farmer co-operatives operating in the production mean purchasing, the food standarization, marketing and sell should be realized. Important will be also the biological progress, i.e. the introduction of more efficient species of plants and animals, better fit to the local natural conditions.

The economic functions of forests, due to the their site in the mountains, are secondary in relation to the non-productive ones, i.e. the water protection and the tourist function. In order to protect those forests, it is necessary to continue the afforestation of the waste lands and the arable ones covered by poor soils, and to create more differentiated biocenoses. The species, age, stage and spatial structures of those forests should be fit to the local natural conditions.

The basic factor of the economic growth of the area is the faster adaptation of its industrial plants to the market economy conditions. The completing of restructuration and privatization will make this adaptation easier. Therefore the privatization should be realized faster. As regards the smaller enterprises, its better functioning requires the liquidation of barriers to their growth; the market, financial, legal and organizational ones. The promotion of their production export to the European Union markets and to those of other countries (Slovakia and Ukraina included) will cause the full use of the discussed enterprises productive potential.

The development of those markets will activate these enterprises, both in national and international scale. To enter into the new market, the enterprises need better information service and the promotion abroad. Polish and foreign businessmen should have closer contacts, by fairs and economic missions. The local exposition and fair centre should be organized.

The development of the investments is the crucial element of the planned development of the whole region - due to it new jobs will appear, the produced goods become more modern and competitive. To make the region more attractive for new investors, the technical infrastructure should be developed, the investment offer prepared and the favourable attitude created. Such the promotion should be orientated both to national and foreign businessmen and its aim would be an inflow of the capitals, mostly the realization of the direct foreign projects.

But there are considerable restrictions the investments, mostly those concerning the usable space in the mountain zones, attractive for tourists, also those of the land property (undecided partially), the natural environment protection and that of water catchment areas and drinkable water reservoirs, and finally the restrictions connected with agriculture.

The sectors of the national economy having priority from the point of view of further investments are: the tourist infrastructure, manufacturing of motor vehicles, electrical machinery and that of electronics, and clothing industry.

To make tourism more competitive, the tourist infrastructure should be improved. The author means the modernization and development of roads leading to the areas of the greatest tourist interest, the development of parkings, car bicycle, horse and hiking tracks, that of skilifts and other sport and recreational facilities.

The transport pattern plays a crucial role in the economic growth. The violent increase of the car number requires the above mentioned necessity of the road network improvement. Such the modernization will make the discussed area more accessible, for national and foreign investors, thus it will be more attractive. The life quality will improve, the traffic safety included. In the works concerning with road system development and exploitation numerous jobs will be created, also due to the tourist traffic growth.

Very important element of the economic transborder co-operation development should be the international action concerning the natural environment protection. The author means the control over the excessive tourist inflow in order to protect the nature, the co-operation within the existing protected areas (the national and scenic parks), and the co-ordinated actions reducing the water and air pollution level.

**References:**

- Borderlands or transborder regions – geographical, social and political problems*, 1998, M. Koter and K. Heffner (ed.), Silesian Institute in Opole, University of Łódź.
- Burzyński T., 2000, *Uwarunkowania rozwoju turystyki w obszarach przygranicznych. Stan i propozycje dalszego rozwoju*, [w:] *Kierunki aktywizacji gospodarczej przez turystykę na obszarach przygranicznych*, Krosno
- Domański B., 2001, *Kapitał zagraniczny w przemyśle Polski. Prawidłowości rozmieszczenia, uwarunkowania i skutki*, Kraków
- Drupka J., 2000, *Promocja i informacja turystyczna południowo-wschodniej Polski i wschodniej Słowacji*, [w:] *Kierunki aktywizacji gospodarczej przez turystykę na obszarach przygranicznych*, Krosno
- Euroregiony. Mosty do Europy bez granic*, 2000, W. Molendowski and M. Szczepaniak (red.), Elipsa, Warszawa.
- Euroregiony w nowym podziale terytorialnym Polski*, 1999, GUS, Warszawa–Wrocław
- Jackowski A., 2000, *Turystyka religijna na Podkarpaciu*, [w:] *Kierunki aktywizacji gospodarczej przez turystykę na obszarach przygranicznych*, Krosno
- Kaganek K., 2000, *Turystyka aktywna szansą rozwoju Podkarpacia*, [w:] *Kierunki aktywizacji gospodarczej przez turystykę na obszarach przygranicznych*, Krosno
- Kozanecka M., 1996, *Pogranicze polsko-słowackie i aktualne problemy współpracy*, [w:] J. Kitowski (red.), *Problemy regionalnej współpracy transgranicznej*, Rozprawy i Monografie Wydziału Ekonomicznego, 10, Rzeszów.
- Kozanecka M., 1998, *Bariery, efekty i możliwości rozwoju współpracy transgranicznej w Euroregionie Karpackim*, [w:] J. Kitowski (red.), *Czynniki i bariery regionalnej współpracy transgranicznej – próba syntezy*, Rozprawy i Monografie Wydziału Ekonomicznego, 15, Rzeszów
- Nowakowski M., 2000, *Bieszczady potencjalnym czy rzeczywistym regionem turystycznym*, [w:] *Kierunki aktywizacji gospodarczej przez turystykę na obszarach przygranicznych*, Krosno
- Powiaty w Polsce*, 2001, GUS, Warszawa
- Ptaszycka-Jackowska D., Baranowska-Janota M., 2003, *Turystyka w polsko-słowackim regionie transgranicznym*, *Prace Geograficzne Instytutu Geografii i Gospodarki Przestrzennej UJ*, 111, 43-60
- Rocznik Statystyczny Województwa Małopolskiego 2000*, 2000, Urząd Statystyczny w Krakowie.
- Rocznik Statystyczny Województwa Podkarpackiego 2000*, 2000, Urząd Statystyczny w Rzeszowie
- Strategia rozwoju województwa podkarpackiego na lata 2000-2006*, Rzeszów 2000.
- Strategia zrównoważonego rozwoju (ekorozwoju) Karpat w granicach województwa nowosądeckiego*, A. Manecki (red.), 1998, PAN, 1-3, Kraków
- Suski Z., Heliński P., 1997, *Euroregion Karpacki*, Krosno
- <http://www.karpaty.com.pl/euroregion/Poland/>

# Warunki rozwoju polskiej części Euroregionu Karpackiego

## Streszczenie

Euroregion Karpacki obejmuje przygraniczne regiony Polski, Słowacji, Ukrainy, Węgier i Rumunii. Głównymi celami współpracy w Euroregionie Karpackim są: rozwój gospodarki i handlu, rozwój turystyki w obszarze przygranicznym, ochrona i poprawa stanu środowiska, wymiana kulturalna i opieka nad wspólnym dziedzictwem kulturowym.

Polska część Euroregionu obejmuje południowo-wschodnią część kraju, położoną w obrębie dwóch województw: podkarpackiego i małopolskiego. Jest to obszar o dużych walorach przyrodniczych, o bogatej i zróżnicowanej kulturze oraz o licznych zabytkach.

Korzystne cechy regionu to: stosunkowo czyste środowisko, duża atrakcyjność turystyczna, bogate zasoby naturalne, w tym przyrodolecznicze, korzystna struktura demograficzna, niewykorzystane zasoby wykwalifikowanej siły roboczej. Niekorzystne cechy to: wysoki wskaźnik osób zatrudnionych w rolnictwie, brak alternatywnych źródeł dochodów dla pracujących w rolnictwie, rozdrobnienie i niska towarowość rolnictwa, braki w infrastrukturze komunalnej, komunikacyjnej i ochrony środowiska, niska jakość życia i poziom dochodów, słaba dotychczasowa promocja regionu.

Priorytety rozwojowe w polskiej części „Euroregionu Karpackiego” to: wielofunkcyjny rozwój obszarów wiejskich (tworzenie nowych miejsc pracy w przetwórstwie, przemyśle, usługach i handlu, rozwój funkcji turystycznej), rozwój nowoczesnego rolnictwa wraz z sektorem rolno-spożywczym, rozwój przedsiębiorczości, zwłaszcza małych i średnich przedsiębiorstw, rozwój sektora turystycznego, w oparciu o walory przyrodnicze i dziedzictwo kulturowe, zwiększenie inwestycji krajowych i zagranicznych, modernizacja i rozbudowa infrastruktury komunikacyjnej, ochrona środowiska, aktywizacja kulturalna, współpraca międzynarodowa.

*Włodzisław Kurek*  
*Institute of Geography and Spatial Management*  
*Jagiellonian University*  
*Cracow*

*Translated by Zygmunt Górka*