## THE GEOGRAPHY IN IAȘI AT THE 150th ANNIVERSARY OF THE "ALEXANDRU I. CUZA" UNIVERSITY

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La géographie à Iași au 150<sup>e</sup> anniversaire de l'Université «Alexandru I. Cuza». Première université moderne de Roumanie; fondée en 1860, l'Université de Iași est, pourtant, une institution d'enseignement supérieur qui succède à toute une série de tentatives d'organisation, culminant avec celle de l'Académie de Mihai Sturza. Les débuts des préoccupations géographiques scientifiques précèdent eux aussi l'Université, se fondant sur l'œuvre de Nicolae Milescu et du prince Dimitrie Cantemir. Même après la fondation de l'Université, des cours de géographie riches en éléments originels, ont été donnés à l'Ecole des Fils de Militaires, par Grigore Cobâlcescu. Les premiers cours réguliers de géographie, à l'Université, ont été tenus, en 1904, par Ștefan D. Popescu, malheureusement disparu dans sa jeunesse. L'entre-deux-guerres fut marqué par la personnalité de deux grands géographes - Mihai David, qui fut aussi recteur, pour la géographie physique, et Gheorghe Năstase, pour la géographie humaine, ceux-ci étant suivis par toute une série de successeurs de valeur - Victor Tufescu, Constantin Martiniuc, Ion Gugiuman, Nicolae N. Lupu etc. Après la Deuxième Guerre mondiale la géographie physique a continué son développement, surtout dans les domaines de la géomorphologie, de la climatologie, de l'hydrologie, de la pédologie et de la géographie physique régionale, mais la géographie humaine, limitée; en principe, à la géographie économique, a fait de moindres progrès. En fin, ces deux dernières décennies, un visible équilibre se réinstalle et la géographie de Iași commence a être de nouveau prise en considération, au niveau des valeurs scientifiques et culturelles européennes.

#### PREMISES

The first geographical works written by a Moldavian-born scientist are due to Nicolae Milescu (1636–1708), a man with a sound multilateral education. In his books, a *Journey through Siberia*... and *Description of the Journey to China*, both written in Russia after his diplomatic mission of 1675–1678, the author dwells on the specific nature of the Asiatic countries, and the habits of the Chinese people. Later on, the Prince of Moldavia, Dimitrie Cantemir, wrote *Descriptio Moldaviae*, the first work rich in original geographical and historical information to which a detailed map of the Moldavian Principality is appended.

The development of education in Romania in the late 18th and early 19th centuries, called for the printing of a great number of geography handbooks, some of them authored by bishop Amfilohie Hotiniul, or by Vasile Fabian Bob, Gheorghe Asachi (published in 1838 together with a small school atlas), V. Popescu-Scriban, D. Gusti, and others.

### THE SECOND HALF OF THE 19<sup>TH</sup> CENTURY

The foundation, immediately after the country's unification in 1859, of the first modern universities in Romania gave a strong impulse to the development of the Romanian education, creating the conditions for a general emulation not only in the field of geography, but in other areas, too. In 1884, the Chair of Ancient History, Epigraphy and Geography set up at the Faculty of Philosophy and Letters of the University of Iaşi (Fig. 1), and headed by Petre Râşcanu, is a first mention of Geography

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being taught in Romanian higher education. Noteworthy is the course in geography given by Grigore Cobâlcescu (Fig. 2) at the Iaşi School for the Sons of militaries and published in 1888 in two volumes: *The Physical Geography of Modern Dacia* and *The Physical Geography of the Romanian Countries and of the Neighbouring Countries*. Under the Law of 1898, the Section of History of the Faculty of Philosophy and Letters became Section of History and Geography, also offering a BA degree in Geography.



Fig. 1 - The main building of Iași University in 1929.

#### **THE YEARS 1900–1947**

In 1902 the course in Didactic Geography for graduates from the Dpt. of Natural Sciences and of the Faculty of Letters was inaugurated and entrusted to Ştefan D. Popescu, a young lecturer of Geography at the Faculty of Sciences, holding also a degree in mathematics from Germany. He was also appointed teacher at two Iaşi high-schools: "Vasile Lupu" Pedagogical High-school and the Commercial High-school for Young Girls. His first open course in Geography, delivered on the 13th of April, 1904 was titled *The Place of Geography among Sciences, Its Educational Significance*. Although the academic and teaching career of Ştefan Popescu was relatively short-lived, yet his scientific interests were wide-ranging, his works focusing on the geomorphological evolution of the upper sector of the Olt Valley, on problems of Economic Geography in Great Britain and the geographical distribution of industries in Romania.

Unfortunately, Ştefan Popescu died at an early age and after his death in 1911, there began a period of substitution, sustained by Ion Simionescu and Ion Borcea. George Vâlsan was appointed titular professor in 1916, but in the wake of the First World War and of a train accident, he could no lecture here, despite having authored two fundamental geomorphological works as professor at the Iaşi University: *The Valleys* and *The Danube's Passage Through the Iron Gate. Physical Geographic Study.* 

The first Romanian Congress of Geography teachers organized in Iaşi was presided over by Simion Mehedinți, the founder the Romanian scientific geography.

The inter-war period was dominated by two outstanding personalities, Mihai David and Gheorghe Năstase, founders of the Iași-based Geography School.

Having a geological background Mihai David (Fig. 3) was appointed tutor – drawer at the Chair of Geography in 1913. After sustaining his PhD thesis in Geology (1919), he was promoted to substitute professor of geography, in 1920, and titular professor, 1922. His activity had in view especially Physical Geography, with particular stress on the geomorphology of the Moldavian Plateau, where he studied *Characteristic landforms* (with special reference to the structural relief – structural platforms, cuestas, contact depressions, etc., the fluvial relief, mainly the valleys and their terraces, indicating old river courses and erosion platforms, correlated with some stratigraphic gaps). Later on, Mihai David extended his geomorphological researches to the Moldavian Subcarpathians, the Eastern Carpathians and the Transylvanian Depression. These researches proved useful for his works of physical regionalization of the Romanian territory.

In his early works Gheorghe I. Năstase seems to have been attracted also by the Geomorphology and Human Geography alike, analyzing the geomorphological particularities of the Danube Delta, the submarine valleys of the Black Sea shelf, the Prut Valley and the Bugeac Steppe, the landslides of Centum Monticuli, etc.

From among the younger inter-war geographers interested in geomorphological studies, generally on the line of Mihai David, we would recall Victor Tufescu (with well-documented studies about the Dealul Mare-Hârlău region), Ion Gugiuman, (with numerous papers on the Huşi Depression and the neighbouring Prut valley, the landslidings of the Bârlad and Crasna Valleys, etc.), Constantin Martiniuc (who worked especially on his PhD thesis about the Baia Depression), Nicolae N. Lupu (studying the Dărmănești Depression), Ioan Şandru (focusing on the Subcarpathian Depression of Onești) and Natalia Şenchea.

Other Physical Geography domains appeared to be less attractive for inter-war Iaşi geographers. However, Climatology and Hydrology proved to be of interest for Iulian Rick, Gheorghe Gr. Gheorghiu, Ion Gugiuman, Natalia Şenchea, Ioan Şandru, Nicolae N. Lupu, while Limnology draw the attention of Gheorghe Năstase and Natalia Şenchea (who actually initiated its teaching), etc.

The first to initiate Human Geography studies was Gheorghe I. Năstase (Fig. 4). Born in Bessarabia and member of the Country's Council, he voted in 1918 for the unification of this eastern part of Moldavia with the rest of Romania. Gheorghe I. Năstase, lecturer of Anthropogeography in 1932 and professor of General and Human Geography in 1938, made part of his studies in Paris. The most important part of his works was devoted to the Historical Geography. He would publish excellent and well-documented works on the realities of the Danube Delta, of Bessarabia (especially about the ancient earthen walls), the Prut Valley, etc.

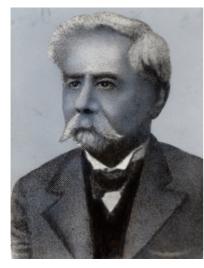


Fig. 2 – Grigore Cobâlcescu (1831–1892).



Fig. 3 – Mihai David (1886–1954).



Fig. 4 – Gheorghe I. Năstase (1896–1985).

3

4

Gheorghe Năstase was also interested in studying problems of Population Geography (regional particularities of the population's ethnic, confessional and professional structure, population dynamics, density and distribution, etc.), the Geography of Human Settlements (urban structure and networks in Moldavia, especially along the Prut Valley), and Economic Geography (salt exploitations in the Bugeac Plain, etc.). Some of Professor Năstase's courses, primarily his course in Anthropogeography (1926), were published by some of his students.

Other, more or less young geographers of the Iași University, preoccupied with Human Geography problems were Victor Tufescu (population and urban settlements, with highlight on the commercial boroughs and the towns of Botoșani and Iași, the rural settlements of Moldavia, the energy resources of this province, tobacco cultivation, etc.), Emil Diaconescu (the mediaeval road network in Moldavia and political geography problems), Iulian Rick (the dynamics of the administrative territorial organization and the economic geography of the Jijia Hilly Plain, fishing in Japan, etc.), Ion Gugiuman (human geography in the Huși Depression and geographical particularities of some towns, e.g. Huși and Bălți), General Scarlat Panaitescu (the problems of Bessarabia, the History of Cartography, Military Geography and Toponymy), Alexandru Obreja (the network of commercial boroughs typical from Moldavia and the influence zone of Iași), Ioan Şandru (the towns of Rădăuți, Bacău and Târgul Ocna), Nicolae N. Lupu and Ion Gugiuman (the villages of the Mureş Valley and of the Hilly Plain of Fălciu), etc.

The works of Victor Tufescu, Alexandru Obreja, Constantin Martiniuc and Ion Chelcea also deal with the ethnic minorities' problems (Roma, Jews, Bulgarians, Hutzuls, etc.). Adepts of the integrated geography concept, and intending to demonstrate the mutual relationships between human society and its environment, the Iaşi University geographers of the inter-war period would tackle problems of human geography also in their papers of physical geography, e.g. Gheorghe Năstase in *Centum Monticuli*, or the Bălătău Lake; Nicolae N. Lupu in the *Depressions of Dărmăneşti* and *Rădăuți*, or in The French region of Auvergne; Victor Tufescu in the *Dealul Mare – Hârlău and Ruginoasa – Strunga regions*; Alexandru Obreja in the Eastern Part of the Upper Bârlad Basin; Iulian Rick in the Jijia Hilly Plain, and Ioan Şandru in the *Oneşti-Caşin Subcarpathian Depression*.

In the first half of the 20th century, Ion Chelcea has been the Ethnographic studies, as a direction in Human Geography. In 1943, the Ethnography Museum was founded, it developing into an autonomous institution after the Second World War.

New courses introduced in the inter-war period were History of Geography, held by Emil Diaconescu in 1926, Geodesy and Land Measurement, later evolving into Topography and Cartography, held by General Scarlat Panaitescu, Agro-Geology, first delivered by Mihai David and then by Nicolae Florov, etc. Some of the courses were lithographed by Professor David's students, among whom there was also I. Gugiuman.

Close and fruitful scientific relations were established with foreign geographers, primarily with the great French scholar Emmanuel de Martonne, who held three conferences at Iași University in 1918, 1926 and 1928, and organized (in 1921) a geographical excursion in Moldavia and Bessarabia. The results were published in the chapter devoted to Romania in volume IV of his remarkable work *Géographie Universelle* (1931). Emmanuel de Martonne, also a *Doctor Honoris Causa* of the University of Iași (1938), would facilitate scholarships in France for some Iași geographers (Gheorghe I. Năstase, Victor Tufescu and Nicolae N. Lupu).

The same period was marked by the foundation of the "Dimitrie Cantemir" Geographical Society and by the publication of the first geographical review in Iași (four volumes) titled *Lucrările Societății Geografice "Dimitrie Cantemir"*, edited there between 1938 and 1942.

#### **THE YEARS 1948–1989**

After the Second World War, dramatic economic, political and social changes deeply affected the destiny of the geographical research and education in Iaşi, too. In 1948, a new faculty – History and Geography, was opened; new courses in Economic and Political Geography, having an evident ideological content, as well as Russian language courses were being held. The professors and lecturers of the inter-war period were obliged to retire or teach in high-schools, and only the former assistants Ioan Şandru, Ion Gugiuman and Constantin Martiniuc remained at the University. Many younger geographers (Ion Sârcu, Maria Schram, Vasile Băcăuanu, Nicolae Barbu, Constantin Blaj, Maria Pantazică, Mihai Apăvăloaiei, etc.) would replace former professors who had been dismissed.

Since for a long period of time, the only Romanian geographer allowed to supervise doctoral dissertations was Tiberiu Morariu, many young Iaşi geographers had to sustain their PhD thesis at the "Babeş-Bolyai" University of Cluj, or at universities in the Soviet Union. It was as late as 1966 that professors Ioan Şandru (Fig. 5), Ion Gugiuman (Fig. 6) and Constantin Martiniuc (Fig. 7) were permitted to supervise doctoral papers; next this right was granted to Vasile Băcăuanu and Ioan Donisă. The majority of their PhD students were Romanians (Pompiliu Poghirc, Iulia Văcăraşu, Irina Ungureanu, Cazimir Swizewski, Elena Erhan, Ion Bojoi, Veronica Giosu, Victor Sficlea, Dumitru Ploscaru, I. Stănescu, Al. Ungureanu, Dumitru Chiriac, G. Davidescu, V. Nimigeanu, Nicolae Lupu-Bratiloveanu, etc.), but there were also some foreigners, from Columbia, Egypt, and the Soviet Union. Over the 1966–2010 period a number of 108 PhD theses were being held.



Fig. 5 – Ioan Şandru (1913–2010).

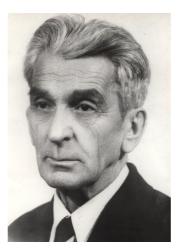


Fig. 6 – Ion Gugiuman (1909–1990).



Fig. 7 – Constantin Martiniuc (1915–1990).

In the 1950–1956 interval, a new faculty, of Geology and Geography, was established. It had a very composite curriculum, comprising a course in the geography of the U.S.S.R., many geological and biological disciplines, soil sciences (first held by Nicolae Bucur and next by N. Barbu), materialist philosophy, chemistry, mathematics, physics, etc., but deficient in terms of human geography education. In 1956, it was renamed Faculty of Natural Sciences and Geography, with sections of Physical Geography, Geography–Natural Sciences and Natural Sciences–Geography (the last two being renamed Geography – Biology and Biology – Geography in 1957). As from 1968, they organized geography students specialization groups for such areas as Geomorphology – Pedology, Climatology–Hydrology, Geography of Population and Human Settlements. In 1977, a new change brought about a dual teaching profile, namely Geography and a Foreign Language (either French, English, Russian or German).

6

Beginning with 1951, as a consequence of the acute shortage of young teachers, a Pedagogical Institute was set up in parallel with the "Alexandru I. Cuza" University; in 1966 the Institute's Faculty of History-Geography was moved to Bacău. For several years, Iași had also a Faculty for Workers, with very many students, but with a very modest educational level.

The Iaşi geographers tried to resist attempts at separating the Human Geography from the Physical Geography, even if the resistance was generally tacit, endeavouring to maintain the classical line promoted by the inter-war Romanian geography. This stance was upheld especially by Ioan Şandru in a paper published in 1964 (*Economic geography – object, methods and history*) and by I. Hârjoabă, in a 1984 paper on the "neogeography".

Scientific conferences were being organized annually, some benefiting from national and even international participation, for example, the National Colloquium of Applied Geomorphology (1973) and the National Colloquium of Geography of Population and Settlements. The majority of studies produced by the geographers of the "Al. I. Cuza" University and of the "Stejarul" Research Station were published in the journals of these institutions: "Scientific Annals of the "Al. I. Cuza" University, Papers of the Geographical Seminar "Dimitrie Cantemir" (resumed since 1981) and Papers of the "Stejarul" Research Station.

Although maintaing relations with the foreign geographers, especially with the Western ones, was a very difficult matter, yet impressive efforts were being made in order to participate in the I. G. U. congresses (Rio de Janeiro, 1956, Moscow, 1976) and in Franco-Romanian colloquia, organize exchanges of professors and students with the universities of Debrecen, Jena, Cairo, Alexandria, Lubumbashi, etc. attend the jubilee session of The Netherlands Geographical Society, and the summer courses organized by the Iaşi University on relevant topics, e.g.: *Nature and Man in the Eastern Carpathians*, etc. Some Iaşi geographers (Ioan Şandru, Ion Gugiuman, Ion Sârcu, Constantin Martiniuc, I. Donisă, I. Hârjoabă, N. Barbu, Ion Bojoi, Al. Ungureanu, and Dumitru Chiriac) specialized or travelled abroad under research and study grants, held conferences, etc. In exchange, outstanding foreign geographers from the Soviet Union, France, Poland, Italy, Eastern and Western Germany, Belgium, etc. visited Iaşi, making documentation trips or holding conferences. The geographers from the University of Iaşi maintained good relationships with their colleagues from others universities and especially with them from the Institute of Geography of the Romanian Academy, who paid several visits in Moldavia.

The unity of Geography was maintained by studies of regional complex, motivated by "systematization and development plans". Some of the outstanding works of regional complex and integrated geography, to which Iaşi geographers (Ioan Şandru, Constantin Martiniuc, Victor Sficlea, and Ion Sârcu) had substantially contributed in those years, are the two-volume *Geographical Monograph of Romania*, published in 1960, presenting the physical and human geography of the country, with two volumes of maps annexed. A third volume, of regional geography, provided with a large set of maps, also boasts a major contribution from the Iaşi geographers. But, although printed, political reasons prevented its distribution. For the same reasons, Gheorghe Năstase, the author of several substantial chapters, especially that on the Central Moldavian Plateau, on field trips and discussions with Soviet geographers, was not allowed to sign his own work.

A second work of national interest was the *National Atlas of Romania*, published in 1974–1979, the Iaşi geographers having contributed to the general concept (Victor Sficlea) and to different thematic maps (Constantin Martiniuc, Ioan Donisă, Ioan Şandru, Cazimir Swizewski, Dumitru Chiriac, Al. Ungureanu and V. Băican).

A third work, begun in 1983, was the five-volume *Geography of Romania*, the first three volumes, devoted to Physical and the Human Geography, as well as the first part of a regional analysis (the Romanian Carpathians and the Transylvanian Depression) were published before 1989. Noteworthy, contributors were I. Donisă and Ioan Şandru (members of the co-ordination team of the 1st and 3rd volumes), Victor Sficlea (The Romanian School of Geography chapter), Ioniță Ichim (The Relief, the Bârgău – Dorna – Moldova Corridor, The Bistrița and the Trotuş Mountains), Elena Erhan and Ion

Gugiuman (The Climate), N. Barbu (Soils and Bucovina's Mountains), Irina Ungureanu (Geographical Environment and Nature Protection), Al. Ungureanu (Toponymy and Geography of Towns), Cazimir Swizewski (Tourism, Human Geography in the Romanian Carpathians and the Giurgeu Depression), Pompiliu Poghirc (Bistrita Mountains) and Iulia Văcăraşu (Trotuş Mountains).

Different geographical regions made also the object of some complex geographical studies: the Moldavian Plateau (Vasile Băcăuanu, N. Barbu, Maria Pantazică, Al. Ungureanu and Dumitru Chiriac), the Bistrița valley (I. Donisă and Pompiliu Poghirc), the Bucovina's Mountains (N. Barbu), the Hăşmaş Mountains, the Bârlad Plateau and the Tutova Hills (Pompiliu Poghirc), Iași County (Ioan Şandru, Vasile Băcăuanu and Al. Ungureanu), Vaslui County (Ion Gugiuman, V. Cârcotă and V. Băican), Neamț County (Ioan Bojoi and Ioniță Ichim), Bacău County (Nicolae Lupu, Iulia Văcăraşu and C. Brânduş), Galați County (Dimitrie Oancea and Cazimir Swizewski), the Giurgeu Depression (Cazimir Swizewski), the Huşi Depression, and the former Iaşi and Galați regions (Ion Gugiuman), the former districts of Paşcani, Bârlad and Huşi, the north-eastern economic region of Romania and the former Suceava region (Mihai Apăvăloiei), Cotnari Vineyard, the Trotuş Basin, the Giurgeu Depression (Cazimir Swizewski), the Dărmăneşti Depression (Iulia Văcăraşu), or the towns of Iaşi (a team-study co-ordinated by N. Barbu and Al. Ungureanu) and of Bacău (Ioan Şandru).

On the initiative of the Romanian Geographical Society, a series of geographical dictionaries of the Moldavian counties have been elaborated, some of them also published, e.g. on the Iaşi County (Alexandru Obreja) and the Vaslui County (Ion Gugiuman, V. Cârcotă and V. Băican).

The introduction of a system of research conventions and the co-operation with design institutions required geographical information in order to document some economic projects (construction of new ways of communication, buildings, hydroelectric plants, irrigation systems, etc.), or to re-organize the territory and the settlement network.

With this aim in view and to support teaching tasks, the Biological, Geographical and Geological Research Station "Stejarul" was set up in 1956 on the precincts of the former Pângărați Monastery, in the Bistrița Valley. The geographers of this Station, first directed by professors Ion Gugiuman and Constantin Martiniuc, worked here until 1983, when they had to move to Piatra Neamț town, under the scientific coordination of the Iași Center for Biological Research. Geographical research at Pângărați focused on Geomorphology, Hydrology, Climatology and Geography of Soils. After 1980, most of these researches would be funded by grants obtained from different state institutions.

In the same way, beginning with 1986 on Professor I. Hârjoabă's initiative, a C-type research team of young geographers was established, intended also to be kind of reserve stock for the teaching profession.

Having no, or little ideological-political subtext, the Physical Geography made significant progress in those years, diversifying all its branches and primarily Geomorphology, directed and developed by Professor Constantin Martiniuc and his successors, the latter (Vasile Băcăuanu, I. Donisă and I. Hârjoabă) also elaborating and publishing an original *Geomorphological Dictionary* (1974).

Relief researches focused mainly on the evolution of the valleys and of the river terraces (along the Siret, Bistrita, Bârlad, Bahlui, etc.), the geomorphological processes the including glacis evolution, landsliding, torrent evolution and the geomorphological regionalization. Other major geomorphological aspects which preoccupied the Iași specialists were the formation of relief steps in connection with the geomorphic evolution on river basins, their lithological particularities in relation with man-made dams. Works and papers on these topics are due to Constantin Martiniuc and Ioan Sârcu, I. Donisă, I. Hârjoabă, Vasile Băcăuanu, Ioniță Ichim, Maria Rădoane etc. A notable study, discussing the geomorphological role of the periglacial processes especially in the Carpathians, was based on research-work made by Ioan Sârcu, I. Donisă, Ion Bojoi, Ioniță Ichim and others, river-bed dynamics (Ioniță Ichim and co-workers), the origin and effluence of alluvia in different river basins (Maria Rădoane *et al.*), gully evolution in the Moldavian Plateau and terrain erodibility, the geomorphological mapping (Irina Ungureanu) and the practical application of the relief studies.

8

Noteworthy are the regional geomorphological studies made, and partially published, by Ion Sârcu (communing the Rodna Mountains and other high Carpathian massifs), Victor Sficlea (the Covurlui Plateau), Vasile Băcăuanu (the Moldavian Plain), Ioan Donisă (the Bistrița and Siret valleys), Ioan Hârjoabă (the Tutova Hills), Ion Stănescu (the Ceahlău Massif), Ioniță Ichim (the Stânișoara Mountains), Ioan Bojoi, Gheorghe Lupașcu, Ion Ioniță, etc.

Developments in Climatology-Meteorology are largely the outcome of Professor Ion Gugiuman's endeavours, who also organized the first two Romanian conferences on Urban Climatology and Struggle Against Air Pollution. He initiated climatological studies with practical applicability, dealing with and supporting the development of Micro-climatology in works about the climate and micro-climates of the Cotnari Vineyard and the Oneşti-Caşin Depression. Ion Gugiuman held the first course in Urban Climatology in Romania and published studies on the wind regime and, together with Marțian Cotrău, a volume of elements of urban climatology, with examples from Romania. A very well-known study due to Professor Gugiuman's team (Gheorghe Pleşca, Elena Erhan and I. Stănescu) deals with *Climatic Units and Subunits in the Eastern Part of Romania* (1960).

I. Donisă also approached climatologie issues, publishing, together with Elena Erhan, a *Climatology of Romania* (1974), underlining, together with G. Davidescu, the influence of the Carpathians on Climatic differentiation in the Romanian Territory. Elena Erhan authored studies about the temperature inversions in some Carpathian depressions and in the Moldavian Plateau, hoar frost and frost in the Jijia Hilly Plain (jointly with Valentina Ștefan), etc.

Many researches were devoted to the problem of the atmospheric precipitation, especially in the eastern part of the country. They are due especially to Ioan Gugiuman (in collaboration with Rodica Stoian he analyzed the snow-cover in the Carpathians), Elena Erhan (the precipitation regime, and the snow cover in Moldavia, the drought and the hail in the Moldavian Plateau, etc.), I. Hârjoabă (the origin of the precipitations jointly with Luminița Crețu, making a characterization of the aridity index, etc.).

From among the complex regional climatological studies we would mention first that of Ion Gugiuman and Elena Erhan (on the climate and micro-climates of Iași and its surroundings), a study taken up again and published in detail by Elena Erhan on the basis of her own network of micrometeorological stations; a climate study on the precipitations and the air temperature in the Eastern Carpathians and the Moldavian Subcarpathians (G. Davidescu, L. Apostol, M. Apăvăloaiei etc.); the climate and micro-climates of the storage-lakes area in the Bistrița Valley (Ion F. Mihăilescu). Microclimatic studies based on instrumental field observations have targeted the Romanian Black Sea Coast (G. Davidescu and E. Gheorghiu) and the Moldavian Subcarpathians (G. Davidescu and Ion F. Mihăilescu), etc. Detailed studies of the air pollution and the influence of the wind regime on the air pollution in the Iași city area, and along the Bistrița and the Trotuş valleys, are signed by Elena Erhan, Ion F. Mihăilescu, L. Apostol, M. Apăvăloaiei and I. Pârvulescu.

In Hydrology, Constantin Martiniuc organized and directed the study about the underground water level variations on the territory of Iaşi city. Maria Pantazică focused on the hydrological study of the Moldavian rivers, with a PhD thesis on the *Hydrography of the Moldavian Plain* published in 1974; Maria Schram studied the reservoirs of the Moldavian Plain, with a doctoral dissertation on the same subject; both authors analyzed also the water quality of the Moldavian rivers. Ioan Gugiuman, I. Stănescu and Virgil Apopei looked also into Moldavia's hydrology. The geographers of the "Stejarul" Station (V. Ciaglic, Virgil Apopei and Elena Pantazi) followed mainly the thermal regime and the level variations of the reservoirs along the Bistrita and the Siret valleys. Studies of underground waters in the Lăpuş alluvial plain, were published in 1985 by Ioan Bojoi and C. Brânduş, while Virgil Apopei discussed the situation in the Bistrita valley.

During the same period, the Soil Science was being intensely developed at the University of Iaşi, a serious school of Pedo-geography being organized by Professor N. Barbu, who set up a laboratory for the chemical and physical analysis of the soils. After 1975, Pedo-geographical research got momentum, with special reference to the soils of the Eastern Carpathians (in the Rarău, Hăghimaş, Ciuc, Tarcău, Bistrița, Mestecăniş, Ceahlău, Stânişoara, Giumalău, Suhard, Nemira and Berzunț

mountains), in the Moldavian Subcarpathians (the Cracău-Bistrița Depression), and in some administrative units (the counties of Suceava and Neamţ). In his work N. Barbu was joined especially by Gheorghe Lupaşcu and C. Rusu. Besides his courses in pedo-geography (1974) and the Geography of Romania's Soils (1987), Barbu published a series of papers on the pedo-geographical position and Pedo-geographical regionalization of the Romanian territory, the soil as study object of geography, the Romanian system of soil classification etc.

N. Barbu and Gh. Lupaşcu had also Bio-geographical preoccupations, authoring studies on some soils in the Carpathians and in the Moldavian Plateau. Applied studies referred to the prospects for the space organization of the Cotnari Vineyard (Irina Ungureanu and V. Nimigeanu), to the assessment of the natural therapeutic resources in the Moldavian Plateau (Ioan Bojoi *et al.*), to the counties of Iaşi and Vaslui etc.

Over this fairly long interval (1948–1989) attempts were being made to impose in the **Human Geography** a certain Marxism-related dogmatism, limiting it to economic aspects, considering that this discipline is part of another group of sciences – the Social Sciences, somehow remote from the Physical Geography. Following the Soviet model, "Economic" Geography was largely assigned a propagandistic and educational role, glorifying the system of centralized planning and contributing to the creation of the "new man". A breach with Human Geography occurred exactly at the time when the latter had registered great progress, with many new theories and currents emerging (Behaviorist Geography, Systemic Geography, Quantitative Geography, etc.).

Had the Marxist theoretical concepts been observed, the "Economic" Geography would have done away with the critical spirit inherent of a scientific discipline, analysis and dialogue, and accept the directives received without contesting them. The result would have been the death of the Human Geography, it remaining a relativistic and conjunctural science, limited to the subjectivism of the decision-makers.

On the other hand, remarkable for post-war Human Geography in Iaşi were some complex crosscountry studies, such as *Romania – A Geographical Overview* (published in Romanian and French by Ioan Şandru) and *Romania's Economic Geography* (by V. Nimigeanu).

Beginning with 1948, first on the initiative of the city's authorities, and later on Professor Ioan Şandru's, Urban Geography studies would be elaborated for several towns: Tulcea, Focşani, Iaşi, Galați, Brăila, Suceava, Paşcani, Huşi, Vaslui, Oneşti, Buhuşi, Adjud, Piatra Neamţ, Fălticeni, Comăneşti, Câmpulung Moldovenesc, Techirghiol, etc. I. Hârjoabă produced an interesting study of the African city of Lubumbashi (Zaire/Congo). These studies, some of them worked out jointly with urban engineering specialists (Iaşi, Galați, Paşcani, Huşi, Bacău, etc.), ended up with chapters on urban management problems.

Far greater attention than in the pre-war years was being paid to Rural Geography issues in the conditions of their typological diversity. Human Geography specialists focused on the problems of village development and the urban future of some of the settlements, the relations between villages and the characteristic geographical conditions, the specific issues of small villages, the changes occurred in the network of rural settlements by the construction of some big hydro-power stations, etc. Substantial contributions to the solution of rural problems made Ioan Şandru, Dumitru Chiriac, Pompiliu Poghirc, V. Nimigeanu, Nicolae Lupu-Bratiloveanu, Mihai Apăvăloaiei, Cazimir Swizevski and Iulia Văcăraşu. The first to elaborate a complex regional study of all Moldavia's villages was Dumitru Chiriac.

Population Geography problems enjoyed a comprehensive approach to dynamics, territorial distribution and its modification, the evolution of different types of structures, territorial mobility, the relations between population and economic development, labour force resources, etc. Noteworthy contributions are due to Ioan Şandru, Veronica Giosu, Victor Sficlea, Dumitru Chiriac, Al. Ungureanu, V. Nimigeanu, Nicolae Lupu-Bratiloveanu, etc.

Previous preoccupations for the History of Cartography (Gheorghe Năstase and Emil Diaconescu), would be continued by Ioan Şandru, Vasile Băican, Victor Sficlea, Al. Ungureanu and Marcel Vârlan, based on archaeological data and old cartographic documents in order to reconstitute the distribution and dynamics of the human settlements and of population, of roads and woods in different historical periods, with special reference to the 18<sup>th</sup> and 19<sup>th</sup> centuries. The importance of some unpublished sources existing in the Paris libraries and archives was outlined.

#### **THE YEARS AFTER 1989**

The fall of the communist regime opened up new opportunities for important changes in the organization and content of the geographical research and education. So, in 1990, the Faculty of Biology separating, there remained the Faculty of Geography and Geology, with a Chair of Geography (1989–2000), next becoming a Department of Geography (2000), with three chairs a dismantled beginning with 2008.

As from 1993, the study-term in the Geography Section and the Section of Geography and a Foreign Language and Literature (English, French and German) was reduced to four years. Between 1996 and 2008, it was for the first time that a Section of Geography with courses and seminars in the French Language and Literature was functioning beside those of Geography-English and Geography-German. New sections were set up: Geography – Environmental Science in 1994, and Tourism Geography in 2003.

Under the Bologna Protocol (2005), the length of studies for a BA degree was reduced to three years, but supplemented with two years of Master studies. New specializations were created also for BA students – Territorial Planning and Hydrology – Meteorology; MA students could follow Tourism and Regional Development, Natural Risks and Territorial Planning, Present-day Environment and Sustainable Development; the number of students has increased considerably.

Scientific documentation opportunities substantially improved due also to the contribution of a former student, Eugen Cosinschi, and of his wife Micheline Cosinschi, both living in Switzerland, who offered the Department two extremely valuable collections of scientific books.

Many younger professors have been accredited to supervising PhD theses – Elena Erhan, N. Barbu, Ioan Bojoi, Ioniță Ichim, I. Hârjoabă, Irina Ungureanu, Gheorghe Lupaşcu, I. Ioniță, C. Rusu, Gh. Romanescu, E. Rusu, and L. Apostol, for Physical Geography, and Al. Ungureanu, V. Nimigeanu, O. Groza, I. Muntele and C. Iațu, for Human Geography.

Scientific and teaching relations with foreign universities have registered impressive developments materialized, in far more contacts with institutions and specialists from other countries, and participation in various international projects (among the projects worked out under the E. S. P. O. N. Program was also *S. Y. G. E. T.*, in collaboration with geographers from Montreal-Canada: *Development of algorithms and computer programs for filtering profilometry data*, jointly with the University of Helsinki, digitization of the territorial administrative organization of Romania, in collaboration with the University of Lausanne; the elaboration of the *Atlas de la Roumanie*, together with geographers from Paris and Bucharest (printed also in Romania), etc. Other types of co-operation: conferences held at foreign universities (in France, Italy, Germany, etc.), joint supervision of PhD theses (those of O. Groza, Simona Niculescu, and G. Camară), dissertations supervised by foreign professors, participation in summer schools, etc.

As an international recognition of the quality of the geographical research in Iaşi, A. Grozavu and Şt. Kocsis have participated in the European Leonardo Project *Environment and Earth Sciences Multilingual Multimedia Dictionary*, publishing also a Romanian version; C. Iaţu was the director of the Romanian team for the international research project *East-European Places of the Spirit*; Carmen Donisă has taken part in the project *Study of the Behavior of Trace elements in Norwegian Podzols and Their Relationship with the Pedogenetic Processes and Pollution*, etc. In 2009, the E. S. P. O. N. Contact Point for Romania was inaugurated in Iaşi.

A noticeable number of foreign geographers have been invited to hold lessons and conferences in Iaşi – Robert Ficheux, the dean of the french Geographie, Jean-Bernard Racine (Lausanne), Violette Rey and Béatrice von Hirschhausen (E. N. S. Lyon), Paul Claval and Micheline Hotyat (Paris IV), David Turnock (Leicester), Charles Hussy and Bertrand Lévy (Geneva), André Dauphiné (Nice), Michel Bussi (Rouen), Myriam Baron (Paris XII), François Seys (Lille), Per Lindskåg (Linköping), Ann van Leeuw (Brussels), etc. The title of *Doctor Honoris Causa* was conferred to the geographers Jean-Bernard Racine (Switzerland), Jean-Robert Pitte (France), David Turnock (United Kingdom) and Denis Baise (France).

The Iaşi geographers had now more opportunities to hold courses and conferences abroad – Al. Ungureanu (in Paris, Dijon, Lausanne, Leipzig, Gotha, Munich, Padova, Linköping, Chişinău, etc.), C. Iaţu (in Nice, Paris, Lausanne, Rouen, Liège, etc.), Irina Ungureanu (in Liège, Nice, Paris, etc.), O. Groza (in Paris, Nantes, Brussels, Fontenay-aux-Roses, Lyon, Dijon, Marseille, etc.), E. Rusu (in Montreal and Paris), Gh. Romanescu (in Paris, Durham, Konstanz, Nice, Ottawa, Concepciòn and Liège), I. Donisă (in Chişinău), I. Muntele (in Nantes), etc. With University support, geographers could take part in various scientific expeditions – in the Arctic regions of Canada and in Greenland (C. Rusu, E. Rusu), in the Atlantic Ocean and in the Tierra del Fuego (Gh. Romanescu), in south and south-east Asia, in the Andine countries, in South Africa, etc. A large student exchange with different universities in France, Belgium, Italy, Spain, Sweden, Denmark, etc. has been organized.

A particular attention has been paid to scientific relations with the Republic of Moldova, guiding young geographers, many of them elaborating and sustaining their PhD thesis with professors from Iaşi – S. Manic, V. Țapeş, I. Danilescu, V. Sochircă, Gh. Cuciureanu and D. Lozovanu; tuition of young students, organization of common scientific conferences, alternative deliverance of courses, exchange of doctoral dissertation experts, etc.

In the Department of Geography have been organized two Scientific Research centers: the Center for Human Geography and Territorial Organization, and the Center for Physical-Geography and Soil Research for the sustainable exploitation of natural resources, currently headed by O. Groza and C. Rusu, respectively.

Until 1993, scientific research had been going on mainly along the lines of the previous period, namely, undertaking complex analyses of the north-eastern part of Romania (the Moldavian Subcarpathians and the Moldavian Plateau), finishing the material for the IVth volume of the *Geography of Romania* (the Moldavian Subcarpathians and the Moldavian Plateau), co-ordinated by Vasile Băcăuanu and I. Donisă; co-authors of this volume have been other 14 Iași geographers.

At the same time with the introduction of courses in geo-informatics held by a specialist, preoccupations for updating geographical research methodology got momentum, Geographical Information Systems (G.I.S.) and Remote Sensing becoming increasingly used in different Physical and Human Geography areas; even a PhD thesis on *Digital Processing of Images to obtain G.I.S.-Required Information on the Development of this Methodology* was presented by V. Donisă. N. A. Roman introduced the method of spatial hierarchical relations applied to the satellite images of the Jijia Hilly Plain in dealing with the use of multi-media for landscape analysis and worked out a unified national land-use information system. M. C. Mărgărint used the national digitized data fund for land improvement studies.

The results of this new orientation were more visible in the elaboration of the *Digital Geographic Atlas of Moldavia* (1993–1997), co-ordinator I. Donisă, and in the regular annual organization of international G.I.S.– related conferences. In order to support the implementation of the latest methodologies, V. Donisă and I. Donisă published a *Dictionary of Remote Sensing and Geographical Information Systems* (1998).

Theoretical and methodological works on the systemic and ecological perspective of the Geography were published by Ioan Bojoi and Irina Ungureanu, in which, setting marks for assessing the quality of the environment are suggested.

The Department of Geography sustained also the teaching of geography in high-schools; schoolbooks elaborated and published by I. Donisă, Angela Donisă, Al. Ungureanu, I. Muntele, Irina Ungureanu and others were positively appreciated.

Just like in the past, the **Physical Geography Research** has been focusing on Geomorphology, Climatology, Hydrology and especially on the Geography of Soils (sustained by N. Barbu) to contribute to the conservation of the soil quality, stability of slopes, control of soil, air and water pollution and the study of some representative geo-systems. Complex regional researches of Physical Geography made the object of doctoral dissertations, e.g. the *Rarău Massif* (C. Rusu), *the Subcarpathians between the Trotuş and the Suşiţa rivers* (A. Grozavu), *the Basin of the Başeu River* (C. Secu), *the Hilly region between the Lohan and the Horincea rivers* (D. Condorachi), *the Central Moldavian Plateau between the Vasluieţ and the Stavnic rivers* (C. Patriche) etc.

Geomorphological studies targeted different territories, e.g. the Tutova Basin (I. Ioniță, Violeta Ioniță) or the south-eastern part of the Maramureș Depression (N. Barbu). Paleogeographical approaches discussed the Suceava Basin flysch zone (D. Juravle and Delia Andone), the contact area between the Carpathians and the Moldavian Plateau (Paula Cristina Condurache) and the sedimentation rate (I. Ioniță). Fluvial geomorphological problems represented a major point of interest, e.g. Evolution of the river valleys (I. Ioniță, A. Grozavu, C. Rusu etc.), Characteristics and evolution of the river channels (Marcel Vârlan, Ioan Bojoi, Alina Popa, etc.), River terraces (A. Grozavu, D. Lesenciuc, etc.), Morpho-dynamics of the Jijia alluvial plain (Ion Bojoi), etc. Erosion platforms in the Giumalău Massif were studied by D. Lesenciuc. A special attention has been paid to contemporary geomorphological processes - Mass movements in the middle Bârlad Basin, Gullies in the Bârlad Basin and the rate of sedimentation in lakes, based on measurements of materials deposited after the Tchernobyl accident (Ion Ioniță), The seasonal character of the geomorphic processes in the Bistrita valley (N. Rădoane), Geomorphic processes in the Danube Delta of the Romanian Black Sea shore (Gh. Romanescu) and of the Giumalău Massif (D. Lesenciuc), the Karst relief formed on gypsum layers in the Tazlău Subcarpathians and the present-day geomorphological processes of the whole Moldavian Subcarpathians (A. Grozavu).

An impressive number of geomorphology PhD theses were elaborated in these years: Moldova's alluvial plain within the Moldavian Plateau (M. Amăriucăi), The Giumalău Massif (D. Lesenciuc), The aluvial plan of the Siret River (Alina Popa) and the Vrancea Subcarpathian Depression (V. Căpăţână).

Problems of Morphometry proved to be of particular interest for the geographers Irina Ungureanu, A. Grozavu, Gh. Romanescu, D. Lesenciuc and others. As an important mean of quantifying the geographical research, a digital model of the relief has been extensively developed beginning with the Territorial study of Iaşi City (V. Donisă and Şt. Kocsis) and continuing with the study of all of Moldavia's relief for the Digital Atlas of this province. Afterwards, the digital model of the relief has been generalized for morphographic and morphometric analyses, as well as for climatic and hydrological studies. Using large-scale topographic maps and satellite images, G.I.S. – based geomorphological maps with superposed layers were produced (D. Condorachi, 2003).

Recent progress in Geomorphology worldwide has made it necessary to publish a new Geomorphological Dictionary (I. Donisă, N. Boboc and I. Ioniță) (2009).

Meteorological and climate studies aroused great interest, some of them covering broader topics, e.g. the precipitation regime of the Equatorial zone, the characteristic features of the atmospheric circulation on Earth, with special reference to the Monsoon circulation in Asia (I. Hârjoabă), the climatic resources of Moldavia (Elena Erhan), the climate and topo-climates of the Moldavian Subcarpathians (L. Apostol A. Grozavu, I. Pârvulescu), the climate of the Siret Corridor (L. Sfâcă) and of Vaslui town (Daniela Larion). Others subjects have been: the air temperature and the thermal inversions in the Ciuc Depression (M. Apăvăloaiei), Latitudinal and longitudinal thermal variation in Europe (I. Hârjoabă, Elena Erhan and C. Patriche) and a regression-based calculation method relying on nett radiation (C. Patriche).

Analyses of various aspects of atmospheric precipitation in different regions have concentrated on the Moldavian Subcarpathians (L. Apostol), the Rarău Massif (L. Apostol and C. Rusu), the Bârgău Mountains (E. Rusu), the Başeu Basin (C. Secu and D. Stoica) and the Jijia valley (C. Iațu), the view regime of the precipitations in Europe (Elena Erhan, I. Hârjoabă and C. Patriche), the daily precipitation (M. Apăvăloaiei *et al.*, 1995, L. Sfâcă, I. Minea, 2005), the characteristic features of the rainfall regime in the Central Moldavian Plateau (Daniela Larion) and the torrential rains in the Siret Basin (L. Apostol and L. Sfâcă).

Other climatological works deal with the nebulosity and sunshine duration (Elena Erhan, L. Apostol and C. Rusu), atmospheric humidity (M. Apăvăloaiei *et al.*), the air temperature and winds in the Moldavian Plain (Elena Erhan), the wind energy potential in Iași city (Daniela Larion), the climate-induced aridization in the Moldavian Plateau (N. Soroceanu and M. Amăriucăi), the foehnization of the air in the eastern part of Romania (Elena Erhan). Also of interest proved to be the negative natural phenomena (hoarfrost or untimely frosts in the Moldavian Plain), or man-induced ones (air pollution in Iași city – Elena Erhan, or sound pollution in Iași – D. Condorachi).

Hydrology is illustrated by numerous and important studies especially of the waters from the eastern part of Romania. So, the PhD thesis of Gh. Romanescu published in 1996 (in foreign language versions) is a morpho-hydrographic study of the Danube Delta. Other of his works are: the Razim-Sinoie lagoon complex, a comprehensive analysis of hydrologic risks (2009); Floods on the Siret in 2005; Wetlands in different regions of Romania; The hydrological potential of the Siret and Prut rivers; Characteristics features of lacustrine waters and of wetlands. Alone or jointly with the Chişinău geographer Gh. Jigău and with other specialists, he published in Bucharest a Dictionary of Hydrology (2003); he has contributed to the Canadian volume Politique de l'eau – grands principes et réalités (2006), to a Dictionary of general hydrology, hydrogeology and hydro-physics of the soils (Chişinău, 2001), etc. I. Minea's preoccupations focused on the Bahlui Basin; I. Hârjoabă and M. Amăriucăi on underground water-feeding; I. Stănescu on the water-flow balance of the Siret and the water resources of the town of Câmpulung Moldovenesc; V. Apopei et al. - on the pollution of underground waters in the Extracarpathian alluvial plain of the Bistrita; Ion Bojoi et al. on the applied geography in the alluvial plains, requiring draining measures; C. Rusu on the influence of water reservoirs on their environment; Daniela Talambă - experimental studies of hydrological processes by using tracing means etc.

A series of pedological and pedo-geographical syntheses published by N. Barbu concern chernozemoid soils, soil as a geographical cover of the Earth, the evolution of the pedo-geographical thinking in Romania, the development stages in soil studies in Romania, etc. With a terminological precision Gheorghe Lupaşcu and his team published in 1998 a *Dictionary of soil science and ecology;* C. Secu and C. Patriche – *the Soils of the world – classification, distribution and characteristics* (2<sup>nd</sup> ed.); C. Secu, L. Neacşu and I. Vasiliniuc produced an *Atlas of the colours and symbols for the legend of soil maps*, a proposition for G.I.S. – related usages.

The Carpathian researches continued with soil studies in the Maramureş Mountains (C. Secu), the Bârgău Mountains (E. Rusu) and the Giurgeu Mountains (C. Rusu *et al.*). But of far greater interest proved to be the soil problems in the Moldavian Subcarpathians – in the Cracău – Bistrița Depression (Gheorghe Lupaşcu) and in the Moldavian Plateau (C. Secu published a *Multi-media atlas of anthropic soils in the Moldavian Plain;* about the Tansa – Belcești area have made studies C. Rusu *et al.*, in the Iași City area (with an Atlas on the geochemistry of heavy metals, to which C. Secu contributed as well), in the Pereschiv Basin (also with an *Atlas of landforms and soils* due to L. Neacşu), in the Horoiata Basin (I. Vasiliniuc), etc.

Special studies had in view the variation of the chemical elements in the soil profile and its relation with the pedo-genetic processes (Carmen Donisă), the organic material of andosoils in the Oaş – Igniş Mountains (Angela Lupaşcu), the elaboration of a simulation methodology for humus accumulation in the soils of the Central Moldavian Plateau (C. Patriche), the influence of the relief on the distribution of azonal soils (D. Nica) etc.

During all these years, Biogeography has benefited from profile studies and PhD theses on the Phyto-geography of the Râmnicu Sărat Basin (C. Stoleriu), the Submountainous zone of Suceava and Neamt counties (Angela Lupaşcu), and the Vegetation of the Bahlui Basin (Liliana Aniței).

**The human geographies research** in the conditions of a democratic regime, theoretical research and geographical epistemology could be approached especially by the new generation of researchers. This new trend is visible in the works of O. Groza (e.g. *Relations between the paradigms of space and territory; Networks, territories and spatial interaction; The spatial scales of Romanian territoriality), I. Muntele, (<i>Theoretical models of urban influence zones; Fearing the memory of space*), C. Iațu (*Time in Human Geography*), G. Țurcănașu, Al. Ungureanu, etc.

An objective approach to Human Geography is currently possible, so that works on subjects banned under the previous totalitarian regime have been elaborated and published. Noteworthy among them are V. Băican's *Historical geography on the whole of 18<sup>th</sup> century Moldavia; Ethnic structure changes in Romania's population and in the present Republic of Moldova* (I. Muntele, Al. Ungureanu); *Romanians living to-day beyond the country's borders* (Al. Ungureanu).

The number of Human Geography works dealing with international issues has increased considerably. Some of these are O. Groza's doctoral dissertation on *The Geography of World Industry*; *Regionalization of economic phenomena, Transports in Eastern Europe* and *Submarine oil extraction*. In great detail and well-documented are I. Muntele's studies on the *European Spatial Units* (the dynamics and structure of the states' population, international migration, etc.), C. Iaţu's volumes on the *European Development Model and the European Union*; Al. Ungureanu's approach to *Urban Development in the East-European Countries*, etc. An increasingly growing number of contributions have been made by O. Groza, I. Muntele, Al. Ungureanu, C. Iaţu, G. Țurcănaşu, etc. to different foreign encyclopedias, atlases, reviews and collections, e.g. *The International Encyclopedia of Human Geography, Images économiques du monde, Atlas du XXI-e siècle, Encyclopédie Clartés, Le petit Robert des noms propres, Österreichische Enzyklopädie Osteuropas. A Human Geography Atlas of Romania* and a *Study of Territorial Networks in Romania* have been elaborated jointly with Paris University and Lausanne University geographers, respectively.

A general characteristic of the last few years is the focal interest in Quantitative Human Geography, based on statistical methods, computer-related programs, spatial analysis, spatial models with practical application to real life, and the elaboration of digital maps (see O. Groza on the use of shift and share analysis in problems of deindustrialisation, the use of G.I.S. methods to emphasize the general spatial structures and local specificity), I. Muntele (evolutions in the territorial hyerarchization of the population, the typology of the migratory population balance etc.), C. Iaţu (conjugated analysis of contiguous spaces, spatial structures representated by variograms etc.), V. Nimigeanu, A. Rusu (especially the latter's PhD thesis on *Large Cities in the Eastern Half of Romania*), G. Țurcănaşu (in his dissertation on *The Current State of the settlement system in Moldavia*), Al. Ungureanu, Oana Stoleriu, Marinela Istrati, and others.

On the line of previous orientations, but at a superior level and with greater minuteness, are the detailed regional studies of Human Geography by I. Muntele (the population of Moldavia in the last two hundred years, spatial differentiations in population dynamics, etc.), O. Groza (migration problems, etc.), Al. Ungureanu (analysis of the regional dynamics of Romania's population), V. Nimigeanu (the evolution of the natural population balance), C. Iațu and I. Muntele (elaboration of the *Statistical-Geographical and Territorial Management Atlas of the Iași County*), C. Iațu (the Rădăuți Depression), R. Dimitriu (the Neamț Depression) etc.

Traditional studies in the geography of settlements have been continued by G. Ţurcănaşu, with an original investigation, among others, into the Moldavian settlement system, Oana Stoleriu, with the most detailed human geography study of the city of Iaşi, Marinela Istrate's, multiple method approach to the influence zones of Moldavian towns and Al. Rusu, author of a study of the urban network in the eastern part of Romania.

I. Boamfă, a specialist in Toponomastics, systematically connected this discipline with the Historical and Social Geography; he has also emphasized the particularities of the chrono-spatial distribution of anthroponymic, ethnographic and folklore elements in the toponymy. Preoccupations for the Political-Administrative Geography have increased considerably, a notable work being *The Electoral Geography of Romania after 1989* (C. Iaţu). Although present-day "Al. I. Cuza" University geographers have not specialized in Economic Geography, yet they have produced works of Tourism Geography (I. Muntele, C. Iaţu), Geography of Agriculture (I. Muntele, C. Iaţu, V. Palamariu) etc.

The traditional scientific journals, Analele Științifice ale Universității "Al. I. Cuza" – seria geografie and Lucrările Seminarului geografic "Dimitrie Cantemir", continued to be published more or less regularly and include ever more foreign languages papers. New periodical publications have been issued over these last few years – Factori și procese pedogenetice în zona temperată (since 1990), Lucrările Simpozionului de Sisteme Informaționale Geografice (since 1995) and Present environment and sustainable development (since 1996).

Many Iaşi geographers have been awarded scientific distinctions – the *Opera Omnia Award* has been offered by the National Council of Scientific Research in Higher Education (C.N.C.S.I.S.) to Ioan Şandru and Alexandru Ungureanu; the Romanian Academy's annual prizes received V. Băican and Gheorghe Lupaşcu, I. Muntele; I. Ioniță; N. Barbu; C. Rusu; O. Groza *et al.*, C. Iaţu, D. Juravle and D. Dumitriu. V. Cotea and N. Barbu have been distinguished with awards by the Academy of Agricultural and Forestry Sciences by the International Organization of Vineyard and Wine, and the 'Romanian Writers Association Award'; the "Umwelt und Wohnen" Award of the German Karlsruhe und Konstanz Universities went to Gh. Romanescu; A. Grozavu and Şt. Kocsis were conferred the "Zlaty kosak"Award by the Slovak Ministry of Agriculture; I. Donisă became *Doctor honoris causa* of the State University of Tiraspol (currently refuged in Chişinău) and Al. Ungureanu of the universities of Suceava and Timişoara. Ioan Şandru has been and Al. Ungureanu is Honorary Fellow of the French Geographical Society. The best doctoral disertation awards were conferred by the University of Iaşi to D. Juravle (2004), G. Țurcănaşu (2006), and Marinela Istrate (2007).

As a conclusion, we would say that the Geography Department of the "Alexandru I. Cuza" University of Iaşi continues to be, as it has always been, a worthy member of the Romanian scientific and educational community, open to the latest trends in the research and the education of the young generation.

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