

Dokumentacja Geograficzna

ZESZYT 1

ECONOMIC REGIONALIZATION

Materials of the First General Meeting of the Commission
held in Utrecht, the Netherlands, from 8 till 9. Sept. 1961

REGIONALIZACJA EKONOMICZNA

Materiały z I Zebrania Ogólnego Komisji w Utrechcie, Holandia,
w dniach 8-9. IX. 1961

WYKAZ ZESZYTÓW
PRZEGLĄDU ZAGRANICZNEJ LITERATURY GEOGRAFICZNEJ

1958

- 1 Zagadnienia geografii zaludnienia i osadnictwa, 5 artykułów, s. 153, zł 10,—
- 2 Teoretyczne zagadnienia z geografii ekonomicznej — 5 artykułów, s. 180, zł 10,—
- 3 Zagadnienia geografii gleb — 6 artykułów, s. 133, zł 10,—
4. Nowsze poglądy na istotę krajobrazu geograficznego — 3 artykuły, s. 127, zł 10,—

1959

- 1 Geografia transportu — 4 artykuły, s. 130, zł 10,—
- 2 Geografia za granicą. Sprawozdania z pobytu w Chinach, Rumunii, Węgrzech, NRF, Czechosłowacji i ZSRR — 6 artykułów, s. 208, zł 10,—
- 3 Zagadnienia klimatologii — 9 artykułów, s. 195, zł 10,—
- 4 Historia geografii — 3 artykuły, s. 178 zł 10,—

1960

- 1 Międzynarodowe Kongresy Geograficzne — 7 artykułów, s. 218, zł 10,—
- 2 Zagadnienia Regionalizacji Ekonomicznej w Związku Radzieckim, 9 art., s. 198, zł 10,—
- 3 Zagadnienia Geografii Przemysłu, 4 art. s. 128, zł 10,—
- 4 Metody badań geograficznych, 5 art., s. 258, zł 10,—

1961

- 1 Zagadnienia wodne 6 art. s. 249, zł 10,—
- 2 Nowe kierunki badań osadnictwa wiejskiego 7 art. s. 149, zł 10,—
- 3 Problemy współczesnej biogeografii 9 art. — Część I zł 10,—
- 4 Problemy współczesnej biogeografii 8 art. — Część II zł 10,—

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INTERNATIONAL GEOGRAPHICAL UNION
COMMISSION ON METHODS OF ECONOMIC REGIONALIZATION

Terms of reference;

"To analyse and compare the ends and means of geographical research on the problems of economic regionalization, undertaken in various countries, both from the point of view of its value for the development of scientific theory and of its practical application".

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AGENDA

OF THE FIRST GENERAL MEETING OF THE COMMISSION
ON METHODS OF ECONOMIC REGIONALIZATION,
INTERNATIONAL GEOGRAPHICAL UNION, IN UTRECHT

8th Sept., Friday afternoon - 9th Sept., Saturday
morning

1. Opening of the General Meeting
2. "Programme of Work for the Commission on
Methods of Economic Regionalization", a
paper by K.DZIEWOŃSKI, S.LESZCZYCKI, and
A.WRÓBEL
3. Communications on state of research of eco-
nomic regionalization in various countries
by the Members
4. Discussion of papers and proposals
5. Problems of economic regionalization at
the London Congress of IGU in 1964 /letter
of Prof.M.J.Wise/

9th Sept., afternoon

- 15⁰⁰h. Business Meeting of the Commission
1. Organizational problems of the Second Ge-
neral Meeting of the Commission in 1963
 2. Application for subsidy from UNESCO
 3. Changes in the membership of the Commi-
ssion
 4. Current issues
- 17⁰⁰h. Final Meeting - Adoption of the propo-
sed resolutions

REPORT OF THE MEETING

On september 8-9 the First General Meeting of the I.G.U. Commission on Methods of Economic Regionalization took place in the Geographical Institute of the University of Utrecht. The following ordinary and corresponding members participated in the Meeting: Prof.S.Leszczycycki /Chairman - Poland/, Prof. S. Ilesic /Yougoslavia/, Prof.A.Bassels Batalla /Mexico/, Prof.M.Blazek /Czechoslovakia/, Prof.K.C.Edwards /Great Britain/, Prof.C.Herbst /Roumania/, Prof. O.Tulippe /Belgium/, and Prof.E.Ullman /U.S.A./, as well as the invited guests: Mr.S.Ileris /Denmark/, Prof.R.Klöpffer and Dr.S.Schneider /German Federal Rep./, Mr.B.Lopez /Chile/, Dr. J.Sperok /Belgium/, Prof.H.J.Keuning and Prof. A.C.de Vooy's /Netherlands/, Dr A.Kukliński and Dr.A.Wróbel /Poland/.

The Meeting has been opened by Prof. S. Leszczycki, who then presented a paper by K.Dziewoński, S.Leszczycycki and A.Wróbel on the Programme of work for the Commission on Methods of Economic Regionalization /see page 12/. The paper has been followed by short reports presented by the participants, on the actual state of research on economic regionalization in Belgium, Czechoslovakia, German, Great Britain, Holland, Yougoslavia, Mexico, Poland, Roumania and United States. In addition the written reports sent by Prof.Juillard /France/ and Prof.G.Jacob /German Democratic Rep./ were

presented to the participants of the Meeting /see pages 45 and 49/.

In result of the joint discussion on these reports the proposals for the Commission programme of work as presented by the Chairman have been accepted. It has been accepted specifically that a three-part survey covering the three main aspects of the research on economic regionalization shall be prepared; the work on each part of this survey will be coordinated by two ordinary members of the Commission, with whom other members of the Commission will cooperate. In particular, the survey of basic concepts and carried out theories will be conducted under the direction of: Professors Leszczyński and Otremba with cooperation of Doc. Blazek, Prof. Dziewoński, Prof. Ullman and Dr. Wróbel; the survey on methods of research will be conducted under the direction of: Professors Harris and Ilesić with cooperation of Prof. Tulippe, Dr. Sporek and Prof. Ullman; and the survey of practical application will be conducted under the direction of: Professors Juillard and Sauszkin with cooperation of Doc. Blazek, Dr. Sporek, Prof. Ullman and Prof. Nicholson.

Further, it has been resolved to prepare a bibliography of the studies of economic regionalization, containing the bibliographies of and pertaining to the basic achievements in the field of economic regionalization of various countries. This bibliography will be compiled by the Secretariate of the Commission in Warsaw, on the basis of the materials sent by the members of the Commission and other persons; this work will be divided geographically as follows: 1/ Prof. Bassols Batalla and Prof. Inhumapse: Mexico and South America, 2/ Prof. Blazek; Czeko-

slovakia, 3/ Dr.Bora:-Hungary, 4/ Dr.Chandra-
sekhara: India, 5/ Prof.Edwards: Great Britain,
6/ Prof.Harris: U.S.A., 7/ Prof.Herbst: Ruma-
nia, 8/ Dr.İleris: Scandinavian countries,
9/ Prof.Ilesic: Yougoslavia and Greece, 10/
Prof.Jacob: German Dem.Rep., 11/ Prof.Juillard:
France, 12/ Prof. Leszczycki in collaboration
with Mr.Kikolski and Mr.Koczy: China, 13/ Doc.
Marinov: Bulgaria, 14/ Prof.Nicholson: Canada,
15/ Prof.Otremba in collaboration with colle-
gues from the Bundesanstalt für Landeskunde:
German Federal Republic, 16/ Prof.Sauskin:
U.S.S.R., 17/ Prof.Tulippe: Belgium, 18/ Prof.
de Vooy: The Netherlands, 19/ Dr.Wróbel: Po-
land.

During the Business Meeting of the Commis-
sion Dr Wróbel presented problems of the or-
ganization of the Second General Meeting of
the Commission. Having taken into account the
opinion of the majority of the participants it
has been accepted that this meeting will take
place in Poland, in September 1963. The possi-
bility of obtaining a larger grant to cover
the costs of the organization of the meeting
was also discussed. An application to the In-
ternational Geographical Union for the subsidy
of \$ 2.500 for this purpose, mainly to cover
part of the travel costs of the Commission mem-
bers was been approved; on his part the Chair-
man promised to apply to the Polish Academy of
Sciences for a subvention to cover part of the
organizational and editorial costs.

The question of the Commission's part in
the activities of the XXth Geographical Con-
gress in London was then discussed on basis
of the letter received from Prof. H. J. Wise,
Chairman of the Congress' Programme Subcommittee.

After listening to Prof. Edwards, who presented the state of the organizational preparation for the Congress, it has been resolved a/ to hold during the London Congress the Third General Meeting of the Commission - open to all participants of the Congress - devoted to presentation and discussion of the results of progress achieved in the world and b/ to ask the Programme Sub-committee of the Congress for the inclusion of short reports of all Commission in the agenda of the General Assembly of the International Geographical Union to be held during the Congress in London. Further, it has been resolved to ask the Programme Subcommittee for eventual organization before or after the Congress of a Symposium on selected problems of Economic Regionalization with special reference to Great Britain; however, since the organization of such a Symposium would necessarily involve large work for the British geographers, it has been left up to their discretion whether such a Symposium should be organized.

So far as the question of changes in the membership of the Commission is concerned, it has been resolved to invite for corresponding members on the motion of Prof. Ullman - Dr. A. Wróbel /Poland/, and on the motion of Prof. Tulippe - Prof. M. Philipponeau /France/.

The final resolution covering the main points decided at the Meeting has been then accepted /see page 11/. It has been also resolved, that the short report on the Utrecht meeting should be sent for publication in the IGU - Newsletter, the similar reports should be published by the participants in the geographical periodicals of their respective countries.

Prof. Leszczycki promised also to publish in one of the series, published by Institute of Geography of the Polish Academy of Sciences, complete materials of the Meeting, together with the reports of these Commission members who were not able attend the meeting, but will send them not later, then by the end of 1961.

Closing the Meeting the Chairman expressed his gratitude to all present for their friendly cooperation and help, and especially to the Chairman of Duch National Committee - Prof. Keuning and to the Director of the Geographical Institute in Utrecht - Prof. de Vooy. On behalf of the participants Prof. Tulippe thanked Prof. Leszczycki and his colleagues for the efficient preparation of the Meeting.

/Andrzej Wróbel/

Kazimierz DZIEWOŃSKI,
Stanisław LESZCZYCKI,
Andrzej WRÓBEL

PROGRAMME OF WORK
FOR THE COMMISSION ON METHODS
OF ECONOMIC REGIONALIZATION
/proposals/

Problems of regions and regionalization have always played an important role in geography and its development. Last years brought a renewed interest specially in the field of economic geography. The regional method and its theory have been formulated, especially in the United States, and widely applied in current studies. Some, most interesting theories on economy in space, based on the concept of economic regions were developed both by economists /Lösch, Isard, Perroux/ and geographers /Christaller/. Moreover, problems of economic regions are of growing importance in economic and physical planning, specially for the socialist countries: here, the most interesting are both practical experiences and theoretical conceptions of the Soviet Union.

All these concepts are closely intertwined, although conceptually they may seem to exclude one another. In fact, any progress achieved in one direction usually has great value, for repercussions and certain further advance in another. For all these reasons it would be a major help in general development and in specific directions of geographical studies to confront and to discuss achievements and failures, expe-

riences obtained and difficulties encountered in various countries. At the XIXth International Geographical Congress in Stockholm a special commission was established by General Meeting of the International Geographical Union to study methods of economic regionalization and to report in four years at the next Congress.

Before making concrete proposals for the organization of work to be undertaken by the Commission, it seems necessary to make few remarks about the conditions of its successful completion.

We have to remember that: /1/ there is only limited time for the work of the Commission - therefore plans although ambitious, should not be too ambitious; /2/ there are difficulties of distances and of other work in which every member of the Commission is individually engaged - this seriously limits possibilities of meetings, therefore the whole work must be decentralized. Even for these reasons only, it will not be possible to develop in the coming four years an unified theory of economic region and regionalization. This should be left to the initiative of individual geographers. However, if we gather, according to some simple rules, all materials for comparison of interesting us problems and order and confront them together, then we will be able to state already all convergences and disagreements and perhaps even to build a wider programme for common research on specific problems of economic regionalization. To this we shall return at the end of this paper, which, in principle, is limited to presenting a programme for registration and survey of the concepts, methods and applica-

tions of economic regionalization as developed up to the present moment.

The aim of the Commission as formulated by its terms of reference is the following:

"To analyse and compare the ends and means of geographical research on the problems of economic regionalization undertaken in various countries, from the point of view for development of scientific theory and of its practical application".

It seems necessary to begin the presentation of our programme with giving some at least working definitions of certain general terms and concepts contained in this formulation. Most important of all is of course the working definition of the very concept of "economic regionalization".

We have start here with the recognition of the fact that in the sphere of economic regionalization there are to be distinguished three different - although mutually in many ways interrelated aspects:

1. On the one side, there exists a concept of "region" as undoubtedly one of the basic analytical tools of geographical research.

2. On the other side, we observe the steadily increasing use of the concept of "region" or "economic region" in various spheres of practical activity of man.

3. Finally, the concept of economic region is used by various theories dealing with certain regularities and laws of development of economy in space, theories which consider economic regions as a significant element in the social economy and therefore, a proper object of their studies.

The existence of these three aspects of the problem has already been marked in the provisionally agreed programme of the work of the Commission. As to the mutual interrelation of these three aspects, neither of which should be neglected, there arises, naturally, the whole set of problems, and the attempt to solve all of them would be a kind of "general theory". It would be overoptimistic to hope that we could achieve such a result, however, we could systematically present the more important differing views in this field to point out the nature of differences as well as some serious gaps in our present knowledge and formulations. This, in return, would lead us to accept certain common basic principles and common terminology necessary for fruitful international scientific cooperation in our field.

While studying the distribution and spatial interaction of a variety of social and economic phenomena, in the framework of regional method, we distinguish in the economic geography various regions. In this general meaning, all these regions are "economic regions".

However, when discussing economic regions in the context of practical activity as well as of scientific theory, it seems reasonable - if not, indeed, necessary - to narrow the concept of economic region to the region significant for the spatial arrangement and development of the totality of quasitotality of phenomena studied by economic geography. It may happen that various such regions /delimited by different criteria/ may have in actual conditions of a given country equal of complementary significance for the course of economic processes shaping the configuration of its land utilization.

It is proposed, therefore, that the subject of economic regionalization as a research activity of economic geography should be understood as defining of regional structures.

On the other hand, when discussing the methods of economic regionalization, we should define the term more broadly and deal with all methods that are or may be used in delimitation of regions or specific areas in the field of economic and social phenomena /including the methods of other sciences, like sociology, biology, etc./.

Besides its research aspect, economic regionalization is also understood as a practical activity. In this practical aspect economic regionalization should be treated as delimitation of regions for various practical purposes of general economic nature /either directly, as in the case of various forms of economic and regional planning, or indirectly, as in the case of regional divisions for statistical purposes/.

In consequence, the whole programme of work should be divided into four parts: first pertaining to the rules for gathering and registration of materials, second, third and fourth dealing with preparation of surveys of the most important problems facing our Commission, i.e. basic concepts and theories of economic regions, methods of regionalization and finally, practical application of concrete studies of regionalization.

Registration of materials

Obviously so far as registration is concerned, gathered materials should be classified under three headings, corresponding to the three

already mentioned most important problems. Further divisions may be left to persons who will actually prepare the survey of the given problem. But still another class should be added, which we propose to call "bibliography of bibliographies". Many countries possess already published bibliographies or critical surveys of economic regionalization. All these should be registered together and transmitted in form of a list to all persons working for us on specific problems. Therefore altogether we have four main headings to be used in classifying gathered materials, sources and data:

- 1/ bibliography of bibliographies and critical surveys of problems connected with economic regionalization
- 2/ basic concepts and theories of economic region and regionalization
- 3/ methods of regionalization
- 4/ practical application of studies of economic regionalization

It seems proper that gathering should be done by countries, group of countries or by languages. We would like to propose that all members of the Commission, both ordinary and corresponding, gather materials within previously agreed limits and areas chosen according to their interests and possibilities. Voluntary helpers are also welcomed and may be easily fitted in. To avoid duplication of work, we should put in the minutes of the Utrecht meeting a list in which be stated who will prepare materials, on what subject and for what area. To other problems of coordination we shall return later on.

Every publication or article should be registered in a proper way on a card. The international bibliographical standards should be followed /for books: author's name, Christian name, title, eventually name of series in which book was published, place and year of publication, number of pages, illustrations, maps and so on; for articles: autor's name, Christian name, title, title of periodical, volume, year of publication, pages from ... to ..., number of illustrations, maps, and so on/. With more important positions a short resume should be given. If the given publication falls under several main headings, the card should be duplicated so many times as necessary. As the cards will have to be sent in for the preparation of the reports and to be edited for publication, an additional copy of each card should be made for the personal use of the author.

Preparation of surveys

Passing to the preparation of surveys on the three most important problems, let us discuss them in detail, but separately. One general remark, however, seems to be necessary. Every survey should be introduced by a short statement on genesis, historical development and the role the discussed problem played in geography, together with review of the value and importance of gathered materials.

/1/ Analysis of basic concepts and theories

The survey of gathered materials and in particular of classified theories, in our opinion, should be divided into two main parts: "Region as a concept and analytical tool" and "Region

as a phenomenon of economic space". Although it is undeniable that concrete theoretical formulations defining the nature of the phenomenon of the economic region determinate to a certain degree the analytical tools used to deal with this phenomenon and vice versa, we consider it a matter of primary importance to treat separately these two aspects and to distinguish between /1/ the formal rules aiming to sharpen the terminology and to secure the logical consistency of scientific pursuit, and /2/ concepts expressing certain judgements about the existing reality and /or/ the best ways of executing certain practical policies. The former may have to a certain degree an universal character independent of our judgements in the latter field.

Under the headline "Region as a concept and analytical tool" should therefore be included such items as the general usage of the term "region", the definition of basic categories /nodality, homogeneity, hierarchy, cores and boundaries, etc./ and the formal rules for delimiting regions. Various formulations in this sphere have been for long inherent in the literature on regional geography and have recently been elaborated in the form of the theory of regional method. However, the most comprehensive, so far, formulation of this theory, found in the well known, so-called "Whittlesey's Report"¹ is far from being complete and needs further elaboration. Finally, we have to include here also all the theoretical questions con-

¹ D. Whittlesey, "The Regional Concept and the Regional Method", in: "American Geography - Inventory and Prospect", Syracuse, 1954.

cerning region as an areal unit of aggregation of statistical data, as discussed recently in the framework of statistical geography¹.

The specific subdivisions of our survey are naturally open for discussion. But to start the ball rolling we would propose that under this heading such problems should be included, as e.g. region in statistics, region in development of geography, theory of regional method.

On the other hand, under the title "Region as a phenomenon of economic space" we would include the theories and concepts relating to the actual economic reality, to the nature of region-shaping forces.

Among them are to be included both "pure theories" /e.g. of A.Lösch/² and the generalizations of empirical material providing certain more or less developed theoretical concepts used subsequently as methodological guiding principles. Here we find many concepts that are covering only partially our field and that are really not contradictory /or only partially contradictory/ to each other, but have rather complementary character. E.g. N.N.Kolossowski's concept of industrial complexes³ is only an alabo-

¹ E.g. O.D.Duncan, R.P.Cuzzort, B.Duncan, "Statistical Geography", Glencoe, Ill., 1961.

² A.Lösch, "Die räumliche Ordnung der Wirtschaft", Jena 1940.

³ N.N.Kolossowski, "Proizvodstviennno-teritorialnoye sochetaniye v Sovietskoy ekonomicheskoy geografii", Voprosy Geografii, VI /1947/, pp.133-168

ration of certain aspects of the Soviet "Gosplan" theory of economic regions, and at the same is comparable to the analogous concepts of Chardonnet¹ or Isard²; similarly, the theory of central places became an integral part of the theory of Lösch.

Our aim will not be of course to pronounce judgment which of these theories is "true". It will be to classify, to compare, and to check them as well as to establish what is the kind and completeness of empirical studies that substantiate these theories, in how far and with what results they have been implemented in economic and geographical research on economic region. Discussion of "Region as a phenomenon of economic space" should cover such theories as e.g. theory of the territorial social division of labour, theory of economic landscapes and regional network of areas of production and consumption /Lösch/, theory of industrial complexes /territorial cycles of production/ /Kolossowski, Sauskik, Chardonnet/, theory of metropolitan regions /Mc Kenzie/, theory of administrative divisions, theory of administrative economic regions within the planned economy /Alampieff/ and others.

Along the survey of theories, a survey of concepts of regional typology and divisions

¹ J.Chardonnet, "Les grands types de complexes industriels", Paris 1953

² W.Isard, M.W.Schooler, T.Vietorisz, "Industrial Complex Analysis and Regional Development", N.York 1959.

shall be necessary. It is so because there are many descriptions of regions and regional divisions, which are not based on fully fledged theories. They do, however, represent some simple inductive generalizations of empirically known reality and in result they should not be completely omitted in our analysis. Here different types of zonal and nodal regions, of historical provinces, of various forms of administrative divisions may and should be included.

Finally, some comparison of concepts and terms should be undertaken. Such a comparison should at least enable us to indicate similarities and dissimilarities of various approaches, but it will also serve as a basis for a unified terminology. At the end, we shall probably agree to disagree, but in any conditions we should fully understand what the differences really are. Misunderstanding of terms is one of the things which, in result of our analysis, we should be able to avoid by defining their meaning within the framework of various theories.

/2/ Methods of research

For a survey of methods of research some mode of their classification is necessary. There are at least two possible: the topical mode, on basis of the final object of research and the methodic mode, on basis of character on the method. In the first, methods of research may be described as pertaining, for instance: to regional structure, regional divisions, interregional relations, historical development of regions, comparative regional studies, or regional monographs; in the second, methods of research may be grouped in the following divisions: historical methods, field methods, car-

tographical methods, statistical methods and econometric methods. Both modes should be applied, in our opinion, in the survey, in spite of the fact that it will involve some duplications in work. However, the first should give a clear picture of the methods used so far by geographers, the second will enable us to work out critical appreciation of the present state of research from the methodic point of view and should indicate directions for improvement and development of new methods and techniques.

There are some tendencies to call certain methods specifically geographic - some of them are certainly geographic by tradition, e.g. cartographic methods; but to create out of them a monopoly for geographers is obviously neither possible nor proper. At the same time methods used in modern geographic research must be almost by definition compound - a geographer cannot resign the use of any, although in individual cases he will use specific combination of methods. From this point of view it would be useful to give at the end of our survey some kind of a cross-table, in which each object of regional research /mode one/ would have ascribed concrete methods /classified according to the mode two/ with special stress laid on new, specially promising methods. This is only a suggestion for discussion. Final decision on making of such a table should be, however, left to the leaders of the groups which will prepare this part of our survey.

/3/ Practical application

There are numerous channels of practical application of regionalization studies; to

mentia: only the most important, we have studies /a/ for use in statistics - there were historically the first; /b/ for administrative divisions, usually developed in connection with proposed reform of such a division - these also have a very old tradition and a distinguished career; /c/ for purposes of regional development - these had been postulated by Geddes in the beginning of this century and later often undertaken within the framework of regional planning /physical and economic/ - these are the most recently developed, but from scientific point of view are also the most interesting ones; also these were specially successful in the socialist countries, but were also undertaken elsewhere. The main difference between those last and the former ones /for purposes of regional planning and of regional development /lies in the fact that while the last are dealing with the balanced development of regional structure of the whole country, the former are limited to some chosen "special" or "problem" area or region. This may seem a minor element, but it leads to the application of completely diverging methods and for this reason both should be characterized separately.

The survey of practical application should be moreover supplemented by a closer review and a short description of outstanding and typical case studies.

Conclusions

The realization of these three surveys, or rather tripartite survey, will form a basis for further studies to be undertaken probably already after the London Congress in 1964. It is, however,

possible to foresee now their possible direction. Two problems look as specially important: /1/ problem of statistical and other sources and data, needed in the studies of regionalization, as there is no doubt that at present in practically all countries, there are serious deficiencies and lacuna within disposable statistical data, internationally agreed list of postulates would certainly be of great value for every country; /2/ preparation of the world map of economic regional structures and regions as at present existing; if we are able to agree on concepts and methods it would be of great interest to apply them to all countries throughout the world and to study economic regionalization on the world-wide comparative basis.

But coming back to our present tasks - some division of work between members of the Commission and certain established time-table are obviously necessary.

Therefore we propose the following scheme for organization, as a basis for discussion:

1. Bibliography of bibliographies will be prepared by the Secretariate of the Commission in Warsaw, Poland, on basis of materials sent by the members or possessed by the Library of the Institute of Geography of the Polish Academy of Sciences. For the purpose the members will send to Warsaw the collected materials, not later than by the end of January 1962. The Secretariate will send the provisional bibliographical list for corrections and for use in preparation of survey by the 1st of May 1962.
2. Three surveys will be prepared, as already mentioned, by countries, groups of countries

or by languages, coordinated by two ordinary members of the Commission, who will be at the same time editoris of the preliminary and final report of the given survey.

We provisionally propose that:

- a/ Professors Leszczycki and Otremba will coordinate work on "Analysis of basic concepts and theories"
- b/ Professors Harris and Ilesic will coordinate work on "Survey of methods of research"
- c/ Professors Juillard and Sauszkin will coordinate work on "Survey of practical application of studies of regionalization"

All taking part in surveys will send their materials to the coordinators by the end of 1962.

The coordinators will send their preliminary reports to the Secrateriate of the Commission in Warsaw, which will mimeograph them for the discussion at the 2nd General Meeting of the Commission.

3. The 2nd General Meeting of the Commission will take place in September 1963, in Poland. The provisional reports on surveys will be then discussed together with proposals for the final report of the Commission, to be presented at the London Congress in 1964.
4. The coordinators will send the corrected versions of their reports to the Secretariate of the Commission in Warsaw not later than at the end of 1963, which will print them together with the final report and proposals of the Commission for presentation and distribution at the London Congress.

5. The 3rd General Meeting of the Commission will take place during the London Congress to discuss the results obtained and, in case of necessity, also the proposals for the reelection of the Commission together with the programme of its future work.
6. In connection with the London Congress, a Symposium should be organized to discuss in detail, with other interested geographers, gathered materials /surveys/. At the Symposium some concrete cases of regionalization should be presented, if possible connected with Great Britain and particularly with the region where the Symposium would take place.

LA REGIONALISATION ECONOMIQUE EN BELGIQUE

I. Recherches concernant la régionalisation économique

S'il faut considérer la régionalisation économique comme comprenant les méthodes d'études et les conceptions en matière de compartiments en régions économiques, force est de constater que l'on ne peut enregistrer actuellement qu'une assez maigre contribution belge.

Ce n'est pas que les Belges soient peu sensibles à ces notions! Au contraire! Mais à la base de ces spéculations scientifiques, on se heurte à un obstacle: la notion de région. C'est là un problème difficile, controversé, différent suivant les pays, les régions, les latitudes.

Pour sérier les difficultés, je voudrais distinguer deux types de régions: la région d'aménagement et la région économique /ou zone de développement/.

Je me suis suffisamment expliqué sur la première et sur le rôle du géographe en Belgique à ce sujet, dans le rapport que j'ai présenté à la Conférence internationale de régionalisation de Kazimierz /Pologne 1958/. Il n'est donc pas indiqué d'y revenir ici. On trouvera le texte de ce rapport dans les Comptes Rendus de cette Conférence à paraître prochainement. On y verra que dans mon pays, le Service du Survey National, aidé des équipes régionales d'aménagement, com-

posées surtout de géographes, d'économistes et de sociologues, et parvenu à un compartimentage valable pour l'aménagement du territoire à l'échelon régional.

Mais aujourd'hui, c'est de région économique qu'il s'agit et du rôle du géographe dans ce domaine.

Les expériences que mes collaborateurs et moi-même avons vécues à l'occasion de notre participation dans les équipes de spécialistes chargés des enquêtes préparatoires d'aménagement et de développement, m'ont convaincu de l'existence indiscutable d'une hiérarchie des régions économiques à partir des régions polarisées. Il apparaît en effet de plus en plus clairement que celles-ci fournissent des ensembles géographiques établis à des niveaux divers, hiérarchisés.

La réunion d'un certain nombre d'unités les plus petites constituent une région de rang immédiatement supérieur et dont le rôle principal sera, ou devra devenir, une agglomération plus importante que celles qui jouent le rôle de centre dans ces petites unités. De même, plusieurs de ces régions de deuxième rang doivent former une région d'un degré supérieur avec comme centre une agglomération plus importante encore déjà existante ou en potentiel vu les avantages de sa position géographique. Le nombre des degrés à prendre en considération est difficile à préciser de façon absolue. Il peut d'ailleurs varier en fonction de l'étendue du territoire envisagé.

Pour la Belgique, notre expérience des surveys régionaux nous autorise à imaginer la possibilité de considérer 5 à 6, voire 6 à 7

degrés à partir du Royaume pris au départ comme unité et en descendant de degré en degré jusqu'aux toutes petites unités dont le rayonnement se limite à quelques communes, voire aux seules communes limitrophes.

Mais il faut reconnaître que l'ensemble de cette hiérarchie des régions paralisées est loin d'être établie en Belgique tant sur la base de la situation actuelle que sur celle des prévisions d'avenir.

Quoi qu'il en soit, un essai de compartimentage en grandes régions économiques a été tenté. D'abord par le Service du Survey National où géographes et économistes collaborent. Il vient d'être précisé par un géographe, Mr. J.Sporck, et publié dans les Cahiers d'Urbanisme¹.

Ces régions ont été identifiées sur la base de l'analyse des structures et par la réunion dans un effort de synthèse régionale, d'unités possédant une certaine unigormité dans les aptitudes naturelles et les activités productives et conduisant ainsi à cinq grands ensembles hétérogènes, mais cohérents. Ces ensembles ne présentent donc pas d'homogénéité géographique, puisqu'ils comprennent fondamentalement des régions industrielles et des régions rurales. Mais il en résultera, selon le mot des économistes, une homogénéité de développement, en fonction de l'existence en leur

¹ J.A.Sporck. La localisation de l'industrie en Belgique. Cahiers d'Urbanisme, No.34 à 36, Bruxelles 1961, pp.100 à 113.

sein de faits de croissance à savoir: complémentarité des pôles techniques de croissance, axe de développement pour les pôles techniques principaux, infrastructure routière, ferroviaire et parfois fluviale pour les flux unissant les pôles de croissance dérivés. Bref, on en arrive ainsi à une conception proche de celles de certains autres pays /vois H. Strida, pour la Tchécoslovaquie/, et coïncide de celle de mon collègue liégeois, le Professeur Davin, pour la région économique Limbourg-Liège.

II. Applications pratiques

Ce compartimentage du territoire belge en cinq grandes régions économiques aurait dû être utilisé pour une première projection spatiale des données de la programmation économique nationale. Il n'en a rien été! Pour des raisons politiques, administratives, voire linguistiques, le Bureau de Programmation et ses organes consultatifs n'ont pas cru devoir retenir cette régionalisation: ils s'en sont tenus à la subdivision tout artificielle en provinces. Ainsi donc, au lieu d'adopter la subdivision régionale proposée - laquelle est fondée sur des impératifs géographico-économiques non contestables - la Belgique, pour le moment du moins, s'accroche encore au traditionnel découpage en provinces, malgré tout l'artificiel d'une telle subdivision.

Cela est d'autant plus regrettable que les cinq régions économiques proposées sont promises à un rôle utilitaire d'avenir dans la Communauté Economique Européenne /CEE/. En effet, chacune d'elle se rattache par delà les frontières à des compartiments frontalières

voisins auxquels, avec le temps elles ne peuvent que s'intégrer vu la communauté des structures, des aptitudes et des activités.

Enfin, il convient de remarquer que dans la régionalisation économique ayant conduit aux cinq régions belges proposées, le rôle dévolu à l'agriculture est pratiquement null. Il y a là une lacune à première vue regrettable. Je voudrais en terminant émettre le vœu que notre Commission soumette le cas à un examen approfondi de manière à arriver à la nette notion soit que cette lacune est sans importance, soit au contraire qu'il faut envisager les moyens de la combler et ainsi intégrer l'activité agricole dans les préoccupations de la régionalisation économique.

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RESEARCH INTO THE ECONOMIC REGIONALIZATION OF BULGARIA

In the past there were several attempts to establish regional division of Bulgaria. The most important among them was that by A.S.Beshkov, which established the scientific basis for such division by use of the index method. After the war and establishment of new economic, social and political regime, systematic investigations of the problems of economic regionalization were undertaken. Among them research conducted in the Institute of Higher Financial and Economic Studies in the Geographical Institute of the Bulgarian Academy of Sciences, of individual geographers in the State University of Sofia and in the Charles Marx Economic Institute in Sofia should be mentioned. Right in the beginning a discussion of the basic theoretical problems dealing with essence and character of the economic region were organized. Two different positions were then defined.

According to the first one in Bulgaria there exists a number of economic regions representing territorial productive complexes. These however did not obtain yet an administrative status. It is a task for scientists to prove their existence and to establish their boundaries.

The second, supported by a small number of geographers assumed that the existing political

and economic administrative division of the country already coincide with economic regions. In result the problem of regionalization is practically solved and there is no further need for research.

In the period 1955-1957 economic geographers of the geographic institutes at the Bulgarian Academy of Sciences and the Academy of Sciences of the USSR organized joint territorial researches into the structure of Bulgarian economy. Expedition groups travelled 24 thousand kilometers and visited almost all industrial centers, hundreds of industrial enterprises, coal and ore basins, ports and railway functions. Besides they made themselves acquainted with the specific conditions of development of rural economy in the different parts of the country. For this purpose many villages and state farms were investigated.

During these field researches special attention was paid to the problems of complex, perspective development of each individual area without any limitation in relation to the existing boundaries of the administrative units.

At the same time an extensive statistical inquiry has been conducted in cooperation with the Central Statistic Office, the State Planning Commission and the majority of economic ministries. Statistical and other data were collected for the same periods, according to specially established methods.

On the basis of the 10 collected basic indices it has been possible to obtain a clear picture of interindustrial connections. It was also possible to prepare a set of detailed economic maps, such as the map of population, and its

occupational structure the synthetic map of industry, map of agricultural production, as well as the general economic map of the whole Bulgaria. The analysis of these materials revealed that the existing /1957/ administrative units of the highest order - the 13 "regions" - do not correspond to the real regional problems of the Bulgarian economy. Detailed researches indicated that in the territory of N.R.Bulgaria there are already formed six economic regions, namely: South Western, South Central, North Central, North Eastern, North Western and South Eastern. Their detailed characteristic is given in the already published monography "Geography of Bulgaria" vol.II - "Economic Geography of Bulgaria", Sofia, 1961 /in Bulgarian/.

Meanwhile, in view of the great importance of the economic regionalization, the Council of Ministers of N.R.Bulgaria in a decree of June 30, 1956 called on the Bulgarian Academy of Sciences, the State Planning Commission, the Central Statistical Office, several ministries, committees and departments, aided by the regional and municipal councils, to prepare and present a project for the complex economic regional division of the country.

In the first stage of inquiry, the territorial distribution of the productive forces for the period 1953-1957 was investigated. Immense material was collected concerning the existing territorial production specialization, the production connections between enterprises and separate agglomerations. This material was elaborated and systematised in specific tables and forms and later on summarized in technical economic reports for every region. The reports

embrace the following elements: geographic background, economic evaluation of natural environment, population, industry, rural economy, forest economy, transport and commodity circulation.

The second stage of the inquiry, which is conducted by the Commission of Research into the Structure of Productive Forces and by the Economic Institute at the Bulgarian Academy of Sciences, comprises the comparative studies of the production on basis of regional divisions.

The basic method used in this second stage was the balancing one.

In these researches there has been used a variety of analytical tools and devices.

I. In the analysis of the territorial distribution of the productive forces and their specialization there have been taken into account:

a/ value and natural indexes for the general and commodity production in individual branches,

b/ the value of capital funds of industrial branches,

c/ the number of workers engaged therein.

By way of the index method there were also calculated: the percentages of the workers engaged in the industry attached to the population of the corresponding administrative economic units and of the commodity production per one worker engaged in the corresponding branch and per one inhabitant.

II. In order to establish the economic interconnections and their intensity between the

separate enterprises and between the administrative economic units, there were studied:

a/ the results of the economic analysis of transport statistics of the commodity flows of 45 sorts of goods,

b/ the balances of materials used for 45 sorts of products of industrial and agricultural origin according to the present division into economic and administrative regions.

III. In order to establish the specialization in production the results of the researches concerning the output of electricity, the fuel, wood, leather and fur industry as well as the problems of the hydro-economy were taken into consideration.

IV. In order to establish the territorial extent and the boundaries of separate economic regions the problems of economic gravitation and specialization of production as expressed in the areal interconnections in the sphere of production were studied.

Upon the basis three economic regions were disclosed, namely: 1. Western region comprising the regions of Sofia, the city of Sofia, Dimitrovo, Kjustendil, Blagoevgrad, Vratza, Machailovgrad and Vidin; 2. Southeastern region comprising regions of Plovdiv, cities of Plovdiv, Pazardjik, Haskovo, Burgas, Kardjaly, Stara Zagora, Sliven, Smoljan, and Yambol; 3. Northeastern region comprising the regions of Pleven, Lovetch, Tirnovo, Rousse, Kolarovgrad, Silistra, Tolbuchin, Razgrad, Targovishte, Varna and the city of Varna.

Of course, these results were obtained by use of the above mentioned methods. It should

be pointed out that, at the present stage of research, these methods do not prove to be very efficient and affective. The principal defect may be seen in the fact that as far, little has been done to use the modern mathematical methods of analysis, e.g. linear programming and, generally, the precise, quantitative methods of research. Neither the indispensable methods of regional analysis defining e.g. the relation between the descriptive and mathematical methods has been satisfactorily developed.

Finally I would like to state that in Bulgaria, as well as in the remaining socialist countries of Europe, working together within Council for Mutual Economic Aid, there arise several important problems for research due to the development of the international territorial division of labour.

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ECONOMIC REGIONALIZATION IN CZECHOSLOVAKIA

In the study of problems of the economic regionalization in the Czechoslovakia we can distinguish two periods. Prior to 1938 mainly for geographers dealt with the question. They proceeded mainly from the viewpoint of physical and geographical classification or from the purely historical one. Conclusions of their studies were published in professional magazines. After 1945 the problem of regionalization grew in importance and became a specially important because of its application to the practical purposes. The interest of the non-geographical scientists in this problem has then increased. Number of published articles was however small. A great number of papers and documents was filed in State Archives and up till now is not yet published.

The detailed information about these studies was given in an article written by Jaromir K o r č a k, "The Development of Methods on Economic Regionalization in Czechoslovakia" published in a volume entitled "Economic and Geographical Regionalization in the Czechoslovak Republic" /Prague 1959/.

In analysing these problems the Czechoslovak geographers tried to apply various viewpoints found in the world literature. In this place I will limit information given to certain aspects of the subject which seem to be

of particular importance in the theoretical problem and practical preparation of regionalization studies.

Economic regions exist in a great variety of types and size. They exist as territorial groups of the economy or of its component parts /industry, agriculture etc./ in such a way, that they possess an independent /or relatively independent/ original territorial individuality. The condition for such a development is the dissimilarity of a particular region from other regions of the same type /specialization/ and the existences of mutual ties among the individual elements of economy within the region /integrity or complexity/.

We recognise all theories and methodological principles which deal with fundamental conception of a region as a regional individuality, as practically useful. We have considered, for instance, the theory regarding the region as a territorial complex /Kolosovskij, Chardonet and others/ as theoretically very useful. Our research studies were directly connected with the needs of practical life. These studies had to be finished and delivered at a fixed date. For this reason, we were forced to supply some theories and methods only. This simplification of procedure, dictated by the urgency of final date does not, however, mean the exclusion of the applicability of other viewpoints.

Then making use of the theory of territorial complex it became evident that it is untenable to narrow the whole problem to the concept of the complex being a territorial /regional/ self-enclosure of production. We understand such a complex as a territorial balance between produc-

tion and consumption. In doing this we do not abandon or weaken the thesis that the productive relations and productive specialization are decisive factors in regional development. The study of productive relations has proved to be very uncertain and so complicated, that it led us to highly unsatisfactorily established and limited to a very narrow frame of reference individual regions.

As a matter of fact we conceived economic regionalization as the selection of such a system of regions which corresponds to practical needs. Through this the necessity of mutual connection and precedence of regions is stressed. In literature there are various views concerning this aspect. When we analyse the formation of the precedence of regions from the most general views, we classify as regions of the first-class importance those regions, which can be grasped as individualities from the point of view of the world economy. Here belong the majority of economically developed countries with the exception of the greatest State /USA, Union of Soviet Socialist Republics, potentially China and others/ which form vast complex within which regions of the highest order are already the component parts of the State territory. Regions of the second order are individualities within the framework of the natural economy etc.

According to our view, the centre of gravity for research lies in the regionalization of districts of lower order. These are of much greater general interest and will require more precise and delicate methods of delimitation. We have assumed that Czechoslovakia represents as the whole a closed complex of the second degree and we have studied its further division.

As the lowest link in the hierarchy of regions we regard such a delimited territory where a geographical division of labour still exists, representing at the same time an area which could be geographically evaluated. In practice the lowest administrative units, i.e. localities proved to be just such units.

We have tried to apply in our studies - without any diminishing of the scientific quality of research - working methods as simple as possible, but at the same time most complex in their nature, that means the methods which embrace many aspects of the analysed economies. The view was not, however, endorsed unambiguously that as such global index, the investigation of relations between residential areas /travelling, migration gravitation, cultural influence, for example Professor Chabot's indices of the applicability in the work/ may be assumed, however, the opinion that relations within residential areas have important influence on the formation of regions was endorsed.

It is true that in the course of our studies it has become evident that methodically it is most suitable to start the analyse of the problem by research into the specialization of regions. Specialization does not only allow us to segregate regions of the same order, it creates mutual relations between unequal regions as well. Specialization of the region of lower order is always a component of the specialization for the region of higher order. In classifying the territories of the whole state, we have started from the fact, that the specialization is most evident and important in the industrial production and so far as the residential areas are concerned the urban agglomer-

rations. We have assumed that industrial towns are nuclei of regions, being leading factors in the formation and delimitation of regions.

The theory of nuclei is particularly advantageous for its simplicity. It was traditionally applied in Central Europe. I suppose its validity is general. Every mutually related aggregation of phenomena must have its focus.

In applying the theory of nuclei in which some questions concerning the hierarchy of nuclei remain unsolved /usually nuclei of higher order are at the same time nuclei of lower order/ we were possibly influenced by the fact stressed in our studies, that our results should serve as basis for delimitation of economic and administrative regions. Nuclei of economic and residential areas are natural centres of management and administration; they should not be several from such centres.

We assume that even the administrative division can be analysed scientifically, perhaps it is better to state, that it should be analysed in this way. We assume that even the regionalization of administrative areas is the component part in economic regionalization. However, the mutual relationship between the administrative and purely economic regionalization is not yet fully elucidated. In my personal opinion, this lack of precision is particularly conditioned by the fact, that during the last years the questions of political geography were not sufficiently studied on the basis of scientific methods. The problems of regionalization should be put in the centre of interest of this branch of geography. Combination of criteria concerning the politico-geographical and economic-geographical classifi-

cation will bring best results in the classification of relations between the administrative and economic regionalization.

For such a treatment it will be necessary to apply on a much larger scale than until now the methods of historical analysis in addition to the statistical and cartographical methods. The econometric methods could be of great importance as well because they allow as to overcome the compound character of analysed phenomena. In Czechoslovakia they are for the time being applied in partial analyses only /e.g. for analysis of the input-output relationships, minimalization of transport between producers and customer of building materials, sugar beet, meat and other products/.

So far as the application of the results of research is concerned, it should be said that the present administrative division of the State introduced since 1960 was based in addition to the purely political motives also on studies prepared by the Czechoslovak geographers.

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Etienne JUILLARD

RECHERCHE PURE ET APPLIQUÉE
EN VUE DE LA RÉGIONALISATION ÉCONOMIQUE
EN FRANCE

I. Les recherches concernant la régionalisation économique

Depuis 50 ans l'un des thèmes favoris de la recherche géographique en France avait été la monographie régionale. Mais ce n'est que depuis moins de 10 ans que ces études se sont préoccupées non seulement d'expliquer l'état présent des choses, mais encore d'envisager une meilleure organisation de l'espace, en adoptant un point de vue prospectif.

Les buts et les méthodes de la régionalisation économique ont fait l'objet de l'une des séances du colloque national de géographie appliquée qui s'est tenu à Strasbourg en avril 1961, et un accord presque général s'est fait sur les points suivants:

- a/ La régionalisation économique dans les pays développés doit se faire dans le cadre de régions "polarisées" par une métropole pourvue de la gamme complète des services d'ordre supérieur. C'est la condition nécessaire pour que la région jouisse d'une relative autonomie et puisse se développer harmonieusement.
- b/ L'accélération des moyens de transport et des divers modes de relation a progressive-

ment accru les dimensions moyennes de la région: au début du XIX-e siècle le rayon d'influence d'une ville même importante ne dépassait pas 20 à 25 km; aujourd'hui ce rayon est de l'ordre de 75 à 150 km pour une métropole de 300 à 500 000 habitants; il peut même dépasser 300 km pour une très grande ville extrêmement bien desservie comme Paris. A égalité d'importance du centre, le rayon d'influence est inversement proportionnel à la densité de la population et à l'intensité des activités productives du territoire.

- c/ Chacune de ces grandes régions se subdivise en unités subordonnées, hiérarchisées; chacune est polarisée par un centre /grande ville, ville moyenne, petite ville, bourg, ville-centre/ organiquement rattaché à un centre de la catégorie supérieure. Lorsque ces subdivisions ne coïncident pas avec les divisions administratives existantes, des réaménagements de ces dernières sont souhaitables.
- d/ Les méthodes de délimitation des régions comportent trois étapes:
1. analyse du territoire considéré en y déterminant des ensembles homogènes /régions naturelles, régions agricoles, régions industrielles/ afin de connaître au mieux la répartition des aptitudes naturelles et des activités productives. Les procédés les plus efficaces reposent sur la cartographie des diverses données de l'observation et de la statistique;
 2. analyse des phénomènes de polarisation, c'est-à-dire des divers modes d'influence des centres urbains sur le territoire /attraction commerciale, rayonnement des services, migrations de main d'œuvre, etc./ et détermination de la hiérarchie de ces centres;

3. synthèse régionale en délimitant des régions polarisées et en montrant comment s'y combinent les aptitudes naturelles et les activités productives, en constituant des ensembles hétérogènes, mais cohérents. Cette synthèse a des chances de faire apparaître certains déséquilibres. Elle facilite le choix des objectifs d'une politique d'aménagement du territoire.

II. Application pratiques

Les résultats de ces recherches permettent aux géographes-conseils des organismes de planification régionale de mieux préciser les options possibles d'une géographie volontaire. Mais le choix parmi ces options fait intervenir des éléments extra-scientifiques qui échappent à la mission d'un géographe universitaire.

La régionalisation économique en France est réalisée par le Commissariat général au Plan, qui élabore des plans régionaux avec le concours des comités régionaux d'expansion économique. Parallèlement, avec des liaisons qui ne sont pas toujours parfaites, le Ministère de la Construction /Direction de l'Aménagement du Territoire/ réalise certaines études régionales.

Des géographes interviennent soit comme conseillers, à l'échelon du Commissariat général ou des comités régionaux dont ils font partie, soit comme chargés de recherches en vue d'approfondir une question précise. Le but du Centre de géographie appliquée de l'Université de Strasbourg, le seul existant jusqu'ici en France, est notamment:

- a/ de fournir à ces organismes des géographes pénétrés de l'esprit de la synthèse régionale;
- b/ d'effectuer, à la demande du Commissariat général ou des comités régionaux ou du Ministère de la Construction, des enquêtes qui donnent lieu à la signature de contrats.

Cette action a connu en France 2 phases: dans la première /1948-1955/ l'objectif immédiat a été la décongestion de la Région parisienne, sans trop se préoccuper de localiser rationnellement ce qu'on parvenait à décentraliser. Dans une deuxième phase, inaugurée par les décrets de juin 1955, ont été mis sur pied des plans régionaux d'action économique. Mais chaque région française n'en est pas encore dotée.

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METHODS OF ECONOMIC REGIONALIZATION
IN USE IN THE GERMAN DEMOCRATIC REPUBLIC

The detailed reports on the development of economic regionalization in the German Democratic Republic have been presented by me in Liblice /1957/¹, as well as at the conference in Kazimierz /1959/² and some other conferences, among these, at the Annual Scientific Meeting of the Geographical Society of the German Democratic Republic in Potsdam³ during the Humboldt-year in 1959.

My contribution to the discussions at the Section of Economic Geography of the XIX International Geographical Congress in Stockholm in 1960, "On the problems of Economic Regionalization in the German Democratic Republic"⁴, pre-

¹ Zur Frage der "ökonomischen Rayonierung in der Deutschen Demokratischen Republik, in: Geographische Berichte, Heft 6 /1957/.

² Der gegenwärtige Stand der ökonomischen Rayonierung in der Deutschen Demokratischen Republik, in: Problems of Economic Region, Warszawa 1961.

³ Die innenbezirkliche Rayonierung als Problem der Gebietsplanung, in: Wiss. Zeitschrift der Univ. Halle, Ges.-Sprachw. VIII/6, Oktober 1959.

⁴ in: Geographische Berichte 19 /2/ 1961, s.123-130.

senting the latest state of development of economic regionalization in my country, was circulated among all members of the Commission¹. So here I will not enter once more into a detailed description of the present development of economic regionalization in the German Democratic Republic.

At present the theoretical and practical work on problems of regionalization in the German Democratic Republic is concentrated on five main points:

1. establishment of economic areas of medium order, i.e. of regions bigger than single districts
2. reorganization of the network of rural settlements
3. regionalization of various branches of industry /especially building and building material industries/.
4. regionalization of agriculture
5. establishment of traffic areas

In speaking about these main points of theoretical and practical importance, I would like to stress the fact that we have now reached the moment, in which our knowledge is gained not only deductively and in which we do not only

¹ see: Jacob, G., Die Bedeutung der Arbeiten zur innenbezirklichen Rayonierung des Bezirkses Halle für die Gliederung des gesamtstaatlichen Rayonnetzes der Deutschen Demokratischen Republik, in: Wiss. Zeitschrift der Hochschule für Verkehrswesen, Dresden 7 /1959/60/, H.3.

interpret the experience of other countries, above all of other socialist countries, as in the preceding years. All our recent work is connected with specific national economic needs. That is to say, our recent knowledge is gained primarily inductively, and the theoretical generalization can be practically verified.

Now let us return to the five main points mentioned above.

1. Two of the three taxonomic units used for the organization of economic areas in our Republic /of lowest, medium and highest order/ correspond to the existing territorial administrative units: namely the economic areas of the lowest order /district/ and the economic area of the highest order /country/.

The economic areas of medium order /of the size of about two to four administrative districts/ are however of great importance for areal planning as a unity of economic and technical planning, especially with regard to the localization of propered basic investments and secondary investments resulting from the first /e.g. construction of roads etc./. These economic areas of medium order are characterized above all by the existance of specific complexes as regards production, raw materials, the potential workers, and traffic between the leading enterprises of this territorial unit. Generally the degree of productive concentration of these enterprises is very high.

Decesive factors among the criteria applied when ascertaining the economic areas of medium order are the special ration of production and the degree of productive complexity. The im-

portance of the other factors depends on the case on hand. The investigation of economic areas of medium order was accomplished in a relatively short time. This was possible, because - as for instance in the County of Hall, the most important industrial district of the German Democratic Republic - a great number of scientists, among them several economic geographers, administrative officials, and prominent experts of industry, agriculture, traffic, education and culture were engaged in this work within a well functioning body of areal planning.

These endeavours of finding out objectively existing economic areas within the entire regional network were strongly encouraged by the demand for a complex-territorial planning, in all branches of our national economy.

2. As already stated in my earlier papers that the "main place areas" as the smallest cells in the network of rural settlements, though belonging only to the regional network within the district, not to the regional network as a whole, form an excellent basis for determining the boundary lines of economic areas of the lower order, which are part of the regional network as a whole.

The comprehensive investigations concerning the network of rural settlements aimed above all at a combination of production, supply and cultural areas into what was called "main place areas" /Hauptortsbereiche/. In most cases these main places are situated advantageously with respect to traffic and meet the necessary requirements for cooperative centres. As a result, erection of new house, will be concentrated in these places.

A complex cooperation of "main place areas" results in establishing an economic area of the

size of a district, i.e. the smallest economic area of importance for the state as a whole. Investigations on the rural network of settlements in several counties of the German Democratic Republic have proved that the boundary lines of these districts, apart from some necessary corrections, do not divide the "main place areas". The first two points relating to our present work refer to problems of complex regionalization, where as the following three points are concerned with questions of what may be called trade of branch regionalization.

3. The necessity of regionalization of various branches of industry results from a constantly increasing industrial specialization, concentration, combination and cooperation within socialist economy.

A specially interesting example, on which we are working at present, is the regionalization of the building and building material industries on basis of their specialization. As is well known, a rapid development from handicraft to industrial building has taken place in the more industrially developed countries. By specialising the building enterprises on a technological basis change their respective catchment areas. Under socialist conditions the development of these territorial catchment areas is being systematically controlled and requires scientifically based regionalization.

We hope to be able to present soon results of these very interesting investigations, which are theoretically, methodically and practically highly important.

4. Studies of regionalization of agricultural production which were carried out chiefly by the Institute of Economics of the German Aca-

demy of Agricultural Sciences, Berlin, are of specific importance, because in this very sector of trade or branch regionalization, in which the natural factors play a decisive part, even in Socialist countries a full agreement as to the methods to be applied so far could not be reached.

The value of agricultural regionalization for the improvement of the local distribution of agricultural production and for establishing proper correlations with other branches of national economy is based on the establishment of larger, territorially stable agricultural areas with similar natural and economic conditions. It was decisively proved that by means of agricultural regionalization an increase of gross production in agriculture, of the income per hectare of arable land and of the productivity of labour could be effected. Besides, by means of these investigations the way of raising backward areas to the level of higher developed areas was shown.

5. The establishment of traffic areas meets the direct demand for a better coordination between economic planning on national level and operative traffic planning. In a narrower sense an improvement of freight traffic planning in the German division of the territory of the German Democratic Republic into traffic areas presupposes a systematic analysis of all experiences hitherto obtained both in the sphere of complex and of trade of branch regionalization. It is the aim of the traffic regionalization carried out by us at present, to achieve a coordination between areas for which the traffic demands are ascertained and catchment areas of actual transport.

Now let us pass to remarks on the points fixed by the Chairman of the Commission in his first draft of our programme of work.

1. Compilation of bibliography and critical survey of the problems connected with economic regionalization

A bibliography of this kind was compiled in my Institute for the territory of the German Democratic Republic. Following the suggestion of the Chairman this material will be sent to the Secretariate of the Commission in Warsaw at the established date of the end of January 1962.

It is not easy for me to express myself separately on the following points 2 to 4 of the programme. For, as was already stated above, the latest works in the German Democratic Republic mostly arose from practical demands of national-economical planning and therefore in most cases contained theoretical, methodical and practical aspects as well.

2. Principles and theories pertaining to economic areas and regionalization

First all authors in my country showed recently a remarkable conformity, as far as questions of regionalization of the state as a whole were concerned.

The thesis, increasingly supported in socialist countries that as economic areas represents a territorial production complex specialised in one or several specific products as compared with the whole state, in which the productive complexity within the district is greater than the complexity with respect to

neighbouring districts¹, forms the basis of all the works by Schmidt-Renner, Dietrich, Jacob of others.

Decisively greater differences of opinion are evident about what is called trade of branch regionalization, as it is practised when establishing industrial, agricultural or traffic areas. There does not yet exist a generally acknowledged theoretical and methodical agreement in this field. This is not astonishing, as at present these practical investigations are in the foreground.

3. Methods of regionalization

Comprehensive methodical experiences concerning regionalization were gathered in establishing economic areas of medium order. Reports on this question were made by Dietrich, Proske and Jacob.

In this connection a paper by Dietrich² is especially noteworthy, in which the importance of the particular criteria is clearly demonstrated on the example of the medium economic area

¹ Jacob, G., Zur Problematik der Ökonomischen Rayonierung in der Deutschen Demokratischen Republik, in: Geographische Berichte, 19 /2/ 1961, s.124.

² Dietrich, Rolf, Kriterien für die Bestimmung von Wirtschaftsgebieten, untersucht am Beispiel des Bezirkes Halle, Diplom-Arbeit Hochschule für Ökonomie, Volkswirtschaftliche Fakultät, Berlin 1959, unveröffentlicht.

of Eisleben - Sangerhausen - Hettstedt, the so-called copper triangle of the German Democratic Republic.

In studying the economic areas of medium order for the County of Halle, the following criteria were applied³:

- 1/ Peculiarities of historical development
- 2/ Geographical conditions /geomorphology, waters, climatic conditions, surface cover/
- 3/ Kind and extent of economic specialization
- 4/ Degree of economic complexity /extent of self-sufficiency/
- 5/ Relations conditioned by production, as for instance the location of industries in relation to the sources of raw material and fuel, feeding or manufacturing enterprises or markets
- 6/ Transport conditions /economical transport distances, centres of traffic, freight transloading points/
- 7/ Structure of population /analysis of the potential workers/
- 8/ Areas of periodic fluctuations of workers
- 9/ Social and cultural relations on supra local level
- 10/ Existing administrative areas /boundaries of districts/

¹ Jacob, G., Zur Problemari der Ökonomischen Rayonierung in der Deutschen Demokratischen Republik, in: Geographische Bericht 19 /2/ 1961, Seite 128.

11/ Perspectives of development of leading branches of economy for at least seven years, though generally fifteen years.

In the field of reorganization of agricultural production studies of the German Academy of Agricultural Sciences for the County of Potsdam likewise brought out some interesting problems.

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THE ECONOMIC REGIONS
IN THE FEDERAL REPUBLIC OF GERMANY

The problem of division into regions is one of the main - and I may say - classic tasks of regional geographical research. Presupposition for solving this task is to know the essential features of the region concerned, to comprehend it as a whole, and to define its limits on the basis of its specific character.

Besides the comprehensive division of geographic environment - natural and cultural - regional geography is also asked for special delimitation according to different geographical features so as natural regions, functional regions, central places with their spheres of influence and economic regions.

Since 1955, when the German Geographical Congress at Hamburg established a research program for delimitation of the economic regions in the Federal Republic of Germany a working group of the Central Committee on German Regional Geography together with the Institute of Regional Geography at Bad Godesberg began these studies. Dr. Otremba, Professor of Economic Geography at the University of Hamburg became Chairman of the working group. The Institute of Regional Geography supplied the editorial staff. The 30 members of the working group were chosen because of their special knowledge of the economic geographical conditions within

various regions of Western Germany. The first step was to create a basic map in the scale 1:300 000 showing the boundaries of regional economic units. During regional conferences, excursions and numerous discussions the materials were collected and edited according to the principle of a progressive regional geographic survey. After five years of work the first issue of the outline map 1: 1 million was presented in 1960 at the International Geographical Congress of Stockholm.

Now, in 1961 we are happy to present this outline map together with 28 sheets of the basic map 1:300 000 and a book with 382 short descriptions of each regional economic unit.

Our aim was to show the regional differentiation of the economic structure within the Federal Republic of Germany not only as a tool of geographic description but even more as a base for regional economic statistics and regional planning.

In regions with high population density and with a long and very different economic and social history we have more difficulties in administration and planning than elsewhere. Therefore an exact inventory is needed as a preliminary basis for development of planning.

The complex of local economic production as a whole was the point of departure for this research work. The "regional economic unit" /Wirtschaftsräumliche Einheit/ is an individual specific region according to its total economic contents and structure. The delimited economic regional units are specific, they should not be classified into types. Their boundaries are found individually as well. Each part of

the boundary line can be determined by different criteria according to the real difference between neighbouring units.

The criteria for delimitation of economic regional units are taken from all spheres - geographic, economic and sociological. In Western Germany most of the economic regional units derive their characteristic structure from the regional coincidence of industrial and agricultural forms of economy. Therefore it seemed useful to combine in a synthesis the characteristic features of the agricultural and of the industrial sector. The relative dominance and the mutual interactions had to be studied.

In the division into economic regions, the population, its density, its economic structure and the distribution of social groups were important points in assessing the structure and thus the regional boundaries. The proportion of the population employed in handicrafts and industry as well as in agriculture and forestry compared with overall employment figures was of decisive importance.

The use of exact comparative data for measuring the dominant features in each region should be suggested. We renounced it, because statistical data in all cases inform more of typological character of a unit than of real criteria for establishment of an individual complex. Moreover the schematic application of threshold data would lead us to serious mistakes.

The delimitation was relatively easy in regions with dominance of agriculture. The boundary lines of different agricultural produc-

tion coincide generally with the boundaries of soils, types of farming, structure of ownership etc.

The characteristic features in industrial regions were specialization of production, size of factories, housing conditions of the workers, transport facilities etc. The limits between two economic regional units were assumed to be there where the individual complex of those elements was changing and another distinct, occupying wider area, complex began.

In the neighbourhood of industrial locations many households are linked both with industrial places of work and with small farms /Arbeiterbauerntum/. Here the limits of economic regional units could be established where the agricultural production begins to dominate or to decrease.

Regions of a specially developed tourism have a character of their own. Their boundaries are there where tourist facilities and their personnel do not any longer dominate in the economic and social life.

Functional interconnections were not taken usually into consideration; however they had to be analyzed in the vicinity /Umland/ of larger cities; the central city has so powerful an influence on the structure of the economic elements within its neighbourhood that the whole economy of this area rests on those functional connections. In such case, the regional differences in the structure of agricultural production near cities and also of industries in comparison with functional connections are of diminished importance for the delimitation.

As a proof of the scientific reliability of these boundaries we may consider the fact that in the contact areas studied by several research workers they are adjusted together.

The size of the regional economic units depends neither on area nor on population figures, but on the general characteristic features of the unit concerned.

In the course of the research work the difficulties of obtaining a uniform size of the units were discussed several times.

In general the most extended units were established in agricultural regions, while significantly specialized industries /Neubekum, Kannebäcker Land, Velbert, Idar-Oberstein/ formed relatively small units. For practical purposes, the boundaries of regional economic areas were assumed to coincide with those of the communities, those being the smallest economic and statistical units in Germany. The Census of 1950 and of 1961 in the Federal Republic of Germany offer nearly 40 data about economic and social structure of the communities.

However we met with some difficulties in regions where we met the so-called "Grossgemeinden", bigger communities. The base map, used for this work, was the "Gemeindegrenzenkarte" 1:300 000 in 28 sheets, edited by the Bundesanstalt für Landeskunde und Raumforschung.

The research was on the basis of the method of regional geographic survey carried out systematically from place to place by observation of the characteristic elements of the economic life. This geographic research work was supplemented by regional statistical data,

by regional literature and by regional and planning atlases.

The result of this team-work was presented in the 28 sheets of the map 1:300 000, in the outline map 1:1 million and in the text book. The 382 basic units are gathered up into larger regional units, which we called "economic districts" /= Wirtschaftsbezirke/.

The 115 economic districts comprehend several /mostly 3-5/ basic units. They were established on basis of the following principles:

- a/ Neighbouring basic units of equal or similar structure were combined, especially if the physical background was identical or similar /Nordwestdeutsche Geestgebiete, Odenwald, Spessart, Rhön/.
- b/ Neighbouring basic units of different character which form in consequence of their differences a larger area of balance and functional interactions were gathered together into functional districts /Ruhrgebiet, Braunschweig, Rhein-Main-Gebiet/.
- c/ In the neighbourhood of strong economic centres the surrounding units generally depend in their economic character on this centre. Here the units were assumed to form a centralized district /Hamburg, Bremen, Stuttgart/.

The above-mentioned districts are useful operational areas for regional economic policies. Their compilation was the first attempt in the establishment of a hierarchy of economic areas. The third step i.e. to form even larger areas is yet to be prepared.

As already mentioned, economic geographic division of Western Germany comprises 382 regional economic units and 115 economic districts. In comparison to the 427 Landkreises in the Federal Republic of Germany we have nearly the same quantity of economic units. The number of inhabitants is on an average 130 000 persons per unit.

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Kenneth EDWARDS

REGIONAL ECONOMIC DEVELOPMENT
IN GREAT BRITAIN

1. Conditions affecting industrial development
in the post-war period

The conditions under which Britain reverted to a peace time economy after the end of the war and under which industrial expansion has since taken place, have been clearly set out in the recent statements by several economic geographers, notably M.J.Wise, A.A.L. Caesar and J.R.James. /See Selected References/. While the production of manufactured goods for export remains the essential feature of the British economy, the conditions affecting this activity are vastly different from those prevailing before the war, both externally /in relation to markets, monetary problems, etc./ and internally /in relation to the decline of older industries, the growth of newer ones, the changing distribution of population and the government's policy of full employment/.

2. Government and Industry

As in most countries the government has assumed increasing responsibilities in economic development. There is of course no central economic plan and only certain industrial activities are nationalized, such as power production /coal, gas and electricity/ and railway transport. Nevertheless government policy clo-

sely affects certain major sectors of private enterprise such as iron and steel production, while through the pursuit of the full employment policy it exerts a controlling influence on the distribution of industry generally. From the regional standpoint, the outstanding example of government action has been that applied to the well known Development Areas /old single industry or basic industry areas, most of them a legacy of the pre-war period/ and the smaller widely scattered districts called DATAC areas /Development Areas Treasury Advisory Committee/ which, like the larger ones, were liable to severe recurrent unemployment. Generally speaking however, the broad objective of the governments policy with regard to industrial development has been to achieve an improved balance in the industrial structure and thus also in employment in the various regions of the country. In this respect a good deal has been achieved. On the other hand, certain forces, economic and social, which are referred to below, have produced powerful counter trends. A comprehensive account of government action in industrial development in Britain is to be found in E.C. Estall and R.O. Buchanan: "Industrial Activity and Economic Geography", London, 1961 /Chapter 6/.

3. Influence of the Barlow Report

Much of the post-war planning policy in Britain including governmental measures, owes its inspiration to the Report of the Barlow Commission on the Distribution of the Industrial Population, published in 1940. This report stressed the disadvantages of the great industrial concentrations and advocated a policy of dispersal and strict control over the further growth of large cities.

The validity of such recommendations, in the light of post-war conditions, must now be questioned. The trend in population changes, clearly demonstrated by the census of 1951 and further emphasised by that of 1961, the intensification of industrial expansion in Greater London, the West Midlands and the South-East all point to the necessity for a reappraisal of the Barlow principles. This in turn calls for further research into the factors concerned in the promotion of industrial complexes based on large concentrations of population. It is in fact the conurbation of the city region as it has been termed, which must now engage the attention of the economic geographer concerned with regional development. Since manufacturing in Britain is becoming less and less resource-based, the investigation of locational conditions becomes more important.

4. Inadequacy of the Regional Framework

Where through post-war legislation the government is directly concerned with the distribution of industry, the regional framework through which it operates is that of the so-called Standard Regions. These are unsatisfactory and in any case were originally devised for quite a different purpose. Broadly similar divisions serve for the nationalized industries. On the other hand, the unit areas for detailed planning /i.e. town and country planning, which includes the siting of industrial enterprises/ are the counties and county boroughs. These are also unsatisfactory because of imperfect co-ordinations. There is therefore a strong case for regional research on the basis of industrial complexes. In the absence of rational changes

in local authority boundaries no other basis can be regarded as realistic. Work of this nature is now being undertaken by geographers /see Selected References/ and within government departments /e.g. Ministry of Housing and Local Government/ recognition is at least given to the Greater London Region as being an entity, albeit and expanding one, which must receive consideration as a whole.

SELECTED REFERENCES

The following titles, representative of a large number of recent studies, have been chosen simply to illustrate the kind of research undertaken by British geographers /including some economists/ in the field of regional economic planning:

1. General conditions affecting planning /including regional planning/:
 - A.A.L. Caesar - Problems of Regional Planning in Great Britain. Problems of Applied Geography, Warsaw 1961.
 - J.R.James - Land Planning in an Expanding Economy. Journ. Royal Soc.Arts., July 1958
 - M.J.Wise - Some Economic Trends influencing Planning Policies. Journ. Town Planning Inst., Jan.1960.
 - M.J.Wise - Geography and Regional Planning in Great Britain. Problems of Applied Geography, Warsaw 1961.

2. Industrial Location

- T.W.Freeman - Some problems of Industrial Location. Geography & Planning, Ch.VI.1958.
- W.B.Johnston - The East Midlands and Post-war Development in Manufacturing. East Mid.Geogr., No.4, 1955.
- K.Lipmann - Land Use, Location & Transport. Manchester School of Econ. & Soc.Studies 1955.
- F.J.McCulloch - Government and Industry: a new Policy? Town Planning Rev., Oct. 1956.
- P.Robson - Growth of Employment & Diversification of Industry in Development Areas. Oxford Economic Papers /New Series/ Feb. 1956.
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3. Demographic Trends

- R.H.Best - The Composition of the Urban area in England & Wales. Journ. Town Planning Inst., June, 1958.

- T.W.Freeman - The Conurbations of Great Britain, 1959.
- R.H.Osborne - Population Changes in England & Wales. 1951-1961. East Mid. Geogr., No.15, 1961.
- R.H.Osborne - Population Concentrations and Conurban Tendencies in the Middle Trent Counties. East Mid. Geogr., No.2, 1954.
- A.G.Powell - The Census of 1951: an analysis of population changes in the East Midlands. East.Mid.Geog. No.2, 1954 and Nos.3 & 4, 1955
4. The Journey to Work, Movement, etc.
- F.H.W.Green - Community of Interest Areas. Econ.Geog.July, 1958.
- R.Lawton - The Daily Journey to Work in England & Wales. Town Planning Rev., Jan., 1959.
- J.Westergaard - Journeys to Work in the London Region. Town Planning Rev., April, 1957.
5. The Greater London Region
- R.C.Estall and J.E.Martin - Industry in the Greater London Region. Town Planning Rev., Jan., 1958.
- A.G.Powell - The Recent Development of Greater London. Advancement of Science, May, 1960.

6. Specific Regional Studies /demonstrating the analytical method./

Conurbation by the West Midland Group, 1948, providing a survey & planning scheme for Birmingham & the Black Country, ranks among the best of many such reports; A Survey of the Chesterfield Region by K.C. Edwards & F.A. Wells, 1949, is an example of regional economic survey commissioned by an official planning authority; Tees-side at Mid-Century by J.W. House & B. Fullerton, 1961 is the most recent publication of this kind.

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STUDIES ON ECONOMIC REGIONALIZATION
IN POLAND

This short report does not aim at presenting a comprehensive picture of the contemporary studies on economic regionalization in Poland since extensive reviews of that kind have been published fairly recently, both in English and Russian, on other occasions¹. It should, therefore, be considered rather as an attempt to briefly present the main trends of the most recent studies in this field, and to recapitulate some basic theoretical ideas underlying these developments.

For some time there already grew among Polish geographers the conviction that economic regionalization as a subject of geographical research is to be considered not so much as a *d i v i s i o n* of the country but rather as revealing of the existing economic regional structure which covers both the study of regional functional interconnections as well as the study of regional uniformities - in terms of criteria significant for economic development.

¹ K.Dziewoński. Problems of Regional Structure of Poland. "Przegląd Geograficzny", XXXII /1960/, Suppl., pp.117-125;
K.Dziewoński, A.Wróbel. Raboty po ekonomicheskomu rayonirovaniyu w Polsce. In: "Problems of Economic Region", Warszawa 1961.

It should be noted here that as a rather fortunate circumstance for the methodological progress in this field is to be considered the fact that for the last dozen of years there was in Poland no attempt to change substantially the existing network of administrative divisions of the highest order; in these circumstances it was easier for the geographers to avoid the identification of the research on economic regionalization with practical activity of delimiting administrative regions. Still, the conducted studies on economic regionalization are of great practical significance both in "direct" and "indirect" way.

By direct significance should be understood the usefulness of such studies as the necessary documentation for planning of regional development. In the indirect way these studies serve practical purposes by providing most meaningful areal units for various types of further research of great practical significance, e.g. in the field of economic programming by use of econometric models, in studies of interregional commodity flows or in some monographic studies on individual planning projects. Needless to say, such studies also contribute to the solution of the problem of the best division of the country into the regions of administration and planning - this is however only one, although very important, of the aims of the studies on economic regionalization.

So conceived economic regionalization is the subject of study of various research bodies, as the Polish Academy of Sciences with its Institute of Geography and its interdisciplinary Committee for Space Economy and Re-

gional Planning, Geographical Departments and Chairs of Economic Geography of various Universities, and other institutions of higher learning, and so on. Two new traits could be distinguished in the development of these studies in recent years:

- 1/ the increasing interest in the study of regional functional interconnections
- 2/ the tendency to use more detailed quantitative data subject to statistical elaboration - which gives a new stimulus also to the study of regional uniformities.

As to the first aspect, particular attention has been paid to the studies of the system of nodal regions and regional centres; first of all the service and commutation regions have been studied owing to greater accessibility of data. Some important work in this field has been done in the Institute of Geography of the Polish Academy of Sciences /studies of passenger traffic regions¹, service regions of the centres of higher education², regions of wholesale trade/; the Cracow geographical centre, where a number of studies of dynamics of regional patterns of socio-economic changes has been

¹ A Wróbel. Nodal Regions of Passenger Traffic in Poland. In: "Problems of Economic Region", Warszawa 1961.

² K.Dziewoński, E.Iwanicka. Places of Residence /Origin/ of Students of Academic Schools in Poland /in Polish, English and Russian summaries/, "Przegląd Geograficzny", XXXIII /1961/, pp.39-52.

accomplished¹, now plans to elaborate, on the national scale, the problem of commutation regions.

Far more difficult has been the problem of the study of commodity flows because of the inadequacies of the transport statistics - besides a few studies of the individual regional centres by way of special questionnaires - only one important study of the interregional railway shipments on the national scale has so far been completed² and its value was limited by the methods of classification of goods employed by the railway statistics. In 1961, the above-mentioned Committee for Space Economy and Regional Planning started the work aimed at obtaining a more exact picture of transport interconnections. Besides elaborating a number of suggestions for the reform of the transport statistics there has been prepared a detailed plan of the extensive survey of shipments by all means of transportation which will be carried on in one of the Spring months of 1962. The numerical results of this survey - pretty detailed both with respect to the number of commodity groups distin-

¹ See, e.g. M. Dobrowolska. Functions of Industries in Shaping of Socio-Economic Structure, "Przegląd Geograficzny", XXXII /1960/, Suppl., pp.133-138; as well as a number of papers published in the annals "Rocznik Naukowy WSP", Kraków.

² Z. Chojnicki. Analysis of Intervoivodship Commodity Flows in Poland /in Polish/ - In printing in: Studia Komitetu Przestrzennego Zagospodarowania Kraju, Warszawa.

guished and the number of areal units of aggregation - will provide an abundant material for studies both of hinterlands of about 50 major cities as well as of interregional exchange. Further projects - however less advanced - concerned a still more complicated tasks of getting the value data on commodity flows via statistics of production and commerce, which will require some deeper changes in the statistical system.

In the study of the areal uniformities the above mentioned tendency towards the use of the more detailed data finds its expression both in taking into account a more detailed set of areal units of reference as well as the extension of range of data taken into account, so as to enable the more refined economic analysis. It means, of course, multiplication of efforts and costs and very often also cooperation of the Central Statistical Office. Here should especially be mentioned the elaboration of the tables of national income and product in regional breakdown, computed by the Central Statistical Office for ~~the~~ **Committee for Space Economy and Regional Planning**, first for 1958, then in an improved form for 1959. Substantial progress has also been achieved in the study of the location of industry and analysis of industrial regions, on basis of the previous compilation of statistical data by counties². Similarly, in

¹ the regional units used were the voivodships /22 administrative units of the highest order/

² S.Leszczycycki, A.Kukliński, M.Najgrakowski, J.Grzeszczak. Spatial Structure of Polish Industry in 1956. "Przegląd Geograficzny", XXXII /1960/, Suppl., pp.139-147.

the field of agriculture there is to be completed in the nearest future by the Institute of Geography of the Polish Academy of Sciences a study of the regionalization of the Polish agriculture taking into account a number of relevant economic characteristics.

It should also be mentioned that independently of these studies on the national scale a number of studies on lower order regions has been done by the regional scientific and planning institutions. Especially in the course of the preparation of the project of the long-range plan of economic development /up to 1980/ the planning commissions of practically every voivodeship, in result of previous studies, based their projects on some set of regional sub-divisions comprising a number of counties.

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BRÈVE INFORMATION SUR LES RECHERCHES CONCERNANT
LA DIVISION ÉCONOMIQUE DANS LA R.P. ROUMAINE

En conséquence du développement général de l'économie nationale et de la répartition planifiée des forces de production sur notre territoire, ont apparus de nouveaux liens économiques entre diverses entreprises industrielles, entre les branches de la production matérielle, entre diverses régions du pays. Le développement et les changements essentiels dans la structure de l'économie nationale se reflètent de plus en plus profondément dans la structure et dans le niveau du développement économique de toutes les parties du pays, et - dans le cadre de ce processus - apparaissent et se cristallisent de plus en plus les régions économiques de la R.P. Roumaine.

L'étude des processus de formation et du développement des régions économiques sur le territoire de la R.P. Roumaine, est d'une importance théorique spéciale pour l'étude de la géographie économique du pays. La mise en évidence de ces régions, l'étude du développement de leur économie, permettent l'approfondissement et la synthèse spatiale des changements qui ont eu lieu dans l'économie du pays.

L'étude de ces processus a aussi en même temps une grande importance pratique, parce qu'elle permet au chercheur de découvrir les conditions économiques et sociales les plus

favorables du développement des diverses branches de la production matérielle sur le territoire du pays; de trouver de nouvelles ressources et réserves pour l'amélioration de l'activité économique et, ainsi, de découvrir de nouvelles possibilités pour redresser la productivité du travail; de contribuer à l'organisation plus rationnelle du territoire, au point de vue économique et administratif.

Le territoire de la R.P.Roumaine est divisé en unités administratives-économiques, notamment: régions, districts /en roumain = ra-ion/, villes et communes.

Pour délimiter ces unités on a pris en vue les conditions économiques, social-politiques, géographiques, historiques et nationales, de manière à créer d'unités territoriales harmonieuses "basées sur l'étude de leur structure sociale-économique et tenant compte de la perspective du développement des forces de production du pays, contribuant à liquider la demeure en arrière de certaines régions".

Partant de ces critères, le territoire du pays est divisé en 16 régions administratives-économiques qui, vu le développement de l'économie nationale et les nouvelles relations économiques créées entre les diverses parties du territoire du pays, ont obtenu une certaine spécialisation et un degré de complexité de leur économie, correspondant à des unités économiques de second degré /en roumain = mezo-ra-ion/.

Les régions /= mezo-ra-ion/, à leur tour sont divisées en 149 districts administratifs, et la ville de Bucarest en 8 districts urbains. Ces districts constituent des unités administra-

tives-territoriales plus petites, ayant un degré de complexité de leur économie moins développé que celui des régions.

Les districts administratifs se groupent, dans le cadre des régions - en certains cas - en unités économiques de troisième degré /en roumain = microraiou/.

Les études ont confirmé qu'entre la division politique-administrative et la division économique, il n'y a pas de contradictions, mais, au contraire, elles se superposent; que l'apparition des centres de gravitation et mouvement de population vers ces centres, sont étroitement liés avec le niveau et avec la direction du développement économique. On a pu observer, aussi, que dans le cadre du développement de l'économie nationale, le rôle de certains centres de gravitation bien connus dans le passé a changé, leur importance augmentant ou diminuant. De même, comme résultat du développement économique, ce sont de nouveaux centres de gravitation qu'on a créés. C'est en relation avec ces changements que se sont modifiées la direction des transports et celle du mouvement de la population. Le développement des régions administratives-économiques entre 1950 et 1960, les changements qui ont eu lieu dans leur structure économique, ont consolidé, de plus, leur caractère d'unités économiques de second degré /en roumain = mezoraiou economic/. Leur spécialisation s'est cristallisée avec plus de clarté, leur degré de complexité économique a augmenté, les liens économiques se sont cimentés.

Pour confirmer le caractère d'unité économique de second degré de nos régions administratives-économiques actuelles, un grand collectif

de géographes roumains de l'Institut de Géologie et de Géographie de l'Académie de la R.P. Roumaine et des trois universités de notre pays, a effectué des études sur le terrain dans les districts administratives-économiques et a rédigé les synthèses des régions administratives-économiques, tout en interprétant un vaste matériel statistique.

Dans ces études on a eu en vue les éléments de base suivants, afin de délimiter et de caractériser les districts économiques:

- 1/ les conditions naturelles et historiques du développement des territoires respectives,
- 2/ la population et l'économie des régions dans leur développement,
- 3/ les liaisons économiques dans le cadre des régions administratives-économiques - qui les cimentent dans les unités territoriales-économiques,
- 4/ les liaisons économiques interrégionales,
- 5/ les éléments de perspective du développement de l'économie des régions administratives-économiques et les changements qu'on entrevoit dans le développement des liaisons économiques intrarégionales et interrégionales.

Dans l'étude des liaisons économiques intérieures, par lesquelles on justifie, principalement, le caractère d'unité économique de second degré des actuelles régions administratives-économiques, on a sélectionné les liaisons qui conditionnent le processus de la production matérielle.

Selon les mêmes critères on a sélectionné aussi les liaisons économiques interrégionales,

tout en accordant une attention spéciale aux liaisons avec les régions voisines.

De cette manière on a pu faire sortir en évidence les liaisons essentielles qui cimentent, délimitent, la région administrative-économique comme unité économique du second degré.

Dans ce sens, nous considérons que l'élaboration du schéma de la division économique de la R.P.Roumaine, ne constitue pas le résultat de quelques études abstraites, mais la mise en évidence des processus, objectifs qui ont lieu dans notre pays, comme un des aspects du développement socialiste de l'économie nationale de la R.P.Roumaine.

Dans les travaux concernant la seconde partie du II-e volume de la Monographie Géographique de la R.P.Roumaine, et qui, à l'heure actuelle, est sous presse, on a accordé un rôle important aux éléments de perspective du développement des régions administratives-économiques pour les évider comme unités économiques du second degré de notre pays.

La division administrative-économique est étroitement liée, comme l'on a vu déjà, avec le développement économique. Il en résulte la nécessité de vérifier périodiquement la division administrative-économique, ainsi que de délimiter de nouveau les régions économiques, par rapport au développement économique, portant des changements dans les liaisons économiques. C'est d'autant plus important pour la R.P.Roumaine, pays où l'économie nationale se développe aux pas rapides, produisant des changements quantitatifs et qualitatifs visibles d'une année à l'autre, dans l'économie des régions.

Les résultats obtenus dans ce domaine sont dus, surtout, au fait qu'une des préoccupations de base du Parti Ouvrier Roumain c'est le redressement économique et social-culturel, des régions moins développées, de même que l'amélioration continue de la répartition territoriale des forces de production. Dans ce sens, les Directives établissent comme une des tâches fondamentales "L'amélioration continue de la répartition territoriale des forces de production, l'augmentation du potentiel économique des régions, districts et villes moins développés".

La réalisation du plan économique pour les années 1960-1965, de même que des lignes directrices établies par le III-ème Congrès du Parti Ouvrier Roumain en ce qui concerne le programme du développement de l'économie nationale en perspective, jusqu'à 1980, apportera de nouveaux et importants changements de la vie économique des régions, dont l'économie deviendra plus complexe encore, les liaisons de production dans l'intérieur des régions plus puissantes, et les liaisons interrégionales plus évidentes et plus organisées. Tous ces problèmes constituent des préoccupations importantes pour les géographes de la R.P. Roumaine.

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NOTES ON THEORY AND PRACTICE
OF ECONOMIC REGIONALIZATION
IN THE UNITED STATES

I. Concepts, Theories and Related Problems

A. Two Basic Types of Regions: Homogeneous
and Functional

Well recognized is the sharp distinction between the two types of regions: homogeneous or uniform region on the one hand, and functional or nodal region on the other hand. The former refers to a somewhat uniform area characterized by some static use or character of the land such as the Corn Belt or Great Plains. The second refers essentially to the tributary area around a city or possibly a line of cities. This distinction was first incisively made by Robert S. Platt in a small note in a pioneer American work, Regional Factors in National Planning published by the old National Resources Planning Board of the U.S. in 1935. At that time Platt sharply differentiated between homogeneous and functional regions as he called them. This distinction was not appreciated until after World War II when it finally became embodied in the Whittlesey report in American Geography - Inventory and Prospect, in 1954. It is now recognized that the two types of regions are quite different and do not coincide, except by accident.

In recent years extensive work has been done on the nodal or functional region where ~~ss~~ formerly they had been virtually ignored by geographers. Some of the problems related to both types of regions are listed below, but before discussing them attention should be given to the problem of hierarchy of nodal regions and particularly to the even more important related topic, the study of central places.

B. Central Place Theory

Extensive work has been conducted on central place analyses in the United States since Ullman first presented Christaller's findings and some new interpretations in 1941. Today the term is loosely used to cover many aspects of external urban geography, tributary areas and the like. For an extensive discussion and list of references see Brian J.L. Berry and Allen Pred, Central Place Studies: A Bibliography of Theories and Applications, Bibliography Series No.1, Regional Science Institute, GPO Box 8776, Philadelphia 1, Pennsylvania, 1961, pp.v+153.

C. Some Problems Connected with the Regional Concept

1. Scale. Quite different problems are encountered depending on the scale of the region. For example, one could start with a city and have one region composed of the built-up area /or urbanized area as the U.S. Census defines it/. Going out a little farther is the commuting and essentially retail trade zone. Moving out still farther is the trade area - the zone

of wholesale dominance, newspaper circulation, and the like, These are all regions of quite different scale and natures.

Secondly is the problem of the hierarchy of nodal regions, already alluded to under central place studies.

Third, is the problem of combining smaller units to produce larger regional wholes, in the case of homogeneous regions to produce a mosaic composed of different small regions combined to produce one large region. The problem is quite different for large regions, such as groups of states as opposed to a small section of a county or local area. A central problem in homogeneous regions is always to make the region as large as possible and still not to get too much into a meaningless average. Thus the smallest viable region in America would be the half block - not a city block - inasmuch as land use generally changes in the middle of a block and not at the edges. The street is the unit.

2. Connections. Nodal regions are composed of regions of connections, or flows and interaction. In this sense, therefore, there is a region around every person of place; viewed this way we have a series of overlapping regions with the problem being to draw the boundary around some change in the pattern of these multitudinous overlapping regions.

3. Boundaries. As is well recognized, the boundaries of regions are almost always zones, not sharp lines, and in many areas we have interstitial regions, although forces are at work to create fairly sharp zones of change between neighboring regions. For nodal regions it often does not pay to distribute to a few customers

beyond the breaking point; for homogeneous regions the advantages of specialization may create a rather sharp break.

4. Centers. A center or capital of a region can be defined generally for a nodal region, but for a homogeneous region there is no necessary center or capital.

The above are merely some suggestive topics; others can undoubtedly be thought of.

II. Methods of Regionalization

A. Homogeneous or Uniform Regions

The delimitation of these regions depends upon both quantitative evidence and judgement with much experimentation now being conducted on use of various sophisticated statistical devices to delimit more objective regions. On a not entirely satisfactory practical level Donald Bogue and others have established State Economic Areas in the U.S. to provide more or less homogeneous regions smaller than states for U.S. Census purposes. These presumably have been established on the basis of rigorous, consistent statistical bases, superior to judgement in most instances. For many geographical purposes, however, the geographer will want to combine the counties to suit his own needs rather than following these previously established State Economic Areas. One problem, however, in the use of political areas for regional data is that political areas, more often than not, are set up on a long-lot basis with a productive ecumene and an unproductive area attached to it. The result for these political areas is

a somewhat meaningless average for many figures, so that the results tend to be biased and not just randomly unsuitable.

B. Nodal or Functional Regions

Considerable work has been done on ways of measuring these regions realistically as opposed to previous assumptions. Various actual measures are used, including newspaper circulation, which is readily obtained from the Audit Bureau of Circulation for major centers in the United States, sampling of retail and wholesale trade, both by interviewing in the countryside and by plotting a sample of shipments or customers, and, particularly in recent years, by use of traffic flow data of various types. Bus travel has not been used much in the United States, primarily because the private automobile is so much more important in America. Highway traffic flow maps are available for all the states and even smaller areas in the United States at frequent intervals and can be used in conjunction with some origin and destination studies /which should be improved in the rural areas/ to plot tributary areas, especially if checked by other means. An example of this kind of work is a recent study by Ullman on the Philippines where highway traffic flow maps for the 50 or so provinces were used as a basic method of dividing up the Philippines into tributary areas /Geographical Review, Vol.50, 1960, pp.203-18/. Data are thus becoming available for making such maps and it is suggested that they should become a basic part of any regional study so that regional studies can become truly regional and include maps of nodal regions as well as the more stereotyped, subjective maps of homogeneous regions. In a sense, nodal regions are the real human regions of the earth. This is a contribution

that students of economic regionalization can make to the practice of regional geography.

III. Applications and Problems of Regionalization in the United States

A. Political Areas

Practically no progress has been made in redrawing political boundaries in the United States, whether of states or counties. Many counties, of course, should be consolidated, with the increased speed of travel, but as a practical reality this is not done. However, many special districts are being created, most notable being perhaps school districts which are now consolidated in most of the United States. The one room rural school has disappeared in most localities. Larger schools served by buses take their place. This is a recent, quiet revolution of considerable magnitude in the organization of American space.

A second alternative to political boundary changes, or consolidation, is the transfer or development of functions in larger units such as states with state police, state highway departments, state health departments, and the like. This assumption of functions by the larger units reflects change in mobility.

B. Planning regions

Up to now, the most widely publicized planning regions in the United States are river basins such as the TVA. Geographers, however, recognize that these regions are suitable only for purposes of water control, and are not even

suitable for all water control purposes. For example, metropolitan sewer districts do not confine themselves merely to one drainage basin. Likewise, recreation visitors and hydroelectric power consumers come from outside river basins in many cases. The river basin appears quite unsuited as a planning region. Even in the TVA it does not include the metropolitan centers such as Memphis or Nashville, and on the Columbia, the other large developed river system, it does not include Seattle and the Puget Sound area. In both cases, these are major centers of the nodal regions affected strongly by river development, but technically are outside the river basins.

C. Metropolitan Regions

Perhaps the liveliest issue in practical matters today is the question of providing for metropolitan government or metropolitan administration. Here again, it has been very difficult to change boundaries or shift functions with the result that two recent proposals to have a whole urbanized area of a city under one administration at St. Louis and Cleveland have been defeated by the voters. As a partial substitute planning regions sewer regions, transportation regions and other special district regions have been set up to meet topical problems which had to be considered over a wider area.

D. Economic Regions Generally

In the United States very little in the way of overall government economic regions have been set up save for the special purpose regions no-

ted above. The twelve Federal Reserve districts, essentially nodal compromise regions, are sometimes referred to as general regions, but they are less used than the Census groupings for many purposes.

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L'ÉTAT ET LES MÉTHODES DES RECHERCHES
SUR LA RÉGIONALISATION ÉCONOMIQUE
EN YOUGOSLAVIE

I

Avant 1957, les géographes yougoslaves ne s'occupaient pas systématiquement des problèmes de principes de la régionalisation économique et de la théorie de la région économique en général. Le problème a été, cependant, sporadiquement abordé par les économistes et planificateurs, surtout du point de vue de la classification précise des régions économiquement développées et celles arriérées. Aussi les statisticiens s'occupaient du problème en essayant de préciser de soi-disantes "régions statistiques constantes". Le problème a été pratiquement abordé à l'occasion de la grande rédivision administrative du pays /1954-1955/, quand les nouveaux arrondissements et les grandes nouvelles communes yougoslaves ont été formées. Les géographes y ont été souvent consultés, dans les cas spéciaux, sur la convenance ou inconvenance de la nouvelle rédivision du point de vue de la vie économique régionale. Mais comme on voit bien de l'aperçu que M.R. Petrović a

¹ R. Petrović, O problemu geografske rajonizacije Jugoslavije. /The Problem of Geographic Regions in Yugoslavia/, Geografski Pregled, Sarajevo, I /1957/, p.104-135.

fait sur les essais faits jusque là sur la régionalisation géographique de la Yougoslavie, les géographes se sont limité, pour la plupart, à établir, dans leur travaux géographiques généraux sur le pays, un schéma de régions géographiques tout court. Ils y ont fait beaucoup de vains efforts pour trouver un mode assez objectif à délimiter ces régions géographiques en se servant simultanément des traits de la géographie physique, de la géographie historique /"culturelle"/ ainsi que de la géographie économique. Aussi s'il s'agissait d'apprécier les régions du pays du point de vue de leur utilité à la vie économique, ils se bornaient, pour la plupart, à l'appréciation, du ce point de vue, des grandes zones régionales physiographiques /M e l i k/¹. Il y avait même de ças d'une identification simple et tout à fait erronée des régions naturelles avec des régions économiques. L'exemple en est le procédé de B.Ž. M i l o j e v i ć² dans son livre sur les vallées principales en Yougoslavie, où la région "de steppes", "la région méditerranéenne", "la région montagneuse" et même la "région continentale tempérée" sont considérées tout simplement comme "régions économiques".

¹ A.Melik, Prirodno-gospodarska sestava Slovenije /Estestvenno-hözjajstvennoe stroenie Slovenii/. Geografski vestnik, Ljubljana, XVIII /1946/, p.3-20.

² B.Ž.Milojević, Glavne doline u Jugoslaviji. Srpska Akademija Nauka. Posebna izdanja.Odd. prir.-matem. nauka, knj.5, Beograd 1951, p.138-150

Ce n'était que A. Melik¹ qui, dans un article général sur les régions économiques en Yougoslavie a fait le premier pas vers une vraie classification des régions économiques en désignant les nouveaux centres d'industrialisation yougoslave comme noyaux principaux en formation des régions économiques yougoslaves.

Les choses ont changé essentiellement depuis 1957. On a commencé de plus en plus, parmi les géographes yougoslaves, de tenir compte du fait que les problèmes de la délimitation et classification des régions économiques se rangent parmi les problèmes les plus actuels non seulement de la science géographique, mais aussi de la vie économique elle-même. L'initiative en a été donnée par le IV^e Congrès des géographes yougoslaves tenu à Belgrade en 1955. Une conclusion y a été faite d'élaborer un schéma préliminaire des régions économiques pour tout le pays. L'initiative fut suivie par le III^e Congrès des géographes slovénes /Portorož, Istrie, en octobre 1957/, où un schéma des régions économiques pour la seule République de la Slovanie a été discuté. Plus tard, au V^e Congrès des géographes yougoslaves /Titograd, octobre 1958/ un symposium spécial sur les problèmes de la régionalisation a été organisé et une commission constituée avec la tâche d'organiser les recherches sur les problèmes de régions et de la régionalisation en Yougoslavie. Malgré toutes les difficultés qui, à cause de la diversité géographique et économique extrêmement forte du territoire yougoslave ainsi que de la rapidité de l'évolution économique et

¹ A. Melik, Gospodarski rajoni v Jugoslaviji. Ekonomika revija, Ljubljana, I, 1-2.

sociale de notre pays, s'opposent à une exécution rapide des recherches de ce genre, la commission se trouve en plein travail et espère qu'elle aussi pourra, dans les années prochaines, attribuer, par son représentant, au travail général de la Commission correspondante de l'UGI.

Des premiers articles qui sont apparus sur le sujet dans les publications géographiques, statistiques et économiques yougoslaves depuis l'initiative de 1955-1958¹, on voit que tout d'abord la théorie de la régionalisation en

¹ S. Ilesic, Sur les problèmes de la délimitation et classification des régions géographiques d'après l'exemple de la Slovanie. Geografski Vestnik, Ljubljana, XXIX-XXX /1957-1958/, p.83-140.

S. Ilesić, Sur les problèmes de délimitation et classification des régions géographiques. Zbornik radova V kongresa geografa FNRJ, Cetinje 1959, p.311-321.

C. Malovrh, Sur les problèmes de délimitation des régions géographiques en Yougoslavie. Zbornik radova V kongresa geografa FNRJ, Cetinje 1959, p.323-332.

C. Malovrh, A contribution to the economic-geographic determination of regions in Yugoslavia. Ekonomski Zbornik, Ljubljana, III /1958/, p.81-96.

Vl. Djurić, Problematika geografske rejonizacije Srbije /Probleme de la division régionale de la Serbie du point de vue de géographie économique/. Zbornik radova V kongresa geografa FNRJ, Cetinje 1959, p.333-343.

général a été abordée. Il s'agit surtout de la question du choix entre la conception "zonale" ou "homogène" et la conception "nodale" ou "fonctionnelle" de la région économique.

II

En Yougoslavie aussi, la discussion se trouva tout d'abord devant les questions de terminologie. Étant donné que les termes "rayon" et "région" sont usés aux sens les plus divers du mot et souvent même au sens identique, les géographes yougoslaves sont inclinés à ne pas les identifier simplement, mais au contraire, de les différencier nettement. Or, pendant que le mot "rayon" signifierait une unité territoriale ne servant que de moyen opératif, quelquefois purement technique, à une planification économique, pour la plupart dans le cadre d'une seule branche de la production /p.e. des "rayons" agricoles, ou même plus spécialisés comme p.e. les "rayons viticoles"/, la "région" est considérée comme une réalité complexe représentant avec tout son contenu complexe un objet par excellence de la science géographique.

Pour les mêmes raisons nous persistons dans la conviction qu'il est nécessaire de traiter le problème de la régionalisation économique toujours en relation avec les questions de la régionalisation géographique en général /questions des régions physiques ou physiologiques qui sont les mêmes réalités d'espace sauf qu'elles sont classifiées d'un autre point de vue/. Il nous paraît aussi inconvenable qu'on parle de l'espace géographique et de l'espace économique séparément, comme si celle-la n'était pas géographique par excellence. Il nous semble que c'est la notion de soi-disant "milieu géographi-

que" qui se reflète trop dans une telle désignation de l'espace géographique. Mais on oublie trop souvent que, au moins en ce qui concerne les pays relativement fort peuplés, civilisés et économiquement développés, la considération du milieu géographique seulement comme milieu naturel est chose périmée et irréelle, étant donné que le vrai milieu géographique est, dans ces pays - là, plus ou moins intensivement infiltré par des éléments "anthropogènes".

Tout ce qu'on appelle une région est donc, d'après notre avis, un morceau de la même réalité complexe d'espace. Le problème des divers principes de régionalisation ne consiste que dans les aspects qui nous dirigent en délimitant ce morceau complexe. Si l'on parle des régions économiques, ces aspects doivent être évidemment d'ordre économique. Mais, en tenant compte justement de la complexité du contenu de l'espace, il faut y comprendre le mot "économique" au sens le plus large du mot, c'est à dire y compris non seulement les faits économiques proprement dits, mais aussi tous les autres traits d'ordre humain qui ne sont déterminés par la vie économique que indirectement /habitat, organisation administrative etc./. La région économique correspond donc, selon notre avis, à peu près à la "human region" de la terminologie anglo-saxonne.

De même que nous ne sommes pas d'accord avec l'identification des notions "région" et "rayon" nous ne le sommes non plus avec la tendance qui se fait valoir surtout dans l'urbanisme et dans la planification régionale, d'appeler la région seulement l'unité territoriale d'un certain degré d'étendue.

Nous sommes, au contraire, d'avis que tout ce que nous appelons région, et régions économiques spécialement en tant que réalités d'espaces avec leur contenu complexe, doivent être nettement hiérarchisé puisque la vie économique et sociale qui s'y déroule est aussi hiérarchisée. Pour cette raison nous avons rangé dans notre schéma préliminaire des régions économique yougoslaves les régions en plusieurs degrés de l'échelle hiérarchique, depuis les grandes zones macrorégionales qui s'étendent d'une république à l'autre, par les macrorégions principales de chaque république jusqu'aux mésorégions et microrégions.

Quant au choix des principes pour la classification des régions économiques, la discussion a démontré, en Yougoslavie aussi, qu'il est presque impossible de se servir simultanément du principe de homogénéité économique /"zonal regions"/ et du principe de gravitation /"nodal regions"/. Jusqu'à 1957, presque toutes les tentatives de la régionalisation économique effectuées en Yougoslavie ont été orientées dans le sens des régions économiques homogènes /formelles, structurelles/. La raison principale en est la prédominance jusqu'ici, dans la plupart de régions de notre pays, de l'économie agricole ainsi que la rareté et la faiblesse des grands centres de gravitation économique. On évitait le criterium de gravitation économique surtout en estimant que les grands centres et lignes de circulation et gravitation modernes ne sont pas encore assez développées en Yougoslavie pour pouvoir jouer le rôle du facteur principal déterminant la région économique, spécialement dans les régions économiquement arriérées et encore pres-

que tout à fait agraire de notre pays. Même après les discussions de 1957-1958 certains géographes yougoslaves préfèrent le système de régions économiques homogènes en affirmant que, pour le moment, il correspond toujours mieux à la réalité économique du pays. Mais on voit bien d'un parmi les essais de ce genre, le plus récent et le plus solide /celui de C. Malovrh¹/, que, malgré tous ses efforts de tenir compte aussi des sources d'énergie et des richesses minérales ainsi que d'introduire parfois même le facteur de gravitation, cette classification pousse trop au premier plan l'économie agraire qui dépend le plus directement des conditions naturelles de la surface en question. Elle néglige, sauf quelques exceptions, les grandes voies de communication qui relient souvent en unités fonctionnelles transversales les secteurs des diverses régions ou zones longitudinales homogènes. Elle place même quelques grands centres économiques du pays, d'où rayonne dans toutes les directions une vie économique intense, à la limite de deux régions économiques voisines /p.e. Belgrade, Maribor/. Elle semble, en outre, hésiter entre le criterium des ressources naturelles disponibles /criterium de la classification des "régions potentielles"/ et le criterium de leur productivité effective, bien que celle-ci seule peut déterminer une région économique réelle.

C'est pourquoi la commission yougoslave pour les recherches de la régionalisation économique a concentré ses recherches sur les mé-

¹ C. Malovrh, ouvrages cités sous 5.

thodes à classer les soi-disantes régions économiques fonctionelles. Elle estime qu' en Yougoslavie aussi le temps est venu de faire entrer dans le procédé de la régionalisation économique, malgré la spécialisation marquée de la production dans certaines régions, aussi des éléments autres que la homogénéité de la production. Il s'agit surtout de la circulation et de l'organisation de la vie économique, celle-ci embrassant non seulement la production, mais aussi la distribution et consommation des produits. Bien qu'on est d'accord avec l'opinion de M.K. D z i e w o ń s k i qu'il ne faut pas ôter aux éléments des zones homogènes toute leur valeur fonctionelle, il n'est pas moins vrai que cette valeur ne consiste qu'en production et ne se fait valoir que par les courants compliqués de circulation et organisation économiques. Pour cette raison nous préférons dans nos recherches sur les méthodes de régionalisation économique de tenir séparées l'une de l'autre la régionalisation "homogène" /"zonal regions"/ et celle de "gravitation" /"nodal regions"/, mais enrichir la dernière en y introduisant outre les éléments de gravitation aussi des éléments dominants de la production "homogène". De telle façon la région devient vraiment "fonctionelle". Il faut donc que la notion de fonction économique soit comprise dans le sens le plus complexe du mot. La gravitation proprement dite n'y est qu'un élément, bien que le plus important, de cette fonction, s'avancant d'autant plus au premier plan que la vie econo-

¹ K.Dziewoński, Elementy teorii regionu ekonomicznego. Przegląd Geograficzny T.XXXIII z.4, 1961, str.593-613, Warszawa 1961

mique de la région en question est plus avancée et les courants de circulation économique plus vifs.

Le problème de la régionalisation économique de la Yougoslavie est, d'ailleurs, l'exemple le plus éloquent démontrant combien il faut être conséquent en se servant, dans la régionalisation économique, du criterium de gravitation en tant que du criterium principal, et qu'on ne peut le varier arbitrairement avec celui de production homogène. Remarquons comme les grandes zones longitudinales de production homogène en Yougoslavie s'allongent parallèlement à l'axe principale dinarique du pays, pendant qu'elles sont liées l'une avec l'autre par des lignes de circulation transversales, autour des lesquelles les principales régions économiques se sont formé ou sont en voie de formations. Cette relation entre les zones économiques "homogènes" et les régions économiques vraiment fonctionnelles est la plus marquée en Bosnie: les quatre grandes macrorégions /de Sarajevo-Zanica, de Tuzla-Doboj, de Banjaluka-Prijedor et de Mostar - Jablanica/ y gravitent par les vallées principales, conduisant à travers les zones "homogènes", très différentes par leur production, vers les grandes lignes de communication longitudinales: les premières trois vers les lignes principales parallèles conduisant de Beograd à Zagreb, la dernière aussi vers le Littoral adriatique.

III .

En ce qui concerne les méthodes utilisées dans les recherches de régionalisation économique en Yougoslavie, elles s'ensuivent de la

conception théorique de la région économique fonctionnelle expliquée ci-dessus, d'après laquelle la fonction économique de la région représente l'entrelacement de diverses activités économiques plus ou moins organisées autour d'un centre de gravitation ou le long une ligne centrale de gravitation. C'est surtout l'étude de la gravitation régionale qui s'impose à nos efforts d'élaborer une base solide pour la régionalisation économique. Puisque la classification, la délimitation et la hiérarchisation des régions économiques d'après leur fonction doit correspondre de même à la hiérarchie des "lieux-centres", l'analyse des fonctions de ceux-ci y est indispensable. On va organiser pour cette raison des recherches systématiques sur les zones d'influence de ces centres. "L'influence" y est comprise dans le sens si large que possible du mot: il ne s'agit pas seulement de l'influence économique proprement dite /vente et achat, approvisionnement, afflux de la main d'oeuvre/, mais aussi de l'influence administrative, culturelle, sanitaire etc. Si ces fonctions d'ordre non directement économique sont en désaccord avec les fonctions économiques proprement dites, il est évident que la planification socialiste n'a pas encore réussi à bien adapter l'organisation de la vie économique et sociale à la réalité économique régionale, soit qu'elle ne suit pas assez vite le dynamisme des régions économiques existantes en transformations, soit, au contraire, qu'elle dépasse leur évolution en essayant de la diriger.

En cherchant les méthodes de la régionalisation et en suivant le dynamisme régional on aborde aussi le problème du rôle des régions historiques et celui des unités administratives dans la classification et délimitation des ré-

gions économiques existantes. Nous sommes d'avis qu'il ne faut prendre en considération les premières que dans la mesure où elles exercent encore une influence notable sur la structure spécifique des régions en questions. En Yougoslavie, ce sont surtout le six républiques fédérales qui sont des formations historiques mais sont devenu aujourd'hui les principales régions économiques fonctionnelles du pays. Les unités administratives de deuxième et troisième ordre /arrondissements et communes/ sont devenu en Yougoslavie qui traverse une phase tellement importante de planification et décentralisation de son économie aussi un très actif "géofacteur" de premier ordre dont il ne faut guère négliger le rôle.

IV

C'est justement ce dynamisme des régions économiques et unités administratives en formation et transformation qui fait des recherches sur les régions économiques un objet très important par la vie pratique aussi en Yougoslavie. Les géographes yougoslaves sont, au moins dans certaines républiques fédérales, constamment consultés sur les problèmes de la délimitation et classification des régions, soit par des institutions d'urbanisme et planification régionale, soit - quand il s'agit de question de la rédivision administrative et ses désaccords éventuels avec la réalité économique - par le pouvoir politique populaire. Il y a de géographes qui sont membres permanents des conseils de spécialistes ou des commissions spéciales correspondantes. Malheureusement ils ne disposent encore que rarement

des études déjà assez approfondies sur les problèmes régionaux afin qu'ils puissent satisfaire toutes ces demandes. Il manque surtout des études régionaux systématiquement organisés et bien documentés. Mais il est à espérer que les équipes de jeunes géographes qui sont en voie de formation, ainsi que la réorganisation en cours des principaux Instituts de Géographie du pays qui a pour le but principal de servir aux tâches pratiques de la vie économique et sociale, seront capables d'accomplir une de ses tâches principales, celle d'étudier minutieusement l'espace économique yougoslave et son évolution.

Geographical Institute
University of Ljubljana

RESOLUTION

The Commission on Methods of Economic Regionalization of the International Geographical Union held its First General Meeting on September 8 and 9, 1961 at the Institute of Geography of the University of Utrecht, which was attended by ordinary and corresponding members together with several guests, numbering 17 in all, representing the following countries: Belgium, Czechoslovakia, Chile, Denmark, German Federal Republic, Great Britain, Mexico, the Netherlands, Poland, Roumania, the United States and Yougoslavia.

After the report on the programme of the Commission presented by the Chairman and following brief communications on the state of research in Belgium, Czechoslovakia, France, German Democratic Republic, German Federal Republic, Great Britain, Mexico, the Netherlands, Poland, Roumania, the United States and Yougoslavia, and the ensuing discussion it was resolved that, in pursuing of the declared aims of the Commission, the programme to be undertaken during the periods 1962-1964 should comprise the following:

1. To prepare three surveys covering the three research problems in the field of economic regionalization, namely: a/ basic concepts and theories, b/ methods of research, and c/ practical application. The preparation of each of these surveys will be coordinated by two ordinary members of the Commission, who will be at the same time editors of the

preliminary and final report of a given survey; professors Leszczycki and Otremba will coordinate work on "Analysis of basic concepts and theories", professors Harris and Ilesic - the work on the "Survey of methods of research", and professors Juillard and Sauskin - the work on "Survey of practical applications".

All taking part in the surveys will send their materials to the coordinators by December 1962. The coordinators will send their preliminary reports by April 30, 1963 to the Secretariate of the Commission in Warsaw, which will mimeograph them for the discussion at the 2-nd General Meeting of the Commission.

2. To prepare a bibliography of bibliographies of the problems of economic regionalization. This task will be fulfilled by the Secretariate of the Commission in Warsaw, Poland, on basis of materials sent by the members or possessed by the Library of the Institute of Geography of the Polish Academy of Sciences. For that purpose the members will send to Warsaw the collected materials for given countries or groups of countries /as agreed and recorded in the minutes of the meeting/, not later than by the end of January 1962; the Secretariate will send the provisional bibliographical list for corrections and for use in preparation of surveys by the 1st of May, 1962.

3. To hold the Second General Meeting of the Commission in September 1963 in Poland. The provisional reports on surveys will be then discussed together with proposals for the final report of the Commission, to be presented at the London International Geographical Congress in 1964. The coordinators will send the corrected versions of

their reports to the Secretariate of the Commission in Warsaw not later than at the end of 1963; the Secretariate will print them, together with the final report and proposals of the Commission for presentation and distribution at the London Congress.

4. To apply to the UNESCO via the Secretariate of the International Geographical Union for a special subsidy of \$ 2.500.- to cover a part of the costs of travel of the members of the Commission to Poland for the Second General Meeting to be held in the year 1963.

5. To hold the third General Meeting followed by a Business Meeting of the Commission during the London Congress, to discuss the results obtained and, in case of necessity, proposals for the renewal and continuation of the Commission together with the programme of future work, and to ask the Organizational Committee of the XXth Congress of the International Geographical Union for: a/ inclusion of ten-minute reports of all Commissions in the agenda of the General Assembly of the I.G.U., and b/ eventual organization of a Symposium on Selected Problems of Economic Regionalization, with special reference to Great Britain.

6. To send the report on the present Meeting to the International Geographical Union for publication in the I.G.U. Newsletter, to ask all members of the Commission for publication of similar reports in the geographical periodicals of their respective countries, as well as to ask Professor Leszczycki for publication of the proceedings of the present Meeting in one of the series published by the Institute of Geography of the Polish Academy of Sciences.

**WYKAZ ZESZYTÓW
DOKUMENTACJI GEOGRAFICZNEJ**

za ostatnie lata

1959

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- 2 PRACA ZBIOROWA — **Instrukcja szczegółowego zdjęcia użytkownika ziemi**, ark. 7, zł 7,—
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- 4 PRACA ZBIOROWA — **Instrukcja do zdjęcia hydrograficznego Polski** (wydanie poprawione), ark. 6, zł 7,—
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- 2 L. KOSIŃSKI — **Pochodzenie terytorialne ludności Ziemi Zachodnich w 1959 r.** s. 34 + 16 tabel nlb. + 16 map nlb., zł 7,—
- 3 J. KOSTROWICKI — **The Aims, Concept and Method of Polish Land Utilization Survey**, s. 43, zł 7,—
- 4 PRACA ZBIOROWA — **National Atlases — Sources, Bibliography, Articles**, s. 56, zł 7,—
- 5 K. WIT i Z. ZIEMOŃSKA — **Objaśnienia do mapy hydrograficznej Polski 1 : 50 000**. Arkusz M-34-100 B Zakopane, s. 105, zł 7,— (do użytku służbowego)
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- 3 PRACA ZBIOROWA — **Materiały do geografii przemysłu Polski**, s. 245, zł 7,—
- 4 M. BOGACKI — **Objaśnienie do mapy geomorfologicznej 1 : 50 000** Arkusz N 34—92 Kolno, s. 50, zł 7,—
- 5 PRACA ZBIOROWA — **Materiały do Geografii Zaludnienia Polski i Czechosłowacji**
- 6 E. TOMASZEWSKI — **Objaśnienia do mapy geomorfologicznej 1 : 50 000** Arkusz N 33—143 — A KÓRNIK s. 50 + 1 tab. nlb. zł 7,— (poz. 2, 4, 5, 6 do użytku służbowego)

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- 1 J. FLIS — *Kras gipsowy Niecki Nidziańskiej*, 1954, s. 78, zł 10,—
- 2 W. WALCZAK — *Pradolina Nysy i plejstocenyjskie zmiany hydrograficzne na przedpolu Sudetów Wschodnich*, 1954, s. 51, zł 3,—
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