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*Geography – environment protection – ecology*

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Geografia – ochrona środowiska – ekologia

WHAT IS MODERN GEOGRAPHY?

Modern geography can be defined as the field of learning in which the earth's surface as the environment of human life and activities is examined (for instance P. Hagget 1975). Such a formulation is amazingly convergent with the view of C. Ritter (1822–1859), whose outlook upon geography was anthropocentric. In his opinion "general physical geography should consider the earth as the place of the human race life".

However, the origin of such a conception of geography is much older. It refers to Strabon's (63 B.C. – 25 A.D.) idea of ecumene as the environment of human life; he considered the relationships between man and the earth to be the main problem of geography. Therefore, we can say that modern geography has its history of almost two thousand years.

In the broad definition of modern geography we can add that we examine spatial differentiation of the natural and socio-economic environment and the relationships between them. So, we study the influence of the natural environment on life and activities of man, and on the other hand the influence of man on the environment, as well as transformations of the environment made by man.

## ENVIRONMENT PROTECTION IN GEOGRAPHICAL STUDIES

As we know, the activities of man have great impact on the environment. Man has created a new quality in the environment; it is visible in many local and regional areas. This new kind of environment can be termed anthropogenic, which is sometimes called geotechnosphere. When speaking, more and more frequently, about global anthropopressure we think mainly about climate. Therefore, the problems of environment protection are of great importance. In the last quarter of this century extensive investigations concerning these problems have been undertaken in many fields, including geography.

Among Polish geographers, one of the first was Wilgat (1971) who published a detailed study of these problems in Poland, and also Leszczycki (1971) and others. Many interdisciplinary research teams comprising geographers have been formed, and scientific conferences with the participation of geographers have been held.

In this paper I want to draw attention to some general problems concerning the role and tasks of geography in the studies of environment protection:

1. The role of geography in the interdisciplinary approach to the problem of environment protection.
2. The role of basic research.
3. Condition of geography; specialization – integration and environment protection.

**The role of geography in the interdisciplinary approach to the problem of environment protection.** Relationships between man and the environment and environment protection are global problems and of the greatest importance in the present age. They have become very important in the second half of the 20th century and will be in the perspective of the 21st century. They affect the whole mankind, all people, all of us. We hope that these problems have been noticed at the right time and, what is especially important, that their political and economical significance has been appreciated.

Scientists were obviously the first to start dealing with these issues, and we can say that they have fulfilled their duty, i.e. scientific and social mission. Of course, they cannot be content with that. New tasks appear involving new problems to be solved. I use the word "science" intentionally because of their interdisciplinary character, complexity and significance. This concerns all natural sciences: biology, earth sciences, chemistry, and also social sciences and humanities. Also geography belongs to these sciences which play an important role in environment protection. I stress the interdisciplinary character of the fields of science of which geography plays its significant role. I want to emphasize that

it is sometimes unjustifiably postulated to recognize geography as the only branch of science entitled to deal with the problem of environment protection. In my opinion not only geography is responsible for the solution of this problem, and making it the scapegoat for this results in frustration, complexes, discouragement.

Another question is whether geography has taken advantage of its scientific abilities which are inherent in its character, in its methodology, and whether its research activities have gone the right way. It has surely left much to be desired, but these abilities, potential as yet, should ensure a high position of geography in resolving problems of environment protection. I will not consider in detail why it has not happened. Perhaps due to a small number of geographers with high professional qualities in comparison with other scientists, which is not given attention.

**The role of basic researches.** Resolution of any problems connected with environment protection should be based on indispensable researches. It seems to be obvious because of complexity and importance of the problems. However, many deviations from this principle occur, sometimes gross. Lack of such researches is observable in many studies, papers, journals. This concerns especially the so-called ecological studies in which both the research material and conclusions are often undefined.

When undertaking ecological problems, geographers must base on their own essential researches in geomorphology, hydrography, climatology or other fields, including economic geography. The use of the achievements of different sciences is then authorized and can be effective.

The existing geographic specializations should be developed and new ones introduced, but not neglecting the old ones partly forgotten. I think, for instance, about phenology widely practised in the 19th century, which is now considered as a scientific discipline dealing with seasonal dynamics of landscapes. It means that phenology is now not limited to phenomena of animated nature but it also concerns seasonal variations of interacting processes, which are characteristic of the whole natural complex, from thermal and humidity regimes to soil and biotic processes. It can give us very early, almost immediate pieces of information about the changes occurring in the environment. Another field of science, which is worth developing and using in resolving the problems connected with environment protection, is historical geography – now considered as the science of the geographical environment in historical times.

**Condition of geography; specialization – integration and environment protection.** In the 20th century, and especially in its second half, the develop-

ment of geography, as of all other sciences, has been characterized by splitting into narrow fields. It is an inevitable process caused by many external and internal factors; it is generally thought favourable. However, some scientists consider that this process has gone too far and has caused disintegration of geography, which can be dangerous for geography as science. I do not think so, nonetheless I consider an attempt of integrating geography to be reasonable. There is nothing controversial because I share the opinion that specialization and integration are two sides to every science, so both are reasonable, inseparable and complementary to one another.

Just when dealing with environment protection there are needed both specialistic and synthetic studies. In the latter, some methods can be used which have been elaborated through integration of geography.

#### ECOLOGY VERSUS GEOGRAPHY

It is true that at present ecology makes a much bigger career than geography. **What is ecology?** This question is not unsensible and naive. Ecology has undergone a significant evolution; from biology studying the relationships between plants and animals and their living environment (E. Haeckel 1866) to a kind of megascience comprising all natural sciences, including geography, and also such disciplines as geophysics, geology, sociology, law or economics. It results from the fact that ecological studies concern man and all relationships between him and the environment. At present ecology is at the initial stage of its development as regards specification of its object and methods of studies.

The ideas to replace geography by ecology and the formation of something like a new geography called geocology are a misunderstanding. "Ecologization" of geography is also a mistake, because the essence of geography is just studying the relationships between the environment and man. If we consider the relation between ecology and geography we should rather introduce more of geographical spirit into ecology. It depends on geography, which is a chance for itself and also for a positive programme of ecological studies.

## REFERENCES

- Haggett P. 1975; *Geography: A Modern Synthesis* (Second ed.). New York, London.
- Leszczycki S. 1971; *Zagadnienia ochrony środowiska człowieka w badaniach geograficznych* (summ. *The protection of human environment in geographical studies*). *Przegl. Geogr.*, XLIII, 3; 227–261.
- Ritter C. 1822-1859; *Erdkunde* 2 wyd., B. 1–19, Berlin.
- Taylor F.S. 1959; *Historia nauk przyrodniczych w zarysie*. Warszawa, PWN.
- Wilgat T. 1971; *Ochrona wartości środowiska przyrodniczego w Polsce*. *Biuletyn KPZK*, 68; 173–210.

## STRESZCZENIE

Jeśli współczesną geografiją pojmujemy jako naukę zajmującą się powierzchnią Ziemi – środowiskiem życia i działalnością człowieka (np. Haggett 1975), to takie sformułowanie jest zadziwiająco zbieżne z poglądami Rittera (1822–1859) i wywodzi się wprost z ekumeny Strabona (63 p.n.e. – 25 n.e.). Możemy więc powiedzieć, że współczesna geografia ma swą prawie dwutysięczną historię.

W artykule omówiono kilka ogólnych zagadnień dotyczących roli i zadań geografii w badaniach nad ochroną środowiska:

1. **Interdyscyplinarny charakter problemu ochrony środowiska i miejsce w nim geografii.** Ze względu na charakter, złożoność i wagę problemu ochrony środowiska uczestniczą w jego badaniach wszystkie nauki przyrodnicze: biologia, nauki o Ziemi, chemia, fizyka, a także nauki społeczne i humanistyczne. Geografia jest jedną z tych nauk. Nie ma priorytetu, nie mówiąc o patencie wyłączności. Może uzyskać natomiast ważną pozycję w tych badaniach, o wiele ważniejszą niż ma obecnie.

2. **Rola badań podstawowych.** Rozwiązywanie jakichkolwiek problemów związanych z ochroną środowiska musi być oparte na badaniach podstawowych. Geografowie powinni mieć oparcie w swoich badaniach czy to z geomorfologii, hydrografii, klimatologii, czy innych działów, w tym także geografii ekonomicznej. W kontekście ekologicznym należy także rozwijać zaniedbane kierunki, takie jak fenologia i geografia historyczna. Bez badań podstawowych opracowania ekologiczne będą puste merytorycznie, jak to ma miejsce obecnie w wielu przypadkach.

3. **Specjalizacja – integracja a ochrona środowiska.** W badaniach nad ochroną środowiska istnieje potrzeba zarówno badań specjalistycznych, jak i opracowań syntetycznych, w których wykorzystano by pewne metody wypracowane w drodze integracji geografii. Specjalizacja i integracja geografii to dwie strony medalu, obie uzasadnione, nieodłączne i wzajemnie się uzupełniające.

4. **Ekologia a geografia.** Obie te nauki nie są tożsame i nie jest uzasadniony trend przekształcania geografii w geoekologię, a w każdym razie jest to działanie przedwczesne. Jest to tym bardziej nieuzasadnione, że ekologia jest dopiero w stadium swojego powstawania, krystalizowania przedmiotu badań, wypracowywania metod. Nie można jej w tej chwili jednoznacznie zdefiniować, to pewnego rodzaju meganauka.

