
In defining their specialty, many geographers do not limit their inquiry to the physical environment. While studying the climate, the various landforms, bodies of water (both inland and oceanic), soils, minerals, plants, and animals, their concerns also encompass the relationship between the physical environment and human needs and actions.

Geography is more than a collection

Geography has links to other disciplines because of its local, national, and international applications.

of classified facts or generalizations. It is really a subjective study of the physical earth and how humans relate to it. In order to adequately analyze and evaluate the data obtained, geographers must relate to specialists in other disciplines. Geography has links to other disciplines because of its local, national, and international applications.

Historical Background

From the time of the ancient Greeks

to the present, human beings have sought to learn more about the earth on which they dwell and about the environment that surrounds them. Through the centuries, geography has been shaped and reshaped, and as exploration progressed, it has become more clearly visualized. Travel has led to more complete descriptions of the various lands and their peoples, cultures, and physical environments. Analysis and synthesis of data from a variety of sources has provided a dynamic approach and a new perspective to the study of geography.

Scientific investigation has led to greater knowledge about human cultures and the natural environment. With the aid of remote sensing instruments, collection of data relating to the terrain and oceanic waters or even outer space can occur without physical contact. This opens new dimensions for research and encourages a broader understanding of interdisciplinary relationships.

Correlation of Geography to Other Disciplines

Geography is not just the study of places, rivers, boundaries, and locations in the various parts of the world. It also includes studies pertaining to

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climate, natural environments, ecology, cartology, computer graphics, and many other areas.

Seeing geography as an interdisciplinary subject inevitably focuses attention on scientific inquiry and geography's contribution to both the natural and social sciences.

Physical Geography

Physical geography emphasizes concepts relating to the earth's measurements and movements. It delves into sources, transport, and deposition by agents such as water, wind, ice, and waves. It also studies how the landscape is transformed by varying moisture content and temperature fluctuations.

Geomorphology

This area is divided into two distinctive disciplines—geography and geology. Earth's landforms are thus viewed in terms of their structure and composition, as well as the underlying rocks that constitute them. The geographer studies the form, distribution, and significance of the landforms. This research can result in better land use through improved soil-drainage patterns and techniques for extracting minerals. Geographers and geologists can thus help us make wise use of the earth's resources.

Pedogeography

Pedogeography, also referred to as soil geography, studies soils found in the different parts of the world, along with their vegetation cover and drainage patterns—and the consequent effect upon the relief features of various parts of the world.

The study of soils can have great significance, since agriculture and most of the raw materials in our earth are obtained from them. Biotic, physical, and chemical factors play a vital role in the formation and development of the soil. Natural and human forces also act upon the soil, modifying it over time.

Climatology

Climatology includes meteorology—the study of the lower levels of the earth's atmosphere, and aerology—dealing with the upper layers. Climatology, therefore, studies the major climatic regions of the world and the weather conditions associated with the hazards of climate. It analyzes the droughts and storms that affect agriculture and other human activities. The temperature and rainfall patterns and the different forms of precipitation relate to the agricultural potential and the concentration of population.

As more data have been collected and greater understanding achieved, other branches of study have arisen, such as agro-climatology and applied geography.

Human Geography

Human geography is a vast area dealing with the many human activities that influence the economy and development of the land on which we dwell. Human geography can be broadly divided into economic geography, population geography, political geography, and historical geography.

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Economic geography relates the disciplines of geography and economics, as it studies similarities and differences from one region to another. Included in this study is the production and distribution of various commodities (both raw and manufactured), as well as their exchange and consumption.

Human activities can be grouped into four major economic areas, based upon the type of occupation being pursued. The primary type deals with agriculture and mining. The second

ary type relates to manufacturing industries. The tertiary type emphasizes services, while the quaternary type chiefly concerns itself with decision-making endeavors.

Today, economic geography itself has specialized areas. It can be subdivided into transportation geography, industrial geography, and the geography of natural resources.

Population geography focuses upon the geographic impact of population, either in specific areas or over the larger sphere of human activity. The distribution, composition, growth, and movement of population has inevitably affected the economy and development of the entire world. The density and distribution of population relate to a variety of geographical factors. These include soil productivity, rainfall, climate, location of land forms (deserts and mountains as well as oceans and rivers) as well as natural and manmade disasters.

Political geography deals with ways political conditions change geography. With the passage of time, the size and shape of most countries have altered due to conflicts related to territorial expansion, linguistic barriers, or relig-

ious intolerance.

Political geographers study the structure, internal divisions, and external relationships of various areas of the earth. How boundary disputes have been settled, under what circumstances treaties were signed, and what factors led to the resolution of political issues, are vital issues.

Historical geography delves into the historical background of the study of geography. The discovery of new lands and the development of cartographic representations, the accounts of great travelers and explorers contributed much to the beginnings of this profound subject. Studying a particular area of the world during the definite period of time can shed light on the reasons for its growth or decline at the present.

Medical Geography

The location and spread of disease, the distribution of various illnesses, and the relationship between disease and the environment are the concern of the medical geographer. These specialists observe the relation between medical facilities and the health of the community as well as the correlation between the occurrence of disease and effects of changes in the environment and human life-styles. Among low-income countries, we see a higher incidence of morbidity and mortality as compared with the more advanced countries of the world. Medical geog-

raphers study the factors that cause these problems and their relationship with other areas of geography.

Biogeography

Biogeography deals with plant geography/botany and zoo-geography/zoology. Plant geography (phylogeography) studies the relation of plants to the environment. One subspecialty, floristic plant geography, analyzes the distribution of a single species of plant and the mechanisms that control its distribution or threatened extinction.

Vegetation studies of tundra, deserts, and grasslands have a direct bearing upon the study of geography. Plant communities in different areas are affected by climate (moisture, rate of evaporation, erosion, et cetera), and factors such as the slope of land and type of soil.

Zoo-geography studies animals in relation to their environments. This speciality involves the distribution of animals, as well as the impact on the animal kingdom of soil, climate, and interference.

Biogeography relates closely to human geography and medical geography.

Statistical Geography

Statistical and mathematical analysis has become an integral part of geographical studies, giving rise to a new dimension of geographical study. It encompasses studies based upon correlation and regression analysis,

graphs, mechanisms to study diffusion processes and multivariable analysis.

Statistical geography analyzes spatial distributions involving land-use maps, location of cities and towns, transport route maps, and soil quality and various types of graphical and pictorial representations.

Map Interpretation

The geographical data available today can be compressed into maps that provide a better understanding of the patterns and distributions of geographical forms. Maps are actually technical spatial messages from the cartographer to the reader using scales and symbols.

Remote Sensing

Of great importance to the geographer is the gathering of data covering large areas from great distances, from areas as broad as the universe or deep as the bottom of the earth's seas and oceans. Remote sensors are sensitive instruments capable of detecting both visible and invisible light across the electromagnetic spectrum. They provide color imagery for detailed interpretation and analysis.

Conclusion

Geography, as a natural and social science, stands unsurpassed by any other discipline in its contribution to

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phone book, which is available in most public libraries. Other countries should contact their national government offices to obtain information about embassy addresses.

THE SIGNIFICANCE OF GEOGRAPHY TO OTHER DISCIPLINES

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studies of the physical earth and humankind, culture and environment. It takes into account human activities and their various distributions upon the face of the earth through space and time.

The political unrest among nations, the plight of refugees, the instability of the governments in the countries exposed to the natural calamities and natural crises, the unusual global climatic patterns, the threats of famine and floods, disasters over land and sea, have all contributed to the role of specialized geographical studies.

Geography will, in the future, be considered as a subject of keen interest, as it relates intimately to technical advances and scientific research in the quest of human search for knowledge. Today, advances in weather forecasting, aerial photography, and sophisticated scientific satellites give us new ways to examine planet Earth.

The broad variety of careers described above point out the importance of a study of geography for today's young people. □

Dr. Alexander S. Job is the author of six geography textbooks currently being used in the middle and secondary schools in India. He has had 20 years of teaching and administrative experience. At present he is working on a book, The Effective Teaching of Geography. He is employed at a firm in Rockville, Maryland, in the data-processing division.

TEACHING BIBLE IN THE THIRD DIMENSION

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10 days. Borrower pays return postage. Available for purchase for \$6.00.

Loan: *Egypt: Partnership Along the*

Nile (#1900). 1982. Umatic or VHS. 28 min. Contrasts modern vs. traditional lifestyles along the Nile. Catholic Relief Services, Karol Media, 22 Riverview Drive, Wayne, NJ 07470-3191.

Slide Materials

Loan: *Flight Into History: Jordan and the Holy Land*. 1983. 58 slides with script and cassette narration. Jordan Information Bureau, 2319 Wyoming Ave., NW, Washington, DC 20008. Book three weeks in advance. Borrower pays return postage.

Purchase: Color slides of relief maps of the Bible lands. Jerusalem Center for Biblical Studies, Box 19991, Jerusalem, Israel. Write for information.

Purchase: Satellite color slides of the Bible lands. Eros Data Center, Sioux Falls, SD 57198. Write for information.

Ralph E. Hendrix writes from Berrien Springs, Michigan, where he recently completed graduate work in Old Testament Studies at Andrews University. His classwork included the study of archaeology and history of the ancient Near East. During the summer of 1988 he participated in a photographic survey of Egypt and Palestine. He recently served as assistant to the curator at the Siegfried H. Horn Archeological Museum at Andrews University. Before attending the SDA Theological Seminary Mr. Hendrix served as a pastor and multi-grade teacher in the Nevada-Utah Conference of SDA.

NEWS NOTES

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Linda University, is chairman, with James Epperson, director of education for the Southern Union, as vice chairman.

• Alternative financial strategies. Southern California Conference president Charles Dart is chairman. Gil Plubell, executive secretary of the North American Division Board of Education, K-12, is vice chairman.

• Marketing and advocacy. Northern California Conference president Donald Schneider is chairman, with Richard Duerksen, vice president for marketing and communication at Pacific Union College, as vice-chairman.

Each task force is carrying out research, making recommendations, and developing resources to improve the quality of Adventist education. One study on faith development, called the Valuegenesis Survey, promises to be a landmark in the understanding of adolescents and religion.

The North American Division

Department of Education, which initiated Project Affirmation, has retained the consulting services of the Minneapolis-based Search Institute. Search founder Merton Strommen is the author of the widely acclaimed books *Five Cries of Youth* and *Five Cries of Parents*, published by Harper and Row.

Last February, Search personnel trained 70 facilitators to hold "vision-to-action" planning sessions across the North American Division. These sessions are now being held in every conference to help church members focus on their desired futures for local Adventist education and lay plans for constructive change. This grassroots drive for excellence, Smith believes, will be the most important and lasting outcome of Project Affirmation.

The work of Project Affirmation will be summarized in three major reports:

• *Risk and Promise — Imperatives Facing Adventist Education* will present findings and recommendations from the four task forces for attaining excellence in the schools. This major report will be presented to the North American Division year-end meetings in 1990 and made widely available throughout the denomination.

• *The Implementation Series* will include a number of research studies and practical resources that will help schools increase their quality and enrollment. Publication has already begun with a marketing guide for elementary and secondary schools.

• *Valuegenesis*. Plans are being made for a book to be published that will explain and make practical and findings of the Valuegenesis Survey of Adventist youth. It will be valuable for parents, pastors, teachers, and all those involved in helping adolescents develop faith.

"We believe that Project Affirmation will leave the North American Adventist Church with four major gains," says Smith. "First, there will be a deeper understanding of constituency concerns at the local school level. Second, new and valuable resources will be available for meeting the needs of schools and school personnel.

"Third, the Valuegenesis Survey will result in a tremendous data bank. This will help educators, pastors, and parents to develop information-based programs and materials to foster faith and church commitment.

"Most importantly," Smith concludes, "Project Affirmation will set in motion a process of planned change. This ongoing effort, carried out at all levels, will keep the schools moving toward excellence into the 21st century."—Project Affirmation news release, October 6, 1989.