
WORLD

REGIONAL

GEOGRAPHY

A Question of Place



PAUL WARD ENGLISH
JAMES A. MILLER

Third Edition

THIRD
EDITION

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A Question of Place

PAUL WARD ENGLISH

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For you
In reminiscence, *The Song of Solomon*, 2:10–12.

PREFACE

About four million years ago, our ancestors embarked on a journey—an odyssey of the spirit—at a place called Olduvai Gorge in Africa. In the time since, human beings spread across the globe and reshaped the earth. They transformed landscapes and continually devised new ways of living. Modern geography is the study of the interactions between people and their environments—past and present. It tells the ongoing story of the world as we know it—the latest stage in the journey that began long ago in the East African highlands.

THE HUMAN WORLD REMADE

Until the last few thousand years of our four million year history, people lived in a very different world from ours today. Only 20,000 years ago, the human race amounted to five million men and women living in small groups spread across the globe. They secured food as **hunters and gatherers** by collecting plants and killing animals within their reach. Their knowledge, energy, and technology were limited. So was their use of the resources of the earth. Then, two periods of explosive change altered their way of life and transformed the geography of the planet.

The Environmental Transformation

During the first period of change, the **Environmental Transformation**, people invented agriculture and tamed animals. The break-through came first in the Middle East about 10,000 years ago. Soon after, agri-

culture appeared in India, China, Southeast Asia, Europe, and much later in Mexico and Peru. Exactly why human beings became farmers and herders at this particular time still eludes us. But when they did, they opened the way to a more humanized world.

These farmers and herders soon clustered together in new and larger settlements, cities. Here, people first became “civilized” in our sense of the word. These cities became the centers of organized agricultural civilizations.

By the beginning of the sixteenth century (A.D. 1500), the **Environmental Transformation**—food production and urbanism—had created a new global geography. Farming and herding gave people a more reliable supply of food. As a result, 500 million human beings inhabited the planet. Sophisticated urban civilizations existed in Western Europe, the Mediterranean, the Middle East, India, China, and in the Aztec and Incan realms of Mexico and Peru. In each of these regions farmers grew the food to nourish elite city dwellers who lived in urban capitals, trading towns, and religious centers. Farmers also provided much of the wealth and labor that built the temples, shrines, and palaces that fascinate tourists today.

The world in 1500 was divided into a number of **culture regions**. Each culture region had a distinctive religion, language, society, and economy. No single civilization was capable of imposing its will on the others, although attempts to do so were frequent. The distances between regions were too long, and communications were too slow.

Manpower, energy, and technology were too limited for one civilization to dominate another for very long.

Then, with the beginning of the second major period of change, the **Scientific Transformation**, Europe became the first society with global capacity. Beginning in the age of Columbus and continuing into the twentieth century, Europeans sailed around the world and subdued civilizations in Asia, Africa, and the New World. These events and their after-effects created the interlocking economic and political realities that we live with today.

The Scientific Transformation

The **Scientific Transformation** started in the 1500s when Europeans began to explore new worlds—geographically and intellectually—to create one of the most exciting eras in human history. In the 1500s, European explorers opened up new routes of communication and trade throughout the world. At the same time, advances in science and technology led to new inventions. It was in this climate of terrestrial and scientific exploration that the **Industrial Revolution** occurred in England in 1750.

The productive powers of machine technology unleashed a torrent of change. Coal, and later oil-powered machines, transformed raw materials into finished goods. New industries emerged, and production of goods soared. New patterns of trade and commerce linked distant parts of the globe. The higher productivity of a new economic system—**capitalism**—combined with advances in science to spur rapid population growth.

By 1800, there were one billion people in the world. Many of these people sought jobs in rapidly growing cities. The city became the home of more and more people; the factory became their work environment. A new and different human geography emerged. These changes brought many improvements in life, but also caused many of today's basic social and economic problems.

The spread of the Scientific Transformation took place in the 1800s and 1900s. Before this, colonies of Europeans were settled along the coasts of North and South America and in South Africa. Elsewhere, a handful of Europeans worked in trading stations on the oceanic rims of Asia and Africa. But generally, Europeans were few and far between outside of Europe.

Beginning in the 1800s, however, millions of emigrants swept out of Europe. They settled in North America, southern South America, South Africa, and Australia—all regions with environments similar to Europe. In each of these areas, the ties of European language and culture remained strong long after new countries like the United States declared their political independence from Europe. In time, these regions settled by European immigrants integrated the capital, resources, and social institutions needed to become industrial nations, members of the Technological World. In North America, the Soviet Union, and Japan the Scientific Transformation took root and blossomed beyond the frontiers of Europe.

In most of Latin America, Africa, and Asia, the impact of the Scientific Transformation was quite different. These areas produced agricultural and mineral products highly valued in the marketplaces of Europe, but their environments were largely unattractive to Europeans. As a result, Europeans came to form a tiny but well-armed minority in the tropics. They established plantations and founded mines as they lived among but apart

from native peoples as **colonial** rulers. Europeans provided the capital and technological know-how; native Latin Americans, Africans, and Asians provided the muscle. **Dependency economies** emerged in these areas, reliant on the production and sale of raw materials to industrial countries. When these colonial societies finally achieved political independence, they did so in a world designed by and for Europeans. The former colonies have not yet fully integrated the Scientific Transformation. Today, they remain less developed and poorer members of the global family, and are often termed the Developing World.

The Scientific Transformation, then, did not spread evenly across the globe. In the Technological World, where science and technology form the basis of society, people live longer, eat better, are healthier, consume more energy, and steadily increase their standards of living. In the Developing World, where science and technology long remained in the hands of European colonialists, life spans and standards of living increased, but at much slower rates than in industrial nations. As a result, vast inequalities separate the haves and have-nots of the world today. One quarter of the five billion people on the planet are relatively well-fed, healthy, and long-lived, and three quarters are not.

GEOGRAPHY AND DEVELOPMENT: A TALE OF TWO WORLDS

These human differences form the core of much study by modern geographers. Interactions between environment, population, culture, and location lie at the heart of geography. Geographic issues involve the distribution of people, food, energy, and resources, and affect each of us, whether we are in the Developing or the Technological World.

Books, newspapers, and television

constantly remind us of the global nature of everyday life. American grain shipments to the Soviet Union and hunger in Africa are issues that have affected Americans directly. Global energy crises have changed driving habits, household economies, food production, and industry. Even a country as vast in size and as rich in resources as the United States must import over 120 vital commodities to maintain its standard of living. And, for the first time, it is within the reach of human beings to put an end to the future tense.

Needless to say, people in the Technological World and the Developing World view this situation very differently and have different hopes for the future. In the Technological World, people work to preserve the current world economic system because it produces their wealth. They support political stability so that their positions and the status quo can be maintained. Achieving higher standards of living is of importance to most people.

In the Developing World, by contrast, dissatisfaction with the world economic system is wide-spread. Here, world political stability is less important to people than a greater share in the global balance of wealth and power. Their goal is to overtake the richer nations by developing their own resource bases and by acquiring the technology and skills needed to raise standards of living. But during the last 50 years, the distribution of wealth and poverty has remained pretty much the same.

In the Technological World, countries have extensive trade contacts, well-developed transportation networks, high rates of energy production and consumption, and high **gross national products**. As a whole, their people are well supplied with medical facilities, have low rates of population growth, and are highly urbanized. Nearly everyone is literate, and most people are able to earn relatively high incomes. The higher living standards in these countries are

the result of diversified commercial and industrial economies.

The poorer countries of the Developing World, by contrast, are weighed down by marginal environments, inadequate natural resource development, poorly connected transportation systems, and low gross national products. Their people are mainly engaged in **subsistence** activities, have high rates of population growth, and low standards of living.

The sources of poverty vary. In South Asia, rapid population growth consumes economic gains that could improve standards of living. In most of the Middle East, dry environments retard national development. In Africa, the legacy of colonialism weighs heavy. In South America, population growth is high and control of the physical environment is inadequate. Although the causes vary from region to region, poverty is now a persistent and pervasive fact of life in the less developed countries.

Several outcomes are possible. The wealthy may continue to provide assistance to less developed countries through organizations like the **World Bank**. The poor may remain poor, except in those countries where determined leaders or the discovery of new resources spur rapid development. Or countries in the Technological World may decide to curtail their standards of living in order to raise living standards in the Developing World. But none of these futures seems likely to resolve world tensions or to be accomplished without great turmoil.

On a day-to-day basis, these long-term issues do not appear to be immediate or compelling. Nearly two thirds of the world's population still lead the simple, lethal, and vulnerable lives of their ancestors. They dwell in the same cities, practice crafts, till fields, and herd flocks much like 300 generations of their ancestors before them. But in a very basic way everything has changed in this generation—and you can sense it.

In Ethiopia, a plowman still uses

the broken branch of a tree to cultivate the land, but he knows that with cash he could buy a metal plow. In the Middle East, villagers live in homes similar to those built at the time of Christ, but they know that their children must leave the village if they are to lead better lives. In South Asia, the back-breaking toil of cultivating rice kills women so rapidly that there is a shortage of wives, and the women know it. In Latin America, men leave their families to find work in the city, because the good land is owned by wealthy landlords.

In a sense, all of these people—your contemporaries—are enduring much as their ancestors endured, but now they have been afflicted by hope. The knowledge of wealth has made them feel poorer; the availability of life has made them resentful of dying. Rising expectations are an important force that will shape the geographical issues of the coming generation.

And so the journey begun at Olduvai Gorge continues. Although the world has changed dramatically through the force of human endeavor, geographical questions of current importance must have occupied our ancestors during those long ages so mysteriously remote from us now. Like us, they were caught up in the business of living. Decisions had to be made about how to assess environmental potential, how to maximize available opportunities, whether to migrate, which course of action to follow, and what the future held. These questions are at the core of modern geography. They engage the concern of most thinking people today.

WORLD REGIONAL GEOGRAPHY: A QUESTION OF PLACE

This book provides a coherent, organized human geography of the

world as we now know it—where we are, where we seem to be heading. Regional discussions of interactions among environments, populations, ways of life, and locations—subjects much studied by modern geographers—from the body of the text.

Organization of the Book

World Regional Geography: A Question of Place is divided into three major parts. The first part, *The Human World Remade*, provides the logic for presenting the geography of the modern world in two groupings of countries. These groupings form the second and third parts of the book, *The Technological World* and *The Developing World*.

Part 1, *The Human World Remade*, briefly outlines events during the two periods of cataclysmic change that gave human beings greater control over the earth. The Environmental Transformation created those agriculture-based civilizations that still encompass the life experience of most people on the planet. The Scientific Transformation created the industrial and commercial societies that have governed world affairs for the last two centuries. Forces originating during these two periods of change have divided the globe into two sets of countries: the Technological World and the Developing World.

Part 2, *The Technological World*, presents a discussion of five world regions—Western Europe, North America; the Soviet Union and Eastern Europe; Japan and Korea; and Australia, New Zealand, and the Pacific World—where the full elaboration of the modern experience has produced unprecedented levels of material well-being and mastery of the environment. Despite differences in tradition, culture, economy, and environment, each of these world regions is highly urbanized and has a diversified economy, a high level of economic productivity, and a well-developed resource base. The chapters of each region of *The Techno-*

logical World use the same system of organization. First, the progress of modernization is traced; second, the contemporary human geography of the region is described; and third, salient problems of current concern are discussed. This consistency of approach is intended to enable students to appreciate the differences in land and life in each world region, while recognizing the similar processes and problems that exist throughout the Technological World.

Part 3, *The Developing World*, introduces those six world regions—Latin America, China, South Asia, Southeast Asia, the Middle East and North Africa, and Africa—where advances in living standards generated by the Scientific Transformation have yet to be fully experienced. Each of these world regions has a high rate of population growth, an agriculture-based economy, urbanization without industrialization, a low level of economic productivity, and a poorly developed resource base. Again, each regional chapter in *The Developing World* follows a consistent format. First, the traditional culture and society of the region is described; second, the contemporary human geography is discussed; and third, the impact of modernization and major problems confronting each society are delineated. As in Part II, this similarity of treatment is intended to enable students to understand the diversity that exists among these regions, while comprehending the

commonalities of life in the Developing World.

Special Features

To support these discussions of every major country in the world, three special features are embodied in the regional chapters. These are Mapscan, Geolab, and Geostatistics.

Mapscan is an important innovation in this book. Essentially, Mapscan is a short course in map interpretation intended to provide students with the basic skills needed to read and use maps with a higher level of understanding. In each regional chapter, Mapscan introduces a basic element of cartographic knowledge using data from the region under study, including the following topics.

- The Beginnings of Cartography
- Map Projections
- Map Scale
- Map Symbols
- Isolines
- Topographic Maps
- Cartograms
- Mapping Population
- Urban Mapping
- Mapping Water Need
- Remote Sensing of the Environment

Maps are a fundamental tool in geographical research and writing; better understanding of their construction, purpose, and best use is essential for all students of world regional geography.

Geolab is a second special feature in this book. In each regional chapter, Geolab introduces a fundamental idea or area of research developed by geographers to analyze the world around them. Each Geolab is based on data from the region under study, including the following subjects.

- Formal Regions
- Spatial Diffusion
- Environmental Perception
- Natural Hazards
- Elevation and Environment
- Climographs of Human Comfort
- The Monsoon
- Rural Settlement Patterns
- Megalopolis
- Location Theory
- Central Place Theory
- Culture Regions

These ideas are important subjects of debate among professional geographers, fertile areas of research still under study. They provide students with an introduction to ongoing study in the discipline as well as preparing them for further exploration in more advanced courses.

Geostatistics, a third special feature provided in each regional chapter, is a statistical profile of each country in the world. Frequently used solely for reference, these tables illuminate patterns of life and livelihood within and among world regions and merit the attention of serious students.

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Completing any long work provides authors with a moment of reflection, a quiet time to express appreciation and recognition. The ideas and materials embodied in this book derive from an array of literature in the discipline. The publications of many of these professionals are acknowledged in figure references and bibliographies in the text. Still more derive from discussions with colleagues, friends, and fellow students.

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Finally, we dedicate this book to those whom we love.

PWE
JAM

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P A R T
O N E

THE
HUMAN
WORLD
REMADE



THE HUMAN WORLD REMADE

The Environmental Transformation

The Discovery of Food Production

The Rise of Cities

The Diffusion of the Environmental Transformation

The Scientific Transformation

The Medieval Agricultural Revolution

The Industrial Revolution

The Diffusion of the Scientific Transformation