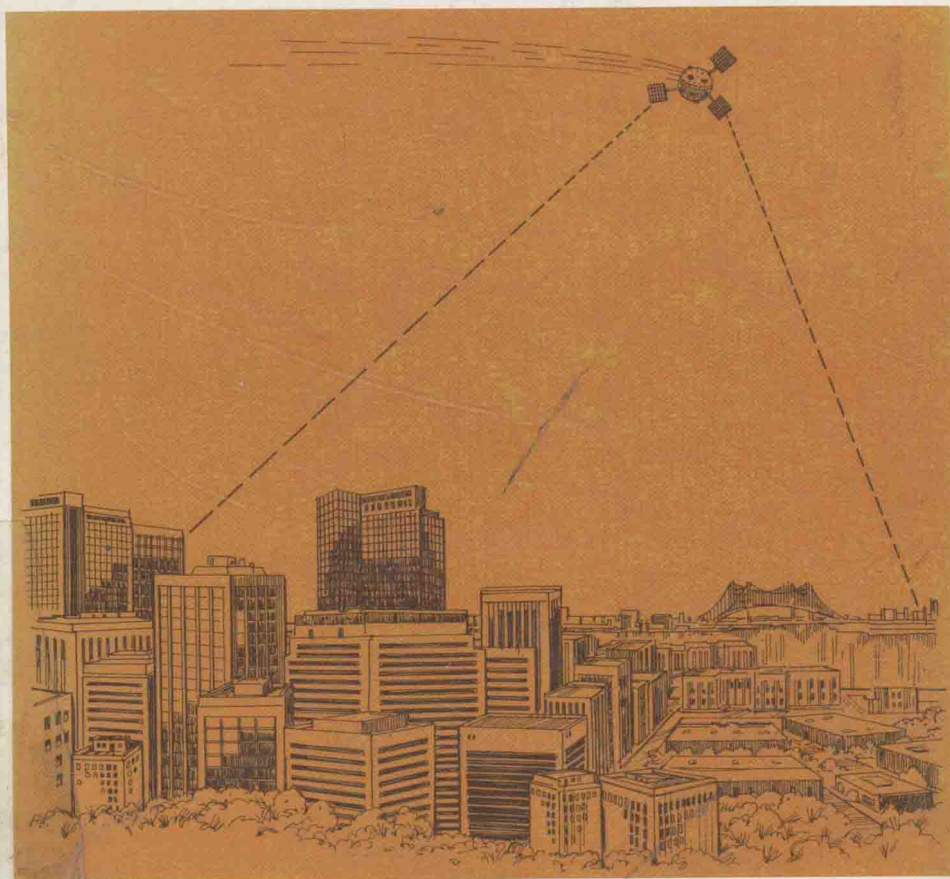


# APPLIED GEOGRAPHY

Selected Perspectives

JOHN W. FRAZIER

EDITOR



JOHN W. FRAZIER, Editor  
*Harpur College*  
*State University of New York*  
*at Binghamton*

# APPLIED GEOGRAPHY

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# About the Authors

**Surinder K. Aggarwal** holds a Master's degree from the Punjab University and is currently specializing in health planning at Ohio State University. He has recently completed intensive fieldwork for the State of Haryana, India, designed to assess the problem of malnutrition of children in that state.

**Frank T. Aldrich** is currently an Assistant Professor of Geography at Arizona State University. His Ph.D. is from Oregon State University. In addition to his academic duties, he has recently authored a field-based comprehensive plan for the town of Buckeye, Arizona. Prior to this he consulted for Wirth-Berger Associates, Mountain West Research, Denver, Colorado and Wirth Associates, Phoenix, Arizona. These projects have included location and site evaluation for a new town for western Colorado coal development, a transportation study for the city of Boise, Idaho, as well as other land use studies and environmental impact assessments.

**Surinder M. Bhardwaj** received his Ph.D. from the University of Minnesota in 1970. His research interests include the geography of religion, and medical geography. He has studied the attitudes of rural people and their utilization of different types of medicine and physicians in Punjab, India. He is currently engaged in a study of the health problems of pilgrims to Hindu sacred places in India. Dr. Bhardwaj is currently a professor of Geography at Kent State University.

**Morris Budin** is Professor of Urban Planning at the State University of New York at Binghamton. For more than 30 years he has served as a consultant, including economic development planning for India. He has served as Vice-

President of the Economic Growth Institute and is the author of numerous consulting reports as well as scholarly publications.

**Donald R. Coates** started his professional career as Chairman in the Geology Department, Earlham College, Richmond, Indiana in 1948. He was project chief with the U.S. Geological Survey in Tucson, Arizona from 1951-1954, with evaluation of water resources. Since 1954 he has been at the State University of New York at Binghamton serving both as Professor and past chairman. In addition to publishing more than 70 professional articles, and editing and authoring 13 books, he has been active as a consultant for such government agencies and corporations as the National Science Foundation, U.S. Army Corps of Engineers, New York State Attorney General, Consolidated Edison Company, and Niagara Mohawk Power Corporation.

**Thomas M. Corsi** is Assistant Professor of Transportation, University of Maryland. He has conducted planning studies on the impact of the fuel crisis on travel behavior for the Southeastern Wisconsin Regional Planning Commission and the University of Maryland. He has also served as consultant to the Interstate Commerce Commission in their nationwide survey of independent truckers, and their analysis on the impact of issuing special permits for government traffic.

**Richard E. Dahlberg** is Professor of Geography at Northern Illinois University, where he has served as past chairman. He has also served as Chairman of the Illinois Mapping Advisory Committee since its formation in 1975. This committee evaluates Illinois mapping priorities and advises the National Mapping Program of the USGS. Since 1972, he has served as a U.S. Member of Commission I (Education) of the International Cartographic Association. Professor Dahlberg also recently served as Staff Specialist, Office of the Chief, USGS Topographic Division working on a national-level study of education in the mapping sciences.

**Michael J. Day** is currently an Assistant Professor of Geography at the University of Wisconsin-Milwaukee. He received his Ph.D. from Oxford University. He was invited to be part of a team of applied research scientists sponsored by the Royal Geographical Society. He traveled as part of two expeditions to Sarawak, East Malaysia as part of this team. Professor Day has published numerous papers, including studies of geomorphological processes and applied geography.

**Bart J. Epstein** is currently Professor and Chairman of Department of Geography, Kent State University. Before award of his Ph.D. from Clark in 1956, he was employed by The Stop & Shop Companies. After eight years of location research and real estate negotiation with that firm, he moved on to the B.F. Goodrich Company where he served in a similar capacity as Manager of Retail Real Estate for seven years. Since his arrival at Kent State, he has continued his business associations as a location consultant and has been co-director, with John Frazier, of a series of applied geography conferences.

**John E. Estes**, Associate Professor of Geography at the University of Cali-

fornia, Santa Barbara, received his Ph.D. in Geography in 1969 from University of California, Los Angeles. The author of more than one hundred publications in remote sensing, Dr. Estes has consulted for a variety of state and federal agencies, and public and private corporations. Included among these are Texaco, Inc., Lockheed Electronics Corporation, General Electric, McDonnell Douglas Earth Satellite Corporation, U.S. Departments of Agriculture and Interior, and the National Aeronautics and Space Administration. With broad research interests in the applications of remotely sensed data, Dr. Estes has been a principal investigator on contracts with NASA, U.S. Department of Interior, Department of Defense, the U.S. Coast Guard, and agencies of the State of California.

John W. Frazier is currently Chairman of the Department of Geography at the State University of New York at Binghamton. He has published a number of scholarly articles dealing with applied geography, urban geography, and housing problems. He also serves as a consultant and has published a number of technical reports for planning agencies. Professor Frazier created and directs national applied geography conferences.

Glen C. Gustafson obtained his Ph.D. from the University of Munich. His interest in aerial observation techniques began as a result of military service beginning with the Cuban missile crisis of 1962. This was followed by four years of Air Force intelligence work from photographic and radar sensors. Dr. Gustafson has served as a consultant to the New York City Board of Water Supply. He is currently Associate Professor of Geography at James Madison University.

Norah F. Henry is an Assistant Professor at the State University of New York at Binghamton. Her research focus is urban social geography and she has published articles and reports dealing with housing, medical geography, and female behavioral patterns. Professor Henry also serves as a consultant to planning agencies.

John F. Lounsbury is Professor of Geography and Director of the Center for Environmental Studies, Arizona State University. Teaching, research interests, and recent publications focus on geographic field methodologies, area analysis, and land use. He has served as Director of the Spatial Analysis of Land Use Program, Master of Arts degree, emphasizing applied research in geography. The program, supported by the National Science Foundation, was developed in cooperation with the geography departments at Florida State University and Michigan State University. He is past President of the National Council of Geographic Education.

Harold M. Mayer is Professor of Geography at the University of Wisconsin-Milwaukee. Before joining academia, he was Chief of Planning of the Philadelphia City Planning Commission, and later Research Director of the Chicago Plan Commission. His interests are primarily in applications of geography to city and metropolitan planning, and in relations of transportation to urban and regional development. Since 1950 he has served as consul-

tant to public and private organizations, planning agencies on land use, and planning agencies on transportation.

Mark J. Salling is currently a geographer/planner for the Northeastern Area-wide Coordinating Agency in Cleveland, Ohio. His research efforts have been in the areas of housing, regional planning, and migration behavior. He has published articles and reports dealing with housing problems, particularly home mortgage investment patterns.

Eileen Schell received her Ph.D. in Geography in 1964, and created Schell Market Research, Inc. Her specialties are site selection and evaluation. She has served as an expert witness in zoning cases, impact studies, and in hearings before the F.D.I.C. Her clients range from small new ventures to large international corporations and members of the "Fortune 500". Dr. Schell is a Certified Management Consultant. She was recently appointed to the governor's cabinet as Director of Consumer Affairs, Commonwealth of Massachusetts.

Ingolf Vogeler studied rural and cultural geography at the University of Toronto and the University of Minnesota. He is Associate Professor of Geography at the University of Wisconsin-Eau Claire. His research in applied geography includes seventeen published articles dealing with various rural problem areas: Appalachia, Indian reservations, rural recreation, and subsistence agriculture. In 1975 he conducted evaluative research on the effectiveness of differential assessment of farmland in metropolitan Chicago for the Illinois Department of Local Government Affairs. His applied research has led him to consider alternative theoretical formulations to traditional positivistic science.

Thomas J. Wilbanks is author or co-author of two books, a monograph, and a number of papers related to energy policy, environmental management, and regional development. He has been an advisor on energy and environmental matters to a wide variety of public agencies at all levels, including recent contributions to assessments by the Office of Technology Assessment of the U.S. Congress of the ERDA Plan (1977). He served on the overview panel for ERDA's Inexhaustible Energy Resources Planning Study, and directed the environmental and social impact assessment part of formulating National Energy Plan II.

Leo E. Zonn is an Assistant Professor of Geography at Arizona State University. His research interests center upon the socioeconomic characteristics of the American City. In particular, he analyzes the relations between intra-urban migration of minority populations and quality of housing. His research focuses on the processes by which these householders acquire information about the city's spatial structure, and on the processes by which this information is used in the householders' residential choice behavior. The role of the realtor in the flow of information is scrutinized, and appropriate policy recommendations result. Professor Zonn is also particularly interested in geographic field methodologies.



# Preface

We are in a period where societal problems, such as energy, transportation, environment, health care, and many others, require careful consideration going beyond pure description. Perhaps at no other time has the cry for university assistance been so loud and the voice of critics been so sharp. The remainder of this decade and the next certainly will provide unique challenges and opportunities for response by the academic disciplines and their graduates.

Already, university geography departments are changing curricula, primarily to meet market demands, but also in an effort to modernize and be more relevant. The trend toward modernization is reflected in the recent interests of professional geographers and their associations. This book also reflects this trend in its exploration of applied geography with regard to perspectives on its nature and purpose, what it has been, and, as importantly, what it should be regarding human problem resolution.

The purpose of the book is:

1. to offer a broad range of perspectives for the application of geographic principles and techniques through an examination of past applications and future needs;
2. to provoke young geographers to think in terms of problem resolution, its pitfalls and prospects; and
3. to serve as a text in courses which stress human problems and their solution and as general reading for those interested in spatial and environmental problems.

The book is divided into four main parts. Part I contains an introductory chapter which provides a perspective of the applied theme in American geography and offers a definition of applied geography. Part II includes four chapters which examine applied geography in city and regional planning. The approach here is to first examine the relationship between geography, as a discipline, and planning, as a professional field. Then, three *examples* of geographic planning strategies are provided in the areas of transportation, health care, and housing. Part III, which also contains four chapters, focuses on applied geography and environmental problems. Geomorphological perspectives are provided to demonstrate pressing problems which are part of the human-environment theme of geography. Sample applications of air photography and remote-sensing technology, a management plan for a park, and energy geography are provided. Four additional chapters constitute Part IV, which provides discussion of some of the practical problems and preparation needed to become an applied geographer. Cartography and remote sensing, preparation for a private career, philosophical options, and data acquisition, all pieces of the career preparation puzzle, are discussed. The book concludes with an epilogue.

This work is primarily designed for persons who seek an introduction to applied geography. It is not a collection of case studies which demonstrate applied geographic research. Such analyses are available as technical reports. Where appropriate, however, case studies are provided, as are detailed references. The book is an effort to provide perspectives on the role of geographers in solving a range of problems. In the process it is hoped that people will begin to "think" applied geography, to identify problems which beg geographic analysis, and to seek training which will permit their solution. This is becoming more essential in view of the increasing number of geographers seeking and obtaining nonacademic employment, and because of the increasing number of geographic problems which require attention.

In a book of this type many individuals must contribute unselfishly. I am particularly grateful to the chapter authors who have worked diligently to meet several deadlines in producing these original essays. I also gratefully acknowledge the constructive criticism of seven reviewers of the text: Professor Peter O. Muller, Department of Geography, University of Miami; Professor John F. Lounsbury, Department of Geography, Arizona State University; Professor Lawrence M. Sommers, Department of Geography, Michigan State University; Professor Brian P. Holly, Department of Geography, Kent State University; Professor Ronald Briggs, Program in Political Economy, The University of Texas at Dallas; Professor James L. Newman, Department of Geography, Syracuse University; Dr. Herbert L. Zobel, Geographic Education Consultant. I am grateful to the following for permission to reproduce materials: Association of American Geographers, American Geographical Society, Bendix Aerospace Corporation, Danko-Arlington, Inc., Environmental Research Institute of Michigan, Professor J. Jensen, University of Georgia, Texas Instruments, Professor A. C. Waltham, and Professor K. Wyrwole.

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John W. Frazier

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## **PART I**

# **INTRODUCTION**

Most human problems have some geographical dimensions. Chapter 1 serves as an introduction to this book by identifying the geographical components of some pressing contemporary problems. Because applied geography has a relatively long history, a brief perspective on geographic applications in the United States during this century is provided.

Applied geography is an extension of geography the science. This is discussed and examples are provided to clarify the distinction between geography and applied geography.



