A new look at the Four Traditions of Geography [An excerpt]

J.L. Lewis, in the following article, argues that William D. Pattison’s “Four Traditions of Geography” is an “excellent statement of the central core and main themes of geography” even in a rapidly changing world. Lewis then assesses these traditions in the light of some trends affecting geographic study. The article may have been written more than three decades ago yet it may still offer insights on understanding geography as a field of discipline.

In the May 1964 issue of the Journal of Geography, William D. Pattison presented a brief and excellent statement concerning the main themes in geography. His four traditions article has been quoted widely since then, and it has helped to reduce the problem of defining the broad scope of the discipline in one or two sentences which would be acceptable to and understood by the public, teachers, and professional geographers. An obvious difficulty of any brief definition is what is omitted by a summary statement. Instead of trying to produce a definition which would receive general agreement, Pattison suggested that we should consolidate the concepts and themes of geography into those few which have been persistent throughout the development of the discipline in the past century. Thus he identified geography’s four traditions: spatial, area studies, man-land, and earth science… Pattison’s four traditions are a happy compromise in learning scale between compiling a list of a dozen or more “main concepts” of geography and memorizing a frustrating single-sentence definition.

Academics who are close to their subject sometimes forget that the intellectual problems of defining a discipline are not unique to geography. Because of the “knowledge explosion” of the past few decades, many disciplines are in a state of flux as attempts are made to compartmentalize knowledge into convenient boxes for study purposes. Where are the lines between geology and physics or chemistry; has the linking zone become the field of geophysics? How can the boundaries of history be defined when it can deal with all events, over all time, in any area of the world? Do we know the people-concepts of sociologists and how they differ from those of psychologists? The rise of interdisciplinary studies in the universities is a reaction partly to a desire to remove academic boundaries and also to the difficulty of defining them. Students and teachers will always face the dilemma that knowledge is so vast that we must divide it in order to understand or master some part of it, yet all knowledge is related and we must try to understand the links and interactions. The arguments
are not new – neither for the specialists who face the impossible task of learning “all” about a part of knowledge, nor for the generalist who has the equally impossible task of trying to see the “whole.”

Despite the academic difficulties of defining fields of study or disciplines, there are thousands of geographers who feel that their point of view, their approach, their interests, their phenomena of study are somehow different from those of the sociologist, historian, or geologist. Geographers have a long tradition which tells us what we study, how we study, and why we study…

Pattison said that throughout its modern history geography has dealt with at least four central themes. We recognize that all geographical work need not be confined by these themes but that one or more of them is usually included in most geographical work. It may be useful to discuss these traditions again and to assess them in terms of some recent trends.

**THE SPATIAL TRADITION.** If a discipline can be condensed into one word (which is perhaps less difficult than one sentence!), one might agree that geology is rocks, botany is plants, history is time, sociology is people, and geography is place. Geographers have always been concerned with the attributes of place – its location, position, direction, and distance – and aspects of the form and movements related to these attributes. Part of the spatial tradition of geography is concerned with the distribution of phenomena. But this is not to say that geography is concerned only with the areal or spatial arrangement of phenomena; any phenomenon which is large enough to be “seen” has a distribution of some type, and geography should not make the inclusive claim of studying all phenomena. A definition of geography as “the science of distributions” is not very helpful. Other disciplines are interested in the distribution of, for example, rocks, plants, and ethnic groups; we should be pleased that they are concerned with distributions instead of claiming that such study is the preserve solely of geography.

Geometry, measurement, and movement have been among our concerns in geographical description and explanation. Quantification is not new in geography; the use and understanding of measurement have always required varying amounts of mathematics in geographical work. Pattison reminded us that the concepts of location and measurement are of equal concern to the grade school teacher dealing with ideas of direction or scale and to the research geographer working on central place theory or seeking geometric laws for patterns of dispersal or concentration.

Using new computing tools and better training in mathematics, geographers analyzed the spatial arrangements of cities, land uses, beach pebbles, shopping centers, etc. As part of the attempt to make geography “scientific” when science was all-powerful in the mid-1960s, great amounts of data were analyzed in order to find models, laws, or patterns. The vast amount of evidence that could be collected, processed, and analyzed permitted more exact knowledge of areal distributions and their relationships, compared with the “fuzzy generalizations” and intuitive correlations of earlier years. Unfortunately, some of these geographers became “technicians” more interested in their methods than with the historic concern of geography for generalization or synthesis of elements in the world about them.

One of the new trends in geography, found also in the other traditions, is the psychological concept, perception. The question is not simply where something is located, but where someone thinks it is located. A growing literature on students’ “mental maps” indicates that the public’s concepts of spatial matters may be quite different from those of the trained
geographer. In the spatial tradition, it is almost taken for granted that the geographer knows and uses the concepts of scale, direction, and distance and understands how to interpret these concepts on maps; there is increasing evidence that many people do not perceive these spatial concepts as geographers do. If computer maps can show that there is order in the world’s spatial systems, can our brains comprehend this order?

A development which concerns me is that in the past decade the word space has taken on a new meaning to students and the public; it refers to outer space, to the moon and planets and “space ships.” I believe that we are not communicating well with these students and the public when we speak of “spatial” matters in referring to something on the earth. We may have already lost the word spatial because our use of it as place, space, or area is no longer the same as that of the majority of other people. If that linguistic battle is about lost, I suggest that we save the tradition and all that it means to geography by going back to the good geographical word areal. Discussing an “areal distribution” or an “areal pattern” may be more explanatory than trying to define the word spatial to a new generation which now uses that word differently. Because a new term, areal tradition, might be confused with the area studies tradition, can we change the name of the spatial tradition to the location-distribution tradition?

AREA STUDIES TRADITION. Geography has always been concerned with the study of places or areas. The geographer’s methodology is to divide the world into smaller areas for convenience of study; a historian uses a similar method to divide the flow of world history into eras or periods that are defined with a particular purpose. Geographers believe there is a hierarchy of areas, small to large and vice versa, which have functional connections. One of the simplest concepts in geography, and yet apparently a difficult one for some to understand, is that areas (places) can be of any size and must be defined.

To a geographer, places or areas contain a variety of phenomena. Area specialists have the task of selecting information; this choice is subjective, depending on the purpose of the study and the background and interests of the geographer. Some have criticized this subjective aspect of area studies, noting that it is contrary to the exactness and measurement of the spatial tradition. For those who so wish, area studies may be considered an art and the spatial tradition a science.

Throughout our history, geographers have attempted to know as much about an area or a region as possible and to select the dominant features of the area which would define its character. At its worst, and too often in the school systems, area studies (often called regional geography) became a listing of miscellaneous, unrelated information about a place – a deadly, dull memorization of facts.

Within the area studies tradition some geographers selected information which permitted the study of landscapes. These geographers were interested in the varying ways that man arranged his fields, roads, houses, industries, etc. in differing degrees of harmony with the local environment. Such work had to be based on field study, an integral part of the area studies tradition... Many geographers achieved personal satisfaction from classifying, comparing, analyzing, and explaining the variety of landscapes in the world or some part of it. To many of the general public and in much of the education system, geographers are still considered the persons who best understand the characteristics of places, areas, and regions.

Most professional geographers, however, now prefer to call themselves topical (or systematic) specialists such as geomorphologists, economic geographers, etc. and no longer
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wish to accept the public image of being area specialists... Areas may also be studied by linguists, historians, anthropologists, and members of other disciplines, and it was sometimes difficult to define what a geographer’s contribution should or could be in a team approach to area study courses. Sometimes the geographer’s role was to supply the facts about the physical environment of the region.

If area studies are declining, is it because most of our graduate schools are concentrating on producing topical specialists and the area in which the activity takes place is secondary to the theory of a process? One must question how some geomorphologists differ from geologists, how the interests of some economic geographers differ from those of economists, or how the questions studied by some sociologists differ from those of social geographers. Although the boundaries between disciplines are difficult to define, many geographers still believe that the characteristic that defines geography is its prime concern with particular areas.

Has the emergence of “regional science,” often led by regional economists, been the result of the neglect of regional research and the lack of application of regional concepts by geographers? The new language of systems theory can make sense to older geographers if one replaces the word system with functional region. Do the areal interconnections, flows, and interactions which geographers study within a region sound more sophisticated if one calls them a system? Perhaps the most encouraging development is that many of us have overlooked a change in scale in area studies. The most popular courses and much of the research in modern geography is in and about cities; the variety of topics in urban studies and their areal problems are quite similar to the work of regional geographers on large agricultural regions in earlier decades. In the words of one of my students, “regional geography [area studies] isn’t dead; it is now called urban geography.”

The Man-Land Tradition. This theme has been persistent through several centuries of geographical work. In it the term land is defined in its broadest sense, meaning the earth or the total physical environment. Throughout our history, geographers have been concerned with probing the relationships between man and his physical environment; numerous methodological and philosophical arguments have arisen from attempts to define the degree of relationship or interaction between man and the land.

Early in this century, in several parts of the world, many geographers found examples, which in turn led to generalizations, of how the distribution, activities, and even social character of man were controlled or deeply influenced by the physical environment in which he lived. This philosophy led some geographers into a detour along the road of geographical development which was called determinism or environmentalism... Similarly, this man-land tradition was probably strongest in the classrooms of our school systems. Many students think of geography as that subject which makes man aware of the elements of the earth around him.

In the past decade, the pendulum has swung to another extreme, with the emphasis on man rather than land. Now many young geographers, and particularly the students in our geography classrooms, are deeply concerned with man’s impact or influence upon his environment. No longer do students think about how the environment controls man’s activities; they are worried about how man is destroying his environment. As is too often the case in the media, the middle view of man-land relationships is lost. There may now be just as many extreme, enthusiastic, ill-informed “eco-freaks” who want to protect the environment for no use
as there formerly were serious prophets of doom who warned that people would be confined
only to certain places on the earth because of the inhospitable environments elsewhere.

Much of the popularity of the “new” discipline of ecology is related to its genuine
concern about the relationships between organisms and their environment – a concept that is not
new to geographers. That many students believe ecological concepts are new and relevant
indicates that geographers have neglected the appeal of the man-land tradition, perhaps because
of the past extremes of environmentalism.

As geography developed closer contact with psychology in recent years, we realized that
the critical element in man-land relationships is really man’s mind, and that we know little about
it. Our questions are not about what the environment is, but what man believes or perceives it to
be. A new group composed of behavioral geographers is asking how man reacts to, or behaves
in, his physical and social environment. We are coming to realize how little we know
specifically about man’s way of thinking about, and his perception of, the natural environment
in which he lives.

We have similar problems in dealing with the “land” part of the relationship… Many
geographers who called themselves human, cultural, social, or urban geographers studied man
with little reference to the physical environment in which he lived. Whereas at one time the
word environment seldom needed an adjective for geographers – it meant the component parts
of the physical earth – new geographers discuss man’s social, political, or urban (that is, man-
made) environments. Man no longer lives in one environment, the land, he lives in many.

How many geographers are capable of understanding the land as the total physical
environment? Some physical geographers study processes interacting among elements in the
physical environment and others focus their attention on only certain elements (e.g., landforms,
climate, soil, etc.). It is doubtful that many persons can really perceive the totality of the
physical environment.

That man works with, adapts to, uses, or abuses his environment are pertinent concepts.
Undoubtedly man-land relationships exist and geographers have been interested in trying to
understand them for many decades. But when we realize how little we know about the “man”
part of the relationship, and how little we understand about the totality of the “land,” we should
be questioning the validity of some conclusions concerning the relationship. The answer may
be to do better and more accurate work in the man-land tradition rather than studying man
floating in space with no earthly roots or studying earth processes without the complication of
man’s interference.

THE EARTH SCIENCE TRADITION. By narrow definition, geographers are persons who
are interested in geos (“the earth”). Geography is the word of Greek origin which meant “to
write about the earth.” In the last century in Europe and in the early part of this century in the
United States, many geologists developed a greater interest in the surface of the earth than in its
underground rock structure and became “geographers.” These persons and others found
satisfaction in studying how landforms, drainage, climate, vegetation, and soils interacted in
particular areas and how this total physical environment varied from place to place around the
world. In time, many physical geographers became more concerned with the processes involved
within the elements of the environment and less interested in the areas where the processes were
located. Some physical geographers preferred to leave man out of the study of process, but as
population densities increased throughout the world, this omission became more difficult and
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often impractical. As noted in the preceding section, the earth science tradition can merge into the man-land tradition depending upon the degree of omission of, or emphasis on, man.

Some geographers worried that the “geo” had gone out of geography. This decline in the United States was not characteristic of geography in most of the rest of the world, however. In Europe, the Soviet Union, Britain, and Canada, physical geography remained a strong component of geographical education and training. In these places and elsewhere, geographers still believed that one of their purposes was to try to understand and explain “the earth as the home of man.” To many of the general public, geographers are still the persons who are expected to know the facts about landforms, climate, etc. of any part of the world.

To some geographers, earth science (physical geography) is becoming more attractive because it deals with the “real” world; it is more “scientific” and exact than the “fuzzy generalizations” of the human and cultural geographers… Geologists and ecologists are moving in to fill the space vacated by geographers. Specialization continues even within physical geography, as in other disciplines, and we produce geomorphologists, climatologists, biogeographers, etc. rather than “earth scientists.” Of the many disciplines now interested in the physical environment, properly trained physical geographers should come closer than most to understanding and finding solutions to problems associated with the interrelated processes of man’s earth.

CONCLUSION. The four traditions are a useful framework for discussion of the content and purposes of geography as a discipline. Undoubtedly they will not satisfy all geographers. Some will note the omission of comments on the time element or historical geography. Also neglected are cartography and maps, the traditional tools of geographers. Some can say that our discipline lacks unity and seems to be divided into smaller sub-disciplines. In fact, few geographers are left who do not use an adjective in front of the word to define their work and interests. If we are to remain a discipline, we need to agree that there are some common themes and purposes in our work. Despite the changes, trends, and narrowing focus of interests in geography, the four traditions seem to provide an effective structure for describing the philosophy of our discipline.

Although some geographical work may include all four (or more) of these traditions, it is likely that most will emphasize only one or two of them. If, however, a work has none of these themes or concepts, are we then justified in asking the annoying question, But is it geography? Although there have been excesses in the promotion, acceptance, and rejection of these traditions, they have remained central to most geographic investigations during the past century. It is relevant to study the development of geography in the past when one realizes that some of the new trends in the discipline are really the same worthy traditions in a slightly different form and with better tools.

For general education purposes, having a “simplified” identification of the elements basic to the study of geography may be adopted. These are: Location, Places, Regions, Human-Environment Interaction, and Movement. These themes would be explained in greater detail in Chapter 2.

Location: Where is it?
Place: What is it like?
Region: How are places similar or different?
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Movement: How do people, goods, and ideas move from one location to another?
Human-Environment Interaction: How do people relate to the physical environment?

Geography and its relation to other fields of discipline

Baylor University (Undated) points out that:
By its nature, geography is simultaneously global in perspective and multidisciplinary in approach—Global—most people understand that geography is concerned with a description of world regions…Because it deals with where and how people live, geography is rich in material that relates to international understanding, multi-cultural concerns, and environmental education… Multidisciplinary—the search for a thorough comprehension of the world in all its complexity requires that geographers gather data from a wide range of disciplines. The field integrates knowledge obtained from all these sources into a comprehensive picture of the planet.

Rosenberg (2006) notes that:
The science of geography is likely the oldest of all sciences. Exploration and the discovery of new places, new cultures, and new ideas have always been basic components of geography…Thus, geography is often called the "mother of all sciences" as studying other people and other places led to other scientific fields such as biology, anthropology, geology, mathematics, astronomy, [and] chemistry, among others.

Supporting the interrelation of geography to other sciences, the Department of Geography in the University of New Hampshire (2006) stressed that:
Geography is an integrating discipline, studying many aspects of the physical and cultural environment that are significant to understanding the character of areas or the spatial organization of the world… Because its integrating character establishes common areas of interest with many other fields of knowledge, geography provides an excellent core discipline for a liberal education.

To further elucidate, let us take a closer look at the so-called Continuum of Geography that Ritter (2006) has to present.

The Continuum of Geography
Ritter (2006) explains that:

Geography is a wide-ranging field that incorporates a number of diverse subject areas… Though the discipline can be broken down into two separate areas of study, physical geography and human geography, they are actually seen as blending with one another along a geographic continuum… As we move toward the center of the diagram we enter a zone where the subject matter of the two meet and intermingle. At the center is where the synthesis of the physical environment with the human/cultural environment occurs. In so doing we create a holistic view of earth systems. The study of environmental issues like global warming, response of humans to natural hazards, and deforestation requires this kind of synthesis or examination of relationships between society and the natural environment to understand them. Each sub-discipline draws on the knowledge provided by a variety of disciplines outside of geography. For instance, to study earth phenomena like the distribution of soils we have to draw on the expertise of such disciplines as soil science, botany, and climatology because soil properties are a function of vegetation, energy, and moisture. Geography, therefore, is a very integrative science.

**THINGS TO DO:**

1. Research on the fields related to and on the branches of geography. Familiarize yourself with the focus (of study) of each of the disciplines.

2. Answer these questions: What can geography teach us? How could we put geographic knowledge to practical use?