

1941

# Should geography be included in the high school curriculum?

James A. Briggs

*University of Massachusetts Amherst*

Follow this and additional works at: <https://scholarworks.umass.edu/theses>

---

Briggs, James A., "Should geography be included in the high school curriculum?" (1941). *Masters Theses 1911 - February 2014*. 2637.  
Retrieved from <https://scholarworks.umass.edu/theses/2637>

This thesis is brought to you for free and open access by ScholarWorks@UMass Amherst. It has been accepted for inclusion in Masters Theses 1911 - February 2014 by an authorized administrator of ScholarWorks@UMass Amherst. For more information, please contact [scholarworks@library.umass.edu](mailto:scholarworks@library.umass.edu).



312066013297531

SHOULD GEOGRAPHY BE INCLUDED IN THE  
HIGH SCHOOL CURRICULUM?

---

BRIGGS - 1941

5234  
1941  
254

SHOULD GEOGRAPHY BE INCLUDED IN THE  
HIGH SCHOOL CURRICULUM?

278  
E  
1941

1941

By  
James A. Briggs

A problem submitted in partial fulfillment  
of requirements for the Degree of  
Master of Science

Massachusetts State College  
Amherst  
1941



TABLE OF CONTENTS

CHAPTER	PAGE
I INTRODUCTION. . . . .	1
II THE NATURE AND SCOPE OF GEOGRAPHY. . . . .	4
Definition. . . . .	5
Subject Matter. . . . .	6
Geographical Terms. . . . .	8
Biogeography . . . . .	8
Ecology . . . . .	8
Human Geography. . . . .	8
Ethnology . . . . .	9
Political Geography . . . . .	9
Commercial Geography . . . . .	9
Regional Geography . . . . .	9
Evolution of Geography in the United States . .	10
Sailor Geography . . . . .	10
Factual Geography . . . . .	11
Physiography . . , . . . . .	11
Human Geography. . . . .	12
Geography's Distinctive Field . . . . .	13
Modern Geography an European Contribution . . .	15
America Becomes Internationally Minded . . . .	16
Geography of the Present . . . . .	18
III GEOGRAPHY'S DISTINCTIVE CONTRIBUTION TO	
EDUCATION . . . . .	19
Educational Objectives . . . . .	20
The Present Status of Geography in Education	21

CHAPTER	PAGE
Geography's Distinctive Contribution . . . . .	24
Examples of Geographic Interpretations . . . . .	26
Geographic Interpretations of an Inter- national Scale . . . . .	28
Making Geography Teaching Effective . . . . .	33
 IV GEOGRAPHIC CONCEPTS IN SECONDARY SCHOOL	
EDUCATION . . . . .	34
Role of the Social Studies . . . . .	35
Neglect of Geography . . . . .	36
Five Geographic Concepts . . . . .	37
Concept of Ecological Relationships . . . . .	38
The Regional Concept . . . . .	40
The Conservation Concept . . . . .	42
The Concept of Landscape Morphology . . . . .	43
The Space Concept . . . . .	44
Conclusion . . . . .	45
 V GEOGRAPHIC KNOWLEDGE ESSENTIAL FOR AN UNDER- STANDING OF POPULATION DENSITIES, PATTERNS AND ACTIVITIES . . . . .	
Patterns of Occupance . . . . .	46
Major Features of Environment . . . . .	47
Examples of Population Shifts and Surface Modifications . . . . .	48
The Need for Geography in all Curricula . . . . .	49
	52

CHAPTER	PAGE
VI THE PLACE OF GEOGRAPHY IN AN ATTACK ON CRIT-	
ICAL PRESENT-DAY PROBLEMS . . . . .	54
Human Life on Earth a Continuity . . . . .	55
A World of Change . . . . .	55
Human Experience Conditioned by the Natural Environmental Setting . . . . .	56
Understanding of Natural Environmental Fac- tors as Related to Human Experience Gained Through Observation or a Study of Available Records . . . . .	58
The Relation of Geography to History . . . . .	59
The Relation of Geography to Political Science . . . . .	63
The Place of Geography in an Attack on Crit- ical Present-Day Problems . . . . .	64
VII CONCLUSIONS AND RECOMMENDATIONS . . . . .	75
Conclusions . . . . .	76
Recommendations . . . . .	79
BIBLIOGRAPHY . . . . .	81

## INTRODUCTION



## CHAPTER I

To prepare the youth of our country to be self-supporting, to participate intelligently in local and national affairs, and to be useful and honored members of society, are among the great aims of education.

The World War stimulated the reconstruction of our educational scheme, and in all parts of this country efforts are being made so to recast our courses of study that a school-education may be of greater value in the affairs of life.

In this work the secondary schools are being studied. This is very important because a large number of our young people do not extend their school life beyond the high school. This means that the studies selected for this four-year period should be chosen because of their actual value to the average individual, rather than because they prepare a minority to enter college.

That the future history of our country is to be inseparably connected with that of the rest of the world is now an assured fact. No longer can our national life be one of isolation, even if we so desired. To perform efficiently and justly our part in world and national affairs, we must know geography.

It is generally conceded that geography is one of the broadest of subjects, and that it cannot, in its deeper significance, be grasped by pupils in the elementary schools.

This means that geography should be taught in every secondary school, and in every institution of higher learning in the United States. This does not mean that geography has no place in the curriculum of the elementary school. The importance of that school as a foundation layer for later work in geography cannot be over-emphasized.

A consideration of the value of the study of geography to the individual must proceed from two points of view; first, the value of geography in the general training of the individual; second, the value of geography in the special training of the individual. It is with the first point of view that I am concerned in this paper. In the development of my subject, I shall discuss the following aspects of the topic: 1. The Nature and Scope of Modern Geography. 2. Geography's Distinctive Contribution to Education. 3. Geographic Concepts in Secondary School Education. 4. Geographical Knowledge is Essential for an Understanding of Population Densities, Patterns and Activities. 5. The Place of Geography in an Attack on Critical Present-Day Problems.

It is my hope that, through the discussion that follows, I can prove that the study of geography is indispensable in the preparation of our youth for intelligent participation in the social process.

THE NATURE AND SCOPE OF MODERN GEOGRAPHY

## CHAPTER II

### 1. Definition

The Encyclopaedia Britannica defines geography as "the exact and organized knowledge of the distribution of phenomena on the surface of the Earth. It deals with the form and motion of the planet so far as a knowledge of these is necessary for fixing positions on the surface and explaining the incidence of solar radiation, more fully with the forms of the lithosphere or stony crust of the Earth, the extent of the water envelope or hydrosphere, the movements of the water and of the all-surrounding atmosphere, the distribution of plants and animals and very fully with that of the human race, and with all the interactions and relationships between these distributions."<sup>1</sup>

In defining the term geography, Case and Bergsmark in their College Geography say: "A long range view of geography shows that it is a study concerned with earth and man. Drawing somewhat closer we see that it aims to make clear the relationships existing between the natural environments and the distribution and activities of men. Although it is therefore concerned with two fields of inquiry--environment and man--its center of interest pivots about the mutual relationship of the two."

Quoting further from Case and Bergsmark: "This study

1 Encyclopaedia Britannica, Vol. 10, p. 138, Fourteenth Edition.

of the adjustments of man to environment and the explanation of human activities as related to environmental factors have not always been the objectives of geographical study. In its old form, geography recorded the distribution of things but did not inquire into causes. The subject, therefore, could scarcely be classified as a science. Nevertheless, the early geographers recorded many interesting facts, which, sooner or later, inquiring minds sought to explain. The interpretation of the phenomena recorded by the geographer led scientists into the fields of meteorology, geology, ecology, sociology, and others of the natural and social sciences. Consequently, the claim has frequently been made that geography is the mother of sciences."<sup>2</sup>

This idea of geography as a study of the "relationships existing between natural environments and the activities and distribution of men" seems to be universally accepted by modern geographers and that is the connotation the term is to have in this study.

## 2. The Subject Matter of Geography

Classification and Content of Geography.--So complex a science demands the labor of many specialists in order to advance it by the separate study of its interdependent parts. There is a geographical aspect of all the sciences which are concerned with the earth and its phenomena and it follows that some knowledge of each of these sciences is required of

2 E. C. Case and D. R. Bergsmark, "College Geography," p. vii, New York, 1932

the geographer in dealing with his proper subject. Though one aspect of geography merges into and is interwoven with another, lines must be drawn to allow of a classification for practical purposes. Each division of geography draws its data from some source which is no longer viewed as essentially geographical but is known as one of the abstract or natural or human sciences, and on the other hand each division of geography is capable of practical applications in the arts or interests of civilized life. The degree of subdivision of the subject matter of geography varies according to the share of attention which each has received, but the main divisions, now recognized are four: mathematical, physical, biological and human.

Mathematical Geography.--This deals with dimensions, figure and movements of the earth. Astronomical geography is a name sometimes given to the determination of position on the earth's surface by reference to the heavenly bodies and navigation is a practical application. Mathematical geography has also to do with the phenomena of the tides and of terrestrial magnetism.

Physical Geography.--The words "physical geography" have often been loosely used as equivalent to Physiography or the description of all nature. More accurately, it is a description of the forms of the lithosphere and their present state of development and of the functions which these forms exercise in controlling the action of solar en-

ergy in the hydrosphere and atmosphere. Physical geography falls into three divisions all depending on the laws of geophysics, viz.--Geomorphology or treating of the forms of the lithosphere dependent in a special degree on geology; Oceanography or the conditions of the hydrosphere depending in a special manner on chemistry and physics; and Climatology or condition of the atmosphere with respect to the earth's surface, depending on meteorology.<sup>3</sup>

### 3. Geographical Terms

Biogeography takes account of the distribution of living organisms on the surface of the globe. As a matter of practical convenience the term is usually limited to the land surface, leaving the life in the sea to be treated as a subdivision of oceanography.

Ecology.--In the last thirty years biogeographers have devoted increasing attention to ecology which means the relation of organisms or groups of organisms to their environment, and as the factors of environment are very largely geographical the ecological as distinct from the floristic or faunistic distribution of plants and animals is now an object of active geographical research.

Human Geography.--This takes cognizance of the distribution of mankind and of human societies in relation to all the conditions of geographical environment, bearing the same relation to anthropology that biogeography does to

3 Encyclopaedia Britannica, ibid., p. 149

biology.

Ethnology considers the different races of mankind and their subdivisions with reference to the areas they inhabit, their languages, cultural development and religions.

Political Geography takes account of the relation of organized groups of people to the region they inhabit. In the case of nomadic tribes with no permanent tie to any particular portion of land, political geography hardly exists, but it becomes important as soon as people settle on some position favorable to their needs under control of chiefs or committees. Political geography has mainly to do with the boundaries and mode of government of countries. Historical geography may be taken as an introduction to political geography.

Commercial Geography.--This deals with production, transportation and exchange of useful commodities. It rests as largely on economics as political geography does on history. Primitive tribes living in a tropical forest afford the simplest example of what might truly be called economic geography or even human ecology, for depending only on wild fruits and the hunting of animals the savage is in harmony with the rest of nature and the power of environment is complete.

Regional Geography.--The attempt made in the foregoing sections to unravel the various threads interwoven in the fabric of geography is apt to spoil the pattern in the



reader's mind unless they are put together again in a concrete synthesis. For this reason the early teaching of geography should begin not with general principles but with the example of a familiar locality from which the world beyond may be opened out as it was opened to the early explorers, and gradually explained as it was explained by the early theorists who fitted facts together in logical order. The scope and bearing of geography can only be fully grasped by the systematic study of a definite region.<sup>4</sup>

#### 4. Evolution of Geography in the United States

Ever since the introduction of geography into the United States, it has been characterized by growth and alteration. A glimpse at its evolution is both informative and interesting.

Sailor geography grew up in New England in the days when Yankee skippers sailed and dominated the seven seas. It is but natural, therefore, that geographies written in New England should have "bristled" with the names of places, winds and ocean currents; of ports, harbors and capes. This brand of geography attempted to justify its existence by its claim to practicability. It was supposed to be a valuable "guide for travelers and traders." Sailor geography is now an outcast. Geographers everywhere join Professor J. Russell Smith of Columbia University, who cries: "I want a new declaration of independence. I want to be

4 Encyclopaedia Britannica, ibid., pp. 152-153

free from the New England sea captains whose ghosts still haunt some of the school geography texts and injure the reputation of geography."

Factual geography consisted of a collection of facts concerning the natural environment, animals, plants, races, products, and industries, without any correlation or unifying principle. While it possessed the skeleton of a highly valuable and fascinating subject, it failed to develop the idea of relationship, which is now the heart of the subject. Accordingly, it is little wonder that geography has few devotees among the adults of the present generation.

Physiography, the country's first scientific geography, was developed by geologists who were laboriously ferreting out obscurities in the history of the earth. It was while engaged in interpreting the origin of land forms that these men became cognizant of certain definite relationships existing between the natural environment and human beings. But since they approached the field from the physical side, they naturally emphasized that side. While they spoke of geography as dealing with "the relations between the earth and man," their writings failed to disclose such relationships. Moreover, these scientists were working from the known facts of physical environment to the less familiar phenomena of life by means of relationships formerly quite unknown. They were accordingly reversing the normal scientific method of research, for this was synthesis rather than analysis.

Furthermore, their definition of the subject included the relation of the natural environment to all the earth's inhabitants--plants and animals as well as man. The fields of animal and plant ecology are being developed not by geographers but by biologists, and properly so. Modern geography concerns itself only with the field of human ecology.

While physiography stimulated logical reasoning, created a strong love for the out-of-doors, and broadened the student's conception of time, it was not precisely what was wanted. At this juncture a demand arose that geography be humanized. This struck a responsive note among geographers everywhere. Slowly but unmistakably the pendulum began to move in the direction of human geography and has so continued.

Human geography is studied from two points of view. In one it is assumed that the natural environment exerts a control on the distribution, character and activities of man. Few modern geographers hold to the control concept. Proceeding from the natural environment to life responses, our pioneer geographers, who were nearly all "rebuilt geologists," found it comparatively easy to assign to environmental factors a determinative influence over man which many modern geographers feel is not justified by the facts. In the other viewpoint, no such assumption is made, and the subject is considered as human ecology or man's adjustment to his natural environment. The great major-

ity of American geographers support this latter point of view.<sup>5</sup>

### 5. Geography's Distinctive Field--Human Ecology

No sharp lines of cleavage separate the several branches of natural or of social science into water-tight compartments. And it would be most unfortunate if they did, for students should recognize the interdependence and the interrelationship of the various fields of knowledge (science) and not study each for its own sake. So intertwined and intermeshed have the several natural and social sciences become that they find borrowing of materials unavoidable. Each, however, calls to its aid and uses these common materials in its own way without a hint of overlapping. For example, the material iron may be studied by the geologist, metallurgist, engineer or economist, each of whom attaches a different significance to the same material. The geographer may also study iron, not for its own sake or interest, but as a factor of the natural environment to which mankind reacts economically, socially, and politically. Similarly, a mountain may be studied by the geographer as an element of Nature to which man adapts his life. Wheat is studied not as a plant, or an economic good, or an item of commerce, but as a piece of equipment possessed by man and used by him to master his environment; and so on, for thousands of other physical or biological items in Nature. Thus geography reveals itself to

5 C. L. White and G. T. Renner, "Geography: An Introduction to Human Ecology," pp. 4-5, New York, 1936

be an interpretation of the relation between the life of man and the elements, factors and forces of Nature; in brief, this is human ecology. It studies man's adjustments to the natural environment, the varied and peculiar ways in which he conforms or adapts his life, either wholly or in part, to physical or organic Nature.

In some areas, man's adjustments are simple and direct; in other areas, complex and indirect. Often his adjustments are influenced by non-environmental factors (law, religion, tradition, etc.). But wherever mankind has established relationships to the natural environment, those relationships are geography or human ecology. Man adjusts himself to his environment in a multitude of ways. His works and their relationships to the natural environment are apparently innumerable and, upon first inspection, appear seemingly without order or system. However, when carefully analyzed, his adjustments are seen to be orderly and systematic and may readily be classified into broad groups. They are, moreover, conditioned by principles in much the same way that the behavior of physical matter is governed by laws. It is the possession of these established and demonstrable ecological principles of relationship which gives modern geography the rank of a science.

When geography is thus considered as human ecology, it discharges a duty performed by no other science, physical or social; it then possesses "a unity and a point of view

unique among the sciences which deal with humanity." As a matter of fact, this relationship concept is the only justification for geography's existence; it is the only quality which the subject retains which has not already been acquired by other fields. Geography has been called by some, and properly so, a science of relationships in which facts of the natural sciences are linked with the facts of the social sciences.<sup>6</sup>

#### 6. Modern Geography Essentially an European Contribution

While Americans undoubtedly did more than the scholars of other countries to develop physical geography, they were slower to see the possibilities of human geography than the English, French and Germans. It seems logical, however, that European geographers should have been the founders of this branch of the subject. Their countries (save Russia) were small, densely populated, and unable to produce the necessary raw materials for their innumerable factories or food for their dense populations despite intensive and scientific agriculture. For instance, England supplies only a little more than one third of the food it consumes, based on value. It must import the rest from the Empire and from foreign countries. The seriousness of this situation was indelibly impressed upon the world during the Great War when the Germans attempted to starve Britain into submission by sinking with their submarines the boats which were transport-

6 C. L. White and G. T. Renner, *ibid.*, pp. 5-6

ing food and supplies to her. How nearly they succeeded the world will not soon forget. It was natural, then, that the various European nations should have become well acquainted with the world because of economic necessity.

But what of America? While Europeans were engaged in world conquest, Americans were strenuously developing their own resources and solving their internal problems. Since the country was historically young, sparsely peopled, climatically diverse, and rich in resources of soil, timber and minerals, its people could hardly avoid being introspective. This point may be illustrated by the following facts: In 1860 American ships carried approximately two thirds of our foreign commerce, but in 1890 they carried less than one tenth--a decline attributable to both economic and political causes, but the former were inherently geographical.<sup>7</sup>

#### 7. America Becomes Internationally Minded

In 1917 the United States became a party to the World War, and immediately its people began to think and talk in international terms. This continued with the signing of the Armistice, the Treaty of Versailles, the discussions concerning debts and the recognition of Russia, the Conference of Disarmament, the meetings of the League of Nations, the World Court, the conferences of the Pan-American countries, the Kellogg-Briand Treaty, the London Naval Conference, the Moratorium on debts and the failure of France, Belgium and

<sup>7</sup> C. L. White and G. T. Renner, *ibid.*, pp. 6-7

other countries to meet their interest payments.

Moreover, during the war period, the United States became the greatest trading nation on the face of the earth and, following the cessation of hostilities, worked tirelessly to maintain its leadership. As a matter of fact, the United States needs foreign markets more desparately now than at any time in its history, for the war accelerated production in all lines. The nation's very welfare depends upon its ability to dispose of the tremendous surpluses. It is patent that people who trade abroad must know the world and the people who inhabit it. One of the best ways to acquire this knowledge is from the study of geography.

Hand in hand with foreign trade as a factor in international friendship and understanding has gone international investment.

Science has made its most notable contributions to international relationship by successfully breaking down barriers of space and time--witness the steamship, the aeroplane, the dirigible, the wireless telephone, the trans-oceanic cable and radio. The world has shrunk remarkably in the last half century.

The chief barrier athwart the path of international friendship is ignorance of the world--of lands and their people. And here is one of geography's best opportunities to contribute to the welfare of humankind, for by studying the mutual relations between human beings everywhere and their



natural environment, we gain a sympathetic understanding of how and why our foreign neighbors live as they do.<sup>8</sup>

### 8. Geography of the Present

A cogent and apt criticism of much of our present education is that it is very much of the past. A student takes a course, and upon its completion, shelves it permanently. This is unfortunate; he should carry into later life (regardless of his vocation) a set of active intellectual interests, only the sparks of which could have been kindled in the high school and college. The worst kind of education is finished education. Possibly one reason for this deplorable situation is that so much of our education seems far removed and even detached from everyday life: to the immature student it does not smack of life at all.

But what of geography? What is its rating in this respect? The geo in its name indicates that it is very much a part of this earth upon which we are destined to spend our lives. Once the student understands what geography really is, he invariably likes it, providing, of course, it be taught by an instructor possessing knowledge, personality, and enthusiasm. He soon learns that his whole life is made richer: travel, the greatest of all educators, becomes more than mere sight-seeing; reading in all its phases takes on new meaning; even his daily work becomes more interesting and fascinating.<sup>9</sup>

9 C. L. White and G. T. Renner, *ibid.*, p. 8

GEOGRAPHY'S DISTINCTIVE CONTRIBUTION  
TO EDUCATION

### CHAPTER III

#### 1. Educational Objectives

Educational leaders may differ as to their definitions of education but there are some educational objectives which they hold in common. Outstanding among these are civic responsibility and social efficiency. According to Finney, "There is everywhere increasing discernment that preparation for citizenship and the other social responsibilities is the most vital objective of the schools of a democracy. Secondary students can well afford to devote at least one fourth of their time to subjects definitely aimed at this objective."<sup>10</sup>

It is with the part that geography plays as an aid in the realization of these objectives that this chapter is concerned. Dr. A. O. Thomas, a leader in the field of education and founder of the World Federation of Educational Associations says: "This new geography contains the essence of education more completely than any other subject. Aside from the mechanics of reading, if I were to select the one subject which should be taught to all the children of the world as a means of bringing about understanding and cooperation, I should choose the subject of geography, and this would be chosen with a view not only to the usefulness of the subject matter, the fascination of its study, but the cultural element as well. I know of no subject which combines the several elements which education

10 Ross L. Finney, "A Sociological Philosophy of Education," p. 285, New York, 1937

seeks to cultivate as the subject of the earth and its inhabitants, the geographic laws under which they live, how they are interrelated and how the different parts of the world help each other to live. It is the one live subject vibrating with the keenest interests imaginable."<sup>11</sup>

Finney seems to agree with this point of view. He says: "What the rising generation needs is a new philosophy of individual and social life; a new set of beliefs. And if this new philosophy is to equip them for all the relationships of modern life it must take its constituent facts from all the modern sciences that deal with human life: geography, biology, psychology, social psychology, anthropology, sociology, economics, political science, ethics, philosophy, and history." I believe that he purposely put geography at the head of the list. At least the following quotation from another section of his "A Sociological Philosophy of Education" suggests that the subject ranks very high in his opinion: "Geography is one of the most liberalizing of all studies. It roots down into all the natural sciences, and branches up into all the social sciences. Our neglect of geography, especially in our high schools, is a most unfortunate omission indeed."<sup>12</sup>

## 2. The Present Status of Geography in Education

In view of the opinions as to the importance of geography

11 Quoted from Geo. J. Miller, School and Society, April 18, 1936, p. 526

12 Ross L. Finney, *ibid.*, pp. 289-290 and 172

as expressed by the above educators, one would be justified in concluding that the subject occupies a very important place in our educational scheme. Unfortunately, such is not entirely the case. While the geographer, I am sure, would not want his subject to occupy a place of preference in the curriculum, he does feel that it should have equal treatment because of the definite contribution it can make in the preparation of our American youth for intelligent social participation.

A study of our present educational curriculum reveals that while in some cases geography is receiving adequate recognition, there are many others where it is entirely ignored or is given only superficial treatment. The elementary school and our colleges and universities seem to be giving it the place it deserves. In the case of the secondary school, however it is by no means receiving anywhere near the attention that it should. According to George L. Miller, "Geography is probably as well done, if not better done, in our elementary schools of to-day than are many other subjects in the school curriculum. There is also an increasingly large body of teachers who have had the training, or who are being trained, to do superior geography teaching. Turning to our universities and colleges, we find an excellent offering in the field of geography. Nearly every university and teachers' college in America and Europe is making an ever-increasing contribution to geographic knowledge and to geographic educa-

tion. A rapidly increasing number of men and women are going out of those institutions, aware of the bearing of geographic knowledge on human affairs. In contrast with the profound ignorance of simple geographical facts among our citizens in the past generation, we may look forward to a geographically informed body of citizens in the future, thanks to the universities and teachers' colleges. In many countries of the old world, ignorance of the geography of the world is considered as inexcusable as the ignorance of the finer things of literature, history, music or art."

Quoting further from Mr. Miller, "In the development of geography in this country a peculiar defect has arisen. In our educational procedure, a great gap occurs in our high schools. As it now stands, the young men and women who pass through our high schools go out into the world with practically no knowledge of the geography of the world in which they live, except that obtained as children in the elementary school. In this respect we are far behind European secondary schools. The great majority of our leaders in education and those who serve as school administrators came up through the same school system and have had no geography themselves since they were children in the grades. It is perfectly natural for them to think in terms of that body of subject-matter in which they had more training, and more recent training. Thus far, only a comparatively small number have grasped the significance of a geographical understanding, the significance

of a knowledge of the geography of the world as an important contribution to citizenship. Since leaders in education and school administrators are primarily responsible for the present situation, they must likewise assume the responsibility for denying our high-school boys and girls the opportunity to become acquainted with the natural world in which they live and in which they must make their way in the future. This situation, however, is not likely to be permanent. There are signs of progress to be observed. Educators are becoming increasingly "geography conscious". One not infrequently hears of small town high-schools with two and three sections of geography courses. In each, a well-trained teacher has been able to demonstrate the value of geographic knowledge. Here lies, then, one of the greatest opportunities in the field of American education. Cooperation between our university and college departments of geography on the one hand, and school administrators on the other, will solve this problem, and make it possible for students of high-school age to acquire some knowledge of the land in which they live and the world of nations with which they must deal."<sup>13</sup>

### 3. Geography's Distinctive Contribution

Considering the fact that geography has gained such a prominent place in the curriculum of the elementary school and that of the college and university, it seems reasonable

13 George J. Miller, *ibid.*, pp. 526-527

to assume that it must have something very definite to contribute to the field of education. If that assumption is correct, it is indeed unfortunate that the senior high-school lags behind by failing to give the subject the position it deserves in its curriculum. Perhaps the failure on the part of administrators to give due attention to the subject is because they still think of the subject as it was taught to them some thirty or forty years ago. Perhaps they are still unaware that geography is no longer concerned with the memorizing of unrelated facts. They do not seem to realize that geography has become humanized, that it, like practically every subject in the school curriculum, is constantly changing to meet changed conditions of modern life.

There is no essential difference between geography as a scientific study--a field of research--and its contribution to the field of education through its distinctive character. In fact, it is the product of that scientific research that we are continuously using as a means of general education. Knowledge, it must be remembered, is dead knowledge until it functions. Geography in education, on its physical side deals, as we have seen, with earth features, as a natural setting in which man lives--soil, surface, climate, forests, minerals, etc.; on its cultural side it deals with man's effort to utilize the materials of this earth environment, that is, interrelation. This involves his industry, his means of communication, the evolution of nations,



the influence of earth environment on man's thinking on social, economic and political problems, local, national and international. This distinctive character must never be lost sight of if geography is to make its contribution effective. The development of such understandings must always be the objective. The factual materials of geography, while important within themselves, are merely means to an end. They are not the end as geography is conceived today. As mere fact items, their value to human welfare is small, but as a means to better understanding of human relations, those materials become of tremendous significance in effective citizenship.

As a means of training a man to interpret correctly the interrelation of his activities to his earth environment, the distinctive character of geography makes a vital contribution to human welfare. It is undoubtedly along that line that geography will win its position as one element in the education of the future. If geography did nothing more than to acquaint a people with other lands and peoples of the world, however, it would be well worth while in the scheme of education.<sup>14</sup>

#### 4. Examples of Geographic Interpretation

Turning to human affairs in search of examples of the interrelation of man and earth environment, we find them on every hand. There is no doubt of the significance of a know-

14 George J. Miller, *ibid.*, pp. 527-528

ledge of the world's great food-producing regions and of their capacity to produce; of the world's great industrial areas and their ability to compete with each other and sustain their population; of the distribution within national boundaries of vital mineral resources and other raw materials such as iron, coal, petroleum, etc. Who can doubt the significance of the ability of many regions of the world to grow cotton and the effects that such production will have upon future cotton growing in our southern states? Agricultural land for the sustenance of a people; of minerals--especially coal, iron and petroleum for the development of manufacturing industries; the maintenance of commerce for the exchange of products, are so vital in the life of a modern nation that it seems almost trite to even mention them. Yet, obvious as they are, it is very common to find them completely ignored or brushed aside with a mere courteous gesture in the political, social and historical interpretations of people. The study of these and similar earth materials and man's efforts to develop and utilize them is distinctly geographical. Such knowledge would be an effective contribution to the whole field of general education, and geography makes this distinct contribution. It should always be kept in mind that the earth environment does not determine what man will do, but rather places a limit upon what he may do. Within those limits man may exercise his intelligence. The big problem which confronts him is, what is the best way in

which he may utilize those natural assets.<sup>15</sup>

##### 5. Geographic Interpretations on an International Scale

The Italian-Ethiopian situation previous to Italy's acquisition of Ethiopia provides an excellent example of an opportunity for geographic interpretation on an international scale. Without pretending to discuss the subject fully, a brief sketch will be sufficient to set forth its possibilities as educative material.

In the case of Italy we have a country with an area smaller than the land area of Minnesota and Wisconsin, on which more than forty-one millions of people live. This means a density of population of three hundred and forty to the square mile as compared with the above named states whose population is only forty to the square mile. Italy's population is increasing at the rate of more than a quarter of a million a year. The present regime does all it can to encourage the people to rear large families. Agriculture is highly intensive. It is not uncommon to see three or more crops being produced on the same piece of land at the same time without serious interference of one crop with another. About forty-five per cent. of the area is cultivated and only a very small portion of the remainder is suitable for agriculture. In regard to minerals and power, we find limited resources of iron ore and practically no coal. Other essential minerals are almost entirely lacking. About four-fifths of

15 Geo. J. Miller, *ibid.*, p. 528

the potential water power has already been developed. The result of such a situation is easy to see. The great mass of the Italian people exist on a very narrow margin between comfortable living and poverty. The great problem that confronts those who carry the responsibility for national welfare is, how to provide for a rapidly growing population living on agricultural land now densely populated and with very few other resources that may be developed for the maintenance of a population. There appear to be three possible solutions to the problem. First, decrease the rate of population growth. This is contrary to the policy of encouraging large families and must, therefore, be discarded. Second, encourage the people to migrate to other countries. To adopt this policy would result in the loss of the productive capacity of these people to their native land. Also, few other countries want the Italian immigrant. Third, territorial expansion into lands suitable for occupation by the Italian people. These, in brief, are the basic facts which motivated Italian policy and resulted in the invasion of Ethiopia.

Having arrived at the conclusion that they must provide new territory to which the excess population of Italy may migrate, those in authority were confronted with the problem of finding it. Looking about the world, they discovered that other countries had already appropriated nearly all the choice land available. Most of the colonial possessions

of Italy are of the arid and semi-arid type and are not capable of sustaining many people. There is, however, an independent country adjoining two of those African possessions. Being independent, it is at the mercy of any nation strong enough to take it. But is it worth taking? The answer to that question lies in the geography of that country. Again, a brief sketch will set forth the facts which will determine whether or not the country is suitable for Italian occupation.

The area of Ethiopia is greater than that of Minnesota, Wisconsin, Iowa, Illinois, Michigan and Indiana combined. Occupying this area is a sparse population, primitive in its development in comparison to modern nations. The native inhabitants have made relative little use of the natural resources of the country. It lies in a tropical region nearly surrounded by desert and semi-arid lands, but like an island in that land of aridity it rises by abrupt slopes in a great plateau to altitudes of ten and fifteen thousand feet. Its northern half is rugged and deeply dissected; the south less rugged. Its climate is of the tropical monsoon type, exceedingly hot and moist in the southwestern lowland areas, becoming more mild as one ascends the plateau, and it is on the plateau where most of the people live. The distinct rainy season from June to October brings seventy inches or more of rain in the far southwest to fifty inches at Addis Ababa and twenty inches or slightly more in the northern province of Tigre, adjoining Eritrea. As you ascend the

plateau you recognize three distinct climatic and vegetation zones. The first zone has an upper limit of some five to six thousand feet. In the southwest the climate is hot and moist. Here is a dense tropical forest with rubber, ebony and banana trees. On the higher part of this zone it is drier. The date palm thrives and the potentialities for coffee growing are great. Passing to the next higher zone up to an altitude of eight to nine thousand feet, is what might be described as a vine highland. Here is a temperate type of climate and conditions are healthful. Forests occupy much of the south with bamboos along the streams. Here also are the sycamore, juniper, olive, orange, fig and apricot trees. In addition, there are the vine and some cereals. There are vast areas of rich pasture land suitable for cattle and sheep. The last and highest zone has forests more of the bushy type of tree growth. Large areas of native grass lands are suitable for pasture, and temperate cereals, such as wheat and barley, may be grown up to twelve thousand feet altitude. Through these three zones, pasture conditions prevail so that undoubtedly thousands of head of live stock may be cared for. Agriculture is very primitive. Little use has been made of these natural resources. Numerous minerals are known, although the quantity and quality are not well known. These minerals include gold, platinum, potash, sulfur, copper, iron and coal. Only a few have been worked intensively. The land is therefore one of po-

tential, rather than of present, development. Climatic conditions are suitable for Italian occupancy.

With these facts before them, it is easy to see why Italian authorities decided that Ethiopia was the answer to their problem. They could mentally picture Italians bringing to that land the intensive agricultural methods of their home land. They could see that vast area producing huge quantities of fruit, cereals, meat, dairy products and all forms of tree and agricultural produce. They could see the minerals being utilized; four million horse power in water being developed to turn the wheels of factories; thousands of Italians making a home in the region and producing larger quantities of materials for consumption in Italy itself. They had no difficulty in rationalizing the situation to justify themselves in the act of aggression which they contemplated. The backwardness of the Ethiopian people, the rich and undeveloped natural resources, the state of savagry existing in some parts of the country, and the existence of slavery convinced them that Ethiopians as well as Italians would benefit by Italian occupancy of this territory.

Here then is the natural setting. Here, in brief, are the basal elements of earth environment as viewed from the Italian side and therein lies the great motive force involved in the Italian policy. The geographic foundation of the Italian-Ethiopian situation is beyond question. Its study offers an excellent opportunity to develop the power of geo-

graphic interpretation. There are, of course, numerous other facts that must enter a full consideration of the situation. Many of these facts offer other excellent opportunities for a practical application of geographic interpretation, as, the interest of Great Britain and France in the situation.<sup>16</sup>

#### 6. Making Geography Teaching Effective

There are a few basic principles that must be adhered to if geography is to function effectively in education.

First, all materials selected must be genuinely geographical. That is, they must deal with earth environment and the interrelations of man with that environment, as that is the way geography may make its contribution to general education. It is, of course legitimate to use non-geographical material when that material will contribute to a better understanding of the problems before the student.

Second, materials should be selected because they contribute to those understandings that are considered essential to effective citizenship. Since the geographical field is broad and good material is abundant there need be little trouble experienced in making the selection.

Third, the material selected to show human-earth-environment relations must be well within the comprehension of the student at a given age level.<sup>17</sup>

16 George J. Miller, *ibid.*, pp. 528-531

17 George J. Miller, *ibid.*, p. 531



GEOGRAPHIC CONCEPTS IN SECONDARY  
SCHOOL EDUCATION

## CHAPTER IV

### 1. The Role of the Social Sciences

In the present projects of economic planning, promotion of friendly trade and cooperation, and revision of our social and political institutions, a knowledge of the facts and principles of geography are indispensable; and unless our schools give our children the fundamental knowledge upon which they may specialize as they mature, the future is fraught with grave possibilities of disorder and confusion.<sup>18</sup>

Most educators agree that the task of creating an enlightened citizenry equipped with such fundamental knowledge, falls squarely upon the social sciences. The major function of the social sciences is the acquisition of accurate knowledge of, and informed insight into, man and society. The declared purpose of instruction in the social sciences is the transmission of such knowledge and insight, with the attendant skills and loyalties, to individuals composing society.<sup>19</sup> A program of this kind would seem adequate if it were not for the fact that, as far as the secondary school is concerned, it has contained almost no geography. This has been true both where the social sciences have been taught as separate subjects and where they have been presented as a unified or integrated study. As has been pointed out in the preceding chapter, this is probably due to the fact that cur-

<sup>18</sup> Education, 265, January, 1935

<sup>19</sup> Commission on the Social Studies, Am. Hist. Assn., "Conclusions and Recommendations," p. 7, New York, 1934

riculum makers still think of geography as it was taught to them thirty to forty years ago.

## 2. The Neglect of Geography

In the few instances where a real attempt has been made to incorporate geography into the social science program of the secondary school, the resultant course of study has usually failed to provide any real geographic values. This has probably been due to unsound theory in course of study making. It is usually assumed that a course of study in social science should be constructed by, first, setting up the objectives; second, by selecting the subject-matter in terms of these objectives; and third, developing generalizations from this subject-matter.

This is theoretically possible, but in practice it can work only when those concerned are familiar with all the several social studies. Where those who set up objectives or select the subject-matter are illiterate in one or more of them, there can usually result only a perpetuation of inadequacy. It is unquestionably owing to this fact that so much of the social science work in the high school lacks perspective and balance. A much more adequate procedure in course of study making is to have stated in concise fashion the specific concepts developed by each of the social studies. After these have been tabulated and sorted over, the objectives of a unified social science program can be properly formulated. The subject-matter should be selected and ar-

ranged so as to develop those concepts inherent in the individual component sciences, rather than to meet objectives hurriedly set up from "a priori" reasoning. Incidentally, when the concepts developed by geography are listed, one usually finds that they have not been incorporated in the course of study, but that their place has been filled by other things merely imputed to be geographic.<sup>20</sup>

### 5. Five Geographic Concepts

Geography is one of the seven social sciences, and shares with the other six the task of studying man and society. Each of them brings to bear its own special viewpoint upon roughly the same field of facts. In so doing, they discover very different things about human life. Geography in the main studies society with the aim of discovering what adjustments mankind has made to environment; that is, it aims to describe and explain the accommodations which man has made to area, situation and resources. This study of man's relation to his environment is human ecology pure and simple, and hence a geography which fails to make man the center of attention is not geography in the modern sense. Geography as a school subject has not yet wholly crystallized in its detail, but it has matured sufficiently to reveal that its educational contribution lies in the cultivation of five definite fundamental concepts, as follows:

1. The concept of ecological relationship.

20 T. Renner and E. Lorraine Conrad, School and Society, 47:1201, Jan. 1, 1938, p. 7.

2. The regional concept.
3. The conservation concept.
4. The concept of landscape morphology.
5. The space concept.

These five concepts are not of equal complexity, nor of equal value educationally, but secondary school education should provide them all in varying measure, or else face its deficiencies. If these concepts have any value it is reasonable to conclude that if geography in the social science program be slighted, then the citizen-in-the-making fails to develop them. If he does secure them later in life, they will almost invariably be rudimentary, distorted, and immature.<sup>21</sup>

The Concept of Ecological Relationship: The most important potential contribution of geography to the social science program is the idea that there are fundamental relationships existing between natural environments and the distribution and activities of man. Contrary to the notion so often fostered in the social studies class, "the activities and institutions of mankind...instead of being the inherent descriptive traits of society, are...merely external devices or forms adopted by man for adjusting himself to his natural environment."<sup>22</sup>

Many social students and idealists resent the impli-

21 T. Renner and E. Lorraine Conrad, *ibid.*, pp. 7-8

22 C. L. White and G. T. Renner, *ibid.*, p. 11

cation that cultures have such material bases. They say that to assume, for example, that coal has anything to do with the shaping and maintenance of art, religion, and so forth, is preposterous. But there is no escaping the observed fact that each type of culture specializes in some natural resources and depends upon those resources for its continuance. The more complex the culture, the greater the number of natural resources linked together, as coal, petroleum, iron, and copper in our culture. Thus every type of human culture is by its origin fitted into a local environment, yet by specialization adjusted not equally to the whole environmental complex, but to a primary and possibly a very few secondary natural resources.<sup>23</sup>

Man can no more be studied apart from the ground which he tills or the lands over which he travels or the sea over which he trades than the polar bear or desert cactus can be understood apart from its habitat. Man's relations to his environment are infinitely more complex than those of the most highly organized plant or animal. The investigation which they receive in the other social sciences is piecemeal and partial. Hence all these sciences, together with history, so far as history undertakes to explain the causes of events, fail to reach a satisfactory solution of their problems largely because the environmental factor which enters into them all, has not been analyzed. Man has been

23 Clark Wissler, Ecology, 5:4, 315-316. October, 1924

so noisy about the way he has "conquered nature," and nature has been so silent in her persistent influence over man, that the geographic factor in the equation of human development has been overlooked.<sup>24</sup>

These influences and relationships are not altogether obvious or simple matters. As Semple pointed out, "So complex are they that they constitute a legitimate and necessary object of special study." The obvious goal of such study is to lead the student to what is frequently called "thinking geographically." By this is meant chiefly the practice of thinking in terms of the relationships between man's activities and the natural environment, but there is also meant the habit of viewing all social phenomena against their areal setting or background.<sup>25</sup>

The Regional Concept: It is obvious that things do not occur separately upon the earth's surface. Investigation will reveal that they fall into natural groupings. Objects which exist together in the landscape exist in interrelation. They constitute a reality as a whole which is not expressed by the constituent parts separately. Area has form, structure and function and hence position in a system, and is subject to development, change and completion.<sup>26</sup>

24 E. C. Semple, "Influences of Geographic Environment," p. 2, New York, 1911

25 Richard Hartshorne, Social Education, p. 172, March, 1937

26 P. E. James, "An Outline of Geography," p. 51

Man, too, is a part of the landscape. He is part of the areal complex and he can not separate himself from it. The apparent separation of man from the earth in the great cities is a dangerous illusion. Even cities must stand on the ground and be supported by resources. Any interruption of the flow of traffic into the city quickly enough brings the urban dwellers face to face with their fundamental reliance on the land.<sup>27</sup>

Thus, natural groupings in the landscape involve both physical objects and the associated human activities and institutions. These natural groupings are the sum total of the separate elements. They possess definite patterns and take on distinctive character. This phenomenon, we are wont to call "regionalism."

The United States is actually a mosaic of several unlike regions. This is likewise true of the world itself on a much larger scale. Within the entire realm of social science, therefore, there are few valid generalizations which can be made for the United States as a whole. A statement regarding one region has almost no validity when applied to other regions. In view of this, regionalism and the regional concept afford the only significant method of social analysis. It is becoming generally realized that many practical problems in business and government can not be solved satisfactorily save in terms of regionalism. Sectionalism, which

27 Technical Committee on Regional Planning, Nat. Res. Com. "Regional Factors in National Planning and Development," pp. 138-139, Washington, D. C., 1935



is and always has been a disturbing factor in American political life, represents simply the regional breakdown of laws and policies. It can be avoided only by harnessing the regional concept in state and federal policy-making and program execution. In this connection, it is interesting to observe that the regional idea has become one of the principal bases in present-day city, state, and national planning.<sup>28</sup>

The Conservation Concept: Geography is, to a large extent, the study of man's use of natural resources. The other side of this coin is conservation. This latter consists of discovering where resource use is actually mis-use, and the formulating of programs for wise resource utilization.

The major facts regarding conservation have been known to geographers, economists, agronomists, and other scientists for seventy-five years or more. Conservation has been a major national issue for several years and the need for it has constituted a crisis for nearly a decade. So far, the high schools have done practically nothing with regard to this. Indeed, in all but a few instances they have ignored the matter entirely. One reason for this is that conservation is largely an abstraction educationally until it is made a part of a definite program of economic and regional geography.<sup>29</sup> If the concept of conservation must depend upon

28 L. W. Hoelscher, The Planners Journal, pp. 72-73, May-June, 1936

29 R. J. Preston, Bus. Educ. World, Service Booklet No. 8, p. 36, New York, 1937

geography as the vehicle by which it is to be presented to the high-school student, it follows that it does not become a part of the equipment of students in high schools which fail to include that subject in the curriculum.

The Concept of Landscape Morphology: The technique of observations of the landscape in which we live or move has been too much neglected in our curricula. Other subjects teach students to observe particular elements as trees, rocks, birds, and clouds; but only geography teaches to observe, comprehend, and retain the entire complex of the view, forests and fields, slopes, hilltops, and valleys, crops, factories, railroads, and homes.<sup>30</sup> Geography does not stop there. It develops the idea that there is a definite morphology of landscape, and that any landscape view is capable of analysis and scientific description. One can see only according to the light which is within him. If one is trained in geography the values of travel are greatly multiplied through the ability to interpret and describe the different landscapes encountered.

The necessity for this is not generally appreciated because people are so familiar with the details of their immediate surroundings that it seems as if any attempt to describe, classify, and interpret these familiar phenomena could lead only to an elaboration of the obvious; and sadly enough, in the hands of an untrained teacher, much that

30 R. Hartshorne, *ibid.*, p. 171

passes for geography becomes little more than this.<sup>31</sup> Dr. James also remarks that in most subjects the obvious things are the big things and that further study is necessary to reveal the minutiae, but that in geography the small nearby things are the obvious ones, while the larger phenomena escape the layman's notice because they are much bigger than he is. Thus the major patterns of things escape the lay observer altogether and even the generic importance of the small and often familiar phenomena is lost. Without geography, we are unable not only to classify but even to observe with anything approaching intelligence or completeness.

The Space Concept: Just as history cultivates the concept of time, geography promotes the space concept in the student's mind. It is true that paleontology and astronomy are better able to develop these two concepts but neither of these sciences are offered, except in a few cases, in the secondary school. The task of cultivating the time sense and the space sense, therefore, falls upon history and geography. History, fortunately, is offered in every high school and the time concept is taken care of. Because of the neglect of geography, however, many graduates of the high schools of our country fail to develop an adequate conception of space.

The space concept means more than the mere perception of earth form and size, planetary distance, direction and angular measurement, or even the extension of the outward

31 P. E. James, *ibid.*, pp. vii-viii

into cosmic or extra-territorial space. It is more than a knowledge of earth coordinates and of map form and scale. It means an appreciation and working knowledge of space relationships as environmental qualities--location, regional size and form, as well as an appreciation of proportional magnitude.<sup>32</sup>

#### 4. Conclusion

Those high schools in this country which include geography in their curricula make the acquisition of these five valuable concepts possible to the pupils who attend them. When geography is missing from the curriculum of a high school, the five major intellectual values which the concepts are capable of yielding are denied to the pupils who are enrolled in that particular high school. When a high school does decide to include geography in its program, the selection of subject-matter for the course should be made by using these concepts as guiding and limiting criteria.

32 E. C. Case and D. R. Bergsmark, *ibid.*, Chapter II

GEOGRAPHICAL KNOWLEDGE ESSENTIAL FOR AN UNDERSTANDING  
OF POPULATION DENSITIES, PATTERNS AND ACTIVITIES

## CHAPTER V

### 1. Patterns of Occupance

The human race, originating probably somewhere in south-eastern Asia, had to adapt itself to a great variety of environments. These have varied from the high, cold, bleak plateau of Tibet to the level, cool forested plain of the Baltic or the hot, steaming selvas of the Amazon. Under these differing conditions man's activities have varied in character. And as these have varied so have the "patterns of occupance" been changed. By "patterns of occupance" is meant the tangible, material, mappable expression on the earth's surface of man's utilization of the world and its resources. These mappable features of the landscape and their interpretation are the field of the geographer.

There are three main categories into which the pattern may be divided:

(1) The transportation and communication systems, including all trails, roads, railroads, airways, canals, sea routes, pipe lines, telephone and telegraph systems. To these should be added conveyances, boats, piers, airplanes, bridges, lighthouses, and all other structures that are an integral part of any route.

(2) The house pattern, including all structures from grass hut to Empire State Building, and these may be classified according to use into (a) residential, (b) commercial, (c) manufacturing, (d) governmental buildings, (e)

educational, (f) religious, (g) miscellaneous.

(3) The crop and field associations, including all types and kinds of fields with their associated fences, irrigation canals, drainage ditches, woodlots and pastures, together with contained animal life.

Even a cursory survey of the world will indicate that the nature of these patterns is strikingly different in different continents and countries. Further study will show that people with differing cultures produce differing patterns and that the patterns are dissimilar under unlike environments.

## 2. Major Features of Environment

The major features of the environment to which the different races of man have had to adapt themselves may be briefly stated as: (1) Position of the earth. (2) Weather and climate. (3) The configuration of the surface or relief. (4) Mineral and soil resources. (5) The vegetation covering. (6) The animal resources. (7) The drainage features. (8) Shoreline characteristics.

The complex of these environmental elements varies from place to place markedly and also from time to time. New inventions, as the steam engine or the internal combustion motor, make available what were hitherto almost static environmental resources; as, coal and petroleum. The development of these has given rise to pattern changes; railroads; pipe lines; factories; coal breakers; these have all been

introduced into the landscape, largely as the result of man's utilization of new sources of energy.

As man has acquired this new knowledge it has changed the relative usefulness of different portions of the earth's surface. Populations have not only increased with the new technical knowledge of the past two centuries, but they have spread and shifted and modified materially much of the surface of the earth in the process.

### 3. Examples of Population Shifts and Surface Modifications

England is a notable example of such a shift in population from the southeast of the island to Lancashire and Yorkshire as the exploitation of the coal seams became of increasing importance. The Rhur of Westphalia, the Rand of Africa and the Mesabi of Minnesota are other examples of such changes. In all these regions new industrial and commercial patterns of occupance have displaced earlier agricultural, pastoral or forest patterns. Dense urban agglomerations of varying types have largely taken the place of widely dispersed rural groupings. On the other hand, certain mining areas once thriving communities have, with exhaustion of the lodes or a fall in values, lost much or all of their population, as for example the "ghost towns" of Colorado and California or Kalgoorlie and Coolgardie in Western Australia.

A survey of the world discloses many areas which have



a value to man out of all proportion to their area, their soils or their mineral production. The Isthmus of Suez is an outstanding illustration. Barren sand dunes, scanty vegetation, a few shallow brackish lakes, and yet to-day by virtue essentially of its position as a link between the Red and Mediterranean Seas the eyes of the world are upon this isthmus and the canal cutting it.

The spread of agricultural and pastoral peoples is closely related to relief, climate, soil and to the natural vegetation. Most of the grains, fruits and vegetables used by man were domesticated long before the dawn of history, but recent centuries have seen a wide-spread distribution of many of them. The introduction of maize and the potato in Europe revolutionized the aspect of the agricultural patterns in many localities, especially in Ireland, Germany and the plains of Hungary. Furthermore, rapid transportation and modern refrigeration have markedly modified the use of tropical and subtropical lands. Nova Scotia consumes South African oranges in exchange for pulp and lumber products. Bananas from middle America compete with New York's own fruit and hence disturb or modify the local patterns of occupation. And in a few cases the introduction of new plants, either produced by artificial selection or by discovery, has opened up to settlement virgin territory or made possible the continuation in old regions of what had been well-established practices and patterns. Marquis

wheat in northwestern Canada and American grapevines in the phylloxera ravaged vineyards of France are examples in point.

In still another field of human activities is the pattern of occupance both a matter of increased technological knowledge and needs, but also a question of available resources. This is in the forest industries. Increasing demands during the past century for lumber, pulp, rubber, cabinet woods, gums, dyes, etc., have led to marked geographic changes. A thriving lumber industry has led to the growth of camps and cities; to the establishment of saw mills, pulp and paper mills; to the spread of the transportation net and to many allied changes. With the exhaustion of the forest, many parts of the United States have seen a reverse process; decrease in population and abandonment of railroads and factories.

Accompanying this evolution has gone a great modification of the earth's landscape. Forests have been removed and given over either to second growth timber--often strikingly different in species from the virgin forest--or to wasteland or brought under the plow. Problems of soil erosion, flood control and river navigation have become pressing with these changes. In the Tennessee Valley Authority the world is seeing a large-scale example of what may be termed conscious construction of landscape patterns in an area where the above mentioned problems are all acute. In the cotton belt of the United States, a region where cotton once

was king, we are to-day witnessing remarkable changes. The ravages of the boll weevil, the impoverishment of the soil because of the one-crop system, and the increased competition resulting from the development of other cotton regions as in Brazil and the Anglo-Egyptian Sudan have resulted in the displacement of cotton and the introduction of crops designed to check soil erosion, restore the fertility of the soil and provide more marketable surplusses. Areas once devoted to cotton now produce tree crops such as the pecan, tung, and yellow pine; and soil enriching crops such as the peanut, soybean and alfalfa.

#### 4. The Need for Geography in all Curricula

A general knowledge of the world's resources--their nature, value, distribution, amount and availability seems to be fundamental to an understanding of population densities, patterns and activities. To have this knowledge is to enable one to live more intelligently this life of ours. For the necessary information, the geographer has to go very often to other authorities; to the geologist, the agriculturist, the forester, or perhaps the economist and historian. But his is the task of assembling the data and properly depicting it graphically and on suitable maps and finally of analyzing and interpreting the deductions which may be reasonably drawn from such studies. This is geography's contribution to the solution of the problems involving man and his environment. This is the essence of the plea for emphasis-

ing geography in all curricula designed for the young people who are to be the citizens of tomorrow in an increasingly complex and internationally integrated world.<sup>33</sup>

33 Sidman P. Poole, School and Society, 49:1275, June 3, 1939, pp. 706-708

THE PLACE OF GEOGRAPHY IN AN ATTACK ON CRITICAL  
PRESENT-DAY PROBLEMS

## CHAPTER VI

### 1. Human Life on Earth a Continuity

The generation in which we live is just one small segment of that continuity which stretches back from the present into the remotest past, and forward, we hope, far into the future. Every person born into the world is not only a unit of the present-day segment, but also a unit of the whole continuity. Just as certain as one can not be born outside this continuity is the fact that he can not live apart from it. We are, whether we like it or not, a part of the same continuum that fostered such sub-units as Julius Caesar, Louis Pasteur, Savonarola, Lincoln and Jesus, and such contemporaries as Mahatma Ghandi, Winston Churchill, H. G. Wells, Adolph Hitler and Benity Mussolini. The collective experience of the human race is the experience of the human continuum.<sup>34</sup>

### 2. A World of Change

We live in a world of change, changes of both organic and inorganic forms. Too often, however, the human individual does not take this principle into account. He thinks and acts as if he lived in a static world of absolutes, in a world in which most relationships can be stated accurately and with a finality that leaves little or nothing more to be said or desired. One of the best lessons for each of us to learn is that the dynamic world in which we live most

34 E. E. Lackey, School and Society, Sept. 12, 1936, p. 329

of the relationships we recognize, state and depend upon are tentative only. Statements of nearly all so-called laws and generalizations need to be hedged about by qualifying words or phrases in order to leave room for the open-minded attitude.

A closed mind in a world of change is a tragedy. Not only does one with such an attitude toward life fail to progress, but, what is more, is likely to be a staunch disciple of reaction. Geography, rightly understood, is one of the best antidotes to the narrow-minded attitude toward life.<sup>35</sup>

### 3. Human Experience Conditioned by the Natural Environmental Setting

Orientation in space is a basic geographic factor. Distance from the equator or from the ocean has a marked influence on man's activities. Location is one of the basic elements of geography and has been so recognized for a long time. In fact, it is about the only element taken into consideration by most people when geography is mentioned even by many of the intellectually elite. But location is only one of the many factors of natural environment. Land forms exert a major influence on human interest and activities, and always have. The role played by mountains, plains, plateaus, rivers, valleys and passes in the drama of human relations can not be discounted. Soils as a factor

35 E. E. Lackey, *ibid.*, p. 329

in human activity and achievement must never be lost sight of if we are to interpret man's interests intelligently. Climate is so intimately associated with nearly everything man does and has been such a potent influence in history as well as geography that every one, it seems, should understand its role in the shaping of human events. Vegetation both native and cultivated, as a factor of environment is a vital influence in human affairs. So closely are plants associated with the necessities of life that human societies always must have taken them into consideration. Other factors of natural environment are important also, but the ones mentioned are and always have been of outstanding significance. It seems almost incredible that any one would attempt to interpret the interest, activities and achievements of any people either present or past without taking natural environmental factors into account. But the bringing of natural environmental factors to bear on the interpretation of human affairs is the very essence of geography. How, then, can it be omitted from the senior-high-school curriculum without doing violence to the intelligent consideration of human problems--present, past, and future? Nevertheless, whether rightfully or not the historian, the political scientist, the economist and the sociologist as a rule have given scant attention to the consideration of the natural environmental background of their respective fields of study. This has been left for the geographer, and up to



the present he has not been able to make the specialist in the social studies realize the value of the contribution geography has to make in understanding the continuity of human experience.<sup>36</sup>

4. Understanding of Natural Environmental Factors as Related to Human Experience Gained Through Observation or a Study of Available Records

Extensive first-hand experience relative to natural environment is vouchsafed to but few persons. Travel experience to most persons is extremely limited. Comparatively few people travel outside the home country, and perhaps fewer still have intimate first-hand knowledge of large portions of the homeland. Fortunate it is, then that we have a cumulative record touching human events and experience as well as extensive records of natural environmental factors. The United States Weather Bureau has for nearly one hundred years been keeping careful record of weather conditions in our country. The United States Geological Survey has spent time, energy and money mapping rock structure and topographic forms. The United States Bureau of Soils has good records of soils in different parts of the country. The Bureau of Land Economics has kept a record of crop production and land utilization. Out of the accum-

<sup>36</sup> E. E. Lackey, *ibid.*, p. 330

ulated records of these and other agencies data have been made available that help to build up understandings, essential in the interpretation of human affairs. These have and will play a large part in the intelligent appraisal of the problems of history, of conditions to-day and of critical problems that only the future can solve.

It is within the province of geography to make students in the senior high school intelligently aware of the part that natural environmental factors play in the drama of human affairs. In fact, it seems entirely necessary that this phase of human experience must be understood if accelerated progress is desired.<sup>37</sup>

##### 5. The Relation of Geography to History

In the study of history--political, economic or social--the natural environmental setting certainly deserves considerable attention. This seems evident when problems in the history of our own country are under consideration. If we consider as a major problem, "How have geographic conditions in New England been influential in its historic development?", the truth of this point of view becomes evident. To illustrate: Why did the New England colonists remain near the coast? The geography of the area played a large part in this phenomenon. The land was rugged, glaciation had left a poor soil, forests were dense and infested with hostile natives, the streams were too small for navigation and waterfalls and

37 E. E. Lackey, *ibid.*, p. 330

rapids prevented the reaching of the interior by even small boats. An investigation of these factors of natural environment indicate that there were good reasons for the early colonists remaining near the coast. Again, what geographical conditions were in part responsible for the unpopularity of slavery in New England? We need but to mention such factors as poor soils, unfavorable climate, industrial development and the ruggedness of the land. Here are two of any number of illustrations which could be used to show how vital is the part that geography plays in the historical development of a country.

A study of the correlation of the geography and history of the United States was recently made to discover, if possible, (1) what some of the landscape features of the country are that both historians and geographers think high-school students in the United States should know or learn, (2) how much of the geographic background of United States history high-school students actually do know before they begin their course in history, and (3) how much of it they learn during their course. Forty-eight landscape features, having both historic and geographic significance, were rated by twelve prominent historians and ten prominent geographers relative to their importance in a course in United States history in high school. The average rate of importance attached to each item as judged by the geographers and historians was computed and the results studied. The study revealed that

there is a high agreement both by geographers and historians as to the importance of the selected landscape features in the study of United States history in the high school. The average rating by historians for the forty-eight items is 63.4%, and the average by geographers is 65.2%. The small difference between the averages is remarkable. The product-moment coefficient of correlation is  $0.77 \pm 0.037$ . The correlation is sufficiently high and the probable error low enough to conclude with confidence that there is high agreement among historians and geographers as to the type of landscape features that should be emphasized in United States history in high school.

Out of one hundred exercises based on the forty-eight rated landscape items, sixty were selected for a test to be given to high school students. The judgements of three college teachers in history, three in geography and three in education were used in making the selection. The exercises were given as a preliminary test to seventy-seven students in three different classes, most of whom had taken a course in United States history in the high-school the preceding year. After making such modifications as was suggested by the preliminary tests, the exercises were given as a test to 4,764 high-school students in forty-three states. Of these high-school students 2,959 had just completed their course in United States history and 1,805 were expecting to study the subject the following year. The scores achieved were com-

puted and placed in table form for study. The formula used for computing the score was:  $S = R - \frac{W}{N - 1}$ . S indicates the score; R, the right answers; W, the wrong answers; and N, the number of choices. The table showed that the achievement of high school pupils is very low on what both historians and geographers designate as important. Pupils who have just finished their course in United States history achieved only 13.2%, whereas those who expect to take history next year scored 8.0%. The coefficient of correlation of the two groups is  $0.92 \pm 0.004$ . There are a number of factors involved in this high correlation, among which are: (a) little geography in the history course other than that learned in the lower grades, (b) geographic background not emphasized in history teaching, and (c) the test exercises may contain only certain materials that every student knows and other materials that no one knows. The difference in average achievement of the two groups of high school students is only 5.2%. This probably means that little attention is given in high-school courses in United States history to geographic backgrounds. The small gains may be credited to increased maturity, accretion from other fields of interest and from incidental review of geography studied in the lower grades.

The major conclusion to be made in connection with this study is that the landscape features which are considered significant in United States history by geographers and historians are not taught to high-school students. Several import-

ant implications emerge from the investigation which deserve critical attention and further study, among which are:

(1) The substantial agreement of historians and geographers as to the nature and importance of landscape features in the teaching and learning of United States history in the high school.

(2) The uniform and nearly equal but low achievement of high-school students in the knowledge of the geographic background of United States history, including those who have completed their course in United States history and those who are ready to begin their course next year.

(3) The complete absence of significant correlation between the achievement of high-school students in their knowledge of geographic features important in United States history, and what historians and geographers think they ought to know.

(4) The need for added emphasis on pertinent landscape features in the teaching of United States history.

(5) Improved methods and techniques of emphasizing the play of landscape phenomena on the writing and teaching of United States history.<sup>38</sup>

#### 6. The Relation of Geography to Political Science

In the field of political science the influence of the natural environmental background is plainly evident when the rise of the Populist Party of the Middle West is considered.

38 Earl E. Lackey, School and Society, Jan. 28, 1939, 49:1257, pp. 126-128

The vicissitudes of an environment to which the early settlers were not accustomed prepared them mentally for social reform. The restraints of tradition were outmoded by the unusual situation in which people found themselves. Geographical conditions of soil, climate, and location therefore were important factors in the Populist movement.

It is not strange at all that one finds many problems of history, political science, economics and sociology in the consideration of which geographic factors loom large.

#### 7. The Place of Geography in the Attack on Critical Present-Day Problems

A frequent criticism of the public schools to-day is that they are failing to give high-school students practice in finding and tackling critical problems of local, state, national or international concern in present-day living. In every community there are problems in which all the people are mutually interested. Perhaps certain highways in the community need improving, or perchance taxes are relatively higher than formerly on account of decreased production of crops or maybe there are possibilities for new enterprises of an industrial or commercial nature that the local community should be sponsoring. Teachers and pupils in the senior high school should be encouraged to find such problems and devise methods of attacking them. High-school students need practice in thinking about problems of this kind.

A large part of Nebraska is referred to as the Sandhills. This is a grazing area with a sparse population. One of the problems in which all the people of the state as well as those living in the sandhill area are interested is that of equalizing educational opportunities for their children, because the social and economic welfare of all the citizens of the state are involved.

Much of Nebraska land is used for growing wheat. All the citizens of the state as well as the wheat-growers themselves should share in the solving of the wheat-growers' problems, because taxes, transportation rates and cost of food are all involved. Would it not be well for every citizen of Nebraska to have an intelligent interest in many such problems? Should the teacher in the senior high school help her pupils to find problems of this kind and instruct them in methods of attack? I do not believe that many educators would hesitate to answer "yes."

A large amount of land in the United States that once was cultivated is now lying idle. Yet there is agitation in many quarters to reclaim cut-over land, drain swamp areas and irrigate dry lands. The welfare of every citizen of the country is involved in this problem. It is certainly one of our mutual concern. Should all the citizens in our democratic republic share in the attack on this situation or should it be left to experts, politicians and demagogues? A population schooled in finding the crucial problems of



the times, and educated in methods of concerted attack on their solution, should be able to manage such problems intelligently. If our democracy is to continue we must have an enlightened electorate. The schools in our country should encourage teachers and high-school students in finding and attacking problems of this kind.

The sugar-producers of the United States will never be able to produce more than a small percentage of the sugar consumed in our country. Yet sugar-producers of Java and Cuba must climb over our tariff walls in order to supply our needs. This matter concerns taxes, the food supply and the general welfare of every citizen of the United States. Yet there are determined efforts in some quarters to maintain a tariff wall, with all its implications for international discord and for inequalities in tax burden. This is a problem of international concern and our schools should give some attention to the training of their pupils in analyzing and solving them.

These four types of problems--local, state, national and international--vitally concern the welfare of every citizen of the country. They are ever-present and never solved. In a world in which the elements entering into nearly every problem are variables this must of necessity be true. The solution of most of our problems is only tentative--satisfactory perhaps for the present, but usually needing constant revision.

For the purposes of this discussion there are at least two important elements in the school situation. The first is the plastic modifiable human organism--the child--and the second is the ever-changing and partly controllable environment. Probably the best schools today are those that are recognizing the ever-changing nature of the environment in which the individual lives. And recognizing this, they understand that opportunity must be provided to develop abilities that will best enable the individual to continue to reconstruct his experience to fit into the rapidly changing scene in which we are living. To-day we are living in an industrial age that has come upon us so rapidly that we do not yet recognize what has happened to us. The patterns of thought of the agricultural age still dominate our thought and action in dealing with the new problems of the industrial age. The coming of farm machinery has enabled fewer farmers to produce an over-supply of wheat and corn. Yet, many farmers have such faith in old ways of thinking that they continue to emphasize vocational training, turning out large numbers of under-educated and under-trained workers, and aggravating an unhealthy situation that is already acute and fraught with danger. Our lessons in the old formulas of the agrarian order have been so well learned that we continue to have faith to believe that things will under such policies right themselves eventually. This is hardly to be expected. Unless our schools are adjusted to the new circumstance of

life our thinking will remain largely what it has been in the past. The school of the future must recognize that we learn what we practice and that youth must have practice in attacking problems that are on the move. Practice in re-solving the problems of the French Revolution or the geography of Ancient Greece or even the geography of the status quo of our own country, can not be depended upon to give high-school students ability in attacking the puzzling problems that are just ahead.

"Why is dairying an important industry in eastern Nebraska?" is recommended as a good geographic problem in the study of relationships. The solution can be worked out to a very satisfactory tentative conclusion. But more important, perhaps, than coming to a final conclusion in this problem should be a realization that the dairying problems of Nebraska will not stay solved, that new problems in the dairying business to which our old formulas may not apply are forever bobbing up. We must see to it that high-school students acquire power to find new problems and appropriate methods of attacking them. The best schools seek to develop this ability.

The lag of our public schools in this type of training is all too evident. Of course the students learn, and they learn as they always have, that is, by the "continuous reconstruction of experience." But the materials introduced by the school for reconstruction into the student's exper-

ience has been all too often dragged from the dead past, and consequently the reconstructed patterns of thought have turned out to be merely the old patterns handed down by authority.

The best schools, however, do not propose to discard the experience of the past in the educative process, they do not propose to part company with factual geography, they do not even propose to eliminate problems of geography that deal with the past or with the status quo, but they do propose introducing the critical problems of the present into the experience of high-school students so they may begin to reconstruct their patterns of thought with an ever-changing present taken into account.

The geography proposed for the senior high school therefore, should take several important principles of education into account. Among these are the following:

(1) the human organism is modifiable; (2) its modification comes largely through its reaction to environmental contacts; (3) it learns what it practices; (4) it learns by continuous reconstruction of experience, and (5) new patterns of thought are contingent upon the nature of the materials introduced into the reconstructive processes.

In each of these several principles, the science of education is as close an ally of geography as it is of any other division of human knowledge. In fact, when it is seen that so much stress is placed on environment by education

one wonders why geographers have not consciously capitalized upon these principles long ago.

One of our prominent educational psychologists has this to say about the nature of the human individual and the forces that play upon him: "By original nature man is a modifiable organism... and his immediate environment determines the type of modification that will be made... Some kinds of environment will affect or modify some individuals, while other kinds of environment are needed to modify other individuals. There is thus a continual interplay between the individual and the environment...In what follows we shall assume the limitations imposed upon the individual by original nature and emphasize merely the effect of the environment in causing changes."<sup>39</sup>

Of course, the environment of which the psychologist writes includes both the social and the natural, because both are involved in the modifications of the human organism. But the geographer is interested in the same natural environment and the same individual. The center of geographic study involves among other things human interests and activities as related to the natural environment.

The educational sociologist is just as much interested in the influence of environment on the development of man's social institutions as the educational psychologist is related to the development of the individual. The several prin-

39 Rudolph Pintner, "Educational Psychology," pp. 186-187, New York, 1930

principles of education previously stated relative to the development of the individual are applicable almost entirely to the development of social institutions.

So while the psychologist and the sociologist are interested primarily in the influence of all phases of the environment on the interests and activities of the individual and of social institutions, the geographer specializes on those interests and activities of man that have a definite relation to the natural environment. When all is said and done, education as the "continuous reconstruction of experience" aims to produce a socially efficient individual--one who can and will make an intelligent contribution in finding and attacking the crucial problems of his times.

Geography proposes to give high-school students practice in finding the significant problems of the present. Since they learn what they practice, we want the school to give them practice in finding significant present-day problems.

For example, here are a few typical problems to illustrate the point of view relative to the home area:

(1) In many communities brick and tile are used very extensively in construction work to-day. An organization with some money to invest is seeking a location for a manufacturing plant of this kind. What are the advantages and disadvantages of my community for an enterprise of this kind?

(2) What interest should the people of my community

have in the improvement of inland waterways?

(3) Should the people of my community be encouraged to enter more extensively into the dairying industry?

Many of the crucial problems of the times, of course, are not local. Some of them are sectional or regional in nature. For example:

(1) What can be done to prevent disastrous floods in the lower Mississippi Valley?

(2) What can be done in the great wheat-growing regions to give profitable employment to the people the whole year round?

(3) To what extent should the states of the Far West encourage manufacturing?

(4) Would it be desirable for the national government to assist New York in making the Erie Barge Canal large enough to accommodate ocean-going vessels?

The puzzling problems of peoples of other lands are a most fruitful field for geographic study. Nothing high-school students can do will more surely develop a broad, inclusive point of view in connection with inter-regional and international relations. Such problems are not hard to find. Here are a few samples which could easily be expanded into many:

(1) How may the resources of Mexico be developed to enable more of the people to share in the benefits derived from exploitation?

(2) Must Argentina continue to be a country of raw

materials, shipping in needed manufactured goods?

(3) How can the conditions for making a living in Sweden be improved, in order that the people will find it more and more desirable to remain in their home country?

(4) How may the people of New Zealand realize larger returns from their salubrious climate, their wonderful scenery and their marvelous natural wonders?

Not only will geography of this kind give senior-high-school students training in finding the type of problems here mentioned, but it will give practice in searching through the natural environment for significant factors in working them out. And since an individual learns what he practices, the senior high school should provide practice in novel as well as traditional methods of attack. Geography will give the high-school students practice in withholding judgement. Since this is a changing world in which we live--a world always on the move--they should have practice in avoiding snap judgement, because this is what an education should give them.

If high-school students are given practice in working on important problems of the present-day living they will soon learn that it is not possible to secure a final answer to all problems. That, in fact, problems of relationship where human items and natural environment items are involved usually do not call for a final and absolute answer, as do most of the problems of mathematics and many of those in the physical sciences.



Geography in the senior high school, therefore, will lend validity to the idea that problems will not stay solved and that most of the problems in which we are vitally interested are those that are continually in the solving. Since learning is the continuous reconstruction of experience, the critical elements of present-day living should be introduced into the reconstructed experience of senior-high-school students.<sup>40</sup>

40 E. E. Lackey, School and Society, Sept. 12, 1936, pp. 330-335

CONCLUSIONS AND RECOMMENDATIONS

## CHAPTER VII

### 1. Conclusions

It appears clear that if geography is properly taught by properly trained teachers, it has an individuality which enables it to make a distinctive contribution to education. Some of these contributions may be summarized as follows:

(1) It contributes a large body of geographical knowledge that functions in the daily lives of people. If this were its only contribution, it would be sufficient to justify its inclusion in the curriculum.

(2) It contributes to an understanding and appreciation of the efforts of human beings to utilize earth resources in an effort to live better--a vital contribution to effective citizenship and world peace.

(3) It contributes a geographical setting essential for a better understanding of the social studies, such as history, economics, sociology, political science, etc.

(4) It contributes an appreciation of the fact that the evolution of human society, whether sectional or national, has been conditioned by the earth environment in which that evolution took place. There can be no real understanding, appreciation or effective solution of world problems without recognition of the significance of earth environment in the evolution of human history.

(5) It should lead to an understanding of common human interests in the production of raw materials, their manufac-

ture and marketing; to an understanding of the significance of natural resources in the well-being of people and why those resources are a subject of international discussion.

(6) It should lead to a realization that the highest individual success, prosperity and happiness are dependent upon the existence of similar conditions among other individuals, whether this be within a given local group, within a country as a whole or between countries; in other words, a recognition of the rights of others and the substitution of cooperation for aggression.

(7) It should aid in the development of the desirable attitudes of respect, sympathy and understanding toward the peoples who inhabit the world. One cannot fail to find something to admire in any race or group. One cannot become acquainted with the problems of the other fellow without developing a sympathetic understanding and a tolerant attitude. It seems to me that most of the dislike of one group for another, in those cases where it does exist, must be due largely to the fact that neither group has become thoroughly acquainted with the other. It is a traditional thing to distrust strangers. Through geography the barriers of ignorance may be broken down and acquaintances made which should reveal many things which merit a wholesome respect and pave the way for mutual cooperation in the solution of the problems which vex the world to-day.

(8) It should give practice in the finding and solving

of present-day problems. At the same time it should develop the idea that there is no final solution to some problems and that it is dangerous to make snap conclusions. It is through geography that the student will learn that a solution for the problems of one section or region will be no solution at all for another.

(9) It makes possible the acquisition of the valuable concepts of ecological relationship, region, conservation, landscape morphology and space. These might not be acquired at all or acquired in a distorted form if geography is left out of the curriculum. If the highest possible development of the individual is to be realized, these concepts should be made available to the high-school student.

(10) Geography is, or ought to be, the most cultural subject in the curriculum because it gives the student insight into the nature of all those activities of man in his relation to the material world. In this sense, it is the broadest of all the subjects which may be offered.

(11) If one understands the steps by which a people have arrived at a certain state of culture, one comes almost invariably to sympathize with their condition. Democracy lies largely, not in a Utopian universal love for all peoples of the earth but in a realization of why one's neighbor, near or remote, is what he is. The democracy which exists among the people in any given part of the world is an outcome of their common realization of the conditions of

their life. Geography can make this realization possible and is, therefore, indispensable to the schools of democratic countries.

(12) As a means of training a man to interpret correctly the interrelation of his activities to his earth environment, the distinctive character of geography makes a vital contribution to human welfare.

While geography has, in general, been allotted the place it merits in our elementary schools and colleges, it is either entirely lacking or has received only superficial recognition in our senior high schools.

## 2. Recommendations

(1) Every secondary high school in the United States should provide for one or more courses in geography in its curriculum.

(2) If only one course may be included, it should not be limited to one semester as is the practice at present in most of the high schools which do offer it. A full year should be allotted to it. During the first semester there should be a review of the major concepts which were learned in the elementary schools and a study of the major problems of the United States. The second semester should be devoted largely to the problems of Canada and the Latin American countries. It is impossible to study these countries without going, to some extent, into the problems of the Eastern Hemisphere because of the interrelationships involved. In this incidental manner the problems of Europe, Asia, Africa

and Australia could be studied.

(3) Throughout the course the problems studied should be regional problems without regard to state or sectional boundary lines which in the main are artificial and not geographical. Attention, however, should be given to common problems which require regional cooperation in the finding of a proper solution. The teacher should, at all times, endeavor to develop an attitude of sympathetic understanding toward the peoples in regions whose problems require a different solution from that in which the student lives even though the solution of one regions problems may not prove beneficial to his region.

(4) If the curriculum makers can be induced to include more than one course in geography in the program, I suggest that other courses such as, "Geographic Backgrounds of European Life," or "Geographic Setting of International Relations" be added. As has already been pointed out, a consideration of the critical present-day problems of peoples in foreign lands serves to develop not only a discriminating attitude in second-school pupils but also a broad democratic sympathy.

(5) In selecting the subject-matter for a course in geography, the five concepts of ecological relationship, region, conservation, land morphology and space should be made the guiding and limiting criteria.

BIBLIOGRAPHY



BIBLIOGRAPHY

- Case, E. C. and Bergsmark, D. R., "College Geography,"  
New York, 1932.
- Commission on the Social Studies, American Historical Association,  
"Conclusions and Recommendations," New York, 1934.
- Encyclopaedia Britannica, Volume X, Fourteenth Edition.
- Finney, Ross L., "A Sociological Philosophy of Education,"  
New York, 1937.
- Hartshorne, Richard, Social Education, March, 1939.
- Hoelscher, L. W., The Planner's Journal, May-June, 1937.
- Lackey, E. E., School and Society, Sept. 12, 1936 and Jan.  
28, 1939.
- Miller, George L., School and Society, April 18, 1936.
- Pintner, Rudolph, "Educational Psychology," New York, 1930.
- Poole, Simon P., School and Society, June 3, 1939.
- Preston, R. J., Business Education World, Service Booklet  
No. 8, New York, 1937.
- Renner, T. and Conrad, E. Lorraine, School and Society, Jan.  
1, 1938.
- Semple, E. C., "The Influences of Geographic Environment,"  
New York, 1911.
- Technical Committee on Regional Planning, Natural Resource  
Committee, "Regional Factors in National Planning and  
Development," Washington, D. C. 1936.

White, C. L., and Renner, G. T., "Geography: An Introduction  
to Human Ecology," New York, 1936.

Wissler, Clark, Ecology, October, 1924.

Approved:

W. J. Welles

Rollin H. Barrett.

Date:

March 15, 1941



