# THE TEACHING OF GEOGRAPHY IN CANADIAN SCHOOLS

A Thesis

by

RHODES CLARKE OULTON

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# FOREWORD

The teaching of geography in Canadian universities and its application to public affairs at all levels of government have increased remarkably in the last decade. As Canadian scientists, economists and historians paid more and more attention to the geographical factor in the growth of the nation, courses of instruction in geography were introduced into the Arts curriculum. This began in Toronto in 1906 and then at the University of Montreal in 1910. The University of British Columbia, in the twenties, and McMaster and Western Ontario Universities, in the thirties, followed suit and the ground-work was laid for wartime and post-war expansion.

It has been said that "wars make geography". Certainly the wartime needs for geographical knowledge, as well as changes in the geographical organization of economy and policy throughout the world, sharpened the awareness of the value of the discipline. In most of the leading countries, geographers made an outstanding contribution both to the war effort and to the problems of postwar reconstruction which followed.

In Canada, this was recognized by the establishment of geography at the additional centres of Laval, McGill and Manitoba Universities and by the widespread use of geographers in municipal, provincial and federal agencies. Insofar

as geography helped to relate the factors of the physical environment with those of the human scene, and presented a picture of cities in their regional settings, of regions related to each other within Canada and of the ever widening significance of the country in the world, it offered a fruitful field of investigation and provided a much needed training.

A survey of the status of geography in Canadian universities was recently completed by Dr. L.D. Stamp but no comprehensive report exists on the teaching of geography in Canadian schools. It is the purpose of this thesis therefore, to record the findings of the study made of the general nature of geography as a science and of the pedagogical principles involved. Upon this is based the discussion of the teaching of geography, both past and present, in the schools of the provinces of Canada.

The first chapter deals with the nature of geography as a science and the art of teaching it. This involves the definition of what is called "modern geography", its aims and a consideration of the peculiar characteristics inherent in the subject itself. The popular methods or techniques of teaching geography are discussed with special attention given to the historical development and merits of the "regional concept".

This same chapter emphasizes the claim that geography is a science and that when properly taught

it emphasizes further, the importance of the teacher having a sound knowledge of the basic philosophy of geography.

Chapter II is a history of the science of geography. In this study, the great contributions that have been made to the science and its pedagogy are discussed. We are indebted, for the principles and methods that we have to-day, to the great scholars and thinkers of the past. The evolution of the subject is followed through from the Greek Period to the present century. Explorers, travellers, naturalists and psychologists as well as geographers and teachers are seen to have contributed to the growth of the subject as a professional discipline.

In Chapter III the discussion of the development of the teaching of geography in Canadian schools during the period 1840-1955, is based on the knowledge gained from the study made of the science and art of geography and the documents and writings of the scholars of the past.

Chapters IV and V entitled, "The Study of the Geography of Man and the Earth", and "The Study of Geography Technique" deal specifically with the failings of the present geography programmes of the various provinces. In conclusion, some recommendations are made for the improvement of Canadian school geography.

The writer is most appreciative of the helpful suggestions and additions to the bibliography made by the following gentlemen:

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# CHAPTER I

# THE SCIENCE AND ART OF GEOGRAPHY

# I

"It has often been suggested that the question of the nature of geography is of minor importance - that what is needed is simply for geographers to work. In a field in which the members who are officially recognized as "geographers" may, at a single meeting, read papers which to some of the hearers appear to belong in geology, climatology, soil science, economics, history or political science, it is particularly necessary that we know what our field* is, in order that we may hope to understand what its individual students are trying to do." (1)

"Geography is literally a 'writing about the earth' and as such its scope was formerly extremely wide. Until about three centuries ago geographers or cosmographers were counsellors whose advice was constantly sought by rulers and governments. As specialist studies such as geology and meteorology developed, especially after the foundation of the Royal Society in Britain under the patronage of King Charles II in 1660, they carved their spheres of interest out of the former all-embracing geography. In due course little seemed left to geography itself but a varied collection of arid facts of little apparent value. In the latter half of the 19th century, geography was almost non-existent in universities, whilst school text books comprised essential lists of capes, bays and islands, followed by lists of counties, county towns, and the rivers on which they are situated, and then by inevitable lists of countries and towns and what they are 'noted for'. This is as true in Canada as it was in Britain and there are many who

* Sphere of Activity or Operation

recall learning by heart the counties of Ontario and the county towns as their parents had learnt those in England. Unfortunately there is much geography still taught in schools not too far removed from this level and it is small wonder if there are some who are not yet convinced that geography has a place in university studies." (2)

Dr. L.D. Stamp provides us with a concise interpretation of the subject:- "Modern geography may be regarded as human ecology, seeking to trace and explain the lives and activities of man as influenced by the varied environments to be found in the world. It adopts an analytic method in attempting to separate the environmental factors: it attempts also a synthesis and adopts a synoptic view in trying to see the environmental complex as a whole."

In the analytical approach and the study of the natural environment it is necessary, says Dr. Stamp, to consider the following aspects:

a. position on the earth's surface, hence latitude, longitude, space relations - best studied on a globe but of necessity involving the reduction of the spherical surface to a plane. This is sometimes called 'mathematical geography'. Since position is fixed, man's fight is directed towards the conquest of distance by improvement of means of communication and transportation, but even the simple study of location brings into focus many problems of strategy and what military authorities call logistics;

b. the relief of the land - the form, disposition and origin of mountains, plateaus, plains, valleys, oceans,

seas, lakes, rivers - hence the use of the physical map as a basic tool. Again this is an environmental factor capable of little alteration by man's activities and so a markedly deterministic factor in limiting development;

c. the structure of the earth's crust and the disposition of minerals of economic interest. Here, and also in the study of the relief is where the geographer calls upon the geologist for help and where he learns to appreciate and evaluate geological evidence. Man cannot work a mineral deposit where ore does not already exist: another deterministic factor;

d. weather and climate studied especially on a world basis of major climatic regions and involving also some appreciation of meteorological studies, are basic to geographical work. The individual man's daily life - his clothing, his home construction - is constantly influenced by weather and climate; the activities of nations whether it be in development of agriculture or hydro-electric power are likewise limited. the fight against the climatic factors of the environment is evidenced by heating, air-conditioning, refrigeration, irrigation and in many other ways;

e. soil, determined partly by the character of surface rocks, partly by climate, obviously exercise a marked influence on the life of man and bring questions of land use into the complex picture;

f. the natural vegetation - cover of the land - the disposition of forests of different types, of grassland and desert - reflects the combined influence of the preceding

factors and gives an index not only to those factors but also to man's potential use of the land. So the geographer must be able to appreciate the concepts of the plant ecologist;

g. whilst the larger animals can be, and have been, largely removed or destroyed by the will of man, the distribution of the lesser plagues is still vitally important. The tsetse fly is still the real ruler of Africa, malaria still eliminates human settlers from vast areas of the earth's surface.

The study of the preceding factors of the environment constitute the realm of 'physical geography': as soon as we bring man into the picture we are in the realm of 'human geography'; his organization into nations and states and their interrelationships introduces 'political geography'; his activities in developing and using the resources of the earth are the sphere of 'economic geography'. The geographer who studies selected areas is concerned with 'regional geography'; if, as he should always do, he traces relationships from the past he is concerned with 'historical geography'. If he ventures to look at the implication of his studies as they may affect the future he is brought into the sphere of planning.

Some of the critics of geography may find in the preceding pages ample justification for their contention that geography is not a subject but a hotch-potch of fragments from other disciplines. They overlook the fact that no other discipline attempts to view the ecological relationships of man and his environment as a whole. Just as the plant ecolo-

gist cannot go far without being involved in geology, physiography, pedology, climatology, chemistry, physics and other sciences whose results he must use, so the geographer must learn to understand and handle the results obtained by many specialists. "It is, indeed, one of the great merits of geography as an academic subject that it is synoptic. Geography is a counterweight to specialization. Social progress must be by application of scientific progress to the life of man. Geography has the task of providing the logical orderly approach to the complex problem. Geography still remains a writing about the earth; a study of places, but with a clear over-all viewpoint." (3)

Hartshorne has pointed out that geography, like history, is so comprehensive in character, that the ideally complete geographer, like the ideally complete historian, would have to know all about every science that has to do with the world, both of nature and of man. The converse of this proposition, however, is that every student of a systematic science is somewhat at home in some part of geography. Furthermore, both geography and history endeavour to describe and interpret actual sections of reality as they exist, and in these sections they observe phenomena by methods that, in a general way, are available to the common man. Consequently geography, like history, is a field apparently open for layman to enter. Whereas the study of history, other than current history, at least requires the degree of learning sufficient to utilize the records of the past, geography may be studied by any one who has the opportunity to travel and the ability to describe what he sees.

Consequently, geography was in fact studied by laymen long before any organized subject of geography was constructed, and countless non-professional travellers since have contributed more or less useful data to its literature.

Geography and history are alike in that they are integrating sciences concerned with studying the world. There is, therefore, a universal and mutual relation between them, even though their bases of integration are in a sense opposite - geography in terms of earth spaces, history in terms of periods of time. Again, we can quote Hartshorne, "The interpretation of present geographic features requires some knowledge of their historical development; in this case history is the means to a geographic end. Likewise the interpretation of historical events requires some knowledge of their geographic background; in this case geography is the means to an historical end. Such combinations of the two opposite points of view are possible if the major emphasis is clearly and continuously maintained on one point of view." (4)

Geographers in the development of their subject, have successively stressed locations, descriptions, relationships, interpretations, and, on the horizon, readjustments. Many of the contributions, preceding the present century centered about the construction of maps, and the location of physical and cultural features. Gradually more factual material, primarily of a descriptive nature, was introduced. Map drawing relatively declined in importance. The pupil memorized many interesting facts concerning the earth and its people. Place geography enriched with factual details, made a deep impression

on the pupil. "Too frequently, however, the mastery of geographic material on a memoriter level, resulted in a mastery of word forms without an attendant vivid mental image of the place, product, or activity described. As long as geography involved primarily the location of places and interesting descriptions, there was little or no opportunity for problem discussions." (5)

When relationships between life forms and the physical environment became the core of geography, place geography came to hold a vital but subordinate position. Valuable information was assembled concerning the numerous diversified activities in which man engages in order that he may discover, refashion, select, and redistribute the materials of the earth to serve his wants and needs. The relationships were presented chiefly in the form of descriptions. How man lives with the help of mother earth was the dominating viewpoint. Geographic content was organized to describe the conditions imposed on man by nature and the reactions of man to the limitations imposed and the opportunities presented by nature.

"It was inevitable that the workers in this field should seek to find causes for the discovered dynamic relationships. Why gradually became increasingly interwoven with the where and the how. The discovery and the interpretation of the interacting relationships of man and nature have become the vital nucleus of modern geography." (6)

Geography is becoming increasingly a practical subject to help mould the world's future. No longer are geographers content merely to discover and explain prevailing

relationships. They are attempting to indicate how man may increase his fullness of living by a more effective utilization of the earth's resources.

Place geography and descriptive geography have not been eliminated, but serve a useful purpose as an interwoven part of the interpretative unit. Details take on a new meaning because they are of little value in isolation but of tremendous value when they are related to other details to unfold the meaning of a problem. Geographic facts intrinsically are of little value; geographic facts properly related are indispensable.

Geography is a peculiar subject in that it is not a pure physical science nor a pure social science. It is a connecting bridge between the physical and the social sciences. However, it is more than a mere bridge. Geography stresses human-physical relationships as comprehensive, integrating units. No other subject has this viewpoint for its nucleus. From the standpoint of the relationship nucleus, geography may be called a social-physical or a physical-social science. Some teachers stress the physical background more than the human activities and insist that geography is a physical science; other teachers stress the human activities and insist that geography is a social science. It is not surprising to find, in view of the emphasis that is being placed on a socialized curriculum, that many educators are inclined to stress the social approach to a study of geography and therefore consider geography a social science. This controversy will be discussed in detail in a later chapter.

"The tendency to-day is to stress relationships between

the environment and man from the very beginning. The term human geography, is coming to be used to express this new method of organization. "With the introduction of a socialized curriculum, the emphasis given to physical geography has decreased in some quarters." (7) In the organization of the content of human geography, the number and distribution of people are considered, the relationships between people and the physical background are noted, and the physical background, which helps to explain the relationships, is elaborated as needed.

There is general agreement that geography is a difficult subject to teach. Many handle the subject well and are enthusiastic about it, but they recognize that its teaching technique is not easily acquired. If there is general agreement that geography is badly taught and the subject frequently called the sick man of the curriculum, there is little uninimity of opinion as to the reason for unsatisfactory results. Divergent aims with no common understanding of what is being attempted, abstractions for which pupils have no background in experience, insufficient time, unsuitable textbooks, and incompetent teachers are the reasons most often given, though it is evident that several of these could be applied equally to other subjects.

Undoubtedly, indifferent results have been due to the failure of many teachers to understand the nature of geography. Truly, its content has elastic and elusive boundaries. It

is therefore important to know the aims and methods of teaching the subject.

S.E. Davis lists in his book statements of aim of geography from writers who have given the best formulations of their thought after rich geographical experience. (8)

(1) Geography is the interpretation of the earth's surface and its climate and their relation to life.

(2) Human geography may be defined as the study of the relation of geographical environment to human activities.

(3) Geography treats of the earth as the home of man.

(4) Geography is a description of the surface of the Earth as the Home of Man.

(5) Geography is the exact and organized knowledge of the distribution on the surface of the Earth, culminating in the explanation of the interactions of Man with his terrestial environment.

"Comparing these, it may be noted that in spite of variety, there is little of contradiction among such statements. In fact these typical definitions are strikingly alike..." (9)

In broad terms it is evident that geography concerns LAND and MAN. By means of geography the gap between the physical and human elements is bridged. No other subject has such powers of co-ordination. It is a study of human activities as related to environment. This relationship between man and his physical environment should be studied to discover how he works and lives in particular geographical areas, how his life and occupation are influenced by his environment and to what degree

he is able to control and adapt that environment to his liking.

It was characteristic of James Fairgrieve that he should constantly call attention to the need for all teachers of geography to possess a basic philosophy of their subject. Indeed, he stated flatly that the construction of a proper syllabus is quite impossible unless the teacher has a philosophy. Yet it is possible to find people teaching the subject who possess none of the basic grasp of its aims and methods that a philosophy implies. This arises inevitably from their failure to see the true character of geography and its status as a discipline. More basically it is the failure to understand the two major methods of organizing geographical knowledge, namely systematic geography and regional geography. Although the two methods exist and their relationship must be constantly maintained, it is geography as essentially a regional study that has brought new meaning to the subject. In the literature of geographic education, there is abundant evidence of the recognition of the regional approach as basic to school geography. Since this approach permeates the new outlook to geography an effort will be made in the following pages to review the growth of it with special reference to its development in school geography. This study will be followed by an investigation of other popular techniques of the art of teaching geography.

Even as far back as the ancient Greeks, geography was recognized as a distinct and separate body of knowledge.

Like other Greek sciences, it had hardly achieved the status of a discipline in the modern sense. In medieval times progress owed much to the Moslems, with their great achievements in mathematics and astronomy. Progress continued during the Renaissance and in this period for the first time geographers made reference to the new views of the universe developed by Copernicus and Galileo. Such advances in the natural sciences did a great deal to assist the growth of geography right down to the end of the eighteenth century. Nevertheless, it remained a mass of statistical and political information; as Dickinson and Howarth have said, the subject was still an encyclopedic, unsystematic description of countries. (10)

At this stage, it has been described as "a compendium of all the odd facts about odd people in odd places, altogether an odd subject". In a later chapter we shall see, in more detail, how, in the eighteenth century such pioneers as Ritter and Humboldt first tried to make a system out of description by co-ordinating different facts - such as those of geology and climate, for example. This led to the evolution of a sort of discipline, but one subject to the later evils of determinism. Later thinkers such as Davis in America and Penck in Germany saw geography as the meeting place of geology, climatology and biology. Still others saw it as a meeting place of history, economics and politics. These, and other influences were largely responsible for the fatal and artificial division of the subject into "physical" and "human" aspects. Such attempts at "regional" studies as were made usually involved artificial divisions, mostly political. Thus in France, the departments

had long been used as a basis of division.

Dissatisfaction with the various approaches cited here was evident as early as the eighteenth century. Thus, we are told, Buache, near the close of that century, began to abandon political divisions as the only basis of geographical description. Instead, he adopted river basins as one possible criterion of delimitation. (11) Such early efforts as these were inspired, says Roxby, "with the hope of distinguishing 'real' entities on the earth's surface which might enable us to see the true connection between different classes of geographic facts". (12) But regional geography as we understand it today was late in developing for several reasons. These included a lack of criteria to be used in delimiting areas. This is a problem which, of course, remains with us to this day. Still another difficulty was the discovery of a good method of description of human activities and their correlation with physical phenomena. Nevertheless, by the beginning of the present century, some of these problems were being overcome. The French geographers led the way. Vidal de la Blanche pointed out the need for detailed regional studies to elucidate the influence of the rich variety of factors - physical, historical, political and economic - which affect the present pattern of an area. He sought "to bring into relief the geographic factor" - not as explaining history, "but as a complex influence always to be kept in mind in the study of history". (13) But he always made clear that he was not a determinist.

The essence of Vidal's approach was that from detailed regional studies could be built up a synthesis of general and comparative studies wherein the causes and consequences of his various factors could be clarified. Thus, says Dr. Harrison-Church, Vidal "proceeded to direct geography away from a subsidiary and stultifying place in historical studies, and to direct attention to physical factors". Vidal always insisted that regional study must be based on fieldwork. Thus, his outlook helped to revolutionize not only the philosophy of the subject, but its whole practical approach. By successfully merging the historical and geological schools, the French geographers "achieved a regional synthesis unsurpassed elsewhere". (14) Demangeon, a famous associate of Vidal, observed that every region has its unique character "to which contribute the features of the soil, atmosphere, plants and man. The aim of all research consists of the analysis of these features (while) the aim of description is to synthesize them". Gallois, in one of the pioneering efforts, a regional division of the Paris Basin, chose climate, altitude and structure as delimiting factors. Climatic variations, he observed, occur over large areas, but structural variations occur in small areas, and give rise to distinct local contrasts of land form and vegetation. In his view, in defining small units, such as the sub-divisions of the Paris Basin, structure should be the main criterion. (15)

While the great French school was developing, German geography was also making rapid strides. Here, regional study was probably more specialized and less synthetic than in France.

Hettner was among the first to advocate a division of the world into its component natural regions on the basis of physical criteria. Thus he ignored political divisions and, for each continent, proposed a scheme beginning with large units and working down to smaller ones. German thinking played some part in the development of the ideas of Herbertson, who is the first great name in English regional geography. In 1904 he prepared a scheme of world regions based on climatic distributions. It is interesting to realize that Herbertson had in mind a system that would primarily meet the need for improved geography teaching. Thus he decries the teaching of subject matter by continents. (16) He felt that a new approach was wanted that would "cultivate in a higher degree the pupils' powers of comparison and judgment".

The main criteria used by Herbertson in working out his famous "natural regions" were configuration, climate and vegetation. He stressed that boundaries between his regions would seldom be well marked but would melt gradually into each other. He regarded his well-known climatic map as most important because "climate best summarizes the various influences acting on the surface". The vegetation map he looked upon as "a commentary upon and a summary of the climatic ones". Configuration he regarded as the least important factor, involved mainly "when minor forms are taken into consideration". To Herbertson there was, in all the regions belonging to one group, "a general similarity in the environment as a whole". Minor differences are not absent, but "are of less account than the broad general resemblances". (17) He realized that his

classification might be inadequate, but felt that "some such system of dividing the subject matter of geography for teaching purposes" must come about. This was the essence of Herbertson's contribution which must be regarded as of primary importance in the development of modern geography teaching. Naturally, he was not without his critics. Among the first to recognize the value of his new approach was the Mistress of Method at Oxford, who trained secondary school teachers. To her, the system gave geography the possibility of becoming a true school discipline. No longer would "political consideration of the narrowest kind" determine the method of geographic study.(18) On the other hand, some concern was expressed regarding whether the new system would enable pupils to gain a clear idea of the various countries of the world "and their general arrangement on the earth's surface". However, just as history had reconciled topical study and chronology, so it was hoped would geography solve an analogous problem.

In 1913, Herbertson suggested some revisions in his system which had by then been in use for nearly a decade. (19) This time, he added a few words concerning man's place. Natural regions exist whether man is part of them or not. In some regions, he has so profoundly altered the surface that "it is necessary to consider him and his works in any classification". As an example, he cites the fenlands of eastern England. While admitting that it might be possible and necessary to divide the world into regions according to human activities, this did not do away with the need for a division into natural regions. In

fact, Herbertson regarded natural regions as "an essential preliminary to any attempt to distinguish different regions socially."(20) Nor would it be sufficient to describe physical conditions first and then the historical development of an area. Any description would be incomplete "that does not consider both together at all stages..." Thus, in several ways, Herbertson anticipated the kind of synthesis that characterizes the best geography of today.

Dickinson and Howarth point out that Vidal established the method of regional description on a local basis, and Herbertson the concept of major regions on a world basis. (21) Later, the Germans interrelated the two schemes. Meanwhile in England, Unstead in 1916 suggested a synthetic method of regional delimitation, considering both human and physical elements. The former must often be considered equally with the latter. Geographic units should be determined as areas having common predominant characteristics. Moreover, instead of analysing the world into large regions, we must synthesize smaller areas, already delimited, into larger regions. Unstead expressed this concisely some years later in 1933 when he stated that geographers must identify small regions and combine these "into areas of higher and higher order until at last the major regions of the world are built up". (22) The choice of the small unit-areas (called "stows" by Unstead) may be arbitrary but they must be small enough for detailed scientific investigation, "and must exhibit characteristics which mark them off from the adjoining parts of the earth's surface and thus distinguish them as geographic entities". Unstead held the primary task of geography

to be that "of the investigation of the present constitution and functioning of regions, man being considered as one of the essential factors". Like Herbertson, Unstead was largely concerned with the value of the regional approach in teaching. Studies of unit areas ("stows") could be made by personal observation or with the help of large-scale maps. These studies could be combined with broader views of the larger regions, the unit-areas "being so chosen that the most important types of countries and peoples are represented". Here we can discern the concept of the "sample study" which is so vital a part of good geography teaching today.

Prof. P.M. Roxby has contributed an interesting discussion to the question of natural regions. (23) He considers that it is the comprehensive study of the region and of the inter-regional relations "which gives unity and distinctiveness to geographical investigation". He approves of Herbertson's general approaches but believes that the human element must always receive proper consideration. As a rule, a natural region will tend to develop the type of rural economy most appropriate to its particular soil and climatic conditions. In short, "a physical unit tends to become an economic unit". However, there are occasions when, for example, proximity to an urban market may determine a type of production opposed to that indicated by the physical conditions. Thus, dairy farming developed in southern Essex, England due to the proximity to a great market, even though the heavy London clay requires the importation of feeding stuffs for the cattle.

The work of Herbertson, Unstead, Roxby and others

have combined to produce a marked improvement in geography teaching. Before proceeding to consider this aspect, it may be well to refer to a few more general questions concerned in the regional approach. We have noted that such early problems as the selection of the proper criteria for regional delimitation still remain unsolved. Associated with this is the question of how far the modification of the physical environment should be considered in the delimitation of regions. Some American geographers have evolved so-called "human-use" regions. These are valuable but run the risk of underemphasizing or even ignoring the physical basis. Some might agree with Prof. Cumberland that "the delimitation of geographic regions is mainly a matter of convenience". (24) In his view, a region is no more than a device "for facilitating the description of an area". Prof. Gilbert would agree with this for to him a region is merely "a unit area of the earth's surface", and the unifying factor may be natural or human. He regards geography as "the art of recognizing and describing the personalities of regions". (25) Prof. Kimble, of McGill University fame, in another interesting contribution, is critical of all regional classifications so far attempted. (26) On the one hand, he seems to object to the fact that many criteria employed cannot be accurately measured; contrariwise, he implies that much time is wasted on theoretical discussions when there is a crying need for more geographical research on the systematic side. Kimble also emphasizes that no one set of criteria for regional delimitation is valid and that no regional division can do justice to all phenomena: "We can only secure a division with

the greatest possible number of advantages and the least possible number of disadvantages. It is far more easy to devise seemingly logical systems of classification than it is to produce from these systems patterns that have reality on the ground." (27)

More basic possibly are some of Bowman's observations. He observes that so far as regional synthesis goes, "geography is the only subject that provides it systematically". (28) However, it remains true, says Bowman, that no one has yet devised a commonly accepted regional map of the world. In any case, we are reminded that any possible map would not be permanent. So-called facts are not immutable, for even the physical world changes, albeit slowly. Bowman reminds all geography teachers that the chief defect of their subject is the incompleteness of its data. In gathering its data, geography must draw upon other sciences. This raises further problems of concern not only to the professional research geographer, but even to the humblest classroom practitioner. In drawing upon kindred sciences, geography must "weave the derived facts into the network of its regional framework." (29) In doing this, says J.W. Watson, geography must not become "merely an encyclopedia of the sciences". The geographer is interested in other disciplines "to the extent to which they can help him record the geographical distribution of things and explain them in relation to the total environment". Related disciplines are usually so specialized that someone must study the factors common to them. There are dangers in this, says Watson, but they can be minimized if geographers never ignore the physical

basis. Allied to this are the techniques of fieldwork and the map. Thus Watson declares that "that is not geography which cannot be mapped". This is the substance of Fairgrieve's advice to teachers and illustrates again the community of interest and spirit which the teacher of geography has, and must have, with the professional specialist.

In the preceding discussion a brief attempt has been made to consider the growth of the regional concept. By way of summary, it will be well to recapitulate some of the contributions that the regional approach has made, or should make to a sound philosophy of the subject. The regional concept has provided geography with a much-needed synthesis: in the classroom this is seen in the abolition of the old fallacious distinction between "physical geography" on the one hand and the miscellaneous collection of data that passed, on the other hand, for the other "branch" of the subject. Within this "branch" a major emphasis was given to political geography. The regional approach rejects political lines as suitable lines of division for the subject matter of geography. This is a further step forward. Not only has "capes and bays" geography mostly gone by the board, but the equally unsound deterministic outlook which superseded it is also now nearly dead. Within the regional concept, when properly taught, the physical basis takes its rightful place. It is worth reminding ourselves that possibly the overriding reason for the soundness of the regional approach in school geography is that it has become the characteristic mode of the professional geographer. In

short, teaching by the regional method inculcates in the child the geographic habit of thought which, in the words of the valuable UNESCO publication on the subject (30), when once acquired "will survive longer than a collection of names or facts crowded into the memory". Barker has pointed out elsewhere (31) that any subject, to have its full educational value must be so taught as to represent faithfully in the classroom "the spirit and character of the corresponding movement in the wider intellectual world". This means that school geography "must be the geography of geographers" - and not the mere learning of data and results. This implies a training in the geographer's characteristic "methods and principles and point of view".

In translating the theory into practice Fairgrieve believes that the school syllabus must cover the world and that the study must be regional.(32) But all regions should not (and indeed cannot) have equal emphasis. In teaching regionally, details and concrete instances, so sound educationally, must never be neglected. This is the danger in studying "the rest of the world (after the home region) in decreasing detail". This must <u>not</u> mean <u>increasing</u> generalization for then, says Fairgrieve, "we are merely getting back to the old geography which started with definitions". Fairgrieve's outlook implies discrimination in the selection of regions to be studied, even when we try "to cover the world".

To conclude this discussion on the regional approach it may be worthwhile to refer to a few important publications

that are concerned with general school geography.

The Geographical Association's pamphlet on "Geography in the Primary School" is of interest here. (33) It is worth noting that local and home geography are stressed throughout. This is indispensable in providing "the basis in experience from which all other geographical work proceeds". As far as life in other lands is concerned, it can best be made real to children "by means of vivid, detailed pictorial presentation of typical small unit areas". Even in the junior school, map-reading and map making can begin.

A similar publication deals with geography in the secondary school (34). Here the authors see the need for a dual approach: systematic which will be explained presently and regional. The former will give a world view, and the latter will give "that realistic impression of contrasted lands which so greatly broadens the child's outlook". Regional description should be in three stages the authors say: analysis; an examination of the causes and interactions of the elements analysed; synthesis. Something of each stage may be conveyed even to the lower forms in a grammar school. "Regional geography in school may be expected to present realistic pictures, to teach facts and to lay bare inter-relationships". The first of these may be the main object with less able children, "but the underlying analysis and a search for relationships will still guide the presentation".

The Scottish Education Department has issued a pamphlet on the subject of geography in the secondary schools

of that country. (35) Sample studies are advocated. In regional studies, the authors state, pupils must be made, as far as possible to understand that there are various criteria of regions; moreover, regions seldom have clear-cut boundaries; finally, each of the primary major world regions can be subdivided more than once. Teachers are urged to take care that study by regions "is not allowed to obscure the significance of complete political entities".

"The greatest differences in character within geography are found between the two major methods of organizing the knowledge - systematic geography and regional geography - each of which includes its appropriate part of all the special fields...." This statement was made by the noted American geographer, Richard Hartshorne and it is in the direction of his great work, "The Nature of Geography" that we now turn for an explanation of the much less heralded but important method, systematic geography. We have seen how regional geography organizes the knowledge of all interrelated forms of areal differentiation in individual units of area, which it must organize into a system of division and sub-division of the total earth surface.

"Systematic geography is organized in terms of particular phenomena of general geographic significance, each of which is studied in terms of the relations of its areal differentiation to that of the others. Its descriptive form is therefore similar to that of the systematic sciences. Like them, it seeks to establish generic concepts of the phenomena

studied and universal principles of their relationships, but only in terms of significance to areal differentiation. No more than in the systematic sciences, however, can systematic geography hope to express all its knowledge in terms of universals; much be expressed and studied as unique." (36)

Much of the support that we have seen for the regional concept in geography has come from geographers and educationists of the British Isles. It must not be concluded that it is a method exclusively British. Hartshorne represents an American viewpoint and in doing so states the belief that the ultimate purpose of geography is most clearly expressed in regional geography but emphasizes the need for a dual approach, as follows:

"In the same way that science as a whole requires both the systematic fields that study particular kinds of phenomena and the integrating fields that study the ways in which those phenomena are actually related as they are found in reality, so geography requires both its systematic and its regional methods of study of phenomena and organization of knowledge. Systematic geography is essential to an understanding of the areal differences to each other. This alone, however, cannot provide a comprehension of the individual earth units, but rather divests them of the fullness of their color and life. To comprehend the full character of each area in comparison with others, we must examine the totality of related features as that is found in different units of area -

i.e. regional geography. Though each of these methods represents a different point of view, both are essential to the single purpose of geography and therefore are properly included in the unified field. Further, the two methods are intimately related and essential to each other. The ultimate purpose of geography, the study of areal differentiation of the world, is most clearly expressed in regional geography; only by constantly maintaining its relation to regional geography can systematic geography hold to the purpose of geography and not disappear into other sciences. On the other hand regional geography in itself is sterile; without the continuous fertilization of generic concepts and principles from systematic geography, it could not advance to higher degrees of accuracy and certainty in interpretation of its findings." (37)

The knowledge of the other methods of teaching geography is not as basic to the understanding of the philosophy of the subject as the ones we have just discussed. They are very important, however, as teaching procedures which contribute to the regional approach and the stress placed on interpretative geography in the schools. Since these methods are used extensively in Canadian schools for teaching in more than one subject, but are of particular value in the teaching of geography, they will be taken up at this time.

The authors Crawford and MacDonald supply us with the central features of the project method.(38) They say

that geography teaching has often suffered from the fragmentary type of teaching. Countries have been studied according to logical outlines which included more than could possibly be mastered, with the result that no sense of success and completion of the task was possible. "The project involves a unit of effort that is capable of being finished, however small that unit may be in comparison to the total subject, and that unit is carried through to a definite end. For example "New England" is not a project, but "making a New England village in the sand box" can actually be finished." (39) The project is ordinarily a rather large and comprehensive undertaking and involves something of large-scale, mass production, or protracted work. We sometimes hear of "projects" which were completed within a single class period, but more often the time required is from three weeks to an entire semester. The project is ordinarily a cooperative undertaking, whereas laboratory activities and the usual kinds of geography study tend to be individualistic. Some of the best educational results of project work grow out of the give-and-take feature of group work. "The project is a psychological rather than a logical unit, and therefore refuses to be confined by the usual boundaries of the conventional school subjects." A project may be conceived and carried out in the geography class, but it is almost certain to spread out and include territory that is ordinarily assigned to arithmetic, art, history, science, manual training, etc. "If it is a really good project it will be exceedingly difficult to confine it within the boundaries of

a single subject, because a good project is a sample from life, and life is not nicely divided up into logical subjects." The project may be thought of as a sample from life situations, which is reasonably typical of a large number of other cases which might have been chosen if time had permitted. "The term "type study" has been used in connection with geography teaching to designate somewhat the same idea. The point is that it is impossible to study everything that might reasonably be classed as geography, and even if it were possible it would be undesirable for psychological reasons. Consequently we select a few samplings that are reasonably typical of the whole, and get a rich and thorough experience with these few, letting them stand for all the rest. The project method is, therefore, a valuable corrective for the encyclopedic tendency which has spoiled so much of geography teaching in the past and which has made so many pupils cordially dislike the subject." (40)

The classification of the details of geography in an orderly way has manifest advantages. In so far as the objective organization of content is concerned, this classification can be readily effected through the use of a topical outline. An analysis of geographic content has led to the adoption of a topical outline that includes topics dealing with physical factors, such as location, relief, climate, soils, and drainage basins, and with human activities, such as fishing, hunting, farming, mining, manufacturing and the transportation of commodities. The geographic content of a region

can thus be presented with few overlapping details. As the pupil studies the detailed treatment of each topic, he gradually builds up a knowledge of the region as a unit. This method, known as the topical method was in high esteem says Branom when it was assumed that the chief function of the textbook writer was to present his material especially with reference to its objective organization. "This method failed to take into consideration (1) the interests of the pupils, (2) purpose, or objective, which makes the details necessary, and (3) use; or the possibility of doing something with the material after it has been mastered. The teacher who used the topical method was long on content but short on method," says Branom. (41) The topical method has formed the basis for a series of problematic inquiries and thusly introduces another modern method which is the problem method and highly thought of by M.C. Branom.

The problem method of presenting geography sets up a definite goal for the pupils to work toward. The pupils are confronted with a definite challenge. Facts are secured and evaluated with reference to their bearings on the problem. The pupil no longer looks merely for interesting facts about a topic. He must constantly exercise judgement. The same facts that are mastered in a topical outline may enter into the study, but the facts are meaningfully related. The following problems illustrate how problems can be the chief motive in the study of regions.

(1) Why is the grazing industry the leading industry of the Great Plains?

(2) Why is the center of the iron and steel industry of the United States tending to shift northward toward the Great Lakes?

(3) Why has commerce on the Mississippi River declined?

"A problem presents a challenge to the pupil to secure and interpret material that will result in its solution." (42) It may involve the explanation of physical phenomena or may deal with the uses to which products are put or the transportation of commodities to market. Whatever the basis of the problem its object remains the same and that is the stimulation of the thought processes.

The systematic and regional approach to geography and the important incidental teaching methods have been dealt with in some detail. It is not to be understood that these methods make up all of what is useful to the teacher of the subject. The importance and skillful use of maps, globes, diagrams and graphs, pictures, museums, films and field trips as teaching aids will be considered in a later chapter.

Geography, when properly taught, should strongly cultivate observation, map technique and representation, imagination and inductive reasoning. It should broaden the sympathies and give the student a larger idea of his relations to other peoples of the world.

Strabo wrote, "In addition to its vast importance to social life and the art of government, geography unfolds to us the celestial phenomena, acquaints us with the

occupants of the land and ocean and the vegetation, fruits and peculiarities of the various quarters of the earth, a knowledge of which marks him who cultivates it as a man earnest in the great problems of life and happiness". (43)

In summing up, it is not necessary to emphasize the broad scope that geography has nor the difficulties that have arisen in attempting to organize its knowledge, for this information has been supplied in the preceding pages. It is hoped, rather, that this dissertation has, in part at least, defined the subject and shown that it has much to contribute as a subject; in spite of its inherent difficulties.

"The intellectual attraction of the study arises in large part from the shortcomings of the unco-ordinated intellectual world bequeathed us by the specialists..

The form of the earth is strictly the concern of geodesy, its physical features are, in part at least, the concern of the geologist, and its climates the result of meteorological processes, the study of which is a branch of applied physics. No less does the explanation of its political divisions appear to fall to the historian, since they are the outcome of long-term human processes - migrations, wars, revolutions and the complex sequence of political and social change ..... Herein lies the peculiar virtues or as some hold, the inherent vice of geography regarded as a "subject". <u>It fuses the results, if not the methods, of a host of other "subjects"</u> and in its full latter-day development

seems to require a knowledge of a larger range of ancillary studies than almost any other science or art." (44)

# CHAPTER II

## THE GROWTH OF GEOGRAPHY AS A DISCIPLINE AND ITS RELATION TO EDUCATIONAL DOCTRINE

## II

No study of the development of geography in the schools would be complete without taking account of the wider growth of the subject as a professional discipline. It would be quite beyond the scope of this work to consider in detail all of the contributions made to the subject since the time of the ancient Greeks, but it will be in order to deal with those men who have contributed most to the subject. As we shall see, all of these men were not geographers for some were explorers or travellers while others were pedagogues or psychologists. Some contributions were made to the knowledge of geography while others improved the methods of teaching the subject. Nor is it to be thought that all of the outstanding ideas and discoveries in this field stemmed from any one country. Its growth has been slow and spasmodic but one that has seen devotion bestowed upon it by some of the keenest minds that ever lived.

Even as far back as the ancient Greeks, geography was recognized as a distinct and separate body of knowledge. Like other Greek sciences, it had hardly achieved the status of a discipline in the modern sense. But we are told that Strabo (63B.C.-A.D.36), had summarized the geographic knowledge of his time into seventeen volumes. (1) His is probably the first great name in geography. He criticized

the methods of the 'ancient geographers' and emphasized the importance of observation and general orientation of the student of geography. He recommended the use of fables and myths to animate geography, and considered them to be a great stimulus to learning, especially if they included the marvellous. His emphasis on observation and scientific treatment was forgotten, but his myths and tales, instead of being used to stimulate children, were taken for facts by adults through the superstitious, submissive, introspective dark ages until the great geographical discoveries fully awakened western Europe. (2)

In this Greek period there was also developed two general modes of procedure, the historic and the scientific in the investigation and the teaching of geographical facts. On the one hand there were those who being exact and methodical in thought, supplied, through astronomy and geometry, ideas of the form and size of the earth, who measured the land masses, established longitude and latitude, causes and influences, according as far as possible to the methods of exact science. On the other hand, others were more humanistic, who, though interested in geography, often used it mainly as an aid in the study of history and anthropology. Strabo in general emphasized this side of geography. He tried to correlate the conditions of the land with the conditions of the people, and to show how the former had aided or hindered progress. (3)

In Medieval times, progress owed much to the Moslems, with their great achievements in mathematics and astronomy. The sixteenth century marked the rise of the modern scientific inquiry and the beginnings of the modern science. The discoveries of Copernicus and Galileo and the voyages of Columbus and Magellan did much to awaken inquiry and stimulate observation of Nature. Bacon had formulated the scientific method by 1620 and pointed out the defects of learning of his time.

In the 1630's, John Comenius, a Czech pansophist and writer on pedagogy, was in demand by many nations in western and central Europe, as well as in America, to advise on educational reform and international research. (4) Comenius reflected upon and applied the principles of Bacon to the selection and arrangement of materials and the methods of teaching. He demanded that instruction begin with sense perception, the observation of things, and the study of nature. He is the father of "Home Geography" and was the first to make the knowledge of the home, gained by personal observation, the basis of the study of the country and of the world. Much that was demanded by Comenius for primary instruction in geography is still being demanded to-day. He was the first to recognize the importance of geography as a school study, and it is partly due to his influence that Germany

has given this subject a prominent place in her schools and universities.

John Locke (1633-1704) also regarded geography as the science of observation and urged the use of globes and maps, combining progressively geography with arithmetic and geometry. (5) Locke, although emphasizing observation, meant the observation of maps and globes and not of nature. His method is the opposite of that recommended by Comenius. He begins with the study of the earth as a whole, of globes and maps and finally of the home country. This is called the analytical method. Comenius used the synthetical method, beginning with the familiar and gradually, through widening spheres of experience, leading the child to distant and unknown. The analytical method follows the lines of the logical development of the subject, placing the mathematical and physical before the descriptive. It is the method followed by the ancient geographers. Its arrangement of topics takes little account of the pedagogical order and psychological difficulties of teaching. On the other hand, the synthetic method attempts to arrange the materials according to the interests and mental capacity of the child leading the pupil forward on the basis of his own experience.

Basedow followed out and put into practice the

ideas of Rousseau who emphasized beginning by observation of the home surroundings. In his "Elementary Book" he said, "It is practical to begin with a sketch of a room, a house, a town, and a well known neighborhood, and then to go to a map of a country and so on to a continent." (6) He wished all the senses to be exercised and greatly favored illustrations by maps, pictures, models and products. He had a school museum for these things. He constructed two hemispheres in a field so large that pupils could walk on them and was also a pioneer in illustrating geographical text-books. His books, which contained one hundred copper plates, were the first illustrated text-books for use of classes in geography and have been called the "Orbis Pictus" of the 18th Century. Basedow also emphasized the relation of human activities to geographical surroundings. He put an anthropological impulse into geography which later through Ritter, Guyot, and others became important in all geographical instruction and research.

Two names stand out when reference is made to the reform of the methods of instruction and school discipline in the 18th Century. They are Heinrich Pestalozzi and Friedrich Froebel. (7) Pestalozzi, a German-speaking Swiss, was inspired in his youth by the "Contrat Social" of Rousseau and his life and work has become a kind of educational legend to every teacher and need not be repeated here. He founded

his teaching of geography on the ideas expressed by Rousseau. Like Basedow he tried to teach together geography and the study of nature. His principle, that all knowledge is based on observation, led him to emphasize home geography. He was the first progressive to teach children home geography by excursions. In practice, Pestalozzi's method was to speak the names of cities, rivers, countries, etc., in series to his pupils, who repeated them in chorus. He wished the child, in this way, to learn these facts at an early age before seeking in each name all its relations. He considered this work only a kind of preparation and began the real study of geography by taking the pupils to different places in the Valley at Yverdun, and finally having them reproduce the valley in clay.

Pestalozzi, however imperfect his methods in practice, was in geography, as in other subjects, the great inspirer. Besides many others it is of special note that he was directly a guide and influence on Froebel and of Ritter, of whom more will be said shortly. Both visited Pestalozzi. Froebel returned to apply his principles to his own classes at Frankfurt, bringing geography into the life interests of his pupils, making it a real educational force, intellectually and morally, and receiving from his experience a fund of ideas which formed the basis and the inspiration of all his later teachings on methods. Ritter learned Pestalozzi's method and promised to apply it to geography. The result was his "Comparative Geography",

which may be said to have founded a new science, changing geography from a chaos of facts to an organized whole, giving it life and purpose.

Home geography was worked out to its present completeness by Finger, Matzat, and Diesterweg. They considered the study of geographical phenomena in the home district as psychologically necessary for map reading and the correct formation of ideas of distant places.

The century from 1760 to 1860 witnessed a great expansion of European knowledge of the world comparable only to the great age of discovery which opened modern history. In this period the exploration of the great oceans was completed, and the main interior features of the continents were revealed. British explorers played a conspicuous part in this work which may be regarded approximately as opening with Cook's first voyage and closing with Livingstone's death in Central Africa. "These voyages and journeys revealed to Europe a fascinating variety of lands and of peoples in all stages of development, and the mass of newly acquired facts transformed radically the long-established science or art of geography." (8)

The voyages of Captain Cook form a convenient starting point for a study of modern geography. It was

the younger Forster, naturalist on the second voyage, who inspired Humboldt with his passion for the beauties of natural scenery and many of the navigators who carried on the work of exploration acquired their skill in the hard school of Cook. (9) Joseph Banks, a friend of Cook, did much to awaken interest in geography and paved the way for the Royal Geographical Society of England. "Banks made a great and enduring contribution to that 'broad foundation of precisely recorded facts upon which geography was to rise.' The synthesis of such facts into a reasoned system was the work of his contemporary, Alexander von Humboldt." (10)

Wrote Humboldt in the Introduction to Cosmos -

> "Nature considered rationally, that is to say submitted to the process of thought, is a unity in diversity of phenomena, a harmony blending together all created things, however dissimilar in form and attributes one great whole animated by the breath of life. The most important result of a rational inquiry into nature is therefore, to establish the unity and harmony of this stupendous mass of force, and matter, to determine with impartial justice what is due to the discoveries of the past and to those of the present, and to analyze the individual parts of the natural phenomena without succumbing beneath the weight of the whole." (11)

Humboldt, the founder of modern geography, was born in 1769, the year in which Cook sailed in the Endeavour, and died in 1859, the year of the publication of Darwin's Origin of Species. (12) From observations in part gathered on his own journeys, in part gleaned from the records of others, he strove to build up a rational description of the universe.

It was Humboldt who first tried to apply the regional method of description. His original interest had been the study and classification of vegetation and he turned to geography as a result of his efforts to co-ordinate his many observations of natural phenomena. Like Ritter, he was an empiricist. (13) He was a pioneer in insisting that geography must not be a mere catalogue of other sciences. His extensive explorations, especially in South America, impressed him with the role of plant life in landscape and its relation to climate. He thus examined the great climatic zones of the earth and laid the basis for the study of plant geography and climatology. To Humboldt, we give the first conception of isotherms of maps and the study of topography. In a word, we can agree that for the collection of miscellaneous observations, Humboldt "substituted an orderly system of cause and effect". (14)

Humboldt, by applying scientific methods and principles, had brought order into the accumulations of detailed observations on the earth and its natural phenomena which had been amassed at the opening years of the 19th century. His contribution was essentially that of the natural scientist: but geography as we know it today also takes cognizance of man and his works.

With the reform in the study of the natural world personified in Humboldt, the problem of its relationship to

human history received more intensive study, and it became the life work of Karl Ritter to attempt to discover the link between history and geography, and in so doing to mould decisively the development of the latter subject. Ritter, inspired by Pestalozzi and profiting by the work of Humboldt, wrote his "Comparative Geography". In the preface to his volume on Europe he wrote, in 1804, "From this desolate heap of particles an organic, life-like whole must be developed which corresponds to reality; from the tedious because thoughtless, description of the earth must arise a knowledge of the earth; i.e., a science which investigates causal connections and enlivens intellect and imagination. Geography must virtually become a science." (15) Ritter was opposed to purely descriptive geography; he believed that the subject must be empirical and that a careful accumulation of observations was the first essential. He tried to limit the scope of geography to the surface of the earth and to the natural phenomena working directly upon it. In this setting, the place and role of man must never be neglected. Despite this modern view, Ritter's work was unfortunately later twisted to the uses of the extreme physical determinists. (16) Ritter was the first to subdivide the continents into units or regions, although his work was unsystematic and he failed to correlate human phenomena with natural conditions. Whatever may be thought of Ritter's teleological views, however, the importance of his contribution to geographical thought cannot be challenged.

Many of his observations and generalizations are still valid, apart from the context into which he fitted them. He showed how, by the patient correlation of position, physical features, climate and natural resources, an understanding of the individuality of a geographical area could be built up; he brought geographers to study the world both as a whole and as a group of interrelated units, and to reflect upon the significance of all this geographical diversity in the history of mankind. Though his Erdkunde may be little read, for he made no attempt to woo the general reader and a work of this kind inevitably dates, few works have exerted greater influence upon the development of geography.

The real growth of geography in England is often associated with the name of Sir Joseph Banks, previously mentioned, between 1770 and 1830. He extended great assistance to such explorers as Captain Cook, Mungo Park and others. Not long after his death, the Royal Geographical Society was formed in 1830. Significantly, it included Humboldt and Ritter as honorary members. (17) In 1833, the first chair of geography was established at University College, London. This, however, was soon abandoned. Meanwhile, the society supported explorations to Antarctica and those of Livingstone in Africa. But as a school and university subject, and as anything approaching a university discipline,

English geography languished badly for most of the nineteenth century.

Towards the close of the nineteenth century, matters began to take a better turn. Already, in 1887, there had appeared Archibald Geikie's famous work on the teaching of geography. (18) The modern teacher could do worse than to read this book by the great Scottish geologist. Indeed, one can only reflect with humility at how many of Geikie's excellent ideas still remain to be put into full effect. At the outset, he states his aim as being "to advocate the claims of geography as an educational discipline of a high order..." To Geikie, geography deals with the fundamental elements of topography, showing how these "have affected the distribution and development of the human population". It is a discipline because, if properly taught, it is not "a mere exercise of the memory" but requires use of the powers of observation, stimulates reasoning, develops a just conception of the homeland, and "broad and intelligent views of the world at large". (19) Geikie stresses that the teacher of geography must be trained and that this is not a subject that can be taught by anybody.

Similar advanced views are expressed as regards teaching method. Thus, with young children, the subjects of the earliest lessons "should be taken from the familiar things of everyday experience". The study of geography must begin at home he said, "and from a basis of actual

personal experience should advance to the consideration of other countries and the earth as a whole". Method must begin with the map for understanding and using it, "lies at the base of all sound geographic progress". (20) Geikie also advocated field trips as an essential teaching method. His detailed account of the proper conduct of excursions could well serve as a useful manual for teachers today. (21) He discusses the use of the whole present range of aids and methods: maps, globes, diagrams, models, pictures and photographs.

Geikie's work has been considered in some detail because it was advanced for its time and indicates that there was already some awareness in Great Britain of what good geography should be. That in practice the schools lagged far behind is seen in Scott Keltie's famous report which also appeared in 1887. (22) Made at the instigation of the Royal Geographic Society, it was an exhaustive study which took its author into over 80 English schools and into many on the continent. He was also involved in an extensive correspondence, which included contacts in Canada and the United States. We have space here to note only a few of his findings. In the primary schools he believed geography had improved a good deal since the passing of the Education Act in 1870. At higher levels, he found that the subject had been assigned only a nominal place. Although generally compulsory to the fourth form level, with about one and a half hours per week assigned to it, the teachers were

generally divided between political geography and a sterile, unreal "physical" geography.

With the lack of trained teachers and of equipment, there was no general plan for its teaching. Keltie recognized that geography would never progress in English schools until it achieved university status. He believed that it could never become a real discipline until taught as a single subject. It must not be combined with history - for inevitably geography is the loser. In this observation, we can recognize a view that is echoed today in the controversies concerning "social studies" and the "integration" of subjects.

Keltie states flatly that "appliances are bad, and as for method, there is none". Precise and careful map-drawing (such as he had found in Germany) were unknown in England. Textbooks were deplorable, and frequently written by non-geographers. He found that on the continent geography had a distinct and recognized place in all school curricula, possessing equal status with other subjects, and allotted a fair share of time. Above all, it was not divided, but recognized "as one inseparable whole". In Germany, most teachers were trained, and geography was established in twelve universities. It occupied a comparable position in France. In both Canada and the United States, Keltie found that the subject was no better off than in his own.

Keltie's report concluded by recommending that the Royal Geographical Society approach the universities

with a view to establishing geography in them. This resulted in Mackinder's appointment to the readership at Oxford in 1887. This, then, was an historic year for the growth of the subject in England.

Sir Halford Mackinder would probably be accepted by most English geographers as the most influential, if not the greatest of their number who has thus far appeared. Like most of the pioneers, his training was in other fields: he had read Natural Science and Modern History at Oxford.(23) Born in 1861, Mackinder had a brilliant career as a student and, as already stated, was appointed to a new readership at Oxford in 1887, at the age of twenty-six. The rest of his life was devoted primarily to the advancement of geography, and particularly to its recognition as a worthy discipline in the schools and universities. He was strongly influenced by German ideas and may even be said to have antedated Herbertson in advocating a regional approach in England. As early as 1887, he called geography a subject whose main function "is to trace the interaction of man in society and so much of his environment as varies locally". (24) Environment was defined in terms of natural regions. His readership at Oxford led to the founding there of the first school of Geography in 1899. The first diplomas were granted in 1901. He was later instrumental, in association

with King's College, in setting up the Joint School of Geography, which remains today perhaps the premier department in Great Britain, if not in the world. Mackinder was among the founders of the Geographical Association in 1893. His further interest in work in the schools is indicated by his authorship of such textbooks as "Our Own Islands" (1906) and "Lands Beyond the Channel" (1908). He was an explorer of note, having made the first ascent of Mt. Kenya in East Africa; he was also a member of parliament and a public servant who received a knighthood for his work.

Mackinder always stoutly upheld the essential unity of geography. (25) It must be, he said, an amalgam of the physical and human aspects, with the former as a base. He strongly opposed breaking up the subject and attaching its parts to cognate subjects. He was also opposed to excessive specialization within the subject. As regards method, Mackinder was certain that "the technique of geography, the central fact, is the map". He believed that the subject would never establish itself until it became applied to the solution of social, economic and political problems. He himself made notable contributions, especially in regard to what came later to be known as geopolitics, although this term never found currency in Britain.

Mackinder's views of the place of geography in the schools were well expressed in a paper which appeared in

1903. (26) Here he reiterated his view that geography must be treated as a discipline "and not simply as a mass of information"; it must not be subject to artificial divisions or fragmentation nor treated as a series of chapters from other sciences. Its basic aim must be "to read landscape intelligently". School geography must begin with the child's home, that is, his immediate neighbourhood; then it must extend to the home area; the next step should be a study of the home country, followed by the home region. (here Mackinder was thinking in terms of Herbertson's major world regions) Finally, study must extend to the world whose wholeness on essential unity must be stressed. It will be seen from this that Mackinder was a pioneer in preventing English geography from becoming as narrowly nationalistic as Continental geography. (27) He believed that England, with her world interests and responsibilities, must have a wider outlook; Mackinder was always a great proponent of Empire and Commonwealth geography in schools. In explaining the stages described above, he pointed out: "You will see that we go steadily expanding outwards, but always upon the regional basis". (28)

Mackinder had helped to lay the foundation that Herbertson and others were to build on in ensuing years. Herbertson, as we have seen in a previous chapter, contributed much to the scholarship of the subject, with his regional concept. He had presented this famous paper on

regional geography in 1905. (29) The influence of this and the whole regional concept on school geography has been profound. As one teacher said at the time, Herbertson's new approach provided a new basis for geography teaching in schools and raised the possibility of "a systematic study of a well-ordered body of knowledge". (30) No longer would "political considerations of the narrowest kind" determine the course of geography.

The result of the progress we have been noting enabled Scott Keltie in 1914 to take a much better view of British geography than had been possible in 1887. By 1914, the subject was established in most universities. In 1905, the Board of Education had issued its "Regulations for the Teaching of Geography in Secondary Schools". This required a four year course in all such state-aided schools.(31) Keltie also observed in 1914 that geography had become a reasoning subject, no longer "a mere exercise of memory". It was more practical and scientific, had a regional basis and was yet withal more "humane" than it had been. As regards method, he found more and better teachers than in 1887, more and better use of maps and other equipment, and the provision of special rooms.

The next great name in English geographical education is that of James Fairgrieve. We have already

discussed how he advocated the regional approach in the teaching of geography. As head of the department in the University of London Institute of Education, Fairgrieve was for many years the most influential figure in school geography. His "Geography in School" achieved for him a world reputation and remains among the most authoritative books on the scope and methods of the subject. Especially important was his plea that geography should develop a grammar: a systematic and well-thought-out basis for presenting its subject matter. Always, its basic aim must be "to enable future citizens to imagine accurately the conditions of the great world stage and so help them to think sanely about political and social problems in the world around". (32)

Until the seventies of the last century, the progress of geography in France was on very similar lines to that in England. In the popular mind, it was associated with exploration and travel, with a strong archaelogical flavour: it was French savants under Napoleon's aegis who had first revealed the great variety and interest of Egypt's antiquities, and French scholars were also at work throughout

the Near East. (33) At sea, Dumont d'Urville emulated Captain Cook by his circumnavigation. It was under the impulse of exploits such as these that the first modern geographical society, the Societe de Geographie de Paris, which numbered Alexander von Humboldt among its founders, was formed in 1821. Humboldt's influence continued to be strong in France, and it was also there that Ritter's influence was of greatest importance outside Germany.

Throughout the second half of the nineteenth century, advances in scientific and human studies were continually providing a stimulus to geographical progress. Contributing much to this progress was Paul Vidal de la Blache, "who impressed his concepts indelibly on French geography, and whom every subsequent French geographer has acknowledged as master". (34) He was very interested in the relation of nature and man and when considering this, he emphasized very strongly the importance of geology as a basis of regional differentiation and took the greatest pains, as he insisted also that his pupils should do, to understand the geological background and to trace out its features in the field. He found the connecting link between nature and man in the plants characteristic of each region and themselves dependent upon soil and climate. In this way he is to be associated, when one thinks of regional geography, with Ritter and Herbertson. Vidal de la Blache did not live to complete a systematic work on human geography, but his views

are expressed in many papers contributed to the Annales de Geographie, the periodical which he founded and which has gained a world-wide reputation for its exposition of French geographical thought. He drew largely upon analogies from the science of botanical geography or ecology, that is the study of the mutual relations of all the organisms living in one and the same locality, and their adaptation to the surrounding environment. He stated, "Man in these circumstances, plays a role at once active and passive, engaging in the contest to advance his own ends by neutralizing obstacles or appropriating what can serve him. But the relationship is not static: the terrestial environment is in process of change, in part natural, in part induced by the actions of man himself. Human associations, likewise, are constantly changing through this very process of adaption or under the stimulus of external influences. Man is not a plant enslaved by the environment in which it has taken root. He is obedient to that instinct of progress which is the very life of societies". (35)

Among the best known of La Blache's pupils was Albert Demangeon. His first work was a model regional geography of Picardy, which has inspired many others. He then studied the use of archives in establishing the past human geography of a region. In the early period of the

geographical renaissance in France, the historical element still predominated in the education of a geographer, and ardent students were obliged to seek instruction in the natural sciences after graduating. One result of this was that followers of Vidal de la Blache tended to carry their enquiries too far into the past and to become absorbed in obscure historical problems. The balance in the educational system has long been corrected; more attention is now paid to the physical basis, and historical enquiry is limited to what directly affects present conditions. "This adjustment has been due not least to Emmanuel de Martonne, who was one of the first of Vidal de la Blache's pupils to break away from the old historical bias and to study land-forms scientifically; he is the author of a magistral work on physical geography." (36)

Vidal de la Blache, Gallois, and de Martonne have been the main inspirers in the production of a large number of regional monographs, particularly of French regions.

These have a characteristic imprint very expressive of the French School in its evolution from subservience to history. "The French have successfully merged the historical and geological schools and have achieved a regional synthesis unsurpassed elsewhere and for which they are justly renowned."(37)

The French have also excelled in the study and development of Human Geography. In this, as in Regional Geography, they have brought to their geographical work a

fine literary style, and a firm historical background which is particularly important in this aspect of geography. They have developed Human Geography as an entity, without undue subdivision into a multitude of doubtful sub-specialisms.

European geographers, notably the Germans, have been much more generally interested in the study of the nature of geography than those in North America. Many of the questions raised here only in recent years have been very effectively discussed by certain German geographers since the beginning of the century. It would of course be absurd to suggest that American geographers were entirely unfamiliar with the concepts of geography developed in Europe. In America the course of events developed on much the same lines as in Britain. Throughout the nineteenth century, American navigators and explorers were making important contributions to our knowledge of the world, notably in the Pacific, South America, and the Polar regions, while systematic geography excited little interest in the early years. The American Geographical Society, however, founded in New York in 1852 with stated aims very similar to those

of the Royal Geographical Society, soon became an important center for the collection and dissemination of geographical information, and later for geographical research. (38)

For a time, the teaching of Karl Ritter had exerted some influence through Arnold Guyot, a French Swiss and Professor of Geology and Geography at Princeton in 1867. (39) Guyot was the first professor of geography in an American university. Like many of Ritter's followers he depended on the teleological factor to explain geographic details. Regardless of this view "it was not, however, until the days of Guyot that school geography in the modern sense began to function in schools of the United States. He believed in encouraging children to think. His books, like those of Mauny, stressed physical geography, and these two authors gave point of view and courage to a host of competitor". (40) Guyot had stressed the intimate relationship between surface features and underlying rock structure, and the discovery and examination of the striking physical features of the West initiated a great advance in physical geography, particularly in the study of structure, surface forms and the processes of erosion. Notable contributions in this field were made by men like J.W. Powell, in his work on rivers and the base level of erosion, and by G.K. Gilbert on the structure of mountains and the

processes of land sculpture. (41)

"Far more important was the missionary work of Ellen C. Semple, whose presentation of Ratzel's concept of anthropo-geography set the course of human geography in the United States for a quarter of a century. During the same period William Morris Davis and Professor Albrecht Penck of the University of Berlin did more than any others before or since to establish mutual relations between geography in this country and Germany." (42) Their field of mutual interest, however, was almost exclusively limited to physiography. The emphasis that Davis gave to this part of geography, combined with Semple's exclusive consideration of human geography developed much the same form of dualism that was characteristic of an earlier period in Germany. "For nearly two decades these two points of view dominated most of the thought of American geographers." (43)

Ellen Semple was interested in the study of how "The geographic factor" influenced man. The"geographic factor" was the natural environment. This interest in human geography or as it is sometimes called, the "environmentalist concept" has been "dominant in the (American) universities until recently, and it is still the prevailing concept in the teachers colleges and secondary schools". (44)

The man who, building upon the foundation laid by J.W. Powell and G.K. Gilbert, enlarged and systematized the study of physical geography, and went on to exert a powerful personal influence on succeeding generations of American geographers, was W.M. Davis. (45) Davis declared that through the work of Gilbert, geography gained a new interest for him. His hypothesis of the cycle of erosion in which the dominant concepts are 'structure, stage and process', retains its importance, though it has not escaped criticism, which Davis met in part by the admission of the possibility of 'interruptions'. As has been stated, Davis worked closely with Albrecht Penck, and the interaction of American and German ideas was important. On geography in general Davis' influence was exerted to a considerable degree through his personality and example, his technique of research and formulation of ideas, and by the status he secured for geography, for instance, through the foundation of The Association of American Geographers.

The present trend of geography in America may fittingly be approached through the work of Isaiah Bowman (1878-1950) whose outlook was wide and liberal. (46) He, too, began as a physiographer, attracted and inspired by Davis' teaching, and owing much to his early training under Mark Jefferson, widely recognized as a great

practical exponent of geographical method. In course of time Bowman's active and fertile mind, enriched by travel and his interests in individuals and peoples, gained him a foremost place among modern geographers. 'Forest Physiography: Physiography of the United States and Principles of Soils in Relation to Forest', 1911, his first major publication, gave a sound basis for the study of the physical regions of North America. Then followed research in the physical and human geography of South America and the Andes, culminating in the 'Desert trails of Atacama', 1924. Books of his, such as 'Geography and the Social Sciences' have added much to the understanding of geography, as a subject and have contributed to the advancement of the status of geography in the world of learning and of public affairs. He was particularly concerned with geography as a school subject and was in many ways James Fairgrieve's counterpart in America. He was interested in clarifying the aims and methods of the subject and has been the source of the emphasis placed, when teaching geography, on the development of human sympathies and mutual understanding. (47)

The greatest change in point of view found in the development of geography in America was caused by the work of Carl Sauer in bringing the attention of American geographers to concepts developed in Germany nearly a

generation ago. Through his three somewhat similar studies, published between 1925 and 1931, as well as by his marked personal influence, he has led many, particularly among the younger workers, to think of geography in terms of the study of material landscape features, both natural and cultural and to consider these features according to their chorographic, or regional interrelations.(48) Since this point of view has not influenced in any degree, geography as a school subject, there is no need of making a study of it at this time.

American geography has been markedly influenced by the work of European geographers but it is notable that this influence has come through but very few contacts - for the most part through Guyot, Davis, Semple, and Sauer, "A few individuals, like Fennerman, or Wellington Jones, have been independently influenced but have had little effect on the concepts of geography held by the rest." (49)

Our examination of earlier work in geography has a two-fold purpose. We have already emphasized its

importance in providing us with an understanding of the character of the field of geography. The second purpose has been to observe what the great contributions to the subject have been and what earlier writers have concluded in regard to problems which are of current concern in the methodology of geography, for there are few of these that have not claimed the attention of geographers in the past - in most cases, repeatedly in the past.

Although the roots of geography, as a field of study, reach back to Classical Antiquity, its establishment as a modern science, we have seen, was essentially the work of the century from 1750 to 1850. The second half of this period, the time of Humboldt and Ritter, is commonly spoken of as the "classical period" of geography. Undoubtedly the extraordinary accomplishment of each of these men, working at the same time but in different ways, and the influence of their work on all subsequent geography justifies our regarding them as the first masters of modern geography - in that sense as the "founders". But in applying such titles one is easily led to ignore the previous workers - those, one might say, who laid the foundations for the founders. Most certainly we cannot ignore the contributions made to geographical knowledge by the explorers like Cook, Magellan, and Cartier to name only a few, who brought back with them masses of new facts about distant lands and their climates and varied types of vegetation and relief.

To this wealth of knowledge was added more information by traders and adventurers such as the Polo brothers who brought back to Europe stories of life and habits in the East - stories which stimulated the minds of men and aroused interest in the search for knowledge. "The curiosity which desires a knowledge of the world is the stimulus that requires science to pursue that knowledge and seek to organize it." (50)

There is no doubt that naturalists, such as John Reinhold Forster - the first of the great scientific geographic travelers and their work influenced the later work of the eighteenth century. The descriptions of scenery and features of the landscape by John Forster's son, Johan, we are told, were read with great interest by Humboldt, upon whom, they had a determining effect. (51) Johan, as a boy of 16, had sailed round the world with Captain Cook and had perfected a fine descriptive style.

In the eighteenth century, facts of all kinds bearing on the earth's surface and its life were accumulating with increasing rapidity, to provide ample material for the speculations of scientist and philosopher. The period in many aspects was one of the creative epochs in European civilization for it saw the birth of that great movement which was to spread throughout Europe and America - HUMANISM. Under the impact of advances in many spheres of thought, the study of geography made notable progress.

Springing largely from the teachings of Jean Jacques Rousseau, there was an enthusiasm for nature and for the beauties of natural scenery and thus for rural excursions. The fundamental approach of many geographers of this and the following period was notably influenced by the great reformer of education of the time, Pestalozzi, of Zurich, who brought into German schools the philosophical viewpoint of Rousseau. Of great importance was the rapid growth in various physical sciences.

In other words "both Humboldt and Ritter, in their philosophical point of view, were products of their time - in particular both were influenced by the thought of Kant and of Rousseau". (52) "It hardly seems too much to say that, had neither of these men lived, the development of geography after 1800 would have led ultimately, even though far more slowly, to something like that which we know." (53)

Immanuel Kant, the famous philosopher, gave a course of lectures in physical geography over a number of years, in which, as part of a theory of human knowledge, he embarked upon a general outline of nature. Kant's acquaintance with physical geography, however, was indirect, but he made a valuable contribution by showing that it might be studied systematically. (54) To Ritter's religious nature the concept of a universe of order and law in which all phenomena of nature and man were interrelated required the assumption of some divine purpose and plan which the

scientist should attempt to establish. In Humboldt, on the other hand, the same philosophical concept found a responsive chord in his feeling for the aesthetic rather than the religious. In the writings of Rousseau and St. Pierre, it was the descriptions of the "harmonies of nature" that appealed to him; through Goethe he received the concept of the "landscape". For both Humboldt and Ritter, the concept of unity of nature presumed a causal interrelation of all the individual features in nature. The phenomena of nature were studied in order to establish this coherence and unity. "For both it was axiomatic that the unity of "nature" included organic as well as inorganic matter, humans as well as non-humans." (55)

The geography which men like Humboldt and Ritter, in the late eighteenth century, had inherited from the past was essentially limited to phenomena of the world, as known to man, that is, of the earth's surface, in the broad sense of a surface of some thickness extending into the atmosphere and into the solid earth wherever man had penetrated. The great majority of the writers of geographical works of the seventeenth century had not attempted to translate the purpose of geography in terms of scientific interest. Rather, they were concerned with its practical utility. Over and over again they emphasized the value of the study of geography as a means for other purposes - for an understanding of history and as a practical aid to government. "This

utilitarian point of view prevented scientific progress in geography." (56) It is for the establishment of the modern science of geography in the eighteenth century that we are indebted to Ritter and Humboldt.

Not only Ritter and Humboldt were products of this period. Contributing as much to geography as these men were others, who were interested in pedagogy and the nature of children. Since the latter developed ideas which have had a tremendous influence on our teaching methods in general, and geography teaching in particular, it is most important that we should look at three great educational movements that had their roots in "Humanism" in the eighteenth century - The Pestalozzian Movement, The Herbartian Movement and The Froebelian Movement. To understand the reason for the birth of these ideas it is necessary to know something more about that century and the broad movement, humanism, which so influenced thinking.

"Humanism was a revolt against the medieval dualism of spirit and body. It was a revolt against the

monopoly of theology and Church dogma in the theory and practice of medieval life. It was not directed against Christianity; on the contrary, humanism accepted its close connection with the Christian tradition and Christian morality." (57) Humanism implied both a human and humane approach to educational problems; human in the sense that human nature and human interests should not be suppressed by religion in favour of an ascetic ideal and a narrow dogmatic interpretation of the world; humane in the sense that the nature of the child and its growing mind should not be suppressed by cruel school discipline and rigid methods of instruction. "In its original setting humanism meant the liberation of reason from the shackles of dogma and a critical study of nature and humanity through the observation of actual facts." (58)

A definite break with medieval scholasticism was made by the two pioneers of the new philosophy, Francis Bacon and Rene Descartes. Bacon laid the foundations of the English empirical school by clearly stating for the first time the theory of induction. Bacon's inductive method made all the difference between the experiments of alchemists and the experiments of modern science. But his induction was insufficient in itself to promote that remarkable progress of science which we witness in the seventeenth and eighteenth centuries. Modern science is based on mathematics, and analysis and deduction

are as necessary for scientific research as in induction. Descartes provided both. His famous sentence: Cogito ergo sum (I think, therefore I exist) forms the first step of intuitive knowledge, which is beyond any doubt. It is based on personal experience and is made clear by the analysis of common sense free from any dogma. "Bacon's empiricism and Descartes' analysis released the accumulated emotional protest against the monopoly of the Church and directed it into scientific channels." (59)

The impact of these theories on education led to a new evaluation of the aims of education and its methods. The dissemination of the conclusions of the new philosophy and the new discoveries of science was made possible by the activities of many societies and private schools which were free from the old scholastic institutions. The educational aims of these societies were well expressed by the historian of the Royal Society, Bishop T. Spratt, F.R.S. in his History in 1667.

> "It would be no hindrance to the minds of men if besides those courses of studies which are now followed, there were also trial made of some other more particular ways, to prepare their minds for the world and the business of human life. It is apparent that nothing more suppresses the genius learners, than the formality and the confinement of the precepts, by which they are instructed. To this purpose I will venture to propose to the consideration of wise men, whether this way of teaching by practice and experiments would not at least be as beneficial as the other by universal rules...whether it were not as profitable to apply the eyes, and the hands of children, to see and to teach all the several kinds of sensible things, as to oblige them to learn and to remember the difficult doctrines of general Arts?...We load the minds of

> children with doctrines and precepts to apprehend which they are most unfit, by reason of the weakness of their understandings; whereas they might with more profit be exercised in the consideration of visible and sensible things, of whose impressions they are most capable because of the strength of their memories and the perfection of their senses."

This quotation shows that the reformers demanded both the enlargement of the curriculum with "real" studies and the change of methods to suit the minds of children. It was the beginning of the movement which laid emphasis on the understanding of the nature of children and this has directly influenced geography teaching.

Two names stand out prominently in this respect: Heinrich Pestalozzi and Friedrich Froebel. Both of them were closely connected with the humanist - Masonic circles of their time and in their ideas and practice faithfully interpreted by the twin meaning of humanism as human and humane education. Pestalozzi was inspired in his youth by the Contrat Social of Rousseau and later in 1762 by Emile.(60) In Emile Rousseau described the education of the youth appropriate to his ideal society. The fundamental principle behind Rousseau's meaning of education according to nature is stated in the opening sentence - "Everything is good as it comes from the hand of the author of nature; but everything degenerates in the hands of man". Three definite meanings can usually be assigned to his concept of nature. The first and fundamental one is the social one - education is to be guided by the true nature of man -

such laws are discoverable through investigation. And secondly, instinctive judgement, primitive emotions, natural instincts, first impressions are more trustworthy as a basis for action than are reflection, or experience that comes from an association with others. Thirdly, the "mal-education which comes from man is to be counteracted by contact, fearless and intimate with animals, plants and with physical phenomena and forces of all kinds." (61)

Rousseau became the inspiration of those educational reformers who reduced his vagaries to practicable procedure. He was the forerunner of many who, unconscious of their indebtedness to the despised revolutionist, have followed the trail he blazed, not always, however, reaching the promised land. For Rousseau had the incurable optimism of the eighteenth century, particularly evident in this belief that only good qualities are transmitted by inheritance. Nevertheless, the three interpretations which Rousseau gave to his doctrine of nature mark out the lines of educational development during the 19th century. Rousseau became the forerunner of educational psychologists. The fundamental idea is that education is a natural process. It starts from natural instincts and tendencies to action, and should be controlled by principles derived from the study of the child's mind in development and of the adult mind in its functionings.

Pestalozzi, influenced by Rousseau, as were men like Ritter and Humboldt, based his education on the laws of nature in two senses: on the study of external nature and on the development of the inner nature of man. The foundation of instruction is therefore intuition based on sense perceptions. (62) The beginning of all education therefore is closely connected with the development of our senses and the provision of original impressions. Pestalozzi's fundamental principle was the development of the child's powers, not the communication of knowledge, which had been the traditional purpose of the school before his time. (63) We owe to Pestalozzi and his disciples the famous definition of education; the harmonious development of all the powers of mind and body. He chose the subject-matter of education largely from the child's environment. In our present-day practice of motivating school work by approaching the child's mind through the presentation of concrete materials and through opportunity for direct participation in the activities of the environment, there is an acknowledgment that Pestalozzi was right in the emphasis he laid upon sense perception as the basis of knowledge.

The first educationist to make a serious attempt to place the art of teaching on a scientific basis was

Herbart, a German philosopher and educationist (1776-1841). One of Herbart's chief contributions to pedagogy is the doctrine of apperception, by which he meant the interpretation of new ideas by means of old. (64) This is the germ of the reconstruction theory which consists in setting up relations among old elements of experience in order to constitute a new experience.

Another German educationist whose principles were largely in harmony with the theories of his day was Froebel (1782-1852). He laid emphasis upon the self-activity of the child as the basis of learning. By self-activity he meant the spontaneous effort that the child puts forth because of the inherent interest that the subject matter has for him. Froebel thus made the child's natural interests the starting point in instruction. This principle determined the means he advocated in teaching the child - play, constructive work, and nature study. He endeavoured to have the things learned function directly in activity, thus giving education a social and practical significance. It is evident that Froebel, in his doctrine of self-activity, has emphasized the idea of motivation which occupies so large a place in our theory of learning. (65) "Education", said Froebel, "consists in leading man, as a thinking intelligent being, growing into self-consciousness,

to a pure and unsullied, conscious and free representation of the inner law of Divine Unity, and teaching him ways and means thereto." (66) Applied to early childhood teaching means "leading" the child to self-realization and not imposing on him the moral or religious ideas of adults. Froebel founded the first "Kindergarten" where he applied his method so successfully that it led to an international Froebel movement and the establishment of pre-school institutions all over the world. Although Froebel's panentheistic conception of nature was very far from the present scientific theories, he laid the foundation for modern child-study and in some cases discovered by experience new facts of child psychology. By the work of Pestalozzi and Froebel humanism achieved its second aim: it made education not only human but humane. The love of children which permeated their activity and their deep sympathy with human faults and mistakes has become the first condition of any successful teaching practice.

What is important and very worthy of note in this study of contributions to geography and its teaching, is the influence that Rousseau, Pestalozzi, Herbart,

Froebel and Humanism in general had on the teaching of geography. Of foremost importance was the emphasis placed by the movement on observation, experience and sense perception. Emphasis upon observation and sense perception led many to make the knowledge of geographical facts within the direct observation and experience of the pupil the basis of all geographical instruction. The procedure in our schools to-day in teaching geography follow these lines - of beginning instruction with home geography; slowly moving from the known to the unknown. Excursions and field trips to interesting areas, encouraged in our courses of study these days, were a common thing in some parts in the eighteenth century. It was Rousseau who said in Emile, "never substitute the sign for the thing when you can see the thing itself".

It is now possible with the benefit derived from our study of the science and art of geography and the scholarship of the subject to make some definite observations. These observations concern the nature of geography, its basic philosophy and the art of teaching it. They will represent what is considered to be the greatest contributions to the understanding of the subject as a science and to sound teaching, by men who, over the years, have had its interest at heart.

This formulation of ideas will act as a standard with which we can make comparisons when particular attention is paid in the following pages to the teaching of geography in Canadian schools.

I The nucleus of modern geography is the discovery and interpretation of the interacting relationships of man and nature. The subject therefore, is a physical-social science and is a counterweight to specialization for it correlates the specified branches of the "Environmental" sciences with the "Human" sciences. (see diagram)

II Geography concerns LAND and MAN. By means of geography the gap between the physical and human elements is bridged. For geography to be taught properly there must not be any elimination of "physical" geography. (Definition - P2). The knowledge of physical geography is the foundation of geography. The converse of this that

geography is not complete without a knowledge of the "human" elements, is also true. A happy balance between the physical and human aspects of geography, as taught in the schools must be attempted. Ideal conditions are not existing when either plays a minor role.

III The relationship between man and his physical environment should be studied to discover how he works and lives in particular geographical areas, how his life and occupation are influenced by his environment and to what degree he is able to control and adapt that environment to his liking.

IV With few exceptions geographers have recognized the need for two different methods of approach -

1. The systematic studies concentrating on areal differences of specific elements over the whole earth, or major parts of it.
2. Regional studies of the complete geography of specific areas.

The "Dual Approach", incorporating both of these methods of studying geography is the ideal.

V It is geography as a study of regions which has had the greatest influence on the teaching of the subject in modern times. Although the regional approach is not everywhere accepted enthusiastically by geographers, it has been recognized by most as a

concept which places the study of geography on a more scientific basis than ever before. It has done this by eliminating political boundaries as a criterion for geography study and replaced them by criteria such as climate, vegetation and physical features for choosing natural regions or units for study.

VI It is advocated that geography in school should consist of a study of the home area or neighbourhood, the city and province or state, followed by a detailed study of the home country by regions. On the completion of this the countries of the rest of the world are to be studied, by regions, in less detail.

VII As other techniques useful in the teaching of geography, the "Project Method", "Topical Method" and "Problem Method" have been cited. These methods can be applied very well to regional studies.

VIII The importance of teaching map sketching and map reading, early, has often been emphasized since the Greek Period.

IX The method of field study has been strongly advocated in teaching geography for centuries. It is by no means an antiquated method and can be used in many school systems at both the elementary and high school levels.

X The desire to include too wide a scope in some schools has wrought confusion in the ranks of geography and often vitiated its claim to be a true discipline. The regional concept, with its reliance on a sound physical basis, the method of field study and the technique of the map, provides, a discipline that no other field of knowledge can claim.

XI From contributions made by Pestalozzi, emphasis has been placed on the fundamental principle that in the early school years, education should not deal so much with the communication of knowledge but with the development of the senses. Applying this to the teaching of geography in the elementary grades, the object should be to awaken the children's interest in their immediate surroundings, both in the phenomena of nature and in the lives and habits of the people, and to compare with these the lives and habits of other peoples living amongst different surroundings. This awakening of interest in geography can be brought about through visits to interesting areas, or through imaginary journeys, travel stories, illustrations and other teaching aids.

XII The plan of beginning early lessons by learning definitions is a mistake. Young children may be

> taught to say by rote what an "isthmus" or a "promontory" is; but the things themselves are, as a rule, outside their experience, and the teaching becomes solely the teaching of words.

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In Chapter III the history of the teaching of geography in Canadian schools is traced from 1840 to 1955. The successive stages in the development of school geography in Canada are analyzed to determine the methods and philosophy which the subject possessed and to compare these with the desirable aims and methodology outlined in the first two chapters.

Chapter IV deals specifically with the problems arising from the present courses of study and discusses how geography teaching today falls short of the ideal.

Chapter V examines the techniques of teaching geography which will best comply with the aims of modern geography.

ANTHROPOLOGY
ETHNOLOGY
SOCIOLOGY
SOCIAL GEOG
ECONOMICS
ECON. GEOG.
BOTANY
PLANT ECOLOGY
PHYSICS
CLIMATOLOGY
GEOLOGY
TOPOGRAPHY
ASTRONOMY
CARTOGRAPHY
HISTORY
POLITICAL GEOG.
HUMAN
ENVIRONMENTAL

# CHAPTER III

## THE HISTORY OF GEOGRAPHY TEACHING IN CANADIAN SCHOOLS (1840-1955)

Since no literature exists relating to the history of geography teaching in Canada, it is necessary, in tracing its development, to make a study of all the old textbooks and teaching manuals that can be located. In the nineteenth century in Canada there was not made available to teachers, the literature we have today which attempts to clarify the aims, methods to be used and basic philosophy of a subject. The result was that much emphasis was placed on the textbook, particularly when, in most cases, schools lacked such equipment as wall maps, globes, films and film strips and other teaching aids which are available today. It is not too unreasonable then, to assume that much can be learned from these texts of what kind of geography was taught in the nineteenth century. Following the inauguration of normal schools and the beginnings of the emphasis of methods of study and teaching, the story of the late nineteenth century and early twentieth century is more easily told.

Canada's constitution assigns public education, except for that of the native Indians, to the jurisdiction of each of the ten provinces. While each system varies from the others in particulars, the general plan is the same for all except Quebec where there are two systems, the Roman Catholic which has developed in the French tradition, and the Protestant which is of the English tradition of the other nine provinces. The public school systems of Ontario, Saskatchewan and Alberta, include separate schools, mostly

Roman Catholic. In Newfoundland the schools are denominational - Anglican, Roman Catholic, United Church, Salvation Army and Seventh Day Adventist, with a few non-denominational.

In each province, except Quebec, education is administered by a separate department of government headed by a Minister of Education who, as a member of the Ministry, is responsible to the Legislative Assembly and to the people. In Quebec education comes under the jurisdiction of the Provincial Secretary. The Minister, through his department, is responsible for the administration and enforcement of all statutes and regulations concerned with the schools, including training and licensing of teachers, provision of courses of study, authorization of textbooks, enforcement of attendance laws and the apportionment of provincial grants to schools.

In the systems of the English tradition, the elementary school includes the first eight grades. Children commonly begin at age six or seven and complete the elementary grades at ages 13 to 15.

The secondary school course extends over four years, from grades IX to XII (five years to grade XIII in British Columbia and Ontario).

Grade XII (or XIII in British Columbia and Ontario) is equivalent to first year university. In some provinces grades VII to IX are designated intermediate or junior high and given a broadened curriculum.

It is seen that under Canada's Constitution the responsibility for education is in the hands of the provinces. The outcome of this is that there usually exists in any one year ten different courses of study for the schools and rarely are the textbooks used the same in any two or more provinces.

These facts become obvious when one attempts to trace the history of teaching of geography, or any other subject for that matter in Canada.

The following list of textbooks and other material relative to the subject has been compiled with invaluable help from the education departments of various provinces. In some cases much investigation was required on the part of research departments to supply the information needed. Frequently, too, no records of textbooks for certain periods before the turn of the century could be found but it is probable that they would be similar to, if not exactly the same, as those listed for other provinces.

## PROVINCE OF NOVA SCOTIA

Elementary Schools

1880 Geography I - Calkin's Introductory Text Book (MacKinlay) Grs. 6 and 7)

1920 Nelson's School Geography (Nelson)(Grs. 6 and 7)

1925 Canadian School Geography (Cornish) (Grs. 7 and 8)

High Schools

1880 Geography II - Calkin's Geography of the World (MacKinlay) (Grs. 8 and 9)

1925 Canadian School Geography - Complete (Cornish) (Gr. 9)

1933 Morrison's Commercial Geography (Ryerson) (Gr.10)

## PROVINCE OF NEW BRUNSWICK

Elementary Schools

1899 New Canadian Geography (Gage & Co.) (Grs. 6-8)

1906 Nelson's School Geography (Nelson) (Grs. 6-8)

1920 The New Brunswick School Geography (Wallace) (Grs.4-5)

1927 (Nelson's School Geography (Grs.7-8)
1951 (Discovering Geography (Longman's, Green)

During these years Pictorial Atlas (Longman's, Green) was also prescribed.

1951 Canada and Her Neighbours (Ginn and Co.) (Grs. 5-6)

1951 Geography of Lands Overseas (Gage & Co.) (Grs. 7-8)

## PROVINCE OF QUEBEC

Elementary Schools

1857 Books of Lessons - Lovell

1890 New Introductory Geography - Calkin
Introductory Geography - Lovell
Intermediate Geography - Lovell

1907 New Elementary Geography - Grafton
Introductory Geography - Calkin

1920 New Elementary Geography

1926 New Geography - Frye-Gammell

1950 Visits in Other Lands - Atwood and Thomas
Canada and Her Neighbours - Taylor, Severeight and Lloyd

1953 Southern Lands - Taylor, Severeight and Lloyd

1954 Old World Lands - Barrows, Parker and Sorenson

High Schools

1890 High School Geography - Chase

1904 Elementary Physical Geography - Davis
Physical Geography - Tarr
Physical Geography - Hinman

1907 Longmans' Primary Physical Geography

1911 Ontario High School Physical Geography

1921 New Physical Geography - Tarr

1924 Canadian School Geography - Cornish

1937 A World Geography for Canadian Schools - Denton and Lord

1945 New Physical Geography - Tarr and von Engeln

1947 The World - Stamp
Geography for Today (North America and the Southern Continents) - Stenbridge

1957 The World - Stamp and Kimble

## PROVINCE OF ONTARIO

Geography texts in use in 1846 (approved and recommended for public, separate, continuation and high schools, collegiate institutes by the Department of Education)

1. Epitome of Geographical Knowledge
2. Compendium of Geographical Knowledge
3. Sullivan's Geography Generalized
4. Sullivan's Introduction to Geography and History

Elementary Schools

1875 Lovell's General Geography
Lovell's Easy Lessons Geography
Geikie's Physical Geography
Page's Introduction to Physical Geography

1883 Lovell's General Geography
Lovell's Easy Lessons Geography
Lovell's Intermediate Geography

1889 Public School Geography

1910 Ontario School Geography by Educational Book Co. of Canada

1922 Ontario Public School Geography by W.J. Gage and Co. Ltd.

High Schools

1875 Lovell's General Geography
Page's Introduction to Physical Geography
Geikie's Physical Geography
Pillan's First Steps in Classical Geography

1883 Lovell's Advanced Geography
Campbell's Modern School Geography
Geikie's Physical Geography
Page's Physical Geography (for advanced classes)

1889 High School Geography by G. Chase
Campbell's Modern School Geography
Pillan's First Steps in Classical Geography

1910 Ontario High School Physical Geography by Morang Educational Co. Ltd.
Ontario School Geography

1922 Ontario High School Physical Geography by MacMillan Co. of Canada Ltd.
Ontario School Geography by W.J. Gage and Co. Ltd.

1930 Ontario High School Revised Physical Geography by Ryerson Press

1938 Ontario High School Physical Geography (expired June 1939)

## PROVINCE OF MANITOBA

Elementary Schools

1890 New Canadian Geography

1902 Primary Geography - Our Home and Its Surroundings

1903 Earth as a Whole

1911 The World Relations - McIntyre

1928 Public School Geography (V-VIII)

1928 Book of Boys and Girls (IV)

The last two books mentioned were used for a number of years after 1928

High Schools

Before 1890 Page's Physical Geography

1890 Campbell's Geography

1906 Morang's Complete Geography
(Discontinued 1923)

## PROVINCE OF SASKATCHEWAN

Elementary Schools

1896 How to Study Geography by Parker
The Story of Our Continent by Shaler
The Geographical Reader (American Book Co.)

1906 The New Canadian Geography, NorthWest Territories Edition was added to the books used in 1896

1913 The New Canadian Geography, Saskatchewan and Alberta Edition (Gage & Co.)

1921 World Relations and The Continents, by McIntyre (Gage and Co.)

1927 Canadian School Geography by Cornish -

1939 Far Away People
Journeys by Land and Sea
Public School Geography by Stevenson and Barager (Gage and Co.)
A World Geography For Canadian Schools, by Denton and Lord

1945 Far Away People
Journeys By Land and Sea
A World Geography For Canadian Schools, by Denton and Lord

High Schools

1896 The High School Geography
The Geography of The British Colonies, by Dawson and Sutherland

1913 High School Physical Geography, by Morang's Educational Co.

1921 High School Physical Geography (MacMillan and Co.)
Dominion School Geography (Gage and Co.)

1927 Canadian School Geography, Complete, by Cornish

1939 No Specific text

1945 A World Geography for Canadian Schools

## PROVINCE OF ALBERTA

1905 The New Canadian Geography (NorthWest Territories edition)

1912 Dominion School Geography - Educational Book Co.
(This text appears to have continued in use, in various editions, during the 1920's)

1937 Alberta Public School Geography (Grades 7-8)
A World Geography for Canadian Schools - Denton and Lord - (Grades 7-11)
Commercial and Economic Geography - Ryerson - (Grades 9 and 11)

Secondary and Supplementary References
Jones: Economic Geography (Holt)
Stanbridge: World Wide Geographies, Books VI and VIII (Oxford Press)

Smith: Human Use Geography Book II (Winston)
Smith: Foreign Lands and Peoples (Winston)
Kingsway: Social Geographies, Books I-IV (Dent)
Burrows and Parker: Geography, Europe and Asia (Silver-Burdett)

## PROVINCE OF BRITISH COLUMBIA

Elementary Schools

1878 The World - J.B. Calkin, Modern Geography - Campbell
Science Primer - Geikie

1890 Lovell's First States in Geography
Ancient Geography - Pellano

1924 Canadian School Atlas (Dent)

1928 Canadian Geography for Juniors (Dent)

1936 A World Geography for Canadian Schools (Dent) (Gr.7-8)

1945 New World Horizons (Dent) (Gr. 5)

1946 Old World Horizons (Dent) (Gr. 6)

1950 The Ancient & Medieval World (Clark, Irwin) (Gr. 7)

1950 Canada in the World Today (Clark, Irwin) (Gr. 8)

High Schools

1924 Canadian School Geography and Atlas (Dent) (Gr. 12)

1936 A World Geography for Canadian Schools (Dent) (Gr. 9)
Also Canadian School Atlas (Dent)

1936 A Geography Workbook, Part I (Dent) (Gr. 11)
A World Geography and Atlas (Dent) (Gr. 11)

1938 A Geography Workbook Part II (Dent) (Gr. 12)
A World Geography and Atlas (Dent) (Gr. 12)

1950 World Geography (Ginn) (Gr. 9)

1950 The World (Longmans, Green) (Gr. 10-12)

COURSES OF STUDY

1. "Handbook to the Course of Studies" - Department of Education of Newfoundland (1945)

2. "Programme of Studies, For the Schools of Prince Edward Island, Grades I-X" - Department of Education (1952)

3. "Program of Studies for New Brunswick" (1952)

4. "Handbook to the Course of Study", Department of Education, Province of Nova Scotia. (1933)

5. "Handbook for Teachers in the Protestant Schools of the Province of Quebec" (1953)

6. "Programme of Studies for Grades I to VI of the Public and Separate Schools", Department of Education, Province of Ontario (1941)

7. "Courses for the Intermediate Division of the Schools of Ontario" (1951: revised)

8. "Programme of Social Studies for Manitoba Schools" (1950)

9. ("Elementary School Curriculum Guide I" (1952)
10. ("Programme of Studies for the High School, Bulletin A" ((1950). Department of Education, Province of Saskatchewan.

11. "Bulletin 2, Elementary School" 1949

12. "Junior High School Curriculum Guide for Social Studies" (1952)

13. Geography in the Programme of Studies for the Junior High Schools of British Columbia (1953)

14. Geography in the Programme of Studies for the Senior High Schools of British Columbia (1953)

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15. Report of the Superintendent of Education, British Columbia 1890-91, 1914-15, 1930-31.

16. Report of the Superintendent of Education, Province of Quebec 1860-61, 1889-90, 1908-09.

17. Report of the Superintendent of Education, Province of Ontario 1860, 1890

18. Teachers' Manual - Geography by Ryerson Press Province of Ontario, 1922.

THE TEACHING OF GEOGRAPHY IN CANADA

The text books of the nineteenth century were encyclopedic and were meant to be memorized - just as textbooks unfortunately are in some places today. Much of the content was simple, some of it bizarre, and the fundamental assumptions as to child nature were often amusing. Much emphasis was placed on physical geography but no effort was made to explain how man has been influenced by his environment. The topical method, as previously defined was used extensively, simply so that lists of facts could be learned in an orderly fashion. No effort was made to present geography in any other way than that which used political boundaries as a criteria of division.

These criticisms and others are best illustrated by citing different books in use at that time.

"Geography Generalized", by Robert Sullivan, used in the public and high schools of Ontario, was written and published in Ireland in 1843. It was not only one of the first books used in Ontario but as stated in the text itself, filled a much needed requirement for a geography text book in Ireland.

It is very interesting to note that the book not only contains "Mathematical", "Physical" and "Political" geography, but a section recommending the best ways of teaching the subject. The ideas found in the article on the teaching of geography and in certain passages in the

preface are well advanced for the time and could quite easily be found in Teachers' Manuals for 1954.

> "This little work is", the Preface states, "an introduction to the study of geography. It will, however, be found to contain much more information upon this important and interesting branch of education than is usually met with in much longer volumes. This is entirely owing to the plan upon which it has been drawn up. Instead of dividing the attention, and oppressing the memory of the young student, by obliging him to learn and recollect the unconnected facts and innumerable details with which this, the most extensive of all the sciences abounds, the essential facts and leading principles have been presented to his view under general and separate heads. In this way, he learns with ease, and recollects without effort, the general and fundamental principles of the science, and having thus fixed in his mind a clear and connected outline of the whole subject, he will be able to fill it up as he proceeds, not only without difficulty, but with pleasure."

Mr. Sullivan has pointed out the very weakness of geography texts of his day, but unfortunately the weakness cannot be eliminated simply by placing the important facts and principles to be learned in bold print as he has done.

The first section of the text deals with Mathematical and Physical geography. It handles these branches very well as far as the written word is concerned, but there is a definite lack of interesting and helpful diagrams, sketches or photos to illustrate. The information is very exacting and is presented in the order found in most modern text books. However, very little is said about vegetation and climate, and little emphasis is placed on the adaptation of man, plants and animals to environment.

The section dealing with "Political Geography" is not so well executed. It has the weakness of the time in that its material is encyclopedic. The fact that the size of cities, lakes, rivers or mountains is compared and contrasted, does not make geography more meaningful. It may help the students to learn facts more easily. Definitions abound in this section. No attempt is made at presenting the work of any continent or country according to physical (natural) regions. Much material is to be learned which is not geography. An example of this is the listing of the numbers of men in the Army, Navy, and figures representing Revenue and National Debt.

Each country is presented under the following headings:-

1. Boundaries
2. Divisions
3. Provinces
4. Chief towns
5. Population of the Principal towns
6. Mountains
7. Rivers
8. Lakes
9. Canals
10. Islands
11. Capes
12. Colonies
13. Climate, surface
14. Productions
15. Agriculture
16. Manufactures
17. Commerce
18. Naval ports
19. Religion
20. Government
21. Army
22. Navy
23. Revenue
24. National Debt
25. Imports, Exports

A historical sketch of each country is included with the work. This is short but very helpful. Another good aspect of the book is that it begins with "home geography". The four cardinal points are learned, the position of the sun at different parts of the day and this

is followed by the sketching of the school room, and then the playground. In this way, "geography is commenced, as it should be, with topography", states Mr. Sullivan. This work introduces the students to maps as representing the earth.

Geography was taught in 1855, in the province of Quebec at least, from a series of books of lessons authorized by the Council of Public Instruction for Upper Canada. The series of four "Books of Lessons", as they were called, were originally published in Dublin, it is stated, and republished, by special sanction, at Montreal by John Lovell. The book is probably one of the very few text books possessed by children at that time, for in it is included lessons on Natural History, Geography, Religion, Political Economy and Poetry.

The only mention made of geography in the Preface is a sentence which states that the book contains "a whole Section of Lessons devoted to subjects connected with Geography, which ought to be explained from Maps".

The text contains no maps, sketches, illustrations or photographs and makes no attempt to present the work in an interesting manner. It demonstrates very well everything that is considered today to be abhorred in a text book.

Book Four, which presumably is intended for the senior grades contains notes on Europe, the British Empire, Asia, Africa, America and a number of special articles on

such topics as the Pyramids, Niagara Falls, Scenery of the Upper Orinoko. It is interesting to note that the articles written about South America came from the pen of Alexander Humboldt. These articles are very interesting, as are the others but the "political" geography is very sketchy and it would be difficult even to imply that pedagogical theories had been used in its arrangement and presentation. The following is the geography of Spain as found in this text.

"Spain has lost much of its former power and wealth since its colonies in America declared themselves independent. Before the late war, the monarchy was absolute: at present it can scarcely be considered settled. The established, and only tolerated religion, is the Roman Catholic. Spain is a warm country, and the soil, in many places is rich and fertile, producing excellent wheat, barley, and other kinds of grain, besides fruit, oil and wine. It is remarkable for its excellent breed of horses and sheep; and it contains various mines of gold, silver, copper, lead and tin."

The following inspector's report gives us a fair idea of the poor state in which geography teaching was to be found in the nineteenth century in the elementary schools of the Province of Quebec.

"Considerable progress has been made in this branch in past years. But a short time ago it was quite an unusual thing to find a map in the elementary

schools in my district.

At present those which have not at least a map of the world are the exception.

The teachers still stick too much to the book; but they make the pupils find out the places on the map. In most of the schools I find only very few pupils who study this branch and I call the teacher's attention to it. The invariable answer I receive is that the parents will not buy the geography text."

(Mr. T. Beaulieu, August 1889. From Annual Report of the Superintendent of Education.)

Lovell's "Easy Lessons in General Geography With Maps and Illustrations" is typical of the text used in the elementary schools in the period 1870-1890. (Published by John Lovell, Montreal).

The work of this book consists of seven parts. "Part I contains the introductory lessons and those on the definitions. The remaining six Parts are devoted to the six great land divisions of the Globe. In each of these will be found a general lesson on the Continent of which the Part treats, followed by special lessons on the various countries of the Continent."

This text, for beginners, is a slight advancement on the earlier texts which were mere compendiums. The improvement is most noted in the collection of good black and white maps and illustrations in the book which

must have been received by students with much enthusiasm.

Basically the book has not changed very much from its predecessors. The concentration is still on cold hard facts. The book, as previously explained by a quotation from the Preface, is arranged in lessons. This simply involves the straight catechismic question and answer method. This will be best explained with an example:-

PART I

Lesson I

THE EARTH AND ITS APPEARANCE

Q. Where does the light of day come from?
A. From the sun, which appears to rise up in the sky every morning.

Q. In what direction does the sun appear to travel in the sky every morning?
A. From east to west along the southern sky.

Q. When the sun is out of sight at night, what do we see if the sky is clear?
A. The stars; and also the moon at her regular times of appearing.

Q. Where are the stars during the day?
A. In the sky; but as the sun shines so brightly they cannot be seen.

This question and answer method continues right through Part I which deals with such topics as Time and its Divisions, The Hemispheres, The Mariner's Compass, Great Land and Water Divisions; Size, Motions and Measurements of the earth, Governments and Religions of the Earth.

The same method is used for the lessons on the geography of the continents taken up in the remaining six

parts.

A good example of how uninteresting the learning of geography, presented in this fashion, must have been, can be taken from Lesson XX which is a study of the Province of Quebec. This lesson is typical of the detail and amount of memorization involved in studying any of the countries or provinces in this text.

Lesson XX

PROVINCE OF QUEBEC

Q. Point out the position and boundaries of Quebec.
Q. Which is its largest river?
A. The St. Lawrence

Q. Name the principal rivers north of the St. Lawrence.
A. The Saguenay, St. Maurice, and Ottawa.

Q. Name the principal rivers south of the St. Lawrence.
A. The Richilieu, St. Francis, Chaudiere.

Q. For what is Quebec noted?
A. For its shipping, lumbering, fisheries, iron and copper mines and its beautiful scenery.

Q. Point out and name the nine counties on the Ottawa and their chief towns.
A. Pontiac (Bryson); Ottawa (Hull); Argenteuil (Lachute); Two Mountains (Ste. Scholastique); Vaudreuil (Vaudreuil); Soulanges (Coteau Landing); Jacques Cartier (Pt. Claire; Hochelaga (Longue Pointe); Laval (St. Rose).

Q. Point out and name the fourteen counties north of the St. Lawrence, and their chief towns.
A. .....

"The Public School Geography" used in the schools of Ontario between the years 1887-1910 was authorized for use in the Public schools, High schools and Collegiate Institutes of Ontario, by the Supt. of Education (1887).

The Preface of the text contains a fairly exhaustive lecture to the teacher on the evils of rote learning in geography. This condemnation of the evil which prevailed for so long is the first to be found in the text books studied. "The study of Geography", the author states, "is often the driest and most wearisome the pupil has to deal with and will always be so unless the teacher, to his knowledge adds understanding, and presents the subject so that while he satisfies the child's eager curiosity by offering to it well arranged facts, he also enkindles the child's imagination, and thus makes possible the mental assimilation of these facts. The teacher should be careful to remember that all the Geography is not to be committed to memory, or indeed more than a small part of it; - he who should insist upon his pupils memorizing the number representing the square miles in the various countries of the world, or even a table of their relative sizes, would be worse than an intellectual tyrant - he would be a destroyer of intellect. But the skilful teacher will find no trouble in devising ways and means whereby he shall assure himself that his pupils understand what their text-book contains; then, what is useful for them to remember, they will remember without much subsequent effort."

This text is definitely an improvement on its predecessors. It contains many illustrations and coloured maps. It also has the work arranged in a manner which is to be found in many modern text books. The work, consisting of 46 lessons which are to be completed in the elementary grades, begins with a study of direction and distance to be followed with pictures and maps. A good allotment of time is given to map drawing - beginning with the familiar classroom, township, county and working up to the more difficult conceptions of the printed maps of

countries and the world. The form and size of the earth, latitude and longitude, cause of day and night and other elementary aspects of what is considered to be "Mathematical geography" is taken up. This again is followed by a brief study of all of the countries of the world with a more detailed study of North America.

Each country or province (in the case of Canada) is dealt with in the same manner, namely under the headings of 1. Position, Size and Population, 2. Boundaries, Physical Features, and Sub-division, 3. Soil and Climate, 4. Occupations of the People and Industries, 5. People, Religion, Education and Government.

Exercises and Review exercises are to be found often in this book and they are also an improvement on earlier books for the catachismic Question and Answer method doesn't exist and more emphasis is placed on map work and comparisons.

Many countries and parts of North America are taught through Journey Geography. Imaginary trips are taken and this no doubt makes the work more interesting to young children. It is a method which is commonly used today.

Although a great improvement, one must be critical of the concentration on detail that this book contains.

"High School Geography" by G.A. Chase, B.A. was used concurrently in the High Schools.

Divided into two parts, it first deals with Physical Geography and later with Descriptive Geography.

It is a more detailed version of the "Public School Geography". In this text, as in others at that time, much emphasis was placed on physical geography. Its treatment gave the students an excellent knowledge of the controlling factors of invironment and structural framework of the earth. The physical geography in this particular text was written by such great geologists of the time as Sir Charles Lyle, Dr. J.W. Dawson, Geikie and Dana. Unfortunately, again, the text makes little effort to show relationships between the physical and human factors.

It appears, from the number and character of the text books, that Physical Geography was given a prominent place in the high schools in the Nineteenth Century. Such texts as Dr. Page's "Physical Geography", and Geikie's "Physical Geography", in use in the provinces of Ontario, Quebec and Manitoba in the period 1860-1890, dealt very thoroughly with the subject. It is not unreasonable to find an emphasis being placed on this aspect of geography, at that time. The greatest advances in geography as a science, we have found out, were made along these lines in the latter half of the eighteenth century. Until these advances were made, geography was merely a description of things. Physical Geography should rise above the mere description of external appearances, and seek to explain the causes that produce them. If physical geography is not taught in this way then it is better not taught at all.

Unfortunately, the contributions that physical geography was meant to make to the science, have often been lost. This statement is true of geography teaching in many parts of Canada in the period with which we are now dealing, and it is for this reason that, as we shall see, much less attention was paid to it in the years to follow. The content of physical geography was more than likely learned, or, as in the case of political geography, memorized, but its use as an instrument for reasoning out and explaining geographical problems, was seldom used.

That these conditions existed can be born out by looking at examinations which were given at the time. The following is a High School Leaving Exam held in British Columbia on July 2, 1891. (2 hours duration)

1. a Explain the following terms - orbit, ecliptic, zodiac, llanos, lagoon, mistral.
   b Why is the earth nearer the sun in winter than in summer?
   c Give two reasons for the coldness of winter.

2. Give the boundaries of the following -
   1. Brazil, Holland, Persia, Ontario, California
   2. Name the capital of each of the foregoing, stating the water on which each city is located.

3. Locate the British possessions in the Mediterranean, in Africa, South America, Asia.

4. Trace the course of the following rivers - Tay, Congo, Shannon, Ural, Godavery, Murray, Saskatchewan, Essequibo.

5. a Locate the five principal capes of Europe.
   b Where are the following straits?

| | |
|---|---|
| Palk | Bass |
| Cook | Sunda |
| Menai | Torres |
| Northumberland | Davis |
| Serpent's Mouth | |

6. Mention six trading ports of Europe stating the exports of each.

7. Draw a map of one of the following.
   a Scotland - with mountains, rivers and chief cities
   b The Black Sea - with chief ports and mouths of rivers
   c The Boundary line between Canada and United States - with adjacent territories

This exam illustrates very well, what was expected from the learner in the nineteenth century. It is little wonder that this kind of geography has been tagged with the name "Capes and Bays" geography. The student who could remember a great mass of facts would do well on examination day. He was not asked to reason, he was simply asked a lot of facts. He had a good knowledge of physical geography but he was not asked to use it.

The student of geography meets a problem in every phenomena that presents itself. Why, for instance, do two countries lying within the same parallels of latitude present such differences in climate? Why should the plants and animals that flourish in one region dwarf and die out if transferred to another that seems equally fertile in soils and genial in climate? Why should the men at the mountain-foot be tillers of fields while those a thousand feet higher are herdsmen and shepherds? Or why should one country be the scene of busy industry and successful commerce, of intellectual activity and mental culture, while another, as fair and even more fertile,

remains the mere squatting-grounds of indolent, dependent, and semi-civilized hordes? These and a thousand similar questions press themselves upon the attention of every geographical observer. The facts may be detailed with clearness and accuracy but it is to physical geography that we must turn for a rational solution of the phenomena presented - the order in which they occur, and the causes on which they appear to be more immediately dependent.

Considering this matter further, it is interesting to read the report of Mr. John Parker, school inspector of the Province of Quebec. In his annual report on The Protestant Superior Schools, he made reference in 1908, to the provincial examinations in geography in the following manner -

"The answers given in Physical Geography shows that the pupils in many cases have placed too much dependence on the text book and have neglected observation and reasoning. In many cases the answers given were in the exact word of the text book and when misplaced, or by the omission of a comma or a word, they became utter nonsense."

Too often in the schools, the principles learned from physical geography have been forgotten once the study of political geography begins. If the principles learned are not applied to the understanding of human geography it is no wonder that all geography, to the learner, appears to be a burdensome struggle for acquisition of

facts. Again, it is no wonder that pupils memorized their text books when they were aware that it would not be necessary at examination time to do any thinking. It makes one sad to hear of pupils in our high schools today who have chosen geography as an elective course for the same reason. It is unfortunate that these people feel that it is not necessary to do any thinking in this subject. No doubt this exists because they have never been challenged with any thought provoking geographical phenomena and had the pleasure of reasoning them out. They have, some of them, learned to fear thinking, and would much rather memorize their work. Geography should develop the powers of observation and reasoning. If it fails to do this, then it is not living up to the principles that made it a science. The great lack of qualified geography teachers has probably contributed most to these circumstances.

While physical geography continued to be taught in the high schools of the provinces of Canada during the first twenty years of the twentieth century, a marked decline in its importance in the elementary schools can be noted. It was observed that most of the text books in use in the elementary schools in the nineteenth century had a common method of presenting the subject. They began with a study of mathematical and physical geography, followed by political geography.

The physical geography presented was very detailed, and contained many attempts to explain phenomena of a nature that young minds could not conceive. The texts were thorough but too ambitious. They gave stress to the acquisition of knowledge but neglected to inspire the minds or arouse the interest of the young children in the study of the subject. It is generally agreed today that the ideas of Pestalozzi, Froebel and Rousseau on the nature of children are sound. For this reason, education of the young is not so much a matter of acquiring knowledge as it is a training of the senses. With regard to geography, it is an awakening of interest in nature, people and their occupations and homes.

It is not strange then, to find a change in the study of geography in the nineteenth century. Elementary text books, such as McIntyre's "World Relations and the Continents", "The Ontario School Geography" and Frye-Gammel's "New Geography", introduced in the first and second decades, did much to improve the situation. They introduced into the early grades what may be termed, "Human Geography". Without neglecting, "home geography" or the consideration of the child's physical environment, these texts made a genuine effort, with the use of colourful pictures and illustrations, to make geography interesting. The approach to the study taken in these books is not through definitions but through a series of stories about people in their environment. These

stories picture hill and valley, lake and river, prairie and desert, rainfall and drought, tropic heat and arctic cold, in their bearing on life. The illustrative material has been planned to give information about people, their homes, and their work.

From the stories about people, their occupations and environments the texts lead to a study of the earth as a whole. This study deals with a description of the earth, the heat belts, change of seasons, latitude and longitude, etc. One cannot help feeling that this work is more suited to the middle grades of the elementary school, at which time it is presented in these books, than to the earlier grades.

The study of the continents, beginning with North America is carried out in grades V, VI and VII. Each country is dealt with under the headings SURFACE, LAKES AND RIVERS, CLIMATE, INDUSTRIES, CITIES. The amount of detail has been greatly diminished in comparison to earlier books. A great number of review questions are found after the study of each country has been completed. In some instances the answers to questions asked require a knowledge of physical geography. In this way the facts of physical and human geography are combined to the solution of the problem. This is good geography teaching. The following are examples of this type of question.

1. How are the Prairie Provinces suited to stock-raising? 2. Why is there a dry belt in British Columbia? 3. Why are there fewer people in the south temperate zone than in the north temperate zone? 4. In which part of the torrid zone should you expect to find a cool climate?

Although forward strides were made with the introduction of these texts and their improved approach, they were still too well suited to the kind of geography teaching that emphasized the location of capes and bays, political boundaries and what a certain country or city was "noted" for.

During the period 1920-1935 a great variety of text books stressing different aspects of geography, and each laying claim to the correct arrangement of geographical knowledge and method of instruction, could be found throughout the schools of the provinces of Canada. In the elementary schools some courses of study stressed "Journey Geography" while others were content to arouse interest through the medium of adventure story telling, leaving geography teaching to the high schools. Conditions in the high schools were just as unsettled. A rash of commercial and economic geography came over some provincial programmes while others attempted to maintain the usefulness of physical geography.

It was a period of experimentation. It was also

a period in our history when we became much more conscious of the part Canada played in world relations, economy and trade. Some claimed therefore, that a knowledge of commercial geography should be the aim of the high school course. Other educationists stressed physical geography and the importance of relating it to economic geography. Some courses in geography included sections which taught children the importance of good social behaviour and a pride in their country and government.

Into the midst of this chaos was interjected the philosophy of John Dewey, the foremost American interpreter, in terms of the school, of the vast social and industrial changes which marked the late nineteenth and early twentieth centuries. Although his philosophy had the greatest effects on methods of teaching in the United States, they were also felt in Canada. His work, both experimental and theoretical, has tended both to re-psychologize and socialize education; to give to it a practical content, along scientific and industrial lines; and to interpret to the child the new social and industrial conditions of modern society by connecting the activities of the school closely with those of real life.

Education, in Dewey's conception, involves not merely learning, but play, construction, use of tools, contact with nature, expression, and activity; and the school should be a place where children are working rather

than listening, learning life by living life, and becoming acquainted with social institutions and industrial processes by studying them. The virtues of a school, as Dewey points out, are learning by doing; the use of muscles, sight and feeling, as well as hearing; and the employment of energy, originality and initiative. Mere obedience and the careful performance of imposed tasks he holds to be only a poor preparation for democratic society and government as well.

The "Enterprise", "Dalton Plan" or "Project Method" are different names given to a technique which was also winning much favour in the late 1930's. It was very much in keeping with the Dewey philosophy. As explained in an earlier chapter, the value of the Project Method lies largely in the intensity of the motivation that it secures, and in the vividness of the learning results that it promotes through the employment of the natural activities of the children in interesting pursuits. Not the least of its values is its contribution in the formation of such desirable moral ideals as industry, application, persistence, and co-operation.

These innovations in educational thought brought great alterations to the programmes of study in Canada. Geography, in particular, was involved. Beginning with Nova Scotia in 1933, the provinces of New Brunswick, Prince Edward Island, Ontario, Manitoba, Saskatchewan, Alberta and British Columbia, or in short, all but Quebec

and Newfoundland, reorganized their curricula in a way that no longer taught geography as a separate subject, but with history and civics, under the new programme called "Social Studies". This reorganization marks the most radical change in the history of the teaching of geography in Canada. Within the short period of a few years, the study of geography as a science lost its individuality.

It was claimed that a knowledge of the geographical background was necessary to the proper understanding of history and for this reason the two subjects should be combined for greater correlation. To this was added civics and in some quarters health and guidance. The latter subjects were added as a result of the new emphasis laid on the role the school must play in the teaching of correct understandings, social attitudes, and habits of living. The school was to become a miniature society after the wishes of John Dewey and his converts. Since the school was also to be a practical place for work through active pupil participation, and since the subject matter of "Social Studies" lent itself very well to project work, this method was adopted with the new theories, by more than half of the schools of Canada at the elementary and high school levels. The "Social Studies" programme has continued to exist in the schools, with the exception of those in Quebec and Newfoundland, to the present day. It has been very active in the elementary schools and in

the grades of junior high. It is noted that its popularity in the senior high school is not as great, since in many provinces separate courses in history and geography are once again offered.

The contributions made by the "Social Studies" programme, and its shortcomings will be considered later.

We have traced the history of the teaching of geography in the elementary and high schools from the middle of the nineteenth century to the present decade. This work would not be complete without a picture of the status of geography in our schools today.

In many ways, conditions have changed very little since the last century. There are ten different courses of study and although all the provinces, presumably, have the same aims of education, there is still a great variety of text books used and great differences in the standard of attainment. There is still a lack of qualified geography teachers, and we are still failing to teach geography in a way that will use all of the best ideas of the outstanding minds in the past.

In other ways, noteworthy advances have been made. Present day textbooks with their clear type and colourful pictures, maps and illustrations are a far-cry from the uninteresting and poorly bound books of long ago.

The supply of maps - physical, economic, political, geological, topographical and population distribution, available to the teacher in a variety of scales for different uses, is most helpful. How the teacher of the year 1850 who waited patiently for her wall map of the world to arrive, would have envied us today. She would have been just as envious of the variety of instructional films and film strips that we have within easy access.

We can better understand the conditions of present day geography teaching by taking a close look at the courses of study of the provinces. Since only a general picture is required it will not be necessary to consider the ten courses of study in detail. The object of presenting the geography programmes for Nova Scotia, Quebec, Alberta and British Columbia is to illustrate the differences in philosophy, subject matter and methods that are used. Reference will also be made to the principles of geography teaching which we have inherited from the past that are being put into practice, and those that are not.

## THE PROVINCE OF NOVA SCOTIA

The present program of studies for geography in Nova Scotia has been in effect since 1933. Currently the whole program is being revised but as yet the subject is taught only in grades III to IX. In grade X emphasis in the social study course is placed on history. A course in commercial geography is an elective subject and is not part of the required social studies course. In grade XI and XII only history is offered.

In a letter received in November, 1952, Mr. A.B. Morrison, Director of Curriculum and Research, stated that, "Recently in the social studies committee considerable discussion has taken place on the regional approach to geography teaching. The committee feels also, that the commercial geography in grade X should be replaced by something less commercial and more physical. In the 1933 program considerable emphasis was given to journey geography. Just now the unit or project report seems to be receiving attention."

The following is a summary of the curriculum for each of the grades made from the, "Handbook to the Course of Study", Department of Education, Province of Nova Scotia, 1933.

### GRADE III HOME GEOGRAPHY

Class work in this grade should consist primarily of conversational lessons based on the knowledge that the

pupils have, supplemented by observations made by them under the direction or the suggestion of the teacher.

CONTENT:

A. The teaching of direction and distance
B. Observation of the seasons and their relations to life
C. Land and water forms of the neighbourhood
D. Weather and its effects on life
E. The work done on the land - cultivation and crops grown
F. Teaching the map

Time allotment: 100 minutes a week

GRADE IV JOURNEY GEOGRAPHY

The geography course in grade IV is intended to give the pupils a bird's eye view of that wider world lying outside the bounds of Nova Scotia; the object being to bring to the attention of the pupils facts new and strange; to introduce them to the peoples living in other countries; and to show them how these others are found, like themselves, to be mainly dependent on land and water conditions.

CONTENT: JOURNEY SUGGESTIONS

A. The Arctic Regions of North America
B. South America
   1. A trip up the Amazon
   2. A journey across the Pampas of Argentina
C. Europe
   1. Mountains of Switzerland
   2. Low country of Holland
   3. Fiorded coastline of Norway
D. Asia
   1. Japan
   2. China
E. Africa
   1. Egypt
   2. Sahara Desert

Time allotment: 90 minutes a week

GRADE V

The geography course in grade V comprises the study of Nova Scotia to be followed afterwards, in somewhat lesser detail, by that of the remaining provinces of Canada, and concludes with a series of brief sketches dealing with the geography of the United States, Mexico, Central America and the West India Islands. The Journey method is also emphasized in this grade.

Time allotment: 180 minutes per week

GRADE VI

Owing to the fact that many pupils leave the schools in Nova Scotia at the end of grade VI it was felt that it was more or less imperative to prescribe as wide a course of World Geography for grade VI as the time available permitted. In the sixth grade the actual relation of geographical data to man in his struggle for existence is treated more as a series of observed and attested facts and in consequence is given the major emphasis.

CONTENT

A. CERTAIN FUNDAMENTALS OF GEOGRAPHY
   1. Earth's shape
   2. Latitude and longitude
   3. The winds of the world
   4. The oceans

B. EUROPE
   1. The British Isles
   2. France
   3. Germany
   4. Russia
   5. The Mediterranean and Italy

C. SOUTH AMERICA
D. AFRICA
E. ASIA
F. AUSTRALIA AND NEW ZEALAND

In grades VII, VIII and IX the teacher is urged to adapt new methods (Regional, Topical, Outline, Problem, Project) to the work. It is felt that these methods are valuable contributions to the teaching of the subject.

GRADE VII

A. GENERAL GEOGRAPHY. In this grade, as well as in grades VIII and IX, a great deal of the general geography studied in the earlier grades is reviewed. This review includes: the size, shape and motion of the earth; directions; latitude and longitude; the measurement of time; climatic zones; the atmosphere; forms of precipitation; principal ocean currents.

B. AN INTENSIVE STUDY OF CANADA
1. Its people
2. Its development - (a) study of producing areas
(b) industries of Canada

C. A GENERAL SURVEY OF THE WORLD
1. The Continents
2. North America - (a) location, (b) general surface features, (c) drainage, (4) climate, (5) countries
3. South America
4. Europe
5. Asia
6. Africa
7. Australia

Throughout this study in grade VII all countries and their peoples are studied with a comparison to Canada.

Time allotment: 90 minutes per week

GRADE VIII

CONTENT

A. An intensive study of the British Commonwealth of nations
   1. Reasons for development of British Isles
   2. Steps in the development of Britain (industrial developments). This work is to be correlated with the history.
   3. Component parts of the Empire.
      (a) Canada, (b) British West Indies, Honduras and Guiana, (c) Irish Free State, (d) Egypt, Suez Canal, Gibraltar, Malta, Cyprus, Palestine, (c) The Indian Empire and Ceylon, (f) The Straits Settlements, and Singapore, (g) British Possessions in the East Indies, (h) Hong-Kong, (i) Australia, New Zealand, (j) Union of South Africa; and Rhodesia, (k) Nigeria, (l) Kenya, (m) St. Helena and Falkland Islands

B. A study of the important countries of the World
   1. United States
   2. Mexico and Central America
   3. West Indies
   4. Argentina
   5. Brazil
   6. Chile
   7. European Countries (stressing modern industrial development)
   8. Asiatic Countries (stressing their importance as sources of raw materials for the more highly developed manufacturing centers of Europe and North America)

Time allotment: 90 minutes per week

GRADE IX

The aims of the course in grade IX are (1) to give the child a clear knowledge of the human and physical factors which have entered into the development of the social and industrial growth of Nova Scotia; (2) to awaken an appreciation of Nova Scotia's problems and to train to keep in touch with current affairs and world problems.

CONTENT

A. General view of Nova Scotia
   1. Survey of population
   2. Survey of natural resources

B. Nova Scotia from aesthetic point of view

C. Intensive study of industrial development of Nova Scotia
   1. Mining, 2. Study of minerals, products of which are used in Nova Scotia, 3. Agriculture, 4. Lumbering, 5. Fishing, 6. Water power development, 7. Manufacturing, 8. Tourist trade, 9. Transportation, 10. World transportation and trade, 11. Principal cities and towns of Nova Scotia

Time allotment: 45 minutes per week

The following brief outline is a summary of the proposed new program in social studies, forwarded to me by Mr. A.B. Morrison, Director of Curriculum and Research. It is to be noted that the new curriculum has a direct leaning toward more correlation between history and geography and less instruction of the subjects separately. It may be observed also that geography is still not made available after grade IX and in this respect has not changed from the 1933 program.

The following curriculum is subject to change by the Committee.

GRADE I THE HOME AND THE SCHOOL
(1) The home
(2) The school

GRADE II THE COMMUNITY
(1) The people
(2) The landscape
(3) Communications
(4) Transportation
(5) Community services

GRADE III — THE TOWN, CITY OR COUNTRYSIDE
(1) Physical aspects of the area
(2) How people make a living
(3) Foods we eat
(4) Clothing
(5) Homes
(6) History of the immediate area (in story form)

GRADE IV
A. OUR OWN LOCALITY (COUNTY)
1. Size and location
2. People and population
3. Land and water formations
4. Early settlers and settlements
5. First buildings and institutions

B. OUR LIVING CONDITIONS
1. Homes
2. Foods
3. Clothing
4. Fuel
5. Industries
6. Travel
7. Communications

C. OTHER PEOPLES
1. Early man
2. The Indians
3. The Eskimos

GRADE V — PEOPLES OF OTHER LANDS
(1) An introduction to geography
(2) The Swiss (life is an Inland mountainous country)
(3) The Chinese (life in a large crowded country)
(4) The Negroes (life in a tropical country)
(5) The Arabs (life in a desert region)
(6) The Norwegians (life in a northern mountainous country)
(7) The Dutch (life in a crowded agricultural area)
(8) The French (life in a country similar to our own)
(9) The Lapps (life in a Polar area)
(10) Australia (life in a land of mild, rainy winters and dry summers)
(11) Life in modern Canada (Nova Scotia)

GRADE VI — THE ATLANTIC PROVINCES
(1) History
(2) Geography (physical) - (a) location and size, (b) land formations, (c) water formations, (d) natural resources, (e) climate

(3) Geography (commercial)
Regarding each of: Nova Scotia, New Brunswick, Prince Edward Island, Newfoundland.
(a) towns and cities, (b) travel to and from and within, (c) industries, (d) natural products, (e) trade

## SOCIAL STUDIES, GRADES VII - XII

| | |
|---|---|
| GRADE VII | Canada in its American setting<br>(Geography of the Americas; some history) |
| GRADE VIII | Canada in its commonwealth setting<br>(Geography of the Commonwealth; history) |
| GRADE IX | Canada in its World setting<br>(World Economic geography) |
| GRADE X | World history to 1500<br>(History and related geography) |
| GRADE XI | World history 1500 to present<br>(History with relevant geography) |
| GRADE XII | Canada in the modern world<br>(Social problems) |

It will be first noted in Nova Scotia's programme that geography teaching begins with home geography. This method has been widely accepted. It was used early in the history of the subject in Canada but with the added burden of definitions and facts of elementary mathematical geography to be learned. Its proper aim is the awakening of interest in the home environment and the factors which influence the young children's lives.

This method leads quite naturally to the study of other environments in the world through the medium of imaginary journeys. Again, journey geography has been in use for years but now has reached a point where it is being used for the sake of the enthusiasm it arouses in learning about people in other lands rather than for its value in acquiring factual information.

In these ways, the children of the early grades are introduced slowly to the more serious study of geography in grades V, VI and VII. It is observed that while the Nova Scotia programme is referred to as a social studies course, geography and history are taught for the most part separately within its framework.

The greatest criticism that can be made of the programme is that geography is not offered at all after the ninth grade. Again, while the teacher is urged to adopt new methods to the teaching of the subject, there does not seem to be any agreement as to what method should be used.

The regional method is mentioned as one of the methods to be adopted, but in no grade in the course of study, has any of the work been arranged to suit regional studies. Much is left up to the teacher. This method would be of particular value to the work of the grades in this province since there seems to be an unusual amount to be covered in each grade. As was explained in the guide to the course of study, this is due to the great drop out of students in grades VI and VII.

## THE PROVINCE OF QUEBEC

The following outline of courses in geography 'grades I - XI) was summarized from the "Handbook for Teachers in the Protestant Schools of the Province of Quebec" (1953 Edition).

OUTLINE OF COURSES

### SOCIAL STUDIES (GRADES I - IV)

**GRADE I** SOCIAL DEVELOPMENT IN THE HOME AND SCHOOL ENVIRONMENT

UNIT I The home
UNIT II The school
UNIT III The farm
UNIT IV The seasons
UNIT V The pets

**GRADE II** THE COMMUNITY AND THE CHILD'S CONTACTS WITH IT

UNIT I Helpers who bring us our food
(a) the milkman, (b) the baker, (c) the butcher, (d) the grocer

UNIT II Helpers who produce our clothing
(a) the tailor, (b) the dressmaker, (c) the shoemaker, (d) the merchant

UNIT III Helpers who build our homes
(a) the carpenter, (b) the plumber, (c) the electrician, (d) the mason, (e) the painter, (f) the contractor

UNIT IV Helpers who provide transportation
(a) the engineer, (b) the bus driver, (c) the conductor, (d) the pilot, (e) the captain, sailors, stewards

UNIT V Helpers who provide communication
(a) the postman, (b) the telephone operator and the linesman, (c) the radio operator and announcer, (d) newsboys: the story of the newspaper

UNIT VI Helpers who provide for health and sanitation
(a) the doctors and nurse, (b) the health inspector, garbage man, street cleaner

UNIT VII Helpers who protect us
(a) the policeman and traffic officer,
(b) the fireman

UNIT VIII Helpers who provide for education and recreation
(a) the teacher, (b) the minister, (c) the librarian

GRADE III GEOGRAPHY OF THE HOME LOCALITY

The chief objectives of the work of this grade are to train the powers of observation, to give the pupils practice in expressing in language what they see, and to guide them to search for the meaning of what they observe.

UNIT I Earth and sun relations and local weather conditions
UNIT II Local landscape
UNIT III Man's needs in the locality
UNIT IV Map reading and map making
UNIT V Early life in the locality
(a) To show why the site for the town was chosen
(b) The difficulties and problems of pioneer life
(c) The importance of the locality to the life of the country

In grade III Units I, III, IV and either II or V are to be taught.

GRADE IV JOURNEY GEOGRAPHY: the how and the why of life in various regions of the world where the relationships between environment and life are fairly simple and obvious.

UNIT I How people live together in the neighbourhood
UNIT II Journey geography
Text - "Visit in Other Lands" - Atwood and Thomas
UNIT III Introduction to maps
UNIT IV History stories about:
(a) Negritos, (b) Eskimos, (c) Steppe Herders, (d) The Congo, (e) The Andes, (f) Egypt, (g) India, (h) China, (i) Norway, (j) Mexico, (k) Argentina

In grades V, VI and VII an attempt is made to provide a "one cycle" treatment of the major countries of the world.

GRADE V

CANADA AND THE UNITED STATES
Text: Taylor, Seiveright and Lloyd - "Canada and Her Neighbours"

The emphasis of the grade V course is on the human use of the natural regions of North America, with particular reference to those of Canada.

GRADE VI

MEXICO, CENTRAL AND SOUTH AMERICA, AFRICA IN PART, AUSTRALIA, NEW ZEALAND, THE PACIFIC ISLANDS
Text: Taylor, Seiveright and Lloyd - "Southern Lands"

GRADE VII

ASIA, AFRICA, AUSTRALIA, THE PACIFIC ISLANDS, THE BRITISH EMPIRE, EUROPE IN PART
Text: Frye-Gammell - "A New Geography" pages 203-264

GRADE VIII

Texts: Collins-Longmans - "Clarion Atlas"
Longmans - "Geography for Today. North America"

Part I Introduction to General Geography:

UNIT I Globe Study:
(a) The earth; its shape and size. (General idea only)
(b) Rotation of the earth; day and night, axis, poles, horizon, zenith, pole star
(c) Revolution of the earth and the other planets around the sun
(d) Distribution of land and water on the earth
(e) Finding positions on a map using longitude and latitude
(f) Longitude and time
(g) International date line

UNIT II Map study and map reading:
(a) Map projections such as Mercator, Polar
(b) Relief maps
(c) Simple contour maps
(d) Topographical map

UNIT III Landforms:
(a) An elementary knowledge of the types of rock of the locality in which the school is located. Sedimentary, igneous and metamorphic rock
(b) 1. folded and block mountains
2. plateaus, such as the Appalachian Plateau in southeastern Quebec
(c) Plains
(d) Continental Shelf
(e) Results of the action of the ice sheet in Canada
(f) Drainage. See relief map from Unit II. Mississippi, St. Lawrence, Mackenzie and the chief rivers of the east and of the west coasts. Location of the chief divides.

UNIT IV Climate:
(a) Temperature
(b) Pressure of the air
(c) Rainfall
(d) Factors which influence the climate of North America

Part II Regional study of North America
It is suggested that those sections dealing with Canada, and with Quebec in particular, be studied in greatest detail.

## GRADE IX

### THE SOUTHERN CONTINENTS

In the work of this grade considerable emphasis

is to be placed on the commercial and economic aspects. Attention should be drawn to important crops and industries, as for example the peanut plantations of Africa, the fruit industry of Australia, the coffee industry of Brazil. Topics of current interest should be taken up as they occur. Less emphasis is to be placed on the physical geography than in grade VIII, though this part should not be overlooked.

Texts: Longmans - "Geography for Today, The Southern Continents"
Collins - Longmans - "Clarion Atlas"

Part I General Geographical Background:

UNIT I Study of local conditions to serve as a background for world conditions

UNIT II World conditions
- A. Rotation and revolution of the earth
- B. Wind and pressure belts, with particular attention to the southern continents
- C. Ocean currents as they affect the climate of the southern continents
- D. Natural vegetation belts

UNIT III Regional study of Africa:
The chief emphasis is to be placed on a study of the continent as a whole rather than on the separate political units

- A. Physical features
- B. Climate and rainfall
- C. A general survey of the natural vegetation and cultivated crops of each region
  1. equatorial forests
  2. grasslands - areas of good and of scanty rainfall, areas of low and of high altitude
  3. deserts and semi-desert lands
  4. Mediterranean conditions of the northwest and the southwest
- D. Mineral products from the south, the Congo, the Rhodesias, West Africa, Tanganyika
- E. Study of the natural vegetation regions of the continent

1. the forest lands
   - i the equatorial rain forest of West Africa
   - ii the Congo lands
   - iii dense tropical forests of the southeast
2. the grasslands of Africa - the tropical grasslands (wet savannas and dry savannas)
   - i West Africa. Native cattle raising and subsistence farming. Plantation crops of peanuts and cotton. Savanna conditions in Nigeria. Cotton, peanuts.
   - ii Plateau conditions of Central Africa and East Africa. Plantation crops of Uganda, coffee, cotton, agriculture. Ranching in Kenya. Life in Tanganyika, communications in East Africa, conditions in the savanna zone of the Anglo-Egyptian Sudan; cotton, gum arabic, Savanna conditions in Rhodesia, native cattle raising, dairying by whites, mining, agricultural possibilities of Southern Rhodesia, difficulties of cattle raising due to tsetse fly
   - iii The grasslands of the south
3. desert and semi-desert lands
4. Mediterranean type climate

UNIT IV Regional Study of South America

A. Physical divisions
B. Drainage
C. Natural vegetation
D. Climate
E. Population, development, communications

Regional study of certain South American countries

A. The United States of Brazil
B. Argentina

Choice of one of the following: A, B or C for more detailed treatments.

A. Northern Andean States of Venezuela, Colombia Ecuador
B. Peru and Bolivia
C. Chile

UNIT V Australia

A. General study of Australia
   1. the surface
   2. climate and rainfall
   3. vegetation
   4. animals and birds
   5. native inhabitants and early settlers

B. Occupations
1. the pastoral industry
2. crop farming
3. mining
4. manufacturing and chief towns
5. some problems of Australia

UNIT VI New Zealand
As an introduction to the study of the occupation, there is need for a brief survey of surface and climate.

A. Physical features to be noted
B. Climate
C. The inhabitants and occupations

GRADE X

THE STUDY OF EUROPE AND ASIA

The emphasis in this grade should be placed on:
1. The use man makes of available resources.
2. The contrast of the effects of topography on different peoples in different parts of the world, e.g. Switzerland and Tibet.
3. The effect of climate on agriculture.

Texts: Stamp and Kimble - "The World"
Dent's - "Canadian School Atlas"

Part I General Study of Eurasia

UNIT I Surface features
II Climate
III Vegetation

Part II Regional Study of certain selected areas

UNIT I
A. Agriculture
B. Ranching, herding and dairying
C. Forestry
D. Mining
E. Fishing
F. Manufacturing
G. Cities

UNIT II The whole Mediterranean region of Eurasia
A. Agriculture
B. Ranching and herding
C. Mining
D. Fishing
E. Manufacturing
F. Cities

UNIT III Monsoon Lands
- A. Agriculture
- B. Herding and animal husbandry
- C. Mining
- D. Forestry
- E. Manufacturing
- F. Cities

UNIT IV Choice of any three of following regions to be done in rather less detail than Units I, II and III.

- A. The Northern Eurasian Plain (U.S.S.R.)
- B. Scandinavian Lands and Finland
- C. Central European Uplands and Danubian Basin
- D. Great interior plateaus
- E. Plains and plateaux of south-west Asia

GRADE XI

This course should furnish the graduating student with a knowledge of his own country against a background of the world as the home of man. The course consists of two parts, either of which may be taken first. As a guide to the relative emphasis to be placed on each part, the following recommendation is given on the basis of the eight month teaching time in grade XI:

| | | |
|---|---|---|
| Part I | General Geography | 2 months |
| Part II | Regional Study: | |
| | Canada | 3 months |
| | U.S.A. and Mexico | 2 months |
| | British Isles | 1 month |

Authorized Text: Stamp and Kimble - "The World"
Dent's - "Canadian School Atlas"

Part I GENERAL GEOGRAPHY

UNIT I Earth movements
UNIT II Globes and maps
UNIT III The atmosphere
UNIT IV The hydrosphere
UNIT V The lithosphere
UNIT VI Climatic and vegetation regions of the world
UNIT VII Man on the earth

Part II

A study of Canada in particular and to a lesser degree the countries bordering the North Atlantic. The study should focus on the occupations and resources of Canada and the characteristics of the various regions.

The study of the U.S.A., Mexico and the British Isles should be related to Canada as much as possible.

UNIT I Canada

A. Basic geographic controls: A review of North America provides an understanding of the physical features and environment essential for a proper appreciation of Canada.
   1. physical features
   2. climate
   3. natural vegetation

B. Occupations
   1. agriculture, 2. mining, 3. forest industries, 4. fishing, 5. production of water power, 6. manufacturing, 7. transportation

C. Regional study
   1. Canadian Appalachians, Eastern Townships, Gaspe, Maritimes, Newfoundland, 2. Canadian Shield, 3. St. Lawrence and Lowlands and Lake Peninsula, 4. Interior Lowlands, Prairies, Peace River, Mackenzie Valley, 5. The Cordillera

UNIT II The United States of America

A. Introduction
   Review of physical features, review of climate

B. Occupations:
   1. Agriculture
      i interior lowlands - wheat, corn, cotton, dairying
      ii Atlantic Coastal Plains - truck farming
      iii Florida - sub-tropical and early garden produce
      iv the Great Plains and Intermontane Plateaux: ranching
      v California
      vi Conservation problem involved in: Irrigation regions such as Grand Coulee, Tennessee Valley
      vii Alaska, the land of the future

2. Mining
3. Forest Industries
4. Fishing
5. Manufacturing
   i New England
   ii Pittsburg area
   iii New York
   iv Detroit
   v Pacific Coast
   vi Chicago
   vii Birmingham, Ala.
6. Transportation and trade
   i The Great Lakes
   ii The Mississippi
   iii Fall line cities - ports commanding routes to interior
   iv Hudson-Mohawk route

UNIT III The Republic of Mexico

A. Introduction: Review in general the physical features and climate

B. Occupations:

1. Agriculture:
   Note climatic control on distribution of the following: early vegetables and fruits, cereals, tobacco, sisal hemp, bananas, cacao, coffee, corn, ranching and irrigated land.

2. Mining:
   Note the leading position of Mexico's silver and the diminishing importance in world production of oil. Other minerals: lead, copper, gold, tin.

3. Forestry:
   Note forests on windward slopes and eastern coastal lowlands. Chicle of Yucatan.

4. Production of water power. Extensive development.

5. Manufacturing:
   Recent development of factory industries replacing old hand industries.

6. Transportation and trade:
   Development of international highway. Vital necessity of good roads. Tourist trade. Recent great increase of trade with Canada. Location of ports on the Gulf of Mexico and the Pacific Coast, and the capital

UNIT IV The British Isles

A. Physical features in general as a basis for the study of the industries
Climate

B. Occupations
1. agriculture
2. mining
3. fishing
4. manufacturing
5. trade and transportation

GRADE XII

References by pages are to Taylor, Environment, Race and Migration and Finch and Trewartha, Elements of Geography

UNIT I Structure of the Earth
The core, crust, zone of flowage
The building of the continents, particularly North America
The structure of Canada
Ancient peneplains, old worn down mountains, young growing mountains, plains: characteristics of each (General)
Synclines, anticlines, faults, etc. Weathering and erosion
(This is merely an introduction)

UNIT II Rocks
Their formation, classification, chief types, character and resistance to weathering, and erosion

UNIT III Forces of construction in building land forms
Uplift, folding and faulting
Formation of continent of North America
Volcanoes and earthquakes
Formation of Monteregian Hills, Mt.Orford, Owl's Head, etc.

UNIT IV Forces of destruction in building land forms
Stages of erosion, youth, maturity, old age, with land forms and drainage patterns at each stage
Results of erosion in hard, soft and alternating hard and soft rock
Glacial action
Glacial erosion in its various forms, with particular reference to glacial erosion in North America
The continental glacier and its retreat

Formation of lakes and falls in Canada
Formation of Great Lakes and their various outlets
Champlain Sea and formation of the St. Lawrence Lowlands, Ancient islands and beaches

UNIT V Land Forma and their uses

Penoplains
Plains of accumulation - river plains, lake plains, marine plains, etc.
Plateaus, dissected plateaus.
Mountains - young and growing, residual
Youth, maturity and old age of each form and their relation to life

UNIT VI Weather and Climate

Insolation: variation with latitude and season
Movement of point of vertical ray through the cycle of the seasons.

Winds. Belts of high and low pressure on the earth's surface.
Chief wind belts of the world.
Deflection of winds due to rotation with causes.
Ferrel's Law.

Precipitation. Causes of rain-convectional, relief rain, "polar front rain":
Regions of heavy rain: 1. where air is rising
2. where winds are onshore
Regions of light rain: 1. in anticyclonic areas,
2. where winds are off-shore
3. where there are cold shore currents
4. in polar regions

Mountain Climate, adiabatic cooling and heating; chinook winds; rain shadow deserts.

Humidity. Relation to range of temperature. Sensitive temperature. Climatic graphs. Weather maps and weather forecasting.

UNIT VI Climatic Regions

Ice cap; tundra, taiga of coniferous belt, deciduous forest, Mediterranean regions, steppes, deserts, savanna belts, equatorial forest.

UNIT VII Resources of the Earth

A. Water Supply
B. Soil
C. Plant and animal life as originally existing
D. Mineral fuels
E. Mineral ores

Part Two
Option of The Geographical Realms
The humid realms, the dry realms, the humid mesothermal realms, the humid microthermal realms, the polar realms.

or

Regional Geography of the continents as outlined in Taylor's Geographical Laboratory

Part Three
Laboratory Exercises from Taylor's Geographical Laboratory,
A. 1, 2, 3, 4
B. 5, 6
C. 7, 8, 9, 10
D. 14, 15 (Substitute data for Montreal for that of Toronto)
F. 21, 22, 23

The course of study in geography for the Province of Quebec, like that of Ontario, maintains that the subject should be taught separate from history or civics. It is based on the sound principles of the science which have been developed in the past. Recognition of the value of the discipline is made by offering courses from the elementary grades through to the end of the high school. Geography is recognized as a junior matriculation subject.

The geography content and methods used in the elementary grades of the schools of Quebec do not differ very much from those found in the other provinces. The differences are most noted at the high school level. Here it is obvious that an attempt has been made to keep a balance between the physical and human elements of geography. The physical aspects are emphasized in grades VIII, XI and XII. This has been done in spite of the

trend in many quarters toward a socialized curriculum in which physical geography is taught incidentally.

Many provinces have paid lip service to regional geography but the provinces of Quebec and Ontario have put the method into practice. It is observed that the continents studied in all of the high school grades in Quebec are done by regions. The contributions that this method has made to good geography teaching has already been emphasized.

## THE PROVINCE OF ALBERTA

Geography is not taught through a social studies program in the elementary schools of Alberta, but by means of an "Enterprise Program", which includes in its scope social studies, health and science. A major emphasis on social studies is maintained throughout. Health and science are merged with the social studies to provide basic content for the activity program.

Language, reading, literature, music, art, arithmetic, penmanship and physical education are to be regarded as fields for correlation, and are to be treated in as close a conjunction to the Enterprise as may be feasible.

The following sequence pattern for Enterprise activities - grades I to VI has been obtained from "Bulletin 2 Elementary School" (1949).

GRADE I

OUR HOME
A. Our family
B. We play house
C. Friends in our town
D. A birthday party
E. Pets
F. Special holidays
G. The market

GRADE II

OUR SCHOOL AND NEIGHBOURHOOD
A. Our school
B. We visit the farm
C. A trip to the city
D. Our flag
E. Plants that help us
F. Animals that help us
G. Workers who bring us food
H. Community holidays

GRADE III

HOW OUR COMMUNITY LIVES
A. How people live without machinery
B. How modern men overcome the obstacles of geography (life is analyzed in a typical country)
C. How we use natural wealth

GRADE IV

A. How pioneers settled the new world
B. How we live and work in the modern world
C. How trading improves our world
D. How brave and wise men have helped our world

GRADE V

OUR PROVINCE
A. How Canadians established themselves from sea to sea
B. How Alberta provides for her people
C. How global patterns affect us
D. How science has affected our culture

GRADE VI

OUR COUNTRY
A. How men lived and worked through the ages
B. How men live and work in Canada today
C. How we control global patterns (basic geographic concepts)
D. How science has affected our industries

In each grade, four "Enterprises", one from each section, comprise a minimum year's work. Eight "Enterprises" should be considered the practical maximum for any one year.

Some effort has been made to set up sections in each grade from III to VI that will have special emphasis or significance in the development of basic concepts in particular subject areas:

(a) The historical aspect will naturally be emphasized in section A for grades IV, V and VI. In grade III Section B will tend to fit this same general classification.

(b) Geographical understandings are basic in Section C for grades IV, V and VI. Sections A and C for grade III should both promote such understandings.

JUNIOR HIGH SCHOOL

GRADE VII AND VIII

The following summary of the courses was obtained from the "Junior High School Curriculum Guide for Social Studies" 1952 edition.

GRADE VII

THE DEVELOPMENT OF CANADIAN CULTURE

The method of procedure is from the familiar to the unfamiliar. For this reason, the local community with its extractive industries should be the point of departure for any class, which would proceed to deduce from these the probable factors - physical features, climate and natural resources - accounting for the establishment of such industries. By the time the study of the year's work is complete, pupils' knowledge of the physical and economic geography of Canada (geographical features and natural resources) should have a sound foundation.

Primary Reference - Canada and Her Neighbours.

CONTENT:

UNIT I (Suggested time - 8 weeks)

The Farmer

A. Of the central plain
   1. Wheat and coarse grains
      (a) prairie space, (b) rich soil - nature, origin, (c) climate
   2. Truck gardening and sugar beets in south seed farming
      (a) low altitude and warm nights, (b) irrigation
   3. Ranching in southwest
      (a) hills, (b) prairie wool, (c) Chinooks, (d) creeks and ponds
   4. Mixed farming in Parkland, Peace River
      (a) level land and space for grains, (b) groves of trees for shelter, (c) seasonal rainfall, (d) varieties of wheat developed for more northerly latitudes
   5. Dairying, poultry, fur farming, beekeeping
      (a) cities and towns, needs of large centres of population, (b) cold climate - heat in poultry houses

B. Of the St. Lawrence Lowlands
   1. Fruit farming
      (a) low altitude, warm nights, (b) effect of presence of large bodies of water, (c) grain growing on large scale not profitable in competition with west
   2. Mixed farming
   3. Dairying
      (a) root crops and grasses for feed, (b) water supply, (c) large centres of popula-

lation in general, (d) cheap transportation, (e) accessibility of many markets

4. Poultry farming
5. Tobacco
6. Maple sugar

C. Of the Appalachians
Products peculiar to this region: (1) apples, (2) hay, (3) potatoes, (4) furs

(a) sheltered valleys, (b) large bodies of water, (c) Labrador current, (d) lack of space, (e) accessibility to American and Overseas markets

D. Of the Cordilleran Region
1. The Fraser Valley and Vancouver Island
(a) dairying - excellent pasture, (b) fruits - berries

(i) low altitude, (ii) abundant rainfall, (iii) acid soil, (iv) nearness to ocean, (v) warm Japan current, (vi) peat soil for blueberries, (vii) too damp for large fruits - problem to combat fungi

(c) seed potatoes - Lulu Is.

2. The Plateau
(a) cattle country, South - Western Alberta, (b) large fruits - apples, peaches, pears, cherries, hops, tomatoes.

(i) irrigation, (ii) drier air - fungi and other blights kept under control, sheltered valleys - Okanagan, Kootenay, (iii) mild climate - west wind

UNIT II HOW OPPORTUNITIES FOR WORK HAVE ATTRACTED MANY SETTLERS
(Suggested time - 5 weeks)

A. Manufacturing of farm products
B. Manufacturing of mine products
C. Manufactured products of lumber
D. Fisheries
E. Hunting and trapping

UNIT III HOW OUR EARLY PIONEERS ESTABLISHED A CANADIAN NATION AND CULTURE

This is a history unit
Primary reference - The Story of Canada
Suggested time - 10 weeks

A. The coming of the fur traders
B. First effective settlement under Royal Government (to be developed through the study of such leaders as: Talon, Laval, and Frontenac)
C. The coming of the English
D. The opening of the West

UNIT IV HOW OUR COMMUNITY AND OR REGION WAS SETTLED

Primary Reference - Newspapers, reference libraries, museums, personal interviews
Suggested time - 3 weeks

OUR COMMUNITY
A. What do we mean by our local community?
B. What is the history of our community?

UNIT V HOW CANADIAN COMMUNITIES DIRECT THEIR AFFAIRS DEMOCRATICALLY

Suggested time - 4 weeks

A. Examining the organization of a softball team with a view to comparing it with local self-government
B. The development of local government
C. How our local government works

UNIT VI HOW CANADIAN CULTURE HAS BEEN ENRICHED FROM MANY SOURCES

References - (1) World Geography for Canadian Schools
(2) The Great Adventure or The Story of Canada
(3) The Story of the Prairie Provinces
Suggested time - 6 weeks

A. FRANCE AND CANADA
(1) Contributions of French-Canadians in music, literature, art, religion and drama
(2) Review the coming of the French immigrants
(3) Geography of France, with some attention to the specific areas from which the Canadians came
B. GERMANY AND CANADA
(1) Contributions of German-Canadians in music, art, etc.
(2) Review the coming of the German immigrants
(3) Geography of Germany with some attention paid to the specific areas from which the German-Canadian came

In a similar way the class may inquire into the contributions and geographical background of Canadians from: The Netherlands and Belgium (market gardening),

Scandinavia (physical education, dance, literature, music); an Oriental country; and or other countries.

GRADE VIII

CANADA AND THE COMMONWEALTH

UNIT I THE GEOGRAPHY OF THE COMMONWEALTH
Suggested time - 10 weeks

CONTENT:

A. Discussion of the meaning of the British Empire and the British Commonwealth of Nations
B. A visit to London
C. The geography of the self-governing countries and of some of the larger colonies such as Kenya and Nigeria bringing out the following information:
(1) location, (2) climate, (3) physical features, and drainage, (4) chief industries to be deduced from 1, 2, and 3, above, (5) people - density of population, living standards, races and religions, (6) capitals, chief ports, and other cities.

UNIT II THE PROBLEMS AND ACHIEVEMENTS OF COMMONWEALTH TRADE
Suggested time - 8 weeks

A. Intra-commonwealth trade: (1) areas producing raw materials
B. Advantages of Commonwealth trade today
C. A glance at Commonwealth trade conferences
D. Historical background:
(1) the age of little trade, (2) growth of trade and towns, (3) sea power and world trade
E. Historical advantages of Commonwealth trade

UNIT III HOW THE COMMONWEALTH CAME INTO BEING
This Unit is chiefly historical
Suggested time - 10 weeks

CONTENT:

A. The New World. Introduction - Canada
(1) An Empire gained and lost: The American colonies
B. In Europe - Ireland
C. In Asia - India
D. In Africa - Union of South Africa
E. In Australia and New Zealand

UNIT IV HOW CANADIAN INSTITUTIONS HAVE BEEN MODELLED ON BRITISH INSTITUTIONS
Suggested time - 3 weeks

CONTENT:

Institutions:
A. Family life
B. Everyday work
C. Trade and industry
D. Communication
E. Health, welfare, and safety
F. Government
G. Justice
H. Education
I. Recreation
J. Christian traditions

UNIT V HOW BRITAIN DEVELOPED A DEMOCRATIC GOVERNMENT
This is an historical unit
Suggested time - 5 weeks

CONTENT:

A. The Feudal Period: (1) Anglo-Saxon Feudalism, (b) Norman Feudalism
B. Decline of Feudalism
C. The Tudor Period
D. The Stuarts and the Commonwealth
E. The rise of the Whigs and Tory Rivalry
F. The period of political reform (1816-1928)

UNIT VI HOW BRITISH CULTURAL INFLUENCES ON CANADA HAVE BEEN MODIFIED BY THOSE OF AMERICA
Suggested time - 5 weeks

CONTENT:

Introduction - An overview in the form of a general discussion
A. Food, clothing and shelter
B. Recreation and leisure, religion and art
C. Governing, and guarding health, welfare and safety

Conclusion - Canadians as individuals
(1) admire speed and size, (2) realistic outlook, (3) fond of comfort, (4) ambitious for success, (5) belief in ability of common man to participate in government, (6) impatient of restraint, (7) type of humor, (8) look to future - little reverence for past.

Summary of References - Grade Eight

I Geography
World Geography for Canadian Schools - Denton and Lord

II History
The Commonwealth of Nations, McDougall

The following is a Scope and Sequence outline of Unit Studies in Senior High School Social Studies.

This information was obtained from the "Senior High School Curriculum Guide" (Tentative Edition) September 1952.

GRADE X

ANCIENT ORIGINS OF CANADIAN CIVILIZATION
A. How geography influenced early civilizations
B. The influence of trade on early civilizations
C. Movements of peoples in the ancient and medieval world
D. The development of democratic government
E. How the family influenced early civilization
F. The Christian church and its contributions to our civilization

GRADE XI

MODERN BACKGROUND OF CANADIAN CIVILIZATION
A. The expansion of habitable and productive areas since the beginning of the modern age
B. The effect of science on our economic and social life
C. The rise of Nationalism; the expansion of European Empires
D. The development of responsible government in Britain and U.S.A.
E. Social enlightenment and reform
F. The background of our cultural and religious development

GRADE XII

PROBLEMS OF CANADIAN CITIZENSHIP
A. Political and economic geography of Canada
B. Problems of Canada's international trade
C. World history since 1900, with emphasis on Canada
D. How Canada is governed; legislature, executive, judiciary

E. Canadian social legislation and what it means to Canadians
F. Manifestations of Canadian culture

The outline above for grade XII does not apply for any classes in the school year 1952-53.

The course of study for the schools of the Province of Alberta, has been outlined because it is typical of the way in which geography is taught, correlated with a number of other subjects, in various other provinces as well, notably New Brunswick and Saskatchewan.

In the school programmes of these provinces geography has lost its individuality. It is correlated in the elementary schools of Alberta with health and science. The project or enterprise method is used throughout the elementary grades. In the high schools, social studies are offered, with each unit of work having a definite scope and a problem to be solved which must be related to the main theme and to current affairs. Usually one or two sections of each unit studied emphasizes geographical aspects. Although this programme is offered in all grades of the high school, geography receives little attention in grades X, XI and XII. This is also true of these grades in the schools of Saskatchewan. Moreover, even where geographical aspects are stressed in social studies, it seems likely that physical aspects are neglected. The teachers have generally received specialized training in history or economics. The University of Alberta has no geography department and this subject receives only

cursory treatment in education and normal school courses. Few instructors in such courses have had formal training in geography, and least of all in physical geography.

While geography is taught through a social studies programme in Manitoba and British Columbia, an important difference in its organization in the senior grades is to be noted. In the programmes of both of these provinces separate courses in geography and history are offered in grades X, XI and XII. The following outlines of these courses are supplied so that the reader may be acquainted with the syllabi concerned.

PROGRAMME OF STUDIES FOR THE SCHOOLS OF MANITOBA
SENIOR HIGH SCHOOLS GRADES X, XI, XII

The course in social studies in the Senior High School is designed to embrace the interplay of social economic, historical and physical factors that affect human society. To avoid diffusiveness (with its inevitable lack of thorough and systematic treatment)

In the units of work prescribed for the three levels of the course, the fields have been limited both in time and space. Some will be found to be predominantly geographical, some historical, some sociological within the bounds set for each year.

Of the core courses in social studies, the first, "Social Studies I," is almost exclusively geographical with emphasis on the interdependence of nations and communities in the modern world. The core courses in the second and third years are mainly historical and aim at developing an understanding of the evolution of our society and of modern civilization.

In each year provision is made for an option in the field of social studies which will complement the core course. For the first year this option is historical, for the second and third years the emphasis is on the geographical conditions affecting the peoples whose history is under study.

SOCIAL STUDIES I

WORLD GEOGRAPHY
Time allotment: 12½ or 96 hours
Text: World Geography - Bradley Course

UNIT A. Geography in the Modern World
B. Man and climate
C. Man and the surface of the lands
D. Man and the national resources
E. Life processes of civilization
F. The geography of nations

Chapters XVI, XVII, XXII and any two of Chapters XVIII, XIX, II & XXI

## SOCIAL STUDIES II

CANADIAN HISTORY
Time allotment: 12% or 96 hours
Text: One of

Building the Canadian Nation - Brown
Canada - A Nation - Chafe and Lower
The Canadian Pageant - Reeve and McFarlane

Course outline

A. The land of Canada
   (1) Regions and resources
   (2) Links and barriers
B. Exploration and settlement to 1763
C. Colonial Canada (1763 - 1849)
D. Birth of the Dominion (1849 - 1867)
E. Growth of the Dominion (1867 to the present)
F. Colony to Nation
G. How Democracy works in Canada

## SOCIAL STUDIES III

MODERN CIVILIZATION
Time allotment: 18% or 144 hours
Text: One of

A Survey of European Civilization - Ferguson & Bruun
History of Civilization, Our Own Age - Beard et al
Modern Europe - New and Trotter

## SOCIAL STUDIES, OPTION I

BRITISH HISTORY I
Time allotment: 12% or 26 hours
Text: One of

The British People - Anstey
A Short Social and Political History of Britain - Mackie
History of England - Carrington and Jackson

COURSE

UNIT A. The Racial Origins of the English People
B. The Social and Economic Development of England
C. The Development of the Constitution
D. The British Isles
E. The British Commonwealth of Nations

SOCIAL STUDIES, OPTION II

REGIONAL GEOGRAPHY II
Time Allotment: 12% or 96 hours
Text: Geography for Today - North and South America - Stamp and Kimble

The aim of this course is to give a working knowledge and understanding of the lands and peoples of the New World. In Social Studies I in the First Year of the Senior High School course a survey of world geography emphasized the great and universal elements of man's physical and cultural principles illustrated by world-wide data. In this course in Regional Geography a return to the essence of geography in more restricted studies is made.

COURSE: THE TEXT

SOCIAL STUDIES, OPTION III

HUMAN GEOGRAPHY
Time allotment: 18% or 144 hours
Text: The Earth and Man - Davis

COURSE: Part I, II, III
Part IV - Ch. 17, 19 and 21 optional
Part V - Ch. 37 - 40 are optional

## THE PROVINCE OF BRITISH COLUMBIA

GEOGRAPHY IN THE PROGRAMME OF STUDIES FOR THE JUNIOR HIGH SCHOOLS OF BRITISH COLUMBIA

Instruction in geography, is offered, for the most part in grades VII and VIII, as part of the social studies. In grade IX, the social studies course emphasizes history.

GEOGRAPHY IN THE PROGRAMME OF STUDIES FOR THE SENIOR HIGH SCHOOLS OF BRITISH COLUMBIA

Although included in the broader field of social studies, geography is taught as such within it. A study of the social studies course outline for grades X, XI and XII shows that the main emphasis is on history and sociology.

Two courses in geography are offered as options in the senior grades. They are taught in any two of grades X, XI, XII.

The first course is divided into the following subdivisions.

(1) Introduction to High School Geography
(2) Mathematic Geography
(3) Physical Geography
(4) Basic human needs and occupations
(5) Natural geographical regions
(6) Relation of life to environment and to outside influences in cold regions in high latitudes
(7) Relation of life to environment and to outside influences in the major natural geographical regions of the hot belt
(8) Relation of life to environment and outside influences in the major natural geographical regions of the warm temperate belt
(9) Relation of life to environment in the major natural geographical regions of the cold temperate belt
(10) Review of year's work in geography

The second course is divided into the following subdivisions.

(1) Political geography of the world
(2) Political geography of European states bordering on the Mediterranean Sea
(3) Political geography of the North-western states of Continental Europe
(4) Political geography of Central European States and Russia
(5) Political geography of independent Eastern States
(6) Political geography of the Latin American States
(7) Political geography of the United States
(8) Political geography of the British Commonwealth of Nations and the Dependencies of the Crown

Dr. J.L. Robinson of the Department of Geology and Geography, University of British Columbia, who has been working on a Geography Revision Committee has informed me of the following changes that will take effect in the near future.

"The revision is to be an elective course on British Columbia Geography (in its Western Canada, North America and World setting) at the grade X level, and an elective course on World Geography (by continents) at the grade XII level. The latter course is to use Stamp and Kimble "World Geography" as a text, and follows the chapter outline of that book quite closely, except that part One is omitted. Since the new social studies course for grade XII is on Canada (history, geography, economics, etc.) the department decided to give the students a choice of either World Geography or World Modern History as their accompanying elective.

This new World Geography course is to start this Fall (1953) but the course on British Columbia geography will not be ready for another year. (1954)"

It is now possible to clarify the position of geography in the provincial courses of study by means of a summary as follows:

1. Geography is not taught in any form after the ninth grade in the provinces of Nova Scotia and New Brunswick.
2. It is not taught after grade ten in the province of Prince Edward Island.

3. Geography is taught, as a separate subject throughout the high school grades in the provinces of Quebec, Ontario and Newfoundland.
4. The subject is taught through the social studies programme in Prince Edward Island, New Brunswick, Nova Scotia, Manitoba, Saskatchewan, Alberta and British Columbia.

   Geography receives very little attention in the senior high school in Saskatchewan and Alberta.
5. Optional courses in geography are offered in grades X, XI and XII in Manitoba and British Columbia.
6. As has been advocated in the past, the study of geography in all provinces begins with home geography and thus leads from the familiar to the unfamiliar.
7. A variety of methods is used in the teaching of the subject. In those provinces where social studies are taught, the emphasis is placed on the project method in the elementary grades and the problem method in the high schools.
8. The adoption of the method of regional studies has been encouraged in Quebec, Ontario, Manitoba and British Columbia in the high schools. It has also been mentioned in the course of study for Nova Scotia.
9. There is a marked decline in the recognition of physical geography as the basis to the study of the science.

This is due for the most part to the new emphasis that has been placed on social education.

10. Because of the differences in the courses of study and their methods and aims, there is no common level of attainment. From the point of view of the universities, this condition is a serious handicap to the planning of university courses in geography. Since the standards vary greatly, it has been found necessary to "water down" many of the courses so that the work is understood by everyone.

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In conclusion, we may observe that the present chapter has been solely concerned with a more or less chronological account of the development of school geography in this country. The previous chapter implied that efforts would be made to link such observations with the broad picture developed in the first part of this thesis. Considering the subject comprehensively as one involving the study of man and landscape, we must now ask ourselves how such a concept finds expression in the school programmes just surveyed. This will be the task of ensuing chapters.

# CHAPTER IV

## A DISCUSSION OF THE PROBLEMS OF TEACHING THE GEOGRAPHY OF THE EARTH AND MAN, ARISING FROM THE PRESENT COURSES OF STUDY.

If one reviews the history of the teaching of geography in Canada, one cannot help feeling that there have been three fairly well defined stages in its development.

The first stage was the geography of the nineteenth century when pupils learned great masses of facts about the earth by rote. Text books were dull and geography teaching aids such as wall maps, globes and instructional films were almost unheard of. Mathematical, physical and political geography was the order in which the different realms of the subject were presented. What is particularly noticeable about this period is the emphasis that was placed on the teaching of physical geography at the expense of the human aspect. The principles of physical geography were taught, as we have seen, at the elementary and high school level. It is a discredit to the system that the physical geography was taught as a separate division of the subject and not related as it should be to human geography.

We have seen how geography existed in these false and unreal divisions or compartments in the early nineteenth century in Europe and how men like Ritter, Humboldt and Herbertson shattered this wrong conception of geography. They put the study of geography on a true scientific basis and insisted that it become a study of the relationships between man and nature. There could not be true geography if either was neglected, or if they (man and nature) failed to be related. This new definition of modern geography

spread slowly. The lag is evident in our present study.

The second stage in the history saw an improvement in text books, teaching aids and general viewpoint. This stage may be said to have started at the turn of the century and ended in the mid thirties. Text books were much better illustrated and contained colourful maps and pictures. What is more important, a better balance existed between the human and physical aspects of geography. The idea that modern geography was a study seeking to trace and explain the lives and activities of man as influenced by the varied environments to be found in the world, was catching on. Pupils were not nearly so concerned with the catechismic memorization of unrelated facts. Beginning with the home environment followed by the study of other environments over the world through imaginary journeys and stories, an interest in geography was aroused. The principles of mathematical and physical geography were left to later grades to be learned. It was at this stage in the history of the teaching of the subject that human aspects of geography such as the occupations and industries of man began to be properly related to the environmental factors which influenced them. Geography took on more meaning. It is true that in some provinces at this time much experimentation with methods and philosophies was being carried out, but the overall picture was encouraging.

The preceding account brings us to the stage that we find ourselves in to-day. It began with the introduction of the social studies programme into the schools. In the

first stage it was fairly clear to see the short-comings - factual learning overemphasized, human and physical factors unrelated. Although the second stage was more difficult to generalize about, it is obvious that geography was still being studied for its own sake and that advances were being made. It is the peculiar characteristic of the social studies course, that we don't know what geography is being learned. For this reason the controversial subject of social studies versus separate courses in history and geography will be discussed.

## SOCIAL STUDIES Vs. SEPARATE COURSES IN HISTORY AND GEOGRAPHY.

The American geographer, Richard Hartshorne, states that geography and history are alike in that they are integrating sciences concerned with studying the world. There is, therefore, a universal and mutual relation between them, even though their bases of integration are in a sense opposite - geography in terms of earth spaces, history in terms of periods of time. The interpretation of present geographic features requires some knowledge of their historical development; in this case history is the means to a geographic end. Likewise the interpretation of historical events requires some knowledge of their geographic background; in this case geography is the means to an historical end. Dr. Hartshorne sums the matter up by saying that such combinations of the two opposite points of view are possible if the major emphasis is clearly and continuously maintained on one point of view. This is the first real danger of the social studies course. Geography is correlated with history, civics and

in some places economics, health and science. In this way it loses its identity.

In 1950, there appeared a special memorandum on this contentious subject, prepared by the Education Committee of the Royal Geographical Society. (1) This sees in social studies an attempt to compress several branches of learning into one. The result is the effect produced by squeezing a lemon: "the juice is removed and only the useless rind and fibres remain". The movement is seen to be influenced by American "progressive" ideas and resulting from the pressure of subjects in the curriculum, accompanied by "a new and dangerous conception of education". Even where geography retains its separate identity, the influence of the new ideas tends to make it a "superficial study of a series of social and economic topics, to the almost total exclusion of the physical basis.(2)

Geography is truly a cultural subject. The teacher should strive to develop in the student an appreciation of the orderly grouping of physical and human facts leading to a balanced conception of local, home - country, and major world environments. When geography loses its identity in general courses, the awareness of special relationships is endangered. The crux of the situation is the importance of teaching geography as geography. This subject cannot make its full contribution unless its character is preserved.

Another weakness that exists with this method,

is that "because social studies are often taught by teachers whose basic training has been in history, the geography which should be included is under emphasized - even eliminated entirely and the general framework of essential factual learning considerably weakened". (3)

As an example of this we can take the hypothetical study of the port of Montreal from the viewpoint of social studies versus geography. From the social studies viewpoint much emphasis would be placed on the historical development of the port and on the products imported and exported. The port facilities, the great grain elevators, oil refineries, ship building areas and other related industries would be discussed. The subject, properly carried out from the point of view of the social studies course, would involve a class visit to the area, if possible, to see the grain elevators, the historic land marks and the men at work unloading or loading ships that come from every part of the world.

All of this sounds very well, until one realizes that it is possible for the work to be carried out to its completion without the student ever finding out the reason why Montreal became a great port. There are a great number of geographical conditions which influenced the choosing of the site in the first place and influenced its later growth. These facts, along with the wider knowledge of the relation of the port to the great St. Lawrence - Great Lakes waterway, are basic to the understanding of the situation.

Geography, properly taught, establishes a knowledge of the environmental factors. Human life on the earth can be understood by its reference to this setting.

The opinion, that geography is neglected in the social studies programme, is held by many Canadian educationists to-day. The following are statements made in a reply to a questionnaire on the subject sent to provincial departments of education.

Mr. R.J. Love, Head, Department of Education, University of New Brunswick, stated, "Grouping history and geography under the title of social studies has resulted in the stressing of history and the failure to teach geography well. There is a move to include more geography in our programme. Courses have been offered in our summer session in geography and we are presently attempting to get a suitable instructor in this field for the 1954 session. It is the opinion of the writer that geography is a neglected subject in all levels of our educational programme."

Mr. R.W. Lightly, Principal, Manitoba Provincial Normal School, wrote, "In the grade VII and VIII social studies course the texts deal extensively with history, and since no particular course in geography is outlined, it is felt that the geography part that might supplement the texts is often neglected."

Mr. J.W. Tait, Director of Teacher Training, Department of Education, Saskatchewan, answered, "It is the belief of some of our teachers that geography has suffered by combining it with history in a social studies course. Some hold the point of view that history and geography should be taught as separate subjects, but highly correlated at all times."

Another answer was received from Mr. A.L. Doucette, Director, Faculty of Education, University of Alberta, who is an experienced geography instructor. He said, "With the fusion of geography and history in the social studies pattern or integration, the understandings or generalizations in the area of geography are considerably weakened. So too the general framework of essential factual learning weakened."

## A BALANCE BETWEEN THE PHYSICAL AND HUMAN ELEMENTS OF GEOGRAPHY

Dr. S.W. Wooldridge in his book, "The Spirit and Purpose of Geography" points out the danger of considering the subject as consisting of two divisions - "physical geography" and "human geography". He feels that such cleavage is the very thing geography exists to bridge, and that it is false to its central aim whenever and for whatever reason it recognizes or emphasizes two "sides" in the subject.

We have seen how the physical basis of geography was emphasized in the early days in Canadian schools to

the exclusion of the human aspects. To-day there is a trend toward a lack of emphasis of the essential physical basis of the subject which reflects the need for concern. This trend was discussed by Professor S.W. Wooldridge in a memorable address to the Geographical Association. (4) Here, Prof. Wooldridge pleads for the unitary view of geography "which gives due place to both physical and social aspects". He feels that, "it cannot and must not claim the whole of 'social man' as its province". It can never be emphasized too much that there can be no geography without physical geography.

There is a lack of the physical basis in the social studies courses. It is not suggested that the physical geography must be taught in separate units: Prof. Wooldridge would be the first to see this as a retrograde step. But the physical basis must be seen as "more than an occasional prop to social geography".

Geography is a synthesis itself, fusing the results of a host of other subjects. Ignoring this, it has been added to the social studies synthesis. Geography is a study of the natural aspects of the earth and their relation to human life. What the social studies course emphasizes, are those aspects which have been imposed on nature. It is unduly preoccupied with man, neglecting the more natural aspects.

## THE DIVERSITY OF SCHOOL EDUCATION

The diversity of school education among the different provinces of Canada applies particularly to geography. The following summary regarding the position of geography in grades VII to XI of the English speaking high schools will point this out. Quebec, Ontario and Newfoundland lead the way in having geography throughout; Manitoba and British Columbia have closely integrated social studies courses throughout and offer "optional" courses in geography in grades X, XI, XII. New Brunswick, Nova Scotia, Prince Edward Island and Saskatchewan have no geography at all in grade XI while Nova Scotia and New Brunswick have no geography in grade X or XI though changes are being made.

The differences that exist in the provinces make it impossible to have a common, high level of attainment. At the present each province has its own system of grades, its own range of subjects, and for each subject its own, often very elaborate curriculum. "The resulting levels of attainment as well as the range of factual knowledge seem to vary widely though opportunities for testing this are rare. An interesting and instructive opportunity is, however, afforded by the entrance examinations into the Service colleges - Royal Military College, Kingston, Ont., and Royal Roads, Esquimalt, B.C. In each, half the places are reserved for the separate provinces

on the basis of population, the other half are filled by open competition. The provincial differences in educational standards are most marked. In some cases the marks awarded by the entrance examiners agree very closely with provincial assessment: in other cases there are discrepancies of 20 and even 30 per cent." (5)

## THE RIGIDITY OF CURRICULA IN THE PROVINCES

From the summaries of the curricula in the provinces, we can see the thoroughness that has been achieved in outlining the course that is to be followed in each particular grade. In almost all cases the teacher is obliged to follow the outline strictly. It is necessary to spend definite periods of time on each part of the year's work. "In some provinces the rigidity has become so extreme that entering any school in a given week one knows what lessons will be in progress in each grade, perhaps even which page in the prescribed text. A new difficulty has recently developed with the extended use of visual aids, such as films. A certain film will be in demand from all schools in the same week and remains unused the rest of the year." (6)

Administrators explain this is the only way of ensuring a good general standard. What they achieve of course is a safe mediocrity by cramping the whole of the initiative of the minority who have the ideas and the drive to make advances in educational methods and stan-

dards. More flexibility would permit teachers to use their own discretion in arranging work, choosing textbooks and visual aids if they so wished. This could be done in co-operation with the principal.

The rigidity of curricula in the provinces carries with it the system of provincial adoption of texts. There are advantages in the system to the many concerned - to the author who can wait for a given syllabus and stand a good chance of adoption; the publisher who knows and can provide the market; the administrator who can budget precisely; the teacher who has the lessons nicely cut and dried. It is even possible to use teachers with little knowledge of the subject concerned, but there is no room for new ideas under this system. A teacher before long finds himself in a rut with the same text year after year and will before long find himself failing to inspire anyone. Fortunately, in some of the provinces authorities issue lists of approved texts from which a selection may be made. In addition to this, text-book committees have been established to study conditions and make recommendations where they see fit.

It is apparent from the preceding discussion that a number of factors militate against the development of Canadian school geography along the lines we noted in earlier chapters as the modern concept of the subject, especially as

found in France, Germany and England. At the elementary school level, the fact that teachers are untrained in modern geography (even to the point of having studied it in high school themselves) makes certain that no real concept of it will prevail in many classrooms. In our classification of the subject's position in our various provinces, as discussed at the end of Chapter III, we saw ample evidence that a modern view is very remote in many parts of Canada. Its position in the Maritimes, at least at the high school level, is a discouraging one indeed. Elsewhere, we found that it is often grouped with social studies and subject to varying treatment. (In British Columbia, there is reason to believe that it has maintained its integrity in a social studies setting.) Even in the provinces, such as Quebec, where it remains a separate and distinct subject, its inferior position as a matriculation option and the lack of trained teachers constitute serious handicaps. In passing, we may note these as two fundamental problems everywhere in Canada. The matter of trained teachers will receive consideration in the next chapter. As far as the university status of the subject is concerned, we can only agree with Professor Stamp that until such status improves, geography will be held back at all other levels. It is noteworthy that England lagged badly behind continental countries until, about fifty years ago, geography was admitted to the university. It is not without significance that where our school geography is weakest - in the

Maritimes and on the Prairies, is precisely where there are no university departments.

To return to a consideration of how our provincial courses meet the criteria of good modern geography, we may observe that all pay at least some lip-service to the man-land concept. Most, such as that of Nova Scotia's elementary grades, make some concession to the ideal of starting with the home area and working out from there. In the high school syllabus of this particular province, there is little evidence of the regional synthesis that we saw developed in France. All provinces study particular areas, usually in terms of the lives of children in such areas. The places concerned are often remote, if not exotic, and there is more than a suspicion that the work is on much too socialized a basis to constitute real geography. However interesting may be a story of how a Congo mother prepares the evening meal, it is doubtful if proper emphasis is ever given to the complex topographical and meteorological factors at work which produce the man - land relationship in such an area.

Quebec's syllabus, especially at the high school level, bears more resemblance to true geography. Most of it is avowedly regional in approach, although the regions considered may not always be logical, or may be so large as to involve generalizations greatly remote from the experience of the school child. Thus, the Prairie Provinces, in the books recommended for the Quebec course, are often treated as a region, even though they are much larger

than western Europe and actually have within their boundaries, somewhat less than half the total area as true prairie. However, such a criticism points up the shortcomings of Canadian geography in general more than it does those of any particular school syllabus. This is apparent when we refer to the latest reference book on Canada available to Canadian schools. Entitled "Canadian Regions" and edited by a distinguished geographer, its authors are nevertheless forced to admit that their regions constitute hardly more than the political divisions of the country. Nothing could better illustrate the work that needs to be done in the field in Canada.

When we traced the development of the discipline in Europe, we noted the importance attached by the continental geographers to the "technique of the map". It is needless, by now, to point out how deficient is such training in our Canadian schools. Whereas no matriculation examination in Great Britain would neglect the inevitable compulsory question based on a knowledge of large scale topographic maps, such a question would be rare on provincial papers in Canada. The English schoolboy is introduced to topographic maps at an early age. But, it must be remembered that he lives in the World's most mapped country! an area where every region has actually been mapped on the scale of 6" - 1 mile. By contrast, not 10% of Canada has been mapped on the one inch scale. Such considerations help us to realize why we have been unable to produce the exquisitely detailed studies of small regions so dear to the heart of the French geographers ever since the work of such great thinkers as de Blache. So can we realize

how much must be done before our school work in geography approaches the modern concept previously surveyed.

We have now connected our observations of the development of school geography in this country with the broad picture developed in the first part of this thesis. A study of the teaching of geography in Canadian schools would not be complete without an examination of the geography techniques that should be employed to give the subject meaning and vitality. Some of the techniques which will be discussed in the following chapter are in use in Canadian schools, while the neglect of others has seriously handicapped the teaching of the subject.

# CHAPTER V

## THE STUDY OF GEOGRAPHY TECHNIQUE IN THE SCHOOLS

## LOCAL STUDIES AND FIELD WORK

"In the place where a child lives should he first find his orientation in reality and study the region in all its relationships."
- Ritter

It was James Fairgrieve who declared that if geography is to be "real, scientific or humane", it must "be continually based on what is known by experience". (1) This was the basis of Fairgrieve's idea that geographic study must begin with the local, neighbourhood area, branching out from there to the regional environment, then to the home country, and finally to a study of "the rest of the world in decreasing detail". We have already seen that Archibald Geikie, writing much earlier than Fairgrieve, had made a similar plea. Thus he asserts that "adequate geographical conceptions are best gained by observations made of the home locality". (2) Sir Halford Mackinder also stressed that a knowledge of the home area and country is the beginning of a wider world view. In our own time, this outlook has been increasingly appreciated. The Unesco Seminar on Geography Teaching saw in outdoor work and field study the best means of direct contact with geographic reality.

The wider educational implications of field work have been discussed by R.C. Honeybone. (3) Writing for what would be a largely non-geographic audience, he

wisely begins by stressing the need of a precise purpose and discipline behind all field studies. Such purpose and discipline must be based on detailed and accurate observations. As with all teaching methods and devices, there must be careful preparation and follow-up work. Field studies provide a practical means of integrating various school subjects. They serve to connect the life of the school with that of the world and are, above all, the finest means of "learning by doing".

The British Geographical Association has prepared a valuable publication relating to local studies. (4) This begins by observing that such work forms the basis of the whole structure of geographical knowledge. The facts which underlie any adequate regional account can only be collected by detailed local studies. This was clearly perceived by Vidal de la Blache and formed the basis of his studies of the "pays" of France. Thus, because such work constitutes the essential method of the professional geographer, it is also the best means of teaching children. It is another example of the blending of matter and method that we have noted before.

In the organization of field work, there are a number of practical problems and considerations to be borne in mind. Chief among these are administrative difficulties. Principals and other teachers frequently object to the loss of time from other school subjects

that out-of-school geographic work often entails. The geography teacher himself is often concerned with time lost from classroom preparation for examinations in senior grades. That these problems can be overcome is proven by the number of schools where an active outdoor programme is under way.

The lack of training in field techniques, especially among older teachers, is an important obstacle to work with pupils. More recent graduates of universities and training colleges are fortunate in that field work has usually been a compulsory and integral part of their courses. However, the deficiencies of untrained teachers can be overcome in many ways. Many educational authorities sponsor in-service training of various kinds. The work of Dr. K. Hare, Chairman of McGill University's Geography Department, for instance, has been very helpful to teachers of the Protestant School Board of Greater Montreal. Teachers interested in geography, accompany Dr. Hare on excursions in the greater Montreal area. The courses offered fulfill several purposes: they acquaint the teachers concerned with the geography of the areas visited, thus providing them with a wider choice of future excursions with their own pupils; more important, they taught them how to conduct such excursions, and gave them an insight into the techniques involved. The excursions were supplemented by lectures and discussions.

While it is true that rural areas are of more

obvious advantage for field work than are urban areas (particularly as regards physical work), this is no reason to neglect the urban environment. Urban areas always provide access to industrial establishments and large, well-organized museums. Visits to these do not, however, always possess the value that is claimed for them. Lengthy lecture tours through large factories are of doubtful value. Museum visits can be more worthwhile if they are not too long and if they have a definite purpose. Selectivity of what is to be seen should be the keynote: nothing is more wasteful than the superficial whirlwind tour in which a futile attempt is made to view everything in the museum.

## AIDS TO TEACHING GEOGRAPHY

There can be little excuse for the teacher of to-day complaining of the lack of material or ideas to assist him with his work. If there is any problem, it is in the vast quantity of material available. This requires that the teacher be selective in his use of it. He must never forget that ultimately nothing can take the place of good teaching. Blackboard and chalk remain the basic aids of the truly gifted teacher. Nevertheless, many other useful, almost indispensable devices now exist and geography is particularly well supplied with them. As the Unesco Seminar on the Teaching of Geography agreed,

these are essential if the subject "is to be a full and realistic study of places and people, giving a true perspective of the earth and of man's activities in relation to it". (5)

The best use of visual aids requires not only selectivity by the teacher, but some serious consideration of the best methods that experts have found of value in employing them. English geographers have promoted much useful and basic research into the best uses of teaching aids. This research was summarized by Prof. Scarfe in a valuable paper that appeared in 1949. (6) We learn, for example, that research has shown that few children can comprehend the concept of contour lines much before the age of 10½ years. It is important that the teacher of geography familiarize himself with such research as a guide to his own approach. It is also important that he conduct research of his own and constantly experiment with new ideas.

## I MAP WORK

"The Root of all geographical ability lies in being at home with maps."
- Mackinder

Fairgrieve rightly regards map work as the essential means by which geography may be taught and learned. He expresses the view that "99 per cent of

geography can be put on a map". (7) It is also pointed out that maps can be a hindrance to teaching "for they teach wrong things rather more easily than they do right ones". Every good geographer is aware of the dangers of the flat map and elsewhere Fairgrieve stresses the need of the globe for its value in correcting the wrong impressions conveyed by maps. It may seem self-evident that map-reading must be taught. But Fairgrieve points out that many teachers seem unaware of this. They take it for granted that children already know how to read maps, or can learn it on their own.

Fairgrieve draws an analogy between learning to read, and learning to read maps. The symbols are analogous to the alphabet and, like the latter, are no longer isolated and "learned", but become understood in the context. A graded course in map-reading should lead to map-making. But Fairgrieve does not believe that a map-reading course should be taught independantly: "It should be an integral part of the geography lessons."

The Unesco Seminar pointed out that large-scale maps are valuable because "they represent a size which children can grasp". (8) In other words, they are not generalized, but give exact details which help the children to visualize the landscape represented. It is pointed out that too often young children are given difficult atlas maps to read, while university students study the easy maps of small areas.

In the writer's view, greater use of large-scale maps is by far the greatest single need in Canadian geography teaching. Their use in England, not only in the schools, but by the general public, is widespread. Much greater efforts should be made to publicize their use in Canada. The study of them should be required in every syllabus. The initiative that alone can bring about these improvements must come from the teachers themselves. Meanwhile, further progress can be hoped for as more trained geographers enter Canadian classrooms.

## II VISUAL AIDS

Visual aids include charts, models, dioramas, and various forms of pictures (still, moving, etc.) The ordinary still picture is in wide use as a teaching aid. Nowadays, large and excellent photographs are obtainable from a wide variety of sources. More and more such pictures are being produced for specific geographic use. The Unesco Seminar group has listed some of the qualities of good geographical pictures as follows: (9)

(a) They should be simple and clear, showing <u>one</u> main idea only.

(b) They should show human activity or settlement in its natural environment.

(c) They should be typical, depicting life as it would ordinarily be seen.

(d) They should be geographically significant, i.e., likely to encourage enquiry and curiosity.

(e) They should be recent and not out of date.

(f) Where possible, a series of photographs should show the way of life around the year.

An effective technique is the arrangement of groups of pictures into panels. In this way, small pictures can be used and seen individually by the pupils. The panels are, of course, mounted in different parts of the room and groups of pupils can inspect each.

Filmstrips are, of course, only another means of exhibiting still pictures. They have the advantage of being inexpensive, easily stored and contain pictures selected and anotated by geography specialists. In the writer's experience, the chief defect of Canadian strips is that so many are out of date. There are few organizations constantly engaged in producing them. And aside from an occasional strip put out by the National Film Board, very few are produced by and for geography teachers.

It was Fairgrieve who observed that "wherever movement is essential for the understanding of reality, the film is almost always useful". (10) Otherwise, it is likely that the value of films in the teaching of geography is too often doubtful. Their very movement

and constant change of scene makes impossible the close observation and reflection that lie at the heart of sound geographic thinking. Too often they are used as a means of entertainment and relaxation. A wide and excellent variety of films is available - generally, films that have been produced for geographic purposes. Moreover, titles representing the physical side claim equal place with those on the human side of geography. Most of these are American productions, and it was in the use of films that the Unesco Seminar found the United States most advanced in regard to teaching aids.(11) If there is any criticism of the use of films in North America, it is likely to be on the grounds that their use is overdone. For, as indicated above, the motion picture, however undoubted its fascination, often has negative value. If sparingly and wisely employed, it can be most useful. The Unesco Seminar suggested a procedure that should be followed by every teacher:

(A) The teacher must gain a thorough knowledge of the contents of a film before presenting it to a class.

(B) The film must fit the lesson plan and be included for a definite purpose.

(C) The children's attention must be directed by questions, instructions and activities toward significant points in the film.

It is stressed that to obtain full value, the

film must usually be shown twice. This is a real problem, considering the limited time usually available for geography. Silent films are in many ways preferable to sound ones: it is also worthwhile sometimes (especially during the second showing) to run part or all of a sound film silently. The Unesco Seminar also felt that stopping a film is a valuable device. It permits the careful and detailed study of certain pictures, and allows the pupils time to ask questions and think.

## THE RADIO AS A TEACHING AID.

III The Canadian Broadcasting Corporation has developed a series of valuable services that constitute a fine series of teaching aids wherever they are employed. As far as geography is concerned, the actual broadcast lessons and the famous travel talks which are given during school hours for different grade levels are the most worthwhile. Canada can claim to be as well advanced in the use of radio in the classroom as in the use of films. In fact, the Canadian Broadcasting Corporation has achieved a unique distinction in this field. The American Institute of Radio makes an annual award to that North American radio network (there are more than a dozen) which produces the most effective school broadcasts. Invariably this award (and several in other fields) is won by the C.B.C. There is an excellent series of national school broadcasts, as

well as regional and provincial programmes. Geography is quite well represented in these, although possibly less than on the British Broadcasting Corporation. This might be expected in view of the subject's inferior status in Canada.

Of course, there are several disadvantages in the use of radio for geography. There is no means of interrupting the programme in order to ask questions. Nor can the programme be repeated as a film can be. The greatest disadvantage probably is that broadcast lessons and talks seldom coincide with geography periods on the time table. Nevertheless, all these disadvantages may be overcome by using tape or other recorders. These are becoming fairly standard equipment in many Canadian schools.

Radio lessons demand the same kind of preparation and follow-up work that are required by films. School broadcasts may serve to motivate many activities. Projects, for example, may be organized around a series.

## IV FARM AND SHIP ADOPTION SCHEMES.

The farm and ship adoption schemes are unique to the schools of Great Britain but certainly deserve publicity in Canada where agriculture and overseas trade are of no less, and in many ways greater importance than in Great Britain. The Farm Adoption Scheme is a magnificent source of sample studies, and a great number of schools in

Britain are taking advantage of it. All should take advantage of it when, in their geography syllabi, they are inevitably concerned with the home country at some stage. The Scheme was devised and is promoted by the Association of Agriculture, which was established after the war to promote a better understanding between town and country. It seeks to encourage teachers at all levels to treat agriculture as a normal gateway to the study of biology, geography and history. We are told by Joan Bostock in "Farm Adoption" (1954) that a large number of geography and other teachers, representing nearly 900 educational institutions, now belong to the Scheme.

It is the aim of the Farm Adoption Scheme to tell in practical terms the story of a farm and its setting, and to offer real examples of farming life and practice. We are told that the farms chosen range from Somerset and Kent to Yorkshire and the Western Highlands. They are chosen "for their good farming and their contrasts." For each farm, a folder is produced in conjunction with a Department of Geography or Institute of Education, comprising about a dozen pages, dealing with various aspects of the farm. An introductory outline of the district is given, indicating past and present agricultural practice in relation to the environment. Following this is a photograph of the countryside, together with the farm buildings. A map extract from the local Ordnance Survey sheet and a county map showing the farm's position, are also provided. Details of cropping practice, field acreages,

water supply, soils, livestock, marketing, the layout of the buildings, the labour situation, machinery and equipment, etc., are all given. These folders are available at a cost of five shillings each. Subscribers also receive seasonal letters from the farms. Thus, it is pointed out that "a continual link, season after season, is forged between the classroom and the countryside. . .". The Scheme comprises eight farms in the United Kingdom, and the Association plans extensions to the Commonwealth.

The Farm Adoption Scheme is not, of course, a substitute for actual visits to farms. But it does stimulate an interest in the countryside and permits town children to learn more "real rural geography". Its other obvious advantages need not be cited here.

The Ship Adoption Scheme is of equal value and should also be adopted in Canada. Under this scheme, a school "adopts" a ship. The ship supplies information concerning itself and its work analogous to that supplied in the Farm Adoption folders. The captain and crew correspond with and send reports to the school, describing their journeys, cargoes, daily routine, etc.

## V THE GEOGRAPHY ROOM

Although the geography room is not itself a teaching aid in the ordinary sense, since it is indispensable and contains most of the other aids, it will be considered here. Briault and Shane point out that "in view of the modern development and character of this important subject, geography

has almost as great a claim for a special room ... as has science or art." (12) Yet this claim was slow to receive consideration, and even now a number of schools lack special rooms for geography. Crowded schools are the cause of this state of affairs of course, and this is a severe handicap which can only be overcome when more space becomes available. In many cases where geography rooms exist, they are shared with one or more other subjects.

For teachers who wish to develop a geography room, there is some very worthwhile literature. The best is contained in the recent Geographical Association publication on the subject. (13) This is another example of the kind of valuable and practical material available to teachers in England. No such publication exists in Canada, but the one in question could easily be adapted to Canadian use. This is the type of material that could be published by the Canadian Geographical Society or by the Geographical Branch of the Federal Government. The Unesco Seminar included in its handbook some excellent suggestions on the geography room. (14)

That the use of teaching aids in Canada has increased, is evident from a recent report. (15) It is asserted that one Canadian manufacturer reports a 50% increase in the sale of wall maps, a 50% increase in the sale of geographical visual aids and a 100% increase in the sale of globes. There is a similar increased demand for textbooks, atlases, etc. This report, however,

makes no reference whatever to large-scale maps. The lack of these is, as already suggested, the greatest lack in Canadian geography save only the shortage of trained teachers. Therein lies the answer to a lot of the defects of the subject throughout the country.

# CHAPTER VI

## CONCLUSIONS, WITH SOME RECOMMENDATIONS FOR THE IMPROVEMENT OF CANADIAN SCHOOL GEOGRAPHY

I The essentials of the training of the teacher of Geography are that he should acquire the technique both of teaching in general and of geography teaching in particular. He should have a broad view of geography and a good knowledge of its subject matter. Teaching in general, is peculiar in that it is a profession in the preparation for which much time is given to the acquisition of knowledge, but little, in proportion, to training in actual professional practice. Geography, however, is further weakened in that great differences exist in the amount of knowledge of geography acquired by teachers. It has already been pointed out that geography, as a subject does not exist after grade IX in the schools of some provinces. In the schools of the provinces where geography does exist in the senior grades, it is an optional subject. The result of this is that it is possible for students to graduate from high school and register at teacher training institutions with nothing more than a grade IX knowledge of geography. Furthermore, it is possible for these same people to graduate from our universities and departments of education and still have no more than a grade IX knowledge of geography, since, in the universities also, geography is an elective subject.

Although geography is a valuable and useful subject to students, regardless of what course or field of specialization they may take up in university or job

they may hold in later life, it seems that there is no place on the present overcrowded curriculum for it as a compulsory subject. By providing a general education and adding to the curriculum training in the industrial arts, city schools in particular are unable to give geography the place it deserves. Until the subject is made compulsory, in at least one of the courses of the high school, be it the Science, the Latin or the Engineering course, there will never be a standard from which to work or a guarantee that future geography teachers are being properly prepared.

Another essential of the good geography teacher is that he should possess enthusiasm not merely for the subject but also, and particularly, for its teaching. Whatever the methods and materials used, the attitude of the teacher is of the utmost importance. If he is conscious of the educational value of geography apart from the specialized training to be gained from it, and has himself a world outlook, this will inevitably affect his teaching. If the plight of geography in Canadian schools is to be considered in any detail at all, it is most important that the people who will teach the subject be considered and, finally, that they be well chosen. The subject in the hands of a teacher who is not interested will inevitably be characterized by a lifelessness and unreality which will minimize or even destroy the good effects it might have had.

II The first task must be to organize those teachers who are already at work in the schools. This must begin at the local level. In Montreal it could be done in one of two ways: through a revitalization of the Geography Association of Montreal or by the direct organization of the teachers within the schools. The writer would strongly favour the second approach. The Association referred to, while mainly of teachers, is a more general and popular type of organization, lacking official status. It would be far better to organize the teachers into an Association of Geography Teachers of Greater Montreal (to suggest a possible title). The recognition of such a body by the chief education authority for the city and by the other teachers' organizations would not be a difficult matter. More important, it should be possible to achieve recognition by the provincial department of education, which makes up syllabi and prescribes books. In the past, the department has referred matters to the Curriculum Committee (and other committees) of the Provincial Association of Protestant Teachers (the organization for Quebec of all English-speaking teachers). Geography teachers have been consulted, but their separate organization would undoubtedly give them a greater voice. In short, the first step must be the formation of an association first in Montreal and then in the province, recognized by other teachers' organizations and by the

various local and provincial education authorities.

What would be the work of such a body? It must do more than hold meetings, pass resolutions, write letters or even, at first, issue any bulletins, newsletters or other publications. Its primary task must be the immediate improvement of geography teaching by means of a number of practical steps. First of all, the provincial syllabus must be studied, and recommendations for its improvement made.

The writer can already hear Montreal teachers labeling such proposals as impracticable. It is true that their achievement on a province-wide scale will take considerable time. But a great deal can be done immediately. The individual teacher can do something now to give a certain effect to every proposal made. Moreover, local education authorities need not always wait on the provincial authority; Montreal teachers may not realize their fortunate position. In recent years, the Protestant School Board of the city has taken two very concrete and practical steps: each autumn a field course for teachers is sponsored; summer bursaries are available for teachers wishing to improve their qualifications. There is reason to believe that an organized approach by the geography teachers would result in the provision of more and better geography rooms, maps, field excursions, etc., to name but a few

necessary measures. All these approaches can be made locally, even while the situation in the province is moving possibly more slowly. The provincial department of education can at least be urged to play its part in providing bursaries, conducting in-service courses, etc. The annual Summer School for Teachers, held at Ste. Anne de Bellevue, does sometimes feature a course in geography, but it cannot be said that much advantage is taken of the admirable local facilities for field work. One essential measure that can only be achieved at the higher administrative levels concerns the use of topographic maps in examinations. The geography teachers of the province must first insist on the greater use of those maps. Since they are obtainable at fifteen cents per sheet, it should not be difficult to persuade local authorities to buy them, once they have been educated to the need and value of such maps. At the higher levels, the department of education must arrange with the Mapping Division of the Dominion Government for a wider and easier system of distribution. Most important of all, it must try to arrange, for examinations and general use, extracts from sheets, similar to those supplied by the British Ordnance Survey. A precedent exists for this in the excellent material already available to schools from the Dominion Meteorological Service. It is doubtful if topographic maps would be supplied as suggested to one

province only. Several departments might have to collaborate, or other means of approach found.

Once a Montreal organization has been established and extended across Quebec Province, and the measures initiated that have been suggested as practicable under present conditions, a wider organization of geography teachers must be achieved. This can best be done by alliance with the Ontario geography teachers, who are already provincially organized and recognized. Herein lies the basis of an organization for Canada similar to the Geographical Association of Great Britain. Many Canadian teachers already belong to the National Council of Geography Teachers of the United States. But a separate Canadian organization is essential, along the lines suggested. What would its functions be? It could be the means of approach to the Mapping Division at Ottawa, to make topographic maps generally, and extracts, available to schools on a better basis than at present. The Geographical Association, for example, publishes a set of six extracts from contrasting areas, together with a corresponding set of geological transparencies. A Canadian "G.A." could publish a much-needed journal, similar to "Geography", to keep Canadian teachers in contact with each other. It could sponsor other publications dealing with all aspects of teaching, and could promote research to improve geographical work in the schools. Field classes

for teachers could be organized. Already the Ontario Geography teachers are planning a nation-wide summer excursion for teachers and selected pupils of that province. This is the kind of activity that a wider Canadian organization could sponsor.

It is impossible to limit the list of possible measures that might be taken if Canadian geography teachers could organize themselves. There is also an important part to be played by the Dominion Government's own Geographical Branch, which was mentioned earlier. Already, it has an officer whose main task is educational work. The Branch could assist many, if not all of the measures proposed here, and could act as a co-ordinating body, at least until the teachers became better organized.

Larger developments, such as the establishment of departments in all universities, must take time and patience. Likewise, the raising of teaching standards is a slow process. The notion must be dispelled that geography can be taught by anybody. If education authorities are persuaded to hire specialist teachers, more honours graduates in geography will turn to teaching. Teacher training for graduates must provide more scope for prospective geography teachers.

In closing, it should be stressed that an attempt has been made here to state only some conclu-

sions and recommendations. Many small points that have been mentioned or are implicit in the body of this thesis have been omitted from this final summary. The value of the work represented by this summary is seen by the writer to be indicated in a hierarchy, somewhat as follows:

1. Improved work in the schools of Montreal by calling modern achievements in geography to the attention of the appropriate authorities. This to be accompanied by the organization of Montreal geography teachers.
2. Improved work in the schools of Quebec Province by:
   (a) extension from Montreal of the teachers' organization suggested in (1) above.
   (b) close liaison between such a body and the Provincial Association of Protestant Teachers.
   (c) close liaison with the provincial department of education.
3. Improved work in other parts of Canada by:
   (a) establishment of an alliance between the Quebec organization suggested in (2) and the already existing Ontario geography teachers' body. This would serve as the basis of a wider Canadian body similar to the Geographical Association of Great Britain.
   (b) close liaison between provincial departments

of education, geography teachers' organizations and the national body suggested on the one hand, with Dominion authorities such as the Mapping Division and the Geographical Branch on the other hand.

(4) Improved training for geography teachers in the Provincial Normal Schools and Departments of Education and a supply of specialist teachers ("Honours" graduates) who will be given full opportunities to develop their specialism.

It was discovered, as a result of a questionnaire sent to the appropriate departments of the ten provinces, that no geography "honours" students or qualified geography "specialists" exist in any of the provinces except Ontario and Quebec.

In the schools of Ontario there exist a "few" geography specialists and teachers who have done post-grad work in the subject. A system is being developed at the present time in the teacher training schools in which a "specialist" certificate will be made available to those who complete the requirements.

No geography specialist certificates can be earned in the province of Quebec. It is reported, however, that there are some teachers of geography who have majored

in the subject while at university and others who have taken post - grad work.

No special attention is given to geography in the Normal Schools of Saskatchewan and Alberta nor in the University Departments of Education in the provinces of Prince Edward Island, Alberta and New Brunswick.

Only in the Normal Schools of Nova Scotia and Ontario and in the High School Teachers' Course in Quebec, are teachers given courses in geography teaching in addition to the methods courses. In Ontario and Nova Scotia this consists of a course in general geography. In Quebec a course in physical geography is offered as an elective.

It is not suggested that the measures advocated here provide a panacea for the ills that plague school geography in Canada. Major changes must take much time and are beyond the scope of the present work. It goes without saying that the establishment of geography departments in all our universities, the full recognition of geography as a matriculation subject are, along with other big steps, consummations devoutly to be wished. The biggest task of all is the education of the Canadian public. In the present phase of the unprecedented development of our bountiful resources, is it too much to hope that we shall all finally perceive the vital synthesis of man and landscape that true geography represents?

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