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Reassessment of the "New Geography"

Within the last ten years, both of us who have had responsibility for overseeing graduate work in geographical education at McGill have written papers with similar titles. That of my predecessor, Professor Eric Winter, appeared in this journal under the title, "Towards the New Geography," and argued that the inclusion of urban geography in the curriculum would initiate some changes towards making school geography conform with new developments in the subject. My own paper, "The New Geography — and After?" appeared earlier this year and posed some questions about the future directions which should be taken by school geography in view of the fact that some of the more important developments of the last few years, particularly those in theoretical and quantitative geography, are now under fire from some quarters.

Our two titles, taken in juxtaposition and without further qualification could imply that, here at McGill, the new geography had passed us by, that Professor Winter had been aware it was coming and I that it had gone, but that somehow the crucial intervening period had eluded us. Like some ephemeral comet, this important development in our field, either because the conditions were too cloudy or because we were not looking in the right direction at the time, had seemingly escaped our attention. Such is not, in fact, the case. However, it would be true to say that for Canadian geographical education as a whole, the new geography has had neither the grass roots impact it had in Britain, nor the stimulus from a major project which it received in the United States. Like so many other things, it has come to us as a hand-me-down. Although there are many teachers in all parts of the country using new geography materials and approaches, no

provincial syllabus is cast explicitly in this mold, with the possible exception of the urban studies course in Ontario.³ Before suggesting why this is so, I think it would be appropriate to say something about what the new geography is.

the emergence of the new geography

Like many another traditional school subject which has acquired the adjective "new," the new geography concerns itself more with the discipline's essential structure and its distinctive methods of enquiry than the geography it is in the process of replacing. The "new math" led the way by attempting to show children that mathematics studies the numbers system as a complex of interrelated structures.4 The new history and the new social studies had as their main goal the initiation of children into the process of enquiry by placing in their hands the materials with which they could replicate the investigative procedures of these disciplines. In each case, the learning of facts, and especially the non-comprehending rote learning of facts, became less important than training young minds to approach problems in a systematic and disciplined way. The new geography attempted to do the same, although here the situation was complicated by the fact that the subject was itself undergoing a radical transformation in the universities. Instead of focusing on the distinctive character of geographical regions, it now concentrated upon the regularities among the distributional patterns of the earth's surface.

Since its origins as a modern field of study in the German and the French universities of the nineteenth century, geography has always been a subject with diverse aims. In a much quoted article, William Pattison distinguished four major traditions of geography: the spatial tradition, concerned with the geometry of spatial relationships and with movements; the area studies tradition, concerned with the essential characteristics of regions; the man-land tradition, concerned with the interaction of people and their environment; and the earth science tradition, concerned with the natural features of the earth's surface. The geography with which most of us were familiar from our school days and with which, it has to be admitted, most Canadian children are familiar today, fell fairly and squarely in the regional tradition and saw as its major objective the inculcation of an appreciation of the conditions of the great world stage, to use a famous phrase of James Fairgreaves.

This is not to say that it was entirely descriptive, but, because geography was considered to be primarily concerned with interface between the physical and human realms, its explanations were often, although not invariably, couched in environmental terms. Most of us

can remember being asked on examinations to account for the importance of fishing in Norway or of wheat-farming in the prairies, and there was seldom much doubt in our minds that our answers should be heavily larded with references to environmental constraints and opportunities. Although it has no longer been respectable in modern times to be crudely deterministic in ascribing all economic and cultural patterns, and even national personality traits, to climatic or physiographic conditions, the debate concerning the exact relationship of the man-land dichotomy has characterized most of geography's life as a modern discipline. It did place geography on the horns of a dilemma, however, in that some rather glaring inadequacies appeared in the paradigm, cases where human behavior could not obviously be ascribed to physical factors. More fundamentally, the suspicion grew that the dichotomy was a false one in any case, and that people and nature were inextricably bound together in the same interrelating system.

The strong emergence of the spatial tradition in the post-war era seemed to provide a way out of this embarrassing impasse. It was for this reason, among others, that it was seized upon with alacrity, first by practitioners in the universities, and then by school teachers. The essence of the spatial tradition lies in the fact that it seeks explanations for the patterns of the earth's surface by reference to certain key concepts, which are themselves spatial in nature. The concepts of location, distance, spatial interaction, areal association, nodality and diffusion provide a focus for geographical enquiry which is particular to the discipline, rigorous, and uncommitted to prejudice concerning the influence of environmental factors. In exploring the ramifications of these concepts, geographers were to rediscover the writings of early workers in the field who had seen the world as being organized according to certain spatial laws and regularities. Indeed it is one of the ironies of a geography which called itself "new" that it drew some of its inspiration from von Thünen and Weber, who wrote in the nineteenth century, and from Lösch and Christaller who wrote in the earlier decades of this century. It appeared that the spatial tradition had a provenance at least as respectable as any other perspective on the field, and held more promise for the development of geography as a purely theoretical subject.

the methodology of the new geography

In rediscovering the spatial tradition, geography changed inevitably from an idiographic subject, concerned with the study of the particular event or phenomenon to a nomothetic one, concerned with formulating principles of wide generality. The transformation was not effected without some bitter debate. Richard Hartshorne, who wrote *The Nature of Geography*⁷ — that magistral and definitive work to which all students of geography refer and few now read — saw geography's main interest as being, like that of history, in the unique case. Although, in explaining the complex interrelationships existing within a particular region, the geographer might refer to some general principles, these were usually so loosely defined that it was difficult to see them forming the object of research in themselves. For Hartshorne, the main task of geography was that of explaining the areal differentiation of the earth's surface, the very evident differences between one place and another. However, as Schaefer was to point out, unless more reliable principles governing the spatial patterns of the earth's surface could be discovered, then such explanations would not be forthcoming. Studies of the unique, he maintained, can never lead to general principles: these must be explicitly sought.

Thus, the emergent methodology of geography became firmly associated with the generation and testing of hypotheses leading to the formation of laws and theories. The new geography showed a preference for deductive procedures in which models were constructed from a priori axioms or assumptions and then tested against some portion of reality.¹⁰ For geography, this was a radical shift indeed, since of all the social sciences, it had been most strongly committed to the inductive method of Francis Bacon and J. S. Mill, transmitted into geography teaching by Fairgreaves. The task of making over geography into a more rigorous field of enquiry was assisted, as it had been in other social sciences, by the application of statistics to geographical problems. Indeed so important was this development that many saw the change in geography simply as a quantitative revolution,11 rather than the fundamental methodological transformation that it was. Given that one of the motivations of the new geography was to base school practice more firmly on what was being done in the universities, the hypothetico-deductive scientific method was seen as an appropriate pedagogical as well as a research vehicle for arriving at geographical truth.12 For geographical educators, one of the major attractions of the new methodology was that it showed geography to have a discernible structure, an especially important criterion when the works of Bruner were being so widely read.

the new geography in Britain, the U.S.A. and Canada

The term, "the new geography," is more widely used in Britain than elsewhere, although the theoretical movement from which the new geography sprang was developed in a few geography departments

in the United States and Sweden and had its origins, as I have mentioned, in the works of much earlier German scholars. However, in Britain this style has been more widely disseminated among teachers (as opposed to academics) than elsewhere.

In the sixties, a small band of geographical enthusiasts from schools and colleges of education attended a series of annual lectures held at Madingley Hall near Cambridge. They came to work with and adapt some of the new approaches to rekindle interest in what had become a rather moribund subject. Exercises and sample lessons were presented at Madinglev or elsewhere and passed from classroom to classroom as increasingly dog-eared mimeographed sheets. Although the Madingley Lectures resulted in two tremendously influential collections of theoretical papers,13 textbooks written from the perspective of the new geography did not appear until later. Apart from one important issue of the journal Geography, 14 the established periodicals did not pay a great deal of attention to the trend but, as the number of teachers interested in the new geography grew, their ideas were circulated via a remarkable "underground press." The barrier to wider acceptance of the new methods was the examination system which remained rooted in the older style of geography until recently. At the present time in Britain, although the new geography is not vet the established view of the discipline, its influence is felt with increasing strength.

The approach followed there can be contrasted with that used in the United States. Although American geographers had been in the forefront in formulating the principles of a more theoretical geography, their work had little impact on the geography that was taught in the schools. Geography has not in this century been very well established as an independent subject in American schools and has tended to be the hand-maiden of social studies. Concerned with the weaknesses of geography and the lack of penetration of its exciting new ideas into the classroom, the Association of American Geographers and the National Council for Geographical Education sponsored a major project with financial support from the National Science Foundation.¹⁶ The High School Geography Project, as it was called, presented the opportunity for academics and educators to work together in producing an imaginative array of commercially produced hard- and soft-ware. This was later published commercially as a comprehensive, self-contained, one-year course that could be broken down into separate units if desired, and used in the seventh to twelfth grades. 17 Although the High School Geography Project has provoked a great deal of interest, it is uncertain whether, as a relatively "teacher-proof" package, it has stimulated much individual creativity among American geography teachers. In most

States, geography remains a rather weak subject taught sporadically through high school and without the sequentially structured approach which effective teaching of the concepts of the new geography would seem to require. Nonetheless, the High School Geography Project provides an exemplar which is much cited and imitated.

It is not easy to suggest why the new geography has not had a great impact in Canada. Certainly the university departments have been as aware as those anywhere of theoretical works in geography and have produced, proportionally at least, their fair share of strong practitioners. Perhaps the gap between them and the schools is wider than it might be. In Britain, for example, although teachers and lecturers in colleges of education were quick to take up the challenge. an early lead was given by the Madingley Lectures and by Peter Haggett and Richard Chorley who were the university lecturers who organized them. In Canada, since education is a Provincial matter, it has been traditional for the Provincial Departments and Ministries of Education to play a major role in initiating any change in what is taught in the schools. It is they, after all, who define curricula, recommend textbooks, set examinations and, where these still exist, appoint subject inspectors. For the most part the Provincial authorities have been fairly cautious in bringing about change in curriculum content, perhaps because to bring about major changes would require a greater consensus than could normally be achieved immediately from teachers.

In most Canadian Provinces, the emphasis for the past fifteen years or so has been on regional studies, and especially on Canadian regional studies, pursued in the more progressive schools with topographic maps, aerial photographs, and other primary source materials. The initiative for introducing new materials has been left to the publishers who have tended to supply the educational market with what they feel will find the largest sales. The most widely used books have therefore been regional texts, especially those which are concerned with Canada or with other parts of the world from a Canadian perspective. Perhaps the only major break from this pattern has been in the area of urban studies, where publishers in some respects created a demand¹⁸ and, to this extent, Winter's challenge mentioned in the early part of this paper was taken up by many of the Provinces. Apart from textbooks published purely for commercial gain, there has not been in Canada a major project of the scale of the High School Geography Project. If there had been, perhaps it too would have sought to devise ways of transmitting the new ideas of the universities into the schools. The only recent example of this approach in this country is to be found in some of the works of the Canada Studies Foundation. Here, however, the aims have

been not so much to transmit new developments in the discipline as to transmit a concern for national values, together with an awareness and understanding of national issues.

where is geography going?

Of the three possible foci for curriculum design — the needs of the pupil, of the society in which he or she lives, or of the discipline 19— the new geography has tended to draw its main inspiration from developments within the discipline itself. Curricula, projects or individual texts designed from this perspective have seen as their main objective the transmission of concepts, skills and techniques developed at the frontiers of research in the subject. Of course, it is recognized that many of these concepts, skills and techniques have been developed in response to geographers' attempts to understand problems of social relevance. It is also recognized that in making "little geographers" of students, their own intellectual development is served, for the learning of professional expertise makes fairly heavy demands on their ability to reason logically. However, the primary emphasis in the new geography has been on the discipline itself, and the questions which it has asked have generally been based upon those which excite the curiosity of professional geographers.

In Canada, our preoccupations have been with other questions, those concerning the viability of the Canadian Confederation and Canadian society. This is especially true since the work of the National History Project exposed the distressing ignorance of many Canadian students of basic knowledge about their country and of the questions which animate it.20 The Canada Studies Foundation, which grew out of the National History Project, saw as its main task the remedying of these inadequacies. Accordingly, the interest of many educators in history, the social studies, and in geography, has shifted rather sharply towards matters of social concern. Thus, the published geographical works of the Project have addressed themselves to such questions as the decline of rural society21, French-English relations in Quebec,²² and the problems created by regional disparity.²³ In addition, small projects across the country have been based on such topics as urbanization, Indian and Métis concerns, immigrant and New Canadian concerns, labor-management relations and so on.24 Of course, it is arguable whether the work sponsored by the Canada Studies Foundation is representative of the directions being taken in the teaching of the social sciences in Canada, since a relatively small number of history, geography or social studies teachers are directly involved with the Foundation. However, if the evidence provided by

their interests may be taken as a straw in the wind, it would appear that national concerns are motivating at least some, and possibly a major part of school work in the social sciences.

Paradoxically, if this were true, it could place us, as geography teachers and educators, in the forefront of new developments in the field. As I have pointed out elsewhere, the new geography movement may have run its course. Certainly, for many branches of geographical research, the theoretical, quantitative, model-based approach seems to have reached a point of diminishing returns. Growing disenchantment with this particular direction in geography could lead in one of two directions, both of which are being enthusiastically explored in the discipline's current research.

In questions involving the making of locational decisions, the interest of some geographers has shifted to the actual decision-making process and away from macroscopic models of spatial organization and their underlying assumption of optimality. If people do indeed strive to maximize their gains and to minimize their losses or risks, those geographers believe, legitimate questions may be asked concerning how they perceive the opportunities and constraints of the environment. Behavioral geography has begun to develop ways of dealing with these questions, and, as another contributor to this issue of the Journal has suggested, some of these have relevance to the teaching of geography.27 Perhaps belatedly, geography has discovered that the concept of "Economic Man" is useful only within a particular restricted cultural context and, even there, only as a somewhat crude guide to human motivations and behavior. To understand human actions, some cognizance has to be taken of individuals, how they perceive the world they live in and choose to act within and upon it. In this approach, explanations are drawn, not from general models, but from interpreting an individual actor's behavior in terms of a reconstruction of his/her own view of reality, and are verified by the consistency of supporting internal evidence.28 The danger of this approach is that it may lead back to a particularistic mode of enquiry about unique cases and leave untouched some of the philosophical underpinnings of theoretical geography.

The solution, some writers have suggested, lies not so much in trying to find why a particular model does or does not "work" (which could become a preoccupation for behavioral geographers), but rather in developing a new paradigm. David Harvey, of Johns Hopkins University, has had the remarkable distinction of publishing within the space of four years two important books. One of these, Explanation in Geography, is seen by many as the definitive statement of theoretical geography, while the other is a fundamental questioning of its assumptions and methodology as well as an argument for just

such a new paradigm. The second book, Social Justice and the City, examines some familiar models of urban structure and finds them wanting, not because they do not explain the city as we see it, but because they are reflections of the dominant system of values in our society. As an alternative, Harvey feels the Marxist paradigm has more to offer. His interest, and that of other geographers in the Marxist framework, arises from a growing realization that geography's recent preoccupation with formulating and refining models of spatial behavior may have led it to overlook the value system on which many of the models are based.

If geography is to regain a social concern, some have argued, then it should make explicit its own values and objectives and then develop or adapt models which serve them, much in the way that welfare economics did in an earlier generation. Another Marxist geographer, William Bunge, has put some of these ideas into practice by forming a Detroit and later a Toronto "urban expedition," first to explore the social environment of the city as terra incognita and then to use the knowledge gained in the service of the disadvantaged and the unjustly treated. Whether viewed from a Marxist or from a more orthodox welfare economics perspective, geography would seem to be moving towards a role in which it can further social well-being by analyzing territorial discrimination (the extent to which people are discriminated against with respect to their location), and suggesting ways in which it might be remedied.

It is difficult to say what the implications of this shift in professional geography might have for school geography. One could certainly expect the emergence of a greater interest in social issues and the examination of the ways in which geographical methodology helps us to understand and perhaps solve these social problems. The focus would seem to be about to change from the often esoteric interests of the discipline itself to the wider concerns and preoccupations of society. This may also be a strong emergent interest of Canadian school geography, as it is for history and the social studies. What we may be experiencing is a convergence between interests dictated by our national concerns and those of geography as a whole. If this is indeed the case, exciting possibilities open up. What we may do in Canada is to continue to identify our national concerns, and then to use, from among the powerful techniques that have been developed in the last fifteen years, those that are best able to help us understand them. What can social area analysis tell us about our cities and their tendency to segregate the rich from the poor? Can network analysis or graph theory throw light upon patterns of communication (or lack of it) in Canada? Can we apply diffusion theory to an understanding of the conservatism of the Atlantic Region

and of its propensity for economic stagnation? If we were to address ourselves to this kind of question in our development of school curricula, we can be sure that we could look to current geographical research for guidance, for these are precisely the kinds of questions with which many researchers will be concerned. The time may be ripe to exploit the fortuitous convergence of professional and school geography in Canada and, in doing so, to make school geography not only into a more rigorous subject, but into a more socially responsible one.

footnotes

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