To shed light on the question of whether college geography students should be and/or are being instructed about the history and philosophy of geography, a survey was undertaken to determine the educational objectives and practices of geography educators. Approximately 215 American and Canadian geographic educators and chairpersons of geography departments were asked to respond to questions regarding the desirability of offering a course on the history and philosophy of geography and regarding the availability and status of a history and philosophy course in various degree programs. Findings indicated that most respondents regarded the history and philosophy course as unimportant in an undergraduate program, somewhat important in a masters program, and quite important in a doctoral program. However, many departments of geography do not offer history and philosophy of geography courses at any level because of a variety of reasons, including lack of interest among students and faculty, lack of professional expertise among faculty on the topic, and lack of funds to develop a new course. The author claims that this lack of interest and expertise in the history and philosophy of geography threatens the capability of the discipline to educate properly. Reasons offered for the importance of the topic include that it is intellectually challenging, promotes self-awareness and identity among geography students, and alleviates student confusion due to existing and emerging paradigms of thought and explanation within the discipline of geography. (DB)
ON TEACHING THE HISTORY AND PHILOSOPHY OF GEOGRAPHY

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ON TEACHING THE HISTORY AND PHILOSOPHY OF GEOGRAPHY

INTRODUCTION

Since the early 1950's geography has undergone a series of major philosophical changes and reorientations. These changes are part of an ongoing process, the roots of which lie earlier in this century. Short-term and long-term trends had strong impacts on geography, to the extent that geographers find themselves in a continuing discussion as to the scientific nature of the discipline. The question arises whether geography students, at both the undergraduate and graduate levels, should be involved in this discussion. More specifically, is it at all necessary that students become acquainted with the nature of this discussion, or, in other words, that they be taught about the history and philosophy of geography? The present author, who sees a course on the history and philosophy of geography as different from other courses in the field and has picked up some alarming signals in this regard, has conducted a survey among American and Canadian geographers. This paper presents results of the survey, along with a discussion which attempts to illuminate the importance of teaching the history and philosophy of geography, especially at the undergraduate level.

Survey Results

Two types of mail surveys were conducted during late 1980. An opinion questionnaire was mailed to a randomly chosen twelve percent of geography faculty members in departments offering a graduate program in the United States and Canada, as listed in the Guide (2). The response rate was quite
Respondents were asked to rank the necessity of a course on the history and philosophy of geography, at the undergraduate and graduate levels, on a scale of one to five (low - high). The second survey was conducted among seventy-five geography departments chosen at random from those offering graduate programs in the United States and Canada. Chairpersons were requested to provide information on the availability and status (required or elective) of a history and philosophy course in the various degree programs. The response rate to this survey was similar, accounting for one-third of the departments.

Tables 1 and 2 present the results of the surveys regarding the perceived necessity and the actual status of the course. Table 1 shows that the majority of university professors in geography view the course as unnecessary (ranks 1 + 2) in an undergraduate program. At the same time, though, a relatively substantial percentage of respondents (about 27 percent in ranks 4 + 5) do regard the history and philosophy course as important, while 22 percent think it of moderate importance.

A different situation exists with respect to graduate programs. Most respondents regard the course as important in a masters program and even more so in a doctoral program. Here, too, it is significant that there is a relatively substantial number of respondents who regard the course as unnecessary in both the masters and doctoral programs. Thus while the general attitude about the necessity of the course at the graduate level is relatively clear, the issue appears to be more controversial at the undergraduate level.
Table 1: Percentage Distribution of Faculty Response, by Rank of Necessity, and Degree Program, United States and Canada, 1980.

<table>
<thead>
<tr>
<th>Degree</th>
<th>Rank(1)</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>28.5</td>
<td>22.4</td>
<td>22.4</td>
<td>11.5</td>
<td>15.2</td>
</tr>
<tr>
<td>Undergraduate</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Master</td>
<td>13.3</td>
<td>8.5</td>
<td>15.8</td>
<td>24.2</td>
<td>38.2</td>
<td></td>
</tr>
<tr>
<td>Doctorate</td>
<td>17.6</td>
<td>3.0</td>
<td>5.5</td>
<td>10.3</td>
<td>63.6</td>
<td></td>
</tr>
</tbody>
</table>


Source: Compiled by author from faculty opinion questionnaire.

Table 2: Percentage Distribution of Geography Departments, by Course Availability, Status, and Degree Program, United States and Canada, 1980.

<table>
<thead>
<tr>
<th>Availability and Status</th>
<th>Course Availability</th>
<th>Course Status(1)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>&quot;available&quot;</td>
<td>&quot;not available&quot;</td>
</tr>
<tr>
<td>Undergraduate</td>
<td>33.4</td>
<td>66.6</td>
</tr>
<tr>
<td>Master</td>
<td>68.6</td>
<td>31.4</td>
</tr>
<tr>
<td>Doctorate(3)</td>
<td>56.7</td>
<td>43.3</td>
</tr>
</tbody>
</table>

(1) Refers only to those departments where the course is available.

(2) The remaining 2.9% are accounted for by "no response".

(3) Refers only to those departments where a Ph.D. degree program is available.

(4) The remaining 5.9% are accounted for by "no response".

Source: Compiled by author from chairperson questionnaires.
A clearer picture is gained when the actual availability and status of a course on the history and philosophy of geography are examined (Table 2). Two-thirds of geography departments in the United States and Canada do not offer the course at the undergraduate level. At the graduate level, the situation is reversed: over two-thirds of the departments offer the course for the masters programs, whereas the course is available in only 57 percent of the departments offering a doctoral program. The course status is similar in both undergraduate and graduate programs, being required in between two-thirds and three-quarters of the departments offering it. Those departments that offer the course, regardless of the level of education, recognize the necessity of assigning it a required status.

In comparing the results of the faculty opinion survey to those of the chairperson informative one, it appears that there is an agreement between the perceived necessity of the course and its actual availability with regard to undergraduate and masters programs. The actual availability of the course at the doctoral level, however, does not reflect as closely its desirability as expressed by faculty members.

Chairpersons were also requested to explain in an open question why the course is not offered. Some of the respondents to the faculty opinion questionnaire have kindly provided their own view about the issue too. Most respondents referred to the undesirability of the course at the undergraduate level. While these views cannot be regarded as comprehensive it is of interest to mention them.

One type of explanation refers to the technical ability to offer the course. It appears that limited staff resources and extreme budgetary con-
straints, coupled with stagnating enrollment, force some departments to direct efforts into other courses which are deemed more important in terms of skill development and practical training. A complementary explanation, offered by some respondents, is that most students will not make any use of the knowledge acquired in the course, even those turning to professional careers. Furthermore, several respondents objected to assigning a required status to any course. The majority of arguments, however, referred to the fact that both students and faculty members express little or no interest in the subject. One unique argument, which might explain this lack of interest, was that geography has a "history of opportunities lost and tactical errors" and "therefore, the less said about it the better." An even more extreme response was that "the study by students of the history and philosophy of geography seems to be an exercise in futility and a disservice to the conglomerate of professions that we are .... The greatest service we could do is to drop the word geography from our vocabulary."

Some respondents conditioned their attitude toward the necessity of the course at the undergraduate level on its nature. Agreeing in principle that the course is needed, they rejected its historical aspect and favored an emphasis on current philosophical trends, some viewing as "current" events beginning in the early 1950's, others referring to critical philosophical issues of the 1970's only. Not one such commentator has viewed events prior to the 1950's as essential to the course.

In summary, the situation is quite clear: a course on the history and philosophy of geography at the undergraduate level is not offered or desired by the majority of American and Canadian geography departments and faculty...
members. Judging from its present availability, desirability, and feasibility, even in graduate programs, one can predict that the situation will worsen in the future as present students, who are insufficiently exposed to the issue, become the next generation of teachers of geography at the university level.

THE URGENCY OF TEACHING THE HISTORY AND PHILOSOPHY OF GEOGRAPHY

In the view of the present author, the situation described above threatens the capability of the discipline to educate properly and prepare the future generation of geographers. To avoid jeopardizing the very existence of the discipline, the history and philosophy of geography, especially at the undergraduate level, should be a required course, with its coverage extended to developments since the beginning of the century rather than to the third quarter of the century. This contention can be supported by arguments related to intellectual challenges, professional self-awareness and identity, and students' confusion due to paradigmatic change.

a. An Intellectual Challenge

One common denominator of the explanations given by respondents for not offering the course, or for not deeming it important, is that the history and philosophy course is regarded as just another geography course, subject to considerations of "supply and demand," and thus to cynical and business-like decisions about its role within a program. This attitude, it seems, is the root of the problem. Many geographers, in light of the unresolved philosophical debates that have raged in geography during the last two decades, have become
bored with philosophical issues, which affects their attitude toward the subject and a course dealing with it. While this situation is understandable on psychological grounds (most people tend to shy away from philosophical debates), it should not be allowed to become acceptable on professional grounds. If it does become acceptable, if geographers themselves relegate the course to an inferior position, they are negatively influencing the attitude of students toward the importance of philosophical bases of the discipline and thus toward the course itself.

Interest in the problems of teaching geography in the university has grown in recent years. Questions about the kind of geographers we are educating are being raised, referring both to the content of geographic education offered (10) and to the structure of geography programs in terms of degree requirements. Claims are being voiced that undergraduate geography students in the United States and Canada are insufficiently confronted with demanding intellectual experiences, so that undergraduate preparation for advanced programs is inadequate (7). By giving students complete freedom of choice, without their knowing what is really important for them, we allow them to avoid challenging courses, those demanding intellectual effort of a kind different from that in regular subject-matter courses. We are thus contributing to the education of mediocre students, whose potential for further intellectual development is reduced. If better students are desired, it is necessary to impose some further intellectual demands on them, such as those made by a course on the history and philosophy of geography.
Some would argue that undergraduate students lack, to a considerable
degree, the ability to think in abstract terms; their capability to under-
stand philosophical issues, past and present, is thus viewed as problematic.
This argument may not necessarily reflect the true ability of our students,
and should not prevent geography professors from confronting students with
intellectual challenge. The prescription of norms for certain aspects of
the geography curriculum should be reserved to those in charge of the curricu-

b. Professional Awareness and Identity

A further deficiency in the avoidance of teaching history and philosophy
of geography at the undergraduate level is related to the professional person-
ality of the geographer. It seems that geography and geographers are approach-
ing a professional identity crisis, with the concomitant danger that geography
students will graduate without acquiring a sense of professional self-awareness
and self-identity. An indication of the potential for such a situation is the
proposal by one of the respondents in the survey that "the word geography
should be dropped from our vocabulary," because "I find the greatest block in
trying to establish communication with persons in other disciplines to announce
that I am a 'geographer.' Always the conversation stops right there!" If this
situation is real, it is not because we are geographers, but rather because as
geographers we do little to implant within our students a professional self-
awareness that would establish professional self-identity.
In order to establish a professional self-identity within our students, we must view the professional personality as similar to the human personality. The self-identity of a human being is strengthened by an increased awareness of his past and roots. As members of social, cultural, or national groups, human beings are taught about their national or ethnic history in order to increase their awareness of the group, and thus reduce alienation within the group and within society as a whole. Such a process should be applied in geography as well, to enable the student to relate as a member of the geography community and to geography as part of the larger scientific community.

In this process, it is not sufficient to concentrate only on current developments in the philosophy of geography, as some respondents would desire. When they reject the study of past events by students, geographers are overlooking one of the basic concepts they employ in teaching and studying geographic problems -- the relationship between structure and process. This concept sees the past as the roots of the present, so that understanding the present structure of a phenomenon requires comprehension of the process through which it has evolved. How can a student understand, for example, the post-positivist logico-linguistic, phenomenological, and marxist modes of explanation currently adopted in geography (e.g. 17), if he does not understand the positivistic philosophy of geography? How can he understand the spatial analysis paradigm if his understanding of the nature of the debate between Shaeffer and Hartshorn, and even more so the Hartshorn - Sauer debate or the Sauer - Barrows debate, is insufficient or nil? Without learning about the growth and development of geography as a scientific discipline, one's ability to fully understand its present structure is severely limited.
What does it mean to teach about our past? It means that we make a genuine attempt to uncover both the good and the bad developments. Not long ago we were reminded that although we have made many errors in the past, these errors still persist, obstructing progress in geography (11). The 1970's have witnessed a growing criticism from within geography about our errors. But the statement that "the less said about [these errors] the better" amounts to a shameful willingness to ignore these errors, and can be regarded as an ostrich response. No progress can be made without learning from our mistakes, and understanding the nature of the errors and the circumstances that caused them. We must acquaint our students with the errors we have made, and are still making, rather than hide or ignore them.

On the other hand, our past has not been a history of errors only. We have also produced valuable concepts and approaches which constitute a large body of thought, though perhaps we were not sufficiently aware of their utility and importance. Time, however, has produced a constructive perspective, so that we can now better appreciate what we tended formerly to dismiss. Through sharing with our students our past errors on the one hand, and past valuable concepts and approaches on the other hand, their professional self-identity will be built on a healthier and firmer basis.

Establishing a professional self-identity within an undergraduate geography student is not an easy process. The length of time during which the undergraduate geography student is exposed to geographic education is by
definition shorter than that available for the graduate student. The latter's somewhat longer formal and informal exposure to the philosophical bases of geography, whether through a course or through self-learning, can help him in shaping his professional awareness and identity.

The undergraduate geography student, however, does not have this privilege. Yet he is the neediest of all in this respect, although he does not realize it. For those students who turn to practical employment, the basic notions gained from a course on the history and philosophy of geography are implanted within their minds and do not necessarily fade away. As one respondent to the survey put it: "Many students do not particularly care for this topic while taking the course. Afterwards, however, they appreciate having been exposed to the development of geographic thought. It cannot be gainsaid that immediate appreciation of the content is possible, but in later years a professional will come up with questions about what he has been doing and then this type of course may have some of the answers."

The student has developed, through this course, a sense of professional identity to which he can turn for some of these answers. As for those students who turn to research in advanced education, the earlier they are exposed to some of these answers, the better. Those errors and accomplishments discussed in the course will have had a longer period of incubation within their minds, facilitating proper appreciation of them at later stages.

In trying to make ourselves more acceptable in the scientific community, we have proliferated into diverse areas in addition to adopting scientific methods of inquiry. As interdisciplinary communication is growing, this is a healthy trend. But there is also a danger that we drive ourselves into a
situation of scientific alienation if we do not first establish professional self-awareness and self-identity within our students. When these are developed, there will no longer be geographers willing to drop the word "geography," and our capability to communicate with members of other disciplines will improve significantly. This can only be achieved by teaching the history and philosophy of geography, by explaining to our students where we came from and what we were, what and where are we, and perhaps even where are we heading. Undergraduate students are not capable of establishing a professional self-identity by themselves, so we must help them to one. We must regard the course on history and philosophy of geography as the gate through which we send our students outside, even those who will not practice geography. With self-identity of their discipline established, they are all capable of becoming ambassadors of good will.

c. Paradigmatic Change and Student Confusion

Besides establishing professional self-awareness and self-identity within students, teaching history and philosophy of geography can solve the closely related but more practical problem of student confusion that arises from their exposure to paradigmatic change. This confusion, is in part responsible for the difficulties in developing professional self-identity within students.

Since the publication in the early 1960's of Thomas Kuhn's The Structure of Scientific Revolutions, a concern for the scientific past and indentification of paradigms has grown in geography as well as in other disciplines (5). Although Kuhn's basic notion of scientific discontinuities has not gone unchallenged, its impact has been to establish the concepts of dominant and
competing paradigms within a discipline, past and present. Since the mid-
1960's geography has witnessed a growing debate over existing and emerging
paradigms of thought and explanation. This debate has at times resorted to
the past in order to recruit arguments for or against a paradigm. This is,
in fact, the essence of what this article has referred to above in the terms
of errors and valuable concepts.

Yet, while the debate has been going on, we have tended to forget our
students. Observing, rather passively, this debate, and exposed to emerging
and rival paradigms, the students are left highly confused. Some of us,
loyal to certain paradigms and research traditions, have consciously or un-
consciously implanted within the students the dangerous belief that a para-
digm is perfect and may therefore persist. The students have not been pre-
pared to accept the idea that paradigms may change. Furthermore, they have
received insufficient instruction as to the historical and philosophical
roots of the existing paradigm to be capable of fully understanding the cause
for attacks that may be made upon it. Nor can they, for the same reason, un-
derstand the source and nature of the attack, namely the new paradigm, how-
ever dominant this may be. If we keep in mind the short period of their edu-
cation, and taking on ourselves the responsibility of not acquainting the
students with other possible past and present paradigms, the damage from pro-
ducing a confused graduate will be return to haunt us in the future.

Certainly, paradigms are not replaced overnight. Some persist for
relatively long periods even while new ones are achieving high degrees of
acceptance. Thus the old and the new co-exist within the same geography
department, represented by faculty members who have received their geographic education under the influence of different paradigms. This in itself contributes to student confusion. In the recent decade, however, one gets the impression that the "wave-length" between the emergence of new paradigms has become shorter than in the past. Students are further confused when the old still persists, not yet crystalized enough, while the new is beginning to gain momentum. If they are not taught about the history of our discipline, it may be difficult for them to accept the rather blessed legitimacy of such a situation.

What are some of these debates whose potential for confusion could be eliminated through understanding our roots? What evidence from the past can be brought to bear in the debate, such that it is necessary for students to study the history and philosophy of geography? Let us briefly consider several examples. Since the early 1970's geography has witnessed the growing momentum of marxism as what Smith, a "post-positivist mode of explanation" (17). The terminology used by Smith, and the context within which it is used (with other paradigms labelled under the same post-positivist umbrella) reflects the impression which may prevail among the geographic community that marxism is different from positivism from a methodological point of view. However, a recent comparison between the marxist and positivist approaches reveals that they are different only in perspective, not in method (12). Whether different or similar, the net result for students is confusion, because, in order to understand the nature of the debate between the new paradigm and the old, he needs to be acquainted with the historical roots of the old in geography, and perhaps even with the broader roots of positivism in the philosophy of science and the problem of adapting it to the social sciences.
The same is true with regard to the debate between phenomenology and positivism. It is difficult to understand the phenomenological philosophy standing behind humanistic geography without understanding the errors imbedded within positivism as a mode of explanation for human behavior. It is not argued that phenomenology can be regarded as the dominant paradigm in human geography, nor that it is devoid of problems (19). The recent literature on humanistic geography, however (e.g. 13, 14), in addition to literature of the mid- and early 1970's, makes it necessary for students to study phenomenology, at least as a critical perspective in geography (6), alongside positivism, the subject of its attack. Here, too, it might be valuable to resort to sources outside geography for acquaintance with phenomenology. Through such instruction, our students will be exposed to the problems inherent in positivism, of separating between fact and value and between the objective and subjective.

Furthermore, through formal study about the nature of the humanism-positivism debate in a course on the history and philosophy of geography, our students will be enriched in two respects. First, those who turn to professional careers in the civilian or private sectors will have a better appreciation of their ability to make presuppositions about human behavior. Second, and this applies also to those who will not practice geography, they will have a better appreciation of human and environmental values (16).

It is especially with regard to the debate between humanism and positivism that some geographers have resorted to geography's past in recruiting tools and concepts to support the humanistic paradigm. This direction was taken notably by Buttimer (4), who has reexamined Vidal de la Blâches con-
ceptions of geography. Students who have never been exposed to the basic ideas of the French geographer will be unable to understand properly the nature of humanism in geography, and therefore the problems inherent in positivist geography.

Another argument for teaching the history and philosophy course so as to reduce student confusion relates to the relationship between human and physical geography. It is perhaps in response to James' (11) discussion of the persistence of the human geography -- physical geography dichotomy that Marcus (15) found it necessary to review the roots and fallacies of such a separation. In his view, the status of physical geography within geography has been considerably upgraded in recent years, but it has not yet been fully reintegrated into the discipline. This implies that our students, who are required to take courses in physical geography, do not understand the nature of man-land relationships. True, we are not yet in that happy situation ourselves, but we still claim that man-land or man-nature relationships are the essence of geography. To the undergraduate student this is a highly confusing situation. Part of this problem may be resolved by understanding the roots of the separation between human and physical geography, by resorting to past concepts and approaches, such as Barrows' Human Ecology concept (3).

In an almost associative manner, we are led into another problem causing confusion, the elimination of which would be facilitated by a course on the history and philosophy of geography. This is the old debate between determinism and possibilism. This debate has constituted a thread in geography throughout the twentieth century. Although the debate has quieted during the late 1960's and 1970's, there are certain indications that at least the "debate over
the debate" has not totally disappeared. On the one hand, Spate claims that "possibilism, in fact, is not only dead but decomposed" (18). Determinism, to him, has changed its form to become a technological determinism. On the other hand, a more recent claim by Smith is that "the determinism - possibilism debate was never solved .... Unsolved, it will resurface." (17).

If unsolved, and actually and potentially an important issue, can we assume the responsibility of not teaching our students about its roots and nature? Can we be honest enough to ourselves and yet let the students carry on with what Marcus (15) refers to as the mystified confusion of physical geography with determinism? And isn't possibilism being re-examined as part of the debate between humanism and positivism?

Finally, there is the problem of regional geography. Regional geography has been replaced by the "new geography," which emphasizes the study of spatial relationships with the aid of statistical methods. It has been claimed that the new geography can be criticized on the same grounds as was regional geography; namely, that it is merely descriptive, and while capable of establishing functional relationships can throw little light on causal connections (8). Whether this criticism has been accepted by geographers or not, it is indicative of a certain, though limited, renewed interest in regional geography.

It is of significance to note that already in the early 1970's, at the time when the "new geography" was not yet challenged the way it is today, the authors of the paradigm's most comprehensive textbook believed that regional geography will be practiced to a much greater extent than at present (1). As the old regional geography was severely criticized and relegated to an inferior position, a new regional geography will have to take account
of the limitations of the old one. Some guidelines have already been formulated (8,9). But the new and old regional geographies may be confused by our students. Some of this confusion could be resolved through formal teaching of the nature of the new regional geography. But the role of the old regional geography in shaping the history of geography, correctly, or incorrectly, must also be conveyed to our students through the formal teaching of the history and philosophy of geography.

Certainly, all these examples are closely interwoven. The problem of positivism, for example, is related to the problem of both marxism and humanism. Both marxism and humanism bring forward issues related to man-land or man-nature relationships and thus to the dichotomy of physical-human geography, and the latter is related to the determinism-possibilism debate. All these problems stand in the shade of the continuing debate between the particular and the general, the idiographic and the nomothetic, or the lawseeking new geography and regional geography. They all constitute a body of thought, part of a wider body, to be consulted for better or for worse. Being intricately interwoven, these problems can result in confusion for our students. Such confusion must be formally eliminated by teaching them the history and philosophy of geography.

CONCLUSIONS

In this article, an attempt was made to elucidate the urgency of teaching the currently under-taught and under-valued course on the history and philosophy of geography at the undergraduate level. Such a course is necessary for the alleviation of some problems we encounter in the university education process. These problems relate to intellectual challenge for our students, the estab-
lishment of professional self-awareness and self-identity within them, and elimination of their confusion as they witness paradigmatic change. As the survey found, there is considerable objection to such a course. Some even view reference to the discipline's past as a reopening Pandora's box, or as fruitless at best, indicating that rather than look back and stagnate, we ought to look ahead and progress. There is no doubt that a search for new philosophical directions to resolve problems, "reaching out" as Gould (7) has termed it, is necessary and even crucial. But we cannot deny our own past. Such denial amounts to a rejection of our own rather diverse experience, good and evil, and through that a rejection of the discipline's "culture," with the risk of driving ourselves and our students to scientific alienation and perhaps our discipline to extinction. If an analogy from natural ecosystems may be made, diversity, ensures stability. Past diversity and experience are as valuable assets as our present disciplinary and philosophical diversity, whether originating from within or outside geography. By teaching our students about these assets we will be better able to educate them. In order to achieve this objective, it is necessary that we, who are in charge of this education, change our attitude toward the course on the history and philosophy of geography, recognizing its uniqueness within a geography program.

ACKNOWLEDGEMENTS

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