Aerial view, looking north, of the McGill Sub-Arctic Research Laboratory, Schefferville, Quebec. *Photograph by Hardy B. Granberg, December 1970.*

Canadian Studies and the Arctic

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Although the waters of Canadian cultural nationalism, which reached flood level in the late sixties and early seventies, have abated somewhat, they remain as a deep, powerful stream. Within the universities of Canada, a peak occurred during the year or two following the publication of *The Struggle for Canadian Universities: A Dossier* by R. Mathews and J. Steele (Toronto: New Press, 1969). This book, which also had considerable impact in political circles and in the popular press, contained tabulations indicating that more than half of the professors in Canadian universities at the time were "foreign" by one criterion or another.

Those unfamiliar with this theme in Canadian university life may have considerable misgivings about the short- and long-term implications of a rise of nationalism among academics. But it is important to realize that the Canadian university system (insofar as there *is* a Canadian system — a matter which will be discussed below) experienced a period of extraordinarily rapid growth in the nineteen sixties, that of graduate schools being especially marked. It is difficult to imagine how such growth could have been sustained without the recruitment of university instructors from abroad, although with the benefit of hindsight and using the example of the recent "africanization" policy of many Third World nations, it is possible to argue that growth should have been slowed and/or greater care taken in filling particularly sensitive posts, and in defining contractual terms. As might be expected, given the proximity and size of the United States, and the fact that Canadian universities were developed along American lines, many of the recruits were American, although there was also a considerable British contingent.

In 1972, the Association of Universities and Colleges of Canada (AUCC) reacted in a moderate fashion to the concern about the lack of Canadian content in the educational system by establishing a Commission on Canadian Studies "to study, report and make recommendations upon the state of teaching and research in various fields of study relating to Canada and Canadian universities." The present commentary is based upon the first two volumes of the four-volume report of the Commission.[2] The extraordinary scope of their painstaking enquiry, which will have synthesized a very large number of briefs and letters and a mass of information gained at public and private meetings, is indicated by the following list of principal topics covered in these first two volumes:

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[2]Symons, T.H.B. *To Know Ourselves: The Report of the Commission on Canadian Studies, Volumes I and II.* Ottawa: Association of Universities and Colleges of Canada, 1975.

Canadian content in the university curriculum — contains quite detailed statements on more than twenty subjects including those of particular relevance to the Arctic.

Science, technology and Canadian Studies — includes a great deal of material of northern relevance.

The Canadian component in education for the professions — refers to products of Canadian technology such as snowmobiles and snow removal equipment.

Canadian Studies abroad — mention made of the Arctic.

Canadian Studies in community colleges — includes specific recommendations for the development of colleges in the North.

Archives and Canadian Studies — a topic of interest to those institutions maintaining northern records.

Audio-visual resources and other media support for Canadian Studies.

The private donor and Canadian Studies

The whole Report is introduced by a discussion of a rationale for Canadian Studies, and is of importance in that it indicates the way in which the Commission's findings are presented and the nature and tone of the hundreds of recommendations made by them. While at pains to avoid the many real pitfalls which lie in wait for academic nationalists, it strongly encourages the academic community to develop a healthy sense of nationality. As Commissioner Symons observes, Canadian Studies should not be regarded as "the inculcation of one particular perception of Canadian identity" but as "the importance of self knowledge, the need to know and understand ourselves: who we are; where we are in time and space: where we have been; where we are going; what we possess; what our responsibilities are to ourselves and others" (p. 12). As such this requires "a knowledge of other lands and other times" (p. 14): it should be a broadening and deepening experience, rather than a narrowing one.

The philosophical basis of the Report is developed and reinforced at various points in the text. As the Arctic has played a very important role in the development of Canada, in quite concrete political, economic and general historical terms, and has also had a very powerful, though much less tangible, effect on the Canadian identity, northern topics are frequently used to explain and support points made. This is particularly well illustrated in the introduction to the Science and Technology chapter of Volume I.

The Commission do not seek to refute the fact that science is universal, but point out that there are ". . . national dimensions and perspectives (to science) in addition to . . . essential international and universal characteristics", and that it "is a key ingredient in the cultural fabric of our society" (p. 142). The particular national characteristics of a country present it with a particular set of scientific opportunities and *responsibilities*. Canadian scientists and technologists serve their own ends best, and those of Canada and the world community, by tackling problems which are thrust upon them by their particular cultural and physical environment. Indeed they have both a national and international obligation to "investigate and learn" about that "large and diverse portion of the globe" (p. 143) of which Canada is the custodian.

> "In short, then, science in Canada can be both international and Canadian in the sense that it is approached from a Canadian viewpoint, it fulfills a particular Canadian need or it is related to a particular Canadian interest aroused by location, geography, climate or by some other distinct feature of the country" (p. 143).

An extract from the brief of the Association of Professional Engineers of the Province of Ontario is quoted in the Report to further illustrate the Commission's viewpoint:

> "Although research on polar bears may be undertaken without any recognition of the fact that they live in Canada, such research should still be regarded as an aspect of Canadian studies. But similar work done on camels, of course, would normally be less likely to fall within the ambit of Canadian studies" (pp. 144-5).

Commissioner Symons has, however, pointed out that camels were used in the opening up of British Columbia.

The Commission's argument is that, *in general*, Canadian scientists can contribute to world science most effectively by investigating problems which lie on their own doorstep. Topics such as permafrost, ice, aspects of cold weather and climate, transportation in a cold environment, certain ionospheric studies, etc. are mentioned in the Report as examples.

Thus, the Commission contend that in science and technology, as in other areas of study, "self knowledge" is an important prerequisite for a worthwhile contribution to the mainstream of academic achievement. In this view of national science, university-based research is of particular importance as the research which is most closely associated with a country's formal educational system. It is perhaps needless to say that the Commission found the degree of self knowledge in science and technology and in other areas, pitifully inadequate. Given their particular physical environment, Canadians are deficient as oceanographers, hydrologists, glaciologists, metallurgists, meteorologists ("meteorologically illiterate"), geophysicists, geographers, geologists, foresters and biologists.

Considerable space is devoted in the Report to the fact that within the universities and the educational system in general, teaching and research programmes devoted to polar matters are woefully inadequate. The following quotations, again from the chapter on science and technology, illustrate the view of the Commission that Canadian universities have tended to ignore problems associated with the northerly location of the country in which they are situated:

> "Many of those responsible for resource management (in Canada) have been trained in techniques developed in other countries with warmer climates."
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> "Almost all Canada's university-level courses in ecology (etc.) . . . are based on course materials originating in the South".
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> "Only three (university) courses are dedicated entirely to boreal or northern ecology."
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> "Few universities are conducting serious research into permafrost or ice."
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> "Problems of snow loading on roofs and other effects of snow have received almost no attention by Canadian university scientists."

> "Despite its present and potential importance for the Canadian Arctic, few impact studies have been published concerning the mining industry."

The Commission do speak favourably of some things. They commend, for example, the work of the Arctic Research and Training Centre (ARTC) at Rankin Inlet in the Northwest Territories, but deplore the paucity of the resources which have been made available to it. In stressing the importance of the development of science in Canada, they cite ARTC as an example of the sort of *year-round* facility for training *and* research which should by now be common in the North. They urge the Canadian Government to support ventures such as this, and the universities to cooperate more in northern research. They go on to exhume and endorse the idea of developing the nucleus of a university in the North and the establishment of community colleges there.

The same recommendations are presented again and again throughout the Report. That concerning the community colleges, for example, is further developed in the chapter on colleges; points about cold weather technology are amplified in the chapter on professions, and so on. The Arctic is also prominent in the important curriculum chapter where it is mentioned in the discussions of several academic disciplines and areas of study. In that same chapter there is another extended reference to it under the sub-title *Northern Studies.*

Here, using as a starting point *The University and the Canadian North* by W. O. Kupsch and M. Caillol (Ottawa: Association of Universities and Colleges of Canada, 1973). The Commission urge that there be an increase in undergraduate studies of the Canadian North as part of an effort "to emphasize the need for Canadians not living in the North to appreciate and understand this area of Canada" (p. 90). They see "substantial opportunities" for this increase in most of the standard academic disciplines and in many interdisciplinary areas. They explicitly mention a number of interdisciplinary organizations already involved in northern work with expressions of approval of their value for the advancement of knowledge of the North. The Arctic Institute of North America (AINA) is mentioned more or less in this context, and the *Arctic Bibliography*, published by AINA, merits a full paragraph (p. 91) in which the paucity of good bibliographic work on the Canadian North and the relative inaccessibility of useful published work on it are stressed. It is, therefore, unfortunate that publication of the Bibliography was suspended before the Report appeared.

It is of interest that the Commission conclude their *Northern Studies* section by recommending "the further development of research institutes and transdisciplinary programmes" (p. 92) devoted to the North.

A report with a broad sweep will almost inevitably be rather bland in places and be written at a very generalized level. However, a very widespread, vigorous, if somewhat unselective, inquiry such as the one conducted by this Commission can produce at least two very important results. First, it can significantly change present attitudes; and secondly, the report and the archive materials which back it up can provide an invaluable basis for overview. It is the impression of the present reviewer that this Commission produced waves in Canadian educational circles *before* its report was published, and after reading the first two volumes (almost 350 pages), he feels that there now exists a real basis for generalizing about

"Canadian Studies", northern as well as southern.

Extensive use could have been made of graphs and tables as a synthesizing device in the preparation of the Report. That this was not done might have been in part because such an approach would have limited its readership (which was intended to be *very* wide) and also because discussions of nationalism, which include apparently precise data, could too easily have become the basis of unnecessary, unfruitful and bitter disputations. However, despite the deliberate avoidance of the security blanket of statistical tables, the Commission are firm and unequivocal in tone. There are serious errors and omissions in the treatment of Canadian Studies in educational institutions in Canada and something must be done to rectify the situation at once.

That the Report *is* bland and overgeneralized in places will be apparent to those of its readers with a personal knowledge of a subject discussed in it — rather in the way that articles in the *Scientific American* often appear less than erudite to those whose own subject matter is approached. Thus the present reviewer could see limitations in the treatment of his own subject, geography, as well as in the coverage of those northern topics with which he is most familiar. It could easily be said that the Commission's view of geography is concerned too much with its regional aspects and with maps and atlases, rather than with the analytical and spatial methodological self-image which the subject now has. However, it is interesting to discover that the Commission do, for example, see a need for regional studies of some sort, devoting as it does considerable attention, although not in the geography section, to "area studies". It *is* rather sad that the emphasis on courses in regional geography in universities has declined so drastically, and regrettable that such courses are disappearing at the high school level where, incidentally, polar topics are rare. It is also interesting that a non-geographical commission sees fit to deplore, in the geography section and elsewhere, the relative lack of support for the National Atlas and like endeavours, even if these are not exactly a prime interest of professional geographers at the present time. In the same vein, although one might debate the significance of the fact that 46% of university geographers in Canada are non-Canadian and would have preferred that such a bald statistic (one of the few precise numbers cited in the Report) be qualified by further data or discussion, it is important that geographers should be fully aware of this, and any other information regarding their profession acquired on a national basis.

However, given its overall objectives, it would not have been possible, or even desirable, for a report like this to provide an in-depth appreciation of every academic discipline.

Concerning references to the Arctic, the present reviewer tended to become just as argumentative and aware of gaps and limitations as in the section dealing with his own subject, and so, while pleased that the Boreal Institute for Northern Studies of the University of Alberta and AINA both received commendatory mentions towards the end of the geography section (AINA's library, its journal *Arctic*, the *Arctic Bibliography* and other publishing endeavours are all explicitly mentioned), he could not help thinking smugly of as good or better *exempla admiranda*, or as bad or worse *exempla horrenda*, for the Commission's purposes.

What of the persistent, diverse, very Canadian and very geographical work of the Centre d'Etudes Nordiques, Université Laval? Or the extraordinary record for training and research in the field during the last twenty years of the McGill Sub-Arctic Research Laboratory? Either of these could have been used to illustrate what *has* been done in the Canadian North and also to reinforce criticisms made in the Report, as they have both suffered from the fact "that programmes sponsored by southern-based universities in the North are the first to suffer and be discontinued when these universities come under financial and political stress" (Kupsch and Caillol 1973, quoted on p. 90 of the Report). But in this field, as in very many others covered, the Report cannot be expected to be omniscient. Its deliberate generalization should be constantly borne in mind.

The fact that the Report singles out AINA, a bi-national organization, for explicit, and rather favourable, comment is an illustration of the Commission's lack of xenophobia. It would have been very easy for them to have played to the Canadian gallery with a few choice phrases criticizing foreign influence in the country. Instead, while accepting the ultimate responsibility of Canadian institutions, they welcome any worthwhile work by non-Canadian organizations. Perhaps, therefore, they could have mentioned the Institute of Arctic and Alpine Research (INSTAAR) of the University of Colorado with its role in high-quality research on the Canadian Arctic and, thus, the valuable training it affords Canadian scientists.

However, it must be said that within Canadian universities and schools there are some things which foreign organizations and personnel, even with the best will in the world, simply cannot do. These have to do with developing the general attitude of the bodies concerned and establishing long-term goals for them individually and collectively. As pointed out earlier in this review, a Canadian university system as such does not exist. Education at all levels in Canada is the constitutional responsibility of the provincial governments, although the federal government does have a good deal of more-or-less indirect influence on the universities.

It is possible for universities and colleges to become more coherent and positive national forces, within the framework of the Canadian constitution, *if they wish*, and it is becoming increasingly desirable that they should; the effects would be felt throughout the educational system, notably in the provincial high school systems which have greater difficulty in overcoming interprovincial barriers.

This objective may be achieved by the formation of national organizations, of which the AUCC, which commissioned the Report under review, is a formal example, as are the national learned societies. The major federal granting agencies, with their committee structures and refereeing systems are also examples of involvement in university affairs at the national level, as are the many interprovincial links of a less tangible sort, e.g. members of university faculty studying the same topics, exchanges of graduate students, etc.

The relative failure of Canadian university and school programmes in and about the North (and this failure appears to have been greater in teaching than in research, although the latter is inextricably bound up with the former in the long run) may be due to the ineffectiveness of the coordination of university

activity at the national level. This deficiency could be overcome by a concerted, cooperative effort of teaching and research in the North.

The AUCC, which also commissioned the Kupsch and Caillol report of 1973, has demonstrated its concern in this matter:

Perhaps the current attempt to develop a simple, cooperative framework for northern university research in Canada will be a major step towards meeting the general and specific criticisms of the Commission on Canadian Studies.

Meanwhile:

> "As things now stand (in Canada), there are few other countries in the world with a developed post-secondary educational system that pay so little attention to the study of their own culture, problems and circumstances in the university curriculum" (p. 128).
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> — and there are few countries which are so polar.

Volumes III and IV, to be published later, will cover the following:

Scholarly communication in the Canadian academic community;
The study of Canadian higher education;
Human resources and the universities;
Native studies and Canadian post-secondary education;
Canadian Studies in the schools;
Libraries and Canadian Studies;
Publishing and Canadian Studies;
The study and conservation of Canadian cultural property.