UBC ALUMNI Chronicle

SUMMER 1968

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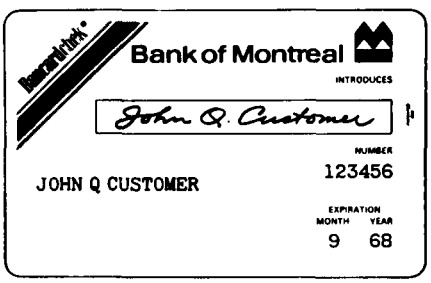

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UBC ALUMNI
Chronicle

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Clive Cocking, BA'62

COVER

John Breukelman

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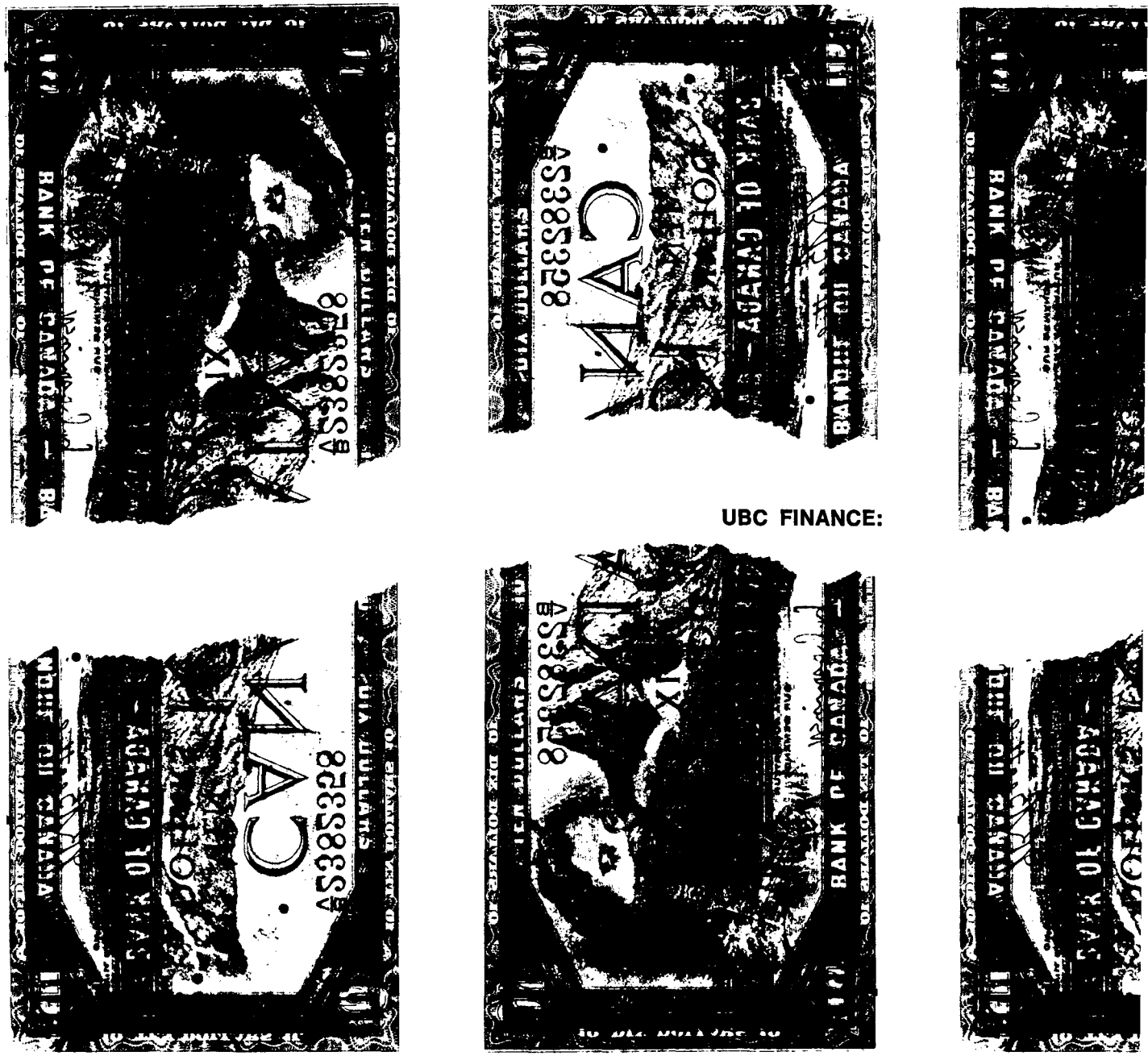
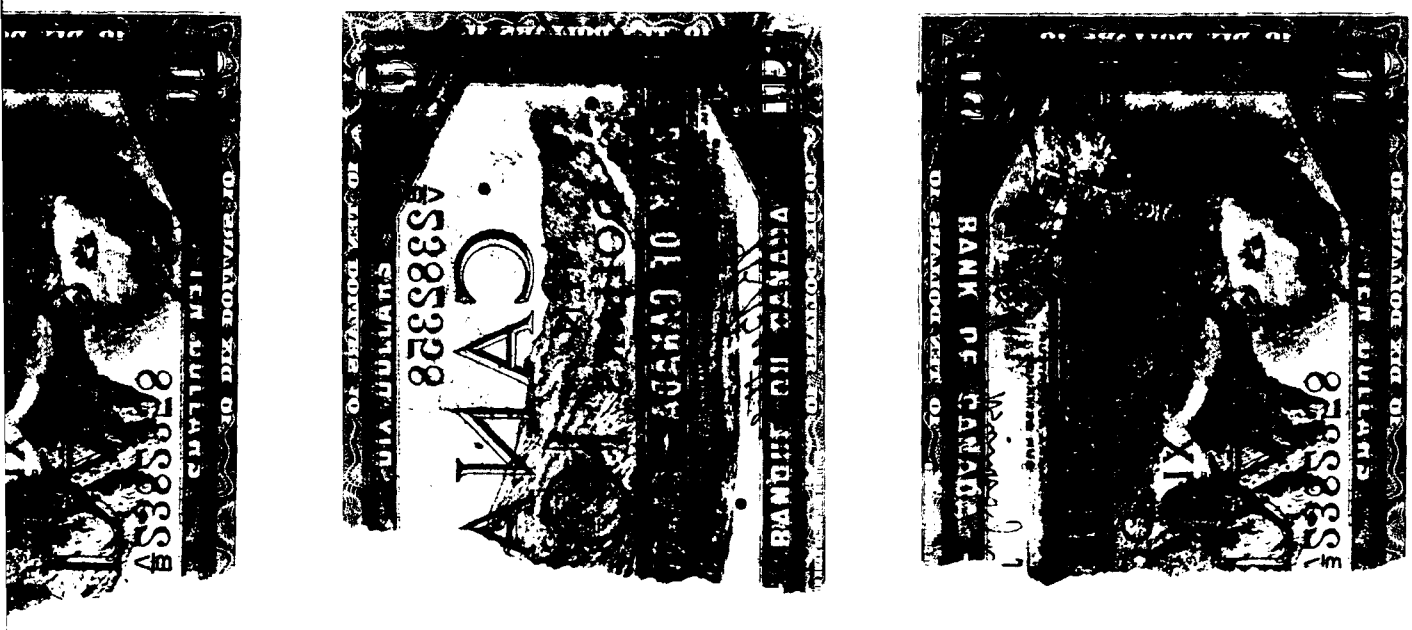


UBC FINANCE:

A FEW YEARS AGO STUDENTS expended vast amounts of energy and ingenuity on the technical problem of putting the maximum number of bodies into the mini-spaces of tiny cars and telephone booths. University administrators today — faced with booming enrolments and bare-bones budgets — have a parallel problem: how to squeeze the maximum number of students into the minimum space without diluting the quality of education.

The space problem has reached the crisis level at the University of B.C. where the administration recently announced a new "get-tough" policy on admissions as a means of staving off dilution of academic standards. Present admission regulations will be enforced to the hilt in a bid to keep enrolment this September down to about 20,000. So serious is the situation that the imposition of higher admission standards was even considered—but rejected. There have been serious delays in major construction, library facilities are grossly inadequate, classes are too large for effective teaching in some areas and there is a chronic shortage of offices and research space.

The root cause of the crisis—which is likely to grow worse instead of better—is the failure of the provincial government to put up enough money to meet the growing needs of higher education in B.C. University administrators are unanimous that support has been inadequate but they are reluctant to make any judgment on whether the provincial government could have done better when the other demands on its purse are taken into consideration. As one faculty dean pointed out, the priority of provincial spending given to such varied demands as hospitals, welfare, roads and higher education, is a purely political decision in the final analysis. Despite this, it is clearly demonstrable that Victoria has failed to provide adequate financing for UBC



TOO LITTLE FOR TOO LONG /by Jim Stott

either in terms of the needs of the university or by comparison with the level of support given to universities by governments of the other provinces. Admittedly, the provincial government has earmarked an increasingly significant portion of its budget to post-secondary education over the past five years, but it has not been enough to meet the needs of the universities.

Operating and capital grants have increased from $13.6 million in 1962 to $33 million in 1967 or from 3.34 per cent of expenditures to 7.85 per cent. In the 1967-68 fiscal year, a total of $53 million was allocated to the universities and the current budget for 1968-69 contains an allotment of $65 million, an increase in capital and operating grants for the three public universities.

A senior member of UBC's academic administration was asked if he felt the 22.6 per cent increase in funds for universities was adequate. "The level of support has been completely inadequate in the past and the current increase must be judged in that light," he said. "If you increased the standard of living in India by 22 per cent, people would still be starving because the starting point is so low."

Victoria's financial contributions to UBC have been niggardly when judged in relation to the standard of support given by the governments of Canada's other affluent provinces, Alberta and Ontario, to their universities. In the year 1967-68 for example, the provincial government's operating grants to UBC fell far below the level the Point Grey campus would have received if it had been located in either Alberta or Ontario. A UBC study shows that B.C.'s three public universities would have received $54,890,000 by Alberta grants standards and $54,497,000 under the Ontario system. The actual operating grant to the three universities was $45

Artwork by John Breukelman

million—almost $10 million less than they would have received from the governments of Alberta or Ontario.

The same study made a comparison between provincial grants in 1967-68 to UBC and to the University of Toronto, the university most comparable to UBC in size and complexity of program. Toronto, under Ontario's formula financing system, received a net provincial grant of $41,459,000 for 38,005 student units. UBC, with the equivalent of 34,000 Ontario student units, would receive a grant of $37,094,000 by Ontario standards. The B.C. government allotted it only $26,424,000.*

UBC also ranked at the bottom of the financial list among Western Canadian universities in terms of per student operating grants between 1963 and 1967. In 1966-67, the provincial government's per-student operating grant to UBC was $843. Comparable grants to other universities for the same school year were: University of Victoria, $1,227; Simon Fraser University $1,787; University of Alberta, $1,586; University of Calgary, $1,462; University of Saskatchewan, $1,005 and University of Manitoba, $1,036.

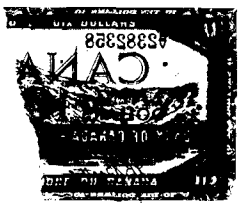
In the 1963-67 period, UBC also held bottom spot in revenue per student figures, combining provincial operating grants, federal grants and student fees. The one exception to the pattern shown in provincial operating grants—a small deviation—was in 1964-65. In that year the University of Saskatchewan held the doubtful honor of receiving the lowest provincial operating grant of $728 per student and UBC moved one step out of the cellar at $732.

Another factor contributing to the fund shortage at UBC, in the area of capital needs, has been the failure of the Three Universities Capital Fund to reach its goal. The fund campaign, believed to be the largest private endeavour of its kind ever undertaken in Canada, set out to raise $28 million from the public for B.C.'s three public universities. To date, despite generous support from individuals and industry, the fund is still $6 million short of its target and far beyond its official closing date of July, 1966.

In retrospect, it seems strange that the universities were prepared—or forced—to rely on such an unpredictable source of capital funds for a major portion of their capital construction needs over a five year period. To this writer it seems almost as financially sacrilegious as floating a national lottery to finance medicare. In the five year period involving the Tri-Universities Fund, the Provincial government guaranteed capital allotments to the universities of $40.7 millions. Presumably their capital needs in the period were $40.7 million plus $28 million or in the region of $69 million. If the provincial government had advanced a larger portion of this total need—or met the capital requests of the universities — the necessity for public solicitation could have been eliminated or substantially minimized.

There will always be a place for the generosity of the friends and patrons of the university but the major cost of education is the responsibility of government. As the report on financing of higher education published in 1965 by Vincent W. Bladen and his colleagues put it: "In the opinion of the great majority of people appearing before us the bulk of this (financing), perhaps 70 to 80 per cent, will have to come from government. Government alone has the resources to meet the costs of the dimensions contemplated."

If UBC was an Ontario university it would have received a $37 million grant in 1967-68 — the B.C. government granted it only $26.4 million.



One consequence of the shortfall in the Tri-Universities drive is that UBC still does not have a biological sciences building extension and civil engineering complex which are urgently needed. Original cost estimates in 1963 for this construction came to $10.5 million. Current cost estimates for the same work have now risen to approximately $20 million—a high price to pay for the delay, even allowing for the inflation which has effected all construction costs.

The general effect of capital starvation on UBC is summed up in the recently-published President's report for the 1966-67 fiscal year. In a reference to graduate studies, Dean Ian McTaggart-Cowan says: "It is difficult to generalize on strictures that are already slowing down the growth of our graduate school because they differ from one department to the next. However, across the entire campus the pressing shortage of accommodation for the academic and administrative functions of the university is paramount. This is forcing restriction of enrolment and requiring some faculty members and the students studying with them to make do with facilities that are inadequate. The pressure of this influence will increase with each year that it goes unrelieved and will act to restrict the opportunities that the university can offer to those of greatest ability and thus deny the province the lasting benefits they could bring it."

**While the Chronicle was going to press the provincial government announced a $31.1 million operating grant to UBC for 1968-69. The grant represents a $4.7 million increase (18 per cent) over the previous year's grant. Simon Fraser received $13.5 million and the University of Victoria $8.2 million. UBC acting president Dean Walter Gage said the university's grant was $3.1 million less than asked for and would mean UBC would not be able to reduce the size of classes or upgrade facilities and equipment as much as anticipated. But he said it was an equitable split under the circumstances.*

In the general introductory remarks, Acting President Walter Gage says:

"The need for adequate operating grants is always with us. Perhaps one of the most serious problems, however, is the lack of adequate accommodation for offices, seminars, laboratories, libraries, and residences. *The lag is critical, is seriously hampering efficiency, and will undoubtedly affect academic standards.*"

Ian McTaggart-Cowan, dean of graduate studies, is more colloquial but equally blunt. "We have been living on a hamburger budget for so long it is high time someone took us out and bought us a steak dinner," he said in an interview. He said the faculty of graduate studies has been under-budgeted for so long that there is no built-in depreciation allowance for replacement of research equipment and faculty members give their own research allowances to support graduate students. "UBC needs replacement capital as much as Simon Fraser University needs starting capital. If you fall behind in the quality of equipment, you fall behind in the pace of research," he said. "I have personal research funds of about $25,000 a year and most of it goes to support graduate student work. Other faculty members do the same. The only reason the university is not on the downgrade is because of the Herculean efforts of the faculty."

McTaggart-Cowan said of 20 departments in the faculty of arts, only three come anywhere close to providing the amount of space considered adequate for each graduate student. He said the amount of capital funds available are about half what he considers adequate to do the necessary job. "Our students are not getting a fair shake relative to other provinces—they are not getting the opportunity to compete and contribute and you can't redress this quickly," he said.

Dean Dennis Healy of the Faculty of Arts reports an acute shortage of office space and a crush of students in the first and second years which may be depriving some students of the maximum educational benefit. (Arts 1, a new experimental program, has been launched within the faculty to stimulate student involvement in the learning process and offset the feeling of disorientation and non-involvement experienced by some students in large classes). Dean Healy said it is difficult to generalize about the effect of high student-teacher ratios because they vary with such factors as the ability and interest of the student and the talent and experience of the lecturer. "Gifted students are at no disadvantage. They hold their own when they go to graduate schools elsewhere. These people are getting an education and a good one," he said. "Another category of students (the less gifted) are not getting the help they deserve at the present time. The situation in the faculty of arts at present is unsatisfactory and if we could work under better conditions we could do a better job."

Dean Healy, however, believes the provincial government has done its financial best for higher education in the face of many other demands on the provincial coffers. "Any premier who sees fit to allocate $74 million to public education is my hero—but I wish it was $150 million," he said. "The government has provided budgets of increasing magnitude year after year and we are grateful for what is on the way." Dean Healy said the provincial government is well-informed on the budget proposals of the university and its decisions are made in good faith and on the basis of logic.

In the faculty of education, Dean Neville Scarfe says provincial support to UBC over the past five years has been inadequate and this has resulted in a severe handicap to educational research and a lack of such facilities as a gymnasium and library.

UBC has the most under-stocked campus library in Canada for its size — short one million volumes.

Perhaps the most glaring example of inadequate facilities at UBC—and one which affects all students regardless of faculty—is the university library. The library's book collection has been doubled in the past five years—mainly as a result of generous gifts by H. R. MacMillan—but it is barely meeting the needs of students. A survey of Canadian university libraries sponsored by the Association of Universities and Colleges of Canada recently revealed that UBC has the most under-stocked campus library in Canada for its size. To bring it up to standards accepted at major U.S. universities, the UBC library would have to add about one million volumes—double its collection again—at a cost of about $10 million.

According to head librarian Basil Stuart-Stubbs the university has been able over the past two years to spend a healthy amount buying books—$1.5 million annually — because of Mr. MacMillan's $3 million gift. But this money is now gone and in the coming year the library will have only $850,000 to spend, which is inadequate for improving the collection. To compound the problem, the library also urgently needs more space — 600,000 square feet of it.

The Sedgewick Library for arts undergraduates illustrates a plight that can only be termed pathetic. It is short 63,000 volumes, seating capacity is 200 per cent less than it should be and because of a staff shortage professional librarians are forced to do clerical work instead of devoting their full-time to the training and guidance of students. In the circu-

lation department 22 full-time staff members work in an area designed—by minimum standards—for 6.25 people and the desks and turnstiles were built to serve one-third of the number of students now using them.

Ture R. Erickson, head of the Sedgewick library, offers the saddest commentary of all in a report to Dean Healy. "The arts undergraduate views the library not as the heart of the university, but as a difficult hurdle in his five-and-a-half months race to the completion of another five examinations," he reports. "I am convinced that this university needs a library designed and built for undergraduates. Each day's delay in building that library is costing this university dearly. Without that library, Maclean's Magazine may well kick us out of the minor leagues and into the cellar."

Inadequate library facilities, critical space shortage for research and faculty offices, large classes and the threat of enrolment limitations: That is the situation now. What about the future?

Enrolment to hit 35,000

Enrolment at UBC in the 1963-64 term was 14,714 students, made up of 13,795 undergraduates and 919 graduate students. Estimates for the 1968-69 term—and the forecasts of the planners are usually conservative—is an enrolment of 20,400. Enrolment estimates for 1973 forecast 35,000 students at UBC — double the current enrolment — provided the inflow of students is not restricted by changes in admission requirements.

Massive expenditures and increases in government allocations will be required if UBC is to meet the challenge of the future and fulfil the role enunciated for it by a former president. Dr. N. A. M. MacKenzie's statement of a decade ago still holds true:

"We must try to provide higher education for all of our young people who have the capacity and the desire for it, and indeed the future welfare of our society depends on our willingness to do so."

These few words outline a gargantuan task and one which the provincial government indicates it recognizes in the budget speech delivered on Feb. 9 of this year by Premier and Finance Minister W. A. C. Bennett. "It is abundantly clear that, with 32 per cent of the total provincial budget being spent on education (at all levels), the Social Credit government recognizes our young people as the province's most important resource. Investment in education is an investment in our future, and the product of our schools and universities assures a continuation in the dynamic growth of the province."

UBC officialdom is prepared — for the public record at least — to accept the assurances of the provincial government at face value despite the obvious inadequacies of the past. But to a man they would like to see a re-entry of the federal government into financing of higher education and a drastic change in the present system of advising the provincial government on how operating funds should be divided among the public universities. This function is now performed by a seven-member advisory board which counsels the minister of education on division of grants.

"One of the big drawbacks at the moment is that there is no adequate assessment of need of the total system and no overall presentation of these needs to the government prior to the distribution of the grant," says Bursar William White. "Capital grants should also be dealt with by the advisory board. Finally, the advisory board needs to have a continuing organization of full-time research staff."

Dean McTaggart-Cowan regards the present advisory board as a halfway measure that is almost useless. "It has no authority at all and advises the government on how to cut up a pie which it has no part in cooking," he said. "The system would be improved if such a board reviewed the budgets in their initial stages and then submitted them to the government untouched, along with an informed analysis." Another senior administrator, who asked not to be quoted by name, described the advisory board in one word: "Useless."

The best hope for an improved era in university financing, in the view of Bursar White, is the formula financing system proposed five years ago in the Bladen Report and now adopted by the Ontario government and the universities of that province. Under the formula system, grants are apportioned to each university on the basis of enrolment, with weight factors to favor the needs of younger universities and those with a larger proportion of advanced students in the expensive graduate and professional schools. For example, a general arts student has a weight of one and a doctoral candidate has a weight of six. In a report, the committee of presidents of the universities of Ontario said: "Formula financing had the advantage of buttressing the independence of the universities by ensuring a basic income to each university without the close scrutiny of operating budgets necessarily involved in subjective review by the granting authority." White says formula financing would offer many advantages to UBC including the stable financial base for long-range planning which does not now exist.

Public molds university policy

In his report for the 1962-63 term, former UBC President John Macdonald summed up the situation then—and now: "The decision about how much of the public purse is to be devoted to education is primarily a political decision . . . Good education cannot be bought cheaply and requires more financial support than we have so far been willing to advance."

The "we" he referred to was the people of B.C., the general public, who in the final analysis mold the political decisions of the politicians. The bulk of the B.C. residents have not yet accepted the fact that a first-rate system of higher education is as vital to the survival of a complex technological society as power projects and highways. Until we accept this fact and apply pressure at the ballot box, universities will continue to suffer from inadequate financing and will offer B.C.'s youth a rapidly declining quality of education. □

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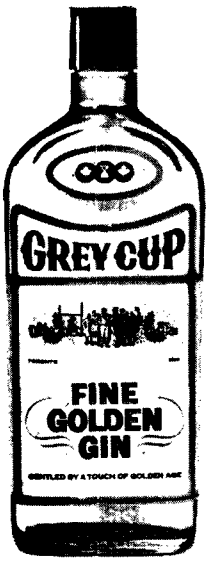

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The Class Bias of Canadian Education

by DR. JOHN PORTER *

IT IS WITH SOME HESITATION that one comes from Eastern Canada to talk about the democratization of education. If judgments are made in quantitative terms British Columbia in general and Vancouver in particular have superior educational systems to all the other provinces. In school retention rates, in the proportion of the higher age groups in school, and in the educational level of its labor force British Columbia does much better than the East. Moreover, there appears to be for these higher levels of educational qualifications a corresponding subjective counterpart or a cultural evaluation of education which is also higher in British Columbia than in other parts of the country.

From the recent career decisions project undertaken by the federal department of manpower we can take a number of items which illustrate this cultural evaluation. For example, in response to the question, "Do you think you will leave school soon, leave later, or stay until finishing?" put to samples of high school students across the country, 81 per cent in British Columbia said they would definitely finish high school, compared to 67 per cent in Ontario and 61 per cent in Quebec. In response to the question, "Among your friends in school, how many are planning to finish high school?" 82 per cent in British Columbia said all or most of them, compared to 74 per cent in Ontario and 60 per cent in Quebec.

The career decisions project, when the analysis is completed, will tell us more about the state of education and its relationship to democracy on a comparative provincial basis than any other source. From the viewpoint of my own interests, I look forward to much light being thrown on the relationship between social class position and educational experience. Even in British Columbia where the educational system has the highest outputs and therefore appears to be the most democratized some relationship between class and educational experience will be found. I do not have direct evidence to support this although it has been well established for Canada as a whole.

I want therefore to speak in more general terms drawing on the range of comparative data concerning the transitions in educational systems as societies become increasingly industrialized and as they try to make plans for the post-industrial future. There are two impelling factors at work. One is the need for a more highly skilled and professionalized labour force, and the other is the increasingly widespread egalitarian values about educational opportunity. Fortunately these two factors—the exigencies of the post-industrial world and social values—are complementary rather than conflicting, although there would still seem to be a body of opinion which holds, incorrectly I am sure, that inevitably more means less

* *From an address Carleton University Sociologist Dr. John Porter gave at UBC this spring. He is author of "The Vertical Mosaic".*

Canada fails to produce enough trained manpower.

because there is a fixed pool of ability and so educational systems cannot be egalitarian.

The educational systems of all western industrial societies are undergoing close examination at the present time to see how they are coping with these two factors. The evidence so far emerging is depressing. All these societies are failing to produce the range of fully qualified manpower that they require and all of them show a shocking waste of human resources as judged by dropouts, and all show a persistent inability to become democratic by eliminating the class factor from educational experience. Moreover, there is another serious deficiency in these systems in that in general terms, they are not teaching the right subjects sufficiently well and in sufficient quantity for the kind of society which is emerging. One only has to consider "the swing from science" which is now going on in the educational institutions of all western societies to understand the seriousness from the point of view of manpower. Moreover, all these conditions which can be considered dysfunctional to a post-modern industrialized society are most in evidence in the United States which we always consider as having the most advanced and the most democratic of educational institutions.

U.S. fails to educate the poor

But the U.S. system is failing to produce the highly qualified manpower that the United States labour force needs, and, at the same time, is experiencing a retreat from democratization or at least a failure to provide educational opportunities to its poor and to its non-white population. As one critic of the U.S. educational system said recently, "The good elementary and secondary schools that helped make American cities good places to live are now in the suburbs where the middle classes and particularly the professional classes live." Every year the United States imports scientific and professional workers—chemists, physicists, physicians, teachers, engineers — because its own institutions do not produce enough for its needs.

Canada still imports skilled labor

Canada is very much the same. The great industrial expansion which has followed the Second World War would have been impossible without the importation of large quantities of skilled and professional workers. Canada imported capital to make its contemporary industrial system, but it also imported the skills. In many respects it can be said that industrialization was in Canada, but not of it. It is not only that we were, as someone said, "one generation off the farm." From the point of view of the realization of our educational needs we were very much still on the farm in the 1950's when over half the male labour force had less than eight years of schooling — totally inadequate standards for industrialization. Since that time school retention rates have improved, our universities have expanded

greatly and there have been introduced in many provinces new and more appropriate forms of non-university post-secondary education. But no education minister can sit back. The labour force requirements are being constantly upgraded and more and more young people must be trained and must acquire the motivations for training to constantly improved levels where disciplines become more exacting.

Canada still imports large quantities of trained people. Our universities send recruiting teams to the United Kingdom. Toronto next year is bringing a plane load of teachers from Australia and staffs its hospitals with nurses from Britain. One could go on indefinitely to demonstrate these inadequacies. I have indicated them briefly because to a great extent they can be traced to the inequalities which I want to deal with, and the solution lies in policies of further democratization. One might say that a system is reaching a measure of efficiency when it is meeting its labour force needs and when it is giving the appropriate kinds of education for the ranges of talent that exist. If I appear to overemphasize the labour force requirements, as opposed to the other purposes of education, such as the development of personality or the meaningful use of leisure, it is because I think the labour force problem in all industrial societies is serious and also because I believe there are no incompatibilities in these various educational aims.

Inequalities are not all financial or economic although there is no doubt that economic conditions continue to be substantial barriers. Other sources of inequality, in addition to the financial, are those arising from structural factors within educational systems and processes themselves, and those arising from cultural factors which are detrimental to high educational aspirations. I would like to deal with each of these sources of inequality. To some extent it will be necessary to draw on evidence from outside Canada if only because research has gone much farther and concern is much greater in other countries. Also, elsewhere there have been attempts to develop coherent educational policies on the national level and to view the question of the development of human resources as a national goal. In Canada we steadfastly maintain the fiction that education is not a national problem and does not require national planning.

Universities are middle-class preserves

First, let us look at inequalities which arise from economic and financial considerations. The relationship between social class and educational experience has been demonstrated for every major industrial society. Usually the method is to show that the higher the social class position of the family the greater is the likelihood of young people staying in the educational stream. Consequently the upper years of the academic high school in North America, the grammar school in the United Kingdom or the Lycee in France, and the universities everywhere, become class biased institutions. I have tried to show in some publications how this relationship applies in Canada. One might simply cite 1961 census data. In families where the male wage earner earned more than $7,000 a year, half the children 19 to 24 years old were in school, but where the male wage earner's income was less than $4000 less than one-eighth were in school. In the last survey of university student income and expenditure in Canada in 1965 just under half the students in the sample had fathers in the top two categories of proprietors and managers and professional occupations.

Family subsidies may be needed

Although Canada fits into the pattern of other modern industrial societies in this respect it has done much less than other countries about it. It is true that costs attaching to secondary education are gradually being eliminated. The changes in Quebec have been radical and the progressive elimination of text book cost in Ontario have been helpful. But we still lack any system of grants paid to parents to encourage them to keep their children in school. For many lower class families children automatically go into the labour force at the school leaving age. In some countries it is recognized that some compensation is necessary for the foregone family income when older children stay in school. Moreover, as the educational content of occupations increases it may be more necessary to consider family subsidization if we are really serious about the problem of inequality.

It is, of course, at the tertiary level of educational systems that the class character is most marked. As far as costs to the student are concerned I suspect Canada has one of the least democratic educational systems to be found in advanced societies. In most European countries this aspect of the problem has been dealt with boldly by having an entirely free system right up to the most specialized and prestigious institutions of higher learning. Moreover, grants are paid to students for living and other expenses associated with remaining in the educational stream. In Canada, in the survey of student income and expenditure which I mentioned earlier, no more than nine per cent of all student income came from fellowships, bursaries or grants, while 17 per cent came from loans, 21 per cent from the parental family and 25 per cent from summer savings. In Canada the cost of post-secondary education continue to be abnormally high for an advanced industrial society.

Education cost is big factor

Education thus becomes a commodity valued differently at different social levels. Because of its cost, the educational horizons of low income families are near rather than far-off. Higher education is not a realistic choice and thus there are repercussions back into the lower levels of the system where children become committed to particular educational streams because they are viewed as less expensive or as a reasonably quick route to the labour market. Even at the university level, the relationship between the degree programme selected, say education or arts programmes as opposed to medicine or law, where there are differentials in cost and the time involved, and the class background of the students has been

shown in a number of surveys. Education has not been democratized when the middle and upper classes are over-represented at the upper levels of the system, and when there are significant class variations between those doing the cheaper degrees and those doing the more expensive ones.

Loan plan creates debtor class

It is surely only a matter of time before these financial impediments are removed either by the abolition of fees or by an award system which makes higher education a genuine possibility for the children of lower income families. We must have something better than, for example, the Canadian student loan scheme which is perhaps one of the most inadequate elements of an educational policy yet seen. It appears to be increasingly popular, not because students like it, but because there is little else. Most provinces are increasing the amounts of money available for grants and bursaries, but the student populations are increasing greatly, both in the university and in other tertiary institutions. Not only does this, or any other loan scheme, create a class of white collar debtors, but it has little or no appeal to lower classes, who often are so much in debt in any case simply to acquire the minimal cultural standards in, say housing and health, that more debts for higher education would scarcely be considered. Indebtedness for higher education can be a class penalty, for the need to go into debt increases as the family's resources are less or as the family members to be educated are more. Some students cannot face up to such indebtedness and leave university, but for the more able who do graduate I suspect that the debts built up as an undergraduate become a considerable impediment to going on to graduate work. Thus by forcing good students out in this way from the manpower point of view a loan scheme can be regressive. However, an adequate grant or award system for university students—however desirable—may not be enough or even have the highest priority. I am increasingly convinced of the need to subsidize low income families to keep their children in school at the secondary level.

U.K. education still class biased

When the financial barriers are removed at all levels of the educational system the process of democratization has just begun. The most striking and perhaps the most disappointing impression that we get when looking at systems where financial barriers have been removed, is that educational institutions are still class biased. In the United Kingdom, for example, the educational reforms which followed the Second World War and which removed the costs of grammar school and university education resulted in greater lower class participation in these institutions, but they by no means achieved the degree of representativeness that was their purpose.

It is important to know why they failed so that we might look at our own society to see to what extent we are making the same mistakes. I think

Chances are these girls won't get to university.

these mistakes could be grouped into the remaining two categories of inequalities—those stemming from structural factors and those stemming from cultural factors. Let me deal first with the structural factors. By structural I mean different types of schools, streams, and programmes which are thought to cater to different educational tastes and capacities. I would also include, as structural, the governing and financing of educational institutions.

Pressure for reform is growing

Let us take as an important feature of most educational systems the differences in programmes and streaming or tracking. In Europe, these have meant systems of the early selection of the more able pupils and the less able and their early commitment to particular educational programmes which for the most part take place in separate schools. Systems of early selection always favour children from the middle and upper classes. There are really no true culture-free techniques of selection. Lower class children live in environments which are restrictive of their intellectual development. Middle class children are exposed at an earlier age and in greater intensity to a range of cultural items which have become important in the measuring of intelligence and aptitudes. Their parents, moreover, have a better knowledge of the system and can prepare them for it. Middle class parents can turn failure in being selected into success by dealing with teachers and school administrators as social equals or superiors rather than social inferiors which is very frequently the experience of the lower class parent. Some lower and working class children are able to compete in this selection system, but they tend to be the exceptionally able.

Once selection has taken place, there is a commitment to an educational stream which is practically irreversible. There is an accumulation of evidence that the system of selection for grammar schools in England and the Lycee in France is both inefficient, because the selection is not one based on true ability, and undemocratic, because it places working class children at a disadvantage. Consequently, the pressures for reform have been great; those which are gradually being introduced involve the postponement of choices until a later age (for example, the abandonment of the discredited "eleven plus" in England), combined with cycles of orientation during which the child is exposed to a greater range of subjects. Moreover, there is an abandonment of the selective school in favour of the comprehensive school. Although everyone concerned will deny it, there is, in both Britain and France, a drift toward the North American comprehensive high school system.

Europe adopting North American model

If, in the present movement from elitism to egalitarianism in education in Europe the traditional systems are changing in the direction of the North American model, what can North American systems learn from watching the European changes and listening to the debates which they generate? I would think there is much to be learned, particularly of the kinds of problems which impede the construction of a thoroughly democratic system and how research might throw light on them. I wonder if we are aware of the selective processes we have in our educational systems and how these might operate differently for different social classes?

Low value put on education

I would suspect that, the financial problems set aside, the class bias that we find in the universities has its origins in the way in which pupils get put into the different streams, and, in particular, the way in which lower class children are under-represented in the college preparatory courses. All these questions have been thoroughly explored in other countries, but in Canada there seems to be a reluctance to admit social class as a relevant background variable in any kind of social analysis.

I want to now consider the cultural factors which make for inequalities in education. Foremost among these is the evaluation which different classes place on education. I have elsewhere suggested that Canadians generally place a low evaluation on education, low, that is, for the kind of occupational structure which Canada now has. The bundle of motives which the middle class child acquires in the process of being socialized to his culture includes the desire to achieve and the desire to move up or at least maintain a middle class position. It has often been suggested that it is the middle class family that has managed to transmit these motives to a sufficient number of its young people to fill the occupational roles of industrial societies up to a particular point in the development of those societies. After all, it takes some degree of determination to put up with the irksomeness of learning and some degree of commitment to educational values. Our occupational structures are evolving to the point, however, where such attitudes and values must reach down into the working class sub-culture where they are less widespread and less firmly held. Where, as in Canada, ethnic and religious sub-cultures tend to reinforce class sub-culture, differences in the evaluation of education will be more marked.

Free education is not enough

Along with all the evidence about school and university attendance and social class is the complementary evidence of how educational attitudes of parents, and mobility and occupational aspirations of children vary by social class. Educational policy-makers have too readily assumed that it is sufficient to provide educational plant free, or almost free, to all takers and throughout the society all young people and families will respond in the middle class fashion. This does not happen, of course, and there are many reasons why. It is wrong to assume that aspirations to move up in the occupational system are strong in the lower or working classes. Some studies indicate that in the lower classes the search and desire for security are more important than the desire to move

up, while education serves the need of the middle class person to move up and is seen as being important for that reason, it tends not to be appreciated in such a way by working class young people, nor is it particularly seen as serving their prime need of security. Working class parents in the main have low levels of education themselves and, therefore, cannot adequately transmit the appropriate values about education to their children. Moreover, it is not easy for children to set themselves on a route which will take them out of the working class culture. Kinship links are strong as are sentiments about neighbourhood and community. There are elements in the working class culture which put a high evaluation on the dignity of manual work. Working class political movements and labour organizations have emphasized the worthiness of the working class way of life, and our major religions have endowed it with a theme of the blessedness of poverty. The working class sub-culture which has developed with the growth of industrialization may have been appropriate in an earlier period, but seems out of date in the more advanced industrial system at least as far as it has a detrimental effect on educational aspirations.

The democratization of education means that a person's social class background is no longer a relevant factor in the amount of education he receives or the kind of educational programme he pursues. Undoubtedly, the removal of financial barriers is an important step in the process of democratization, but as I have tried to indicate, there are substantial structural and cultural impediments that remain. Policy-makers must decide how and to what extent they are going to intrude into these cultural areas where education is not highly valued. They may prefer not to intrude at all for fear of violating principles of freedom. We have seen something of this dilemma when dealing with ethnic or cultural groups who resist the education of their children. The working class culture is not, of course, coherently or solidly against education. Rather, there is simply a low evaluation of it. Often it is considered that parents have a right to choose the amount and kind of education for their children. That, at least, is the position of the traditionalists and the conservatives in Europe in their efforts to protect the highly selective systems that exist there. But education is also a social right belonging to growing and maturing children and there may be grounds for policy makers dealing much more vigorously than formerly with all these factors standing in the way of the equal distribution of these rights. When the discussion shifts to the need for highly qualified manpower in the advanced industrial society based on science and technology, the arguments for overcoming cultural resistance to educational values are equally strong. As is often the case, the rights of individuals and the needs of society are complementary rather than inimical. □

報陽太閱請

Are You A Linear and Sequential Thinker?

A FELLOW named Luhan recently took to brooding about the flood of printed matter that Gutenberg released upon the world and came up with the conclusion that this has been the cause of a revolutionary recasting of man's way of thinking. As a direct result of the universal exposure to printed matter, in which words follow one another in a more or less orderly way, most of the world's people now think in the pattern of the written language. That is, we are linear and sequential thinkers, for better or worse. Heady stuff, this, but nothing to worry about. It just means that it pays everyone to become an expert linear and sequential thinker so that he'll know what he's thinking and talking about. A pleasant and convenient way to do this is to read regularly a good newspaper, like The Sun and then practice thinking sequentially about the news of the world.

SEE IT IN THE SUN

A Reality

Ottawa has Ignored Long Enough

by DR. F. KENNETH HARE
President of the University of B.C.

I HAVE SEVERAL TIMES said strong things about the federal government's recent withdrawal from direct university grant-aiding. I was a long way off when the decision was taken. It looked to me like a bad case of ignoring reality to win short-term political gain.

The reality is that Canada's universities must be national as well as provincial institutions. They do a job for all Canadian society. The constitutional provisions whereby education became the exclusive concern of the province made good sense in 1867, and it is still defensible, if we leave out the word "exclusive". I am content to see Canada's school systems provincially organized, especially since provincial education ministers have begun to consult one another to equalize standards. I am equally content to see the universities grouped into provincial systems for the purpose of planning and coordination. It is quite right that much of the cost should be borne provincially, because the universities serve regional concentrations of people, who have a right to decide what scale of provision should be made. The crux of the matter, however, is that universities cannot stop at that point. The whole nation (or nations, if you so choose) has needs too, that arise from Canada's growing sophistication, from her stature in world trade, and from her need to be master in her own house. "Maîtres chez nous" ought not to be just the motto of the *Québeçois*.

In one part of the university job this national stake is fully realized, and has been little challenged. Research is paid for by a variety of federally established agencies, notably the National Research Council, the Medical Research Council and the Canada Council. I for one, would like to praise the scale and generosity of this aid, which is crucial to the health of the universities. The advancement of knowledge is thus conceded to be important at the national level. Dissemination of that knowledge, however, has to be left to the provinces. Those who drafted the British North America Act visualized the dissemination process as a purely local or regional affair touching mainly the useful arts. It was also something that affected the survival of French culture, mainly in Quebec. They could hardly be expected to foresee the explosive growth of knowledge that would come from research, or the critical role that the academic skills would have in modern central government.

Written constitutions usually contain these sleeper-clauses that return to plague their victims in later generations. In referring education wholly to provincial jurisdiction the Act satisfied 19th century conceptions of its role in public affairs. It also offered a safeguard to those who wanted to protect regional differences in the new federal state, above all the French language and culture, and its associated Catholic orthodoxy. What it failed to do, of course, was to provide for the ever-growing Canada-wide stake in the universities. For those fields that were left to federal jurisdiction include several in which higher education is crucial. This point was clearly seen by the Massey Commission, and endorsed by the federal government of the day that instituted federal grants to universities. It has been lost sight of in the recent years of tension between Ottawa and the provincial capitals.

I think we should rejoice, in Point Grey, in being partners in the development of British Columbia. We have a clear-cut responsibility to the parents of children now in the province's schools: it is to see

that all who can profit can enter UBC or another of the province's universities (which are partners, not rivals) when they are old enough. Equally we must see that all the special skills and research needed for the province's economic and social development are cultivated on our campus. A university is a place where teaching and research go hand-in-hand. Clearly, however, there will be some B.C. students who wish to go elsewhere in Canada, just as students from east of the Rockies will want to come to UBC. Could anything more aptly work for national unity and sense of purpose? And the province can draw on the real achievements of all Canada's universities just as UBC sends her higher graduates and her scientific publications far and wide. This free movement of men and ideas is not always popular. When I did my own doctorate in Montreal for example, I had to pay double tuition fees because I was not born in Quebec. What did that do for national unity?

There is also a compelling economic reason why all Canadian universities are in some sense national. There are many professional and graduate fields — and a few undergraduate — where the cost of mounting courses is prohibitively high. Already, within provinces, it has been admitted that coordination between universities is necessary to avoid duplication of effort. In Ontario, for example, the 14 provincially assisted universities are to work together in the creation of a provincial library for the university system, since it is financially impossible to create 14 independent research libraries. These universities now consult one another before instituting expensive graduate or professional schools, so as to ensure that opportunities are spread round the province, and that good but expensive innovations are not diluted by being tried out twice—at half the available resources. This kind of economy, this sort of rationalization is essential in all provincial university systems as it most certainly is in B.C. But there is also a *national* need of the same kind: there are many things that might be done only once or twice in Canada. To do them many times would reduce the available resources below the critical point. Hence the need for nation-wide thinking. Again we recognize the truth of this in making expensive research installations, such as the $27 million TRIUMF cyclotron. The point is equally valid for the more exotic kind of teaching facility.

Canada's universities have long recognized this need, and have acted responsibly in trying to meet it. The present-day Association of Universities and Colleges of Canada (of which UBC's own Geoff Andrew is Executive Director) is the descendent of other bodies having a long history of national academic consultation. It was this body and its forbears that had the duty of distributing the federal academic grants, when they were still being made. The universities have thus recognized a need that federal politicians have been unwilling or unable to cope with — and from which they have seemed recently to retreat still further because of the constitutional impasse.

I believe that a national—that is, federal—stake in higher education must be preserved, and that this must go beyond research into the realm of teaching, especially at the advanced level. I am well aware of the constitutional difficulties, and am sympathetic towards the special role of the Province of Quebec in relation to French language and culture in the university world. Nevertheless, it is extraordinary that the central government of this country, which insists on speaking for us overseas, and which to other countries is the face we therefore present, should not want an active voice in higher education. And this means that part of the cost of the university system of Canada should come directly out of the federal exchequer. No one now listens to the voice of a penniless prophet. To hand over part of the federal tax intake to provincial finance and education ministers is to place on their shoulders the burden of a national responsibility. Now is the time to put matters right, for the recent Ottawa conference has set in motion constitutional reform that will make or break Canada's central government. Is it too much to ask that in this re-thinking the national function of our universities should be recognized more fully?

Perhaps I might spell out one or two places where the federal stake seems clearest. First I would put the problem of Canada's foreign students. All universities have them, and at some they make up over 10 per cent of the enrolment. McGill, for example, which is sometimes made to feel alien in Quebec by hostile commentators among the Francophones, has about 15 per cent in most years. Montreal and Laval have similarly attracted many students from the French-speaking countries, and Montreal has pioneered in the world-wide organization of Francophone universities to promote such exchanges. Nothing could more benefit the great economic and social upsurge of Quebec than to have this cosmopolitan group in its midst. Yet one hears constant criticism

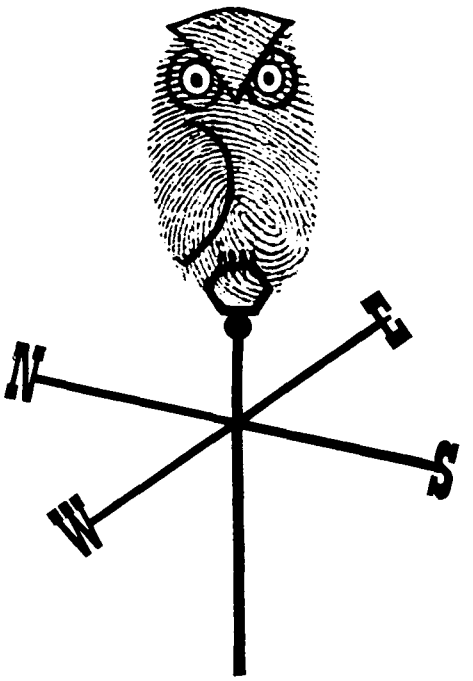
of the "waste" of provincial revenues that this represents.

Let me say at once that a university that has to draw its students from a circumscribed group has a hand tied behind its back. At UBC and everywhere else in Canada, the young Canadian benefits greatly from being educated side by side with people from other countries. And our graduate schools need these visitors very badly. The province that pays the cost is therefore benefitting directly. Nevertheless, the main beneficiary is the foreign student himself and the country to which he returns—since 80 per cent or so of the annual cost of his teaching is publicly borne in this country, and all the capital cost. Hence one can understand criticism of Canadian universities that take in such a large group from outside their provinces.

One can understand it, yet still reject it. We *must* have these foreign students, on two grounds. First of all, rather humiliatingly, we can't yet staff our own universities and other institutions employing people with doctorates. Our academic economy depends on making masters and doctors out of immigrant graduate students, especially from the United Kingdom, the U.S.A., the European countries, Australia and New Zealand. It also depends on students from Hong Kong, Singapore, India and Pakistan, who among them provide a high fraction of all the demonstrators needed for our undergraduate science laboratories. I know of one university where, a few years ago, two-thirds of the chemistry demonstrators were Asians, by birth and citizenship! As long as our own undergraduate faculties fail to provide enough Canadians to fill these needs, this dependence on foreign help will stay with us.

Secondly, Canada, as an advanced nation, must share in the overwhelming world problem of spreading university education to the emerging countries. The immense gulf between ourselves and these poorer peoples will not be narrowed by elaborate technical aid programmes alone. We have to enable them to train their own managers, technologists and scholars. The best way to do this is for the federal government—here is one place where they can act constitutionally—deliberately to encourage the flow of foreign students to Canada. Both the above needs will be helped. The Commonwealth Scholarship scheme, praiseworthy though it is, is too little. And why should not the cost of doing this, both operational and capital, be borne directly?

The other point where I think that federal help would be a marvellous aid to national development is in facilitating the interprovincial movement of our students. Something of this sort may well emerge from the conference of education ministers. If the federal government ever gets its courage back — which in such matters it has lost — it ought to be possible for federal funds to pay for some of the extra cost of such exchanges. For example: why not subsidies to make it easy, even attractive, for young western Canadians to study for a year or two at Laval or Montreal? The French universities of this country are a marvellous cultural resource — and ought to be a national resource of all Canadians. □



The weathervane indicates, though does not govern, the direction of the winds. Some day men may control the weather as they search for further understanding of the unknown.

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Chancellor John Buchanan congratulates Dr. Kenneth Hare

Installation of a President

see overleaf

CONGREGATION '68

A SINGLE EVENT TRANSFORMED UBC's spring congregation from a routine, though colourful, annual ceremony to one of historic significance for the university. It was the installation of a new president, Dr. F. Kenneth Hare. On May 31, the final day of the three-day ceremony, he took the oath of office and was formally robed in the silver-embroidered, black gown of the president.

Dr. Hare, 49, a British-born meteorologist and geographer of international renown, has come to UBC from the University of London, where he was master of Birkbeck College. A Canadian citizen, Dr. Hare obtained his doctorate from the University of Montreal and is a former dean of arts and sciences at McGill University. He succeeds Dr. John B. Macdonald who resigned last June as president.

Dr. Hare will be UBC's fifth president. In addition to Dr. Macdonald, he will follow in the footsteps of Dr. Frank Wesbrook (1915-18), Dr. L. S. Klinck (1918-44) and Dr. Norman MacKenzie (1944-62).

Following his installation, Dr. Hare performed his first official act as president in giving an address to the congregation. He spoke out strongly against Canadian universities becoming parochial institutions. "We must recognize—and here I speak as strongly as I know how—that part of the world is hungry, ill-clothed and near despair," he said, "and that for this it blames the West, whose prosperity and abundance are an affront to them. We must help to remove these inequalities by using our skills directly. We must somehow find the resources, the space and the manpower to increase the flood of students from the developing nations to our doors, and especially to our professional schools."

During the congregation, which ran from May 29 to May 31, the university conferred degrees on a record 3,423 students. At the same time, it awarded honorary degrees to eight distinguished persons.

On May 29, three honorary doctor of laws were awarded. They went to Richard B. Wilson, chancellor of the University of Victoria; Dr. Adelaide Sinclair, who retires this year as deputy director of the United Nation's Children's Fund (UNICEF);

Academic procession enters War Memorial Gymnasium

Above, smiles greet new-style grad

and P. A. Woodward, a retired Vancouver merchant and philanthropist whose gifts to UBC have aided construction of the Health Sciences Centre. At the same time, an honorary doctor of literature degree was conferred on Dr. Hugh McLennan, one of Canada's leading novelists.

On May 30 honorary doctor of science degrees were conferred on Dr. A. W. "Whit" Matthews, former dean of pharmacy at UBC; Dr. Blythe Eagles, former dean of agriculture at UBC; and Sir Charles Wright, a member of the famous Scott expedition to Antarctica and noted geophysicist. At the same time, Dr. Walter Gropius, founder of the famous Bauhaus School of architecture in Germany in the 1920's and one of the great architectural educators of the 20th century was honored with an honorary doctor of laws degree. □

Below, Dean Blythe Eagles signs the register

Powell Hargrave

The Tragedy of

STUDENT ACTIVISM IS GREAT, says dean of applied science William Armstrong.

But Armstrong, deputy UBC president, said in an interview the tragedy of protest on campus is that it often dies out after students leave the university community.

"I've watched many students over the years, and it seems they forget many of their ideals after graduation," Armstrong said.

"This is unfortunate. There is obviously a hard core of protesters who are able to move many of the students to action.

"But when they are removed from this stimulus, the protest ethic doesn't stick.

"When they become members of the community, they're as resistant to higher education taxes as the older people in the community."

Armstrong said the only way for students to effect real changes in the government of the university is to exercise their voting privileges as a bloc.

He said the voting age should be lowered to 18 to give students a voice in government education policy.

"The number of students, proportional to the population are going up all the time," he said.

"If young people were seriously concerned about social reform, they could change the whole pattern of our social system within 10 years after they graduate.

"There's little evidence that they're doing this at the present time, or that they're making any attempt to.

"Activists must accept the fact that they can't achieve true democracy in the government of their affairs unless they apply democratic methods to their efforts."

"It seems student leaders are interested only in those institutions which provide a political platform."

Armstrong talked at length about the function of a university in society.

Contrary to the views of some UBC administrators, Armstrong believes the university should be an instrument of social reform, ferment, and dissent.

"There's nothing we need more in the world than a generation of young people who are violently dedicated to social reform," he said. "But seeming shallowness of this protest is causing me some concern. Students should continue to protest once they become voters and have democratic power.

The university also has to be involved in the society, and should be a leader of social change of society. This is why there is so much criticism of the progressive elements in the university by the community."

Armstrong maintained there are two distinct groups of activists on campus: those who protest the Vietnam war, civil rights and other international issues; and those in favor of student power.

"The students who want control over the government of the university are much better organized," he said. "But I'm a little disappointed that all their energies seem to be directed toward representations on senate and the board of governors.

"Students are a part of the university long enough to be effective in its government. In fact, there has perhaps not been enough participation by students in past years. Students should have been represented on senate years ago.

"But the place where the real decisions are made is in curriculum committees. Graduate students especially can make a concrete contribution there because they've been through the courses recently.

"It seems student leaders are interested only in those institutions which provide a good political platform."

"I've watched many students over the years and it seems they forget many of their ideals after graduation."

Armstrong also said he has little sympathy for protest which is not constructive.

"As a technologist, I'm interested in being creative and constructive rather than anarchist," he said. "I imagine this is where I'm most inflexible.

"I think most hippie protesting is an atonement for the affluence of our society. I've no doubt that many of the people we usually call hippies are very sincere, but it seems their protest is often misdirected.

"People like this have existed in almost every generation.

"We were just as vocal as today's students, although we didn't have such highly developed methods of communication. But instead of influencing the society, I think we changed it ourselves after we left university. I hope the present generation of students can do this too."

Armstrong thinks students are more politically mature than at any time in his 22-year career.

"They're also more sophisticated, as a result of

Student Protest

today's affluence and improved communication."

Nevertheless, Armstrong believes that apathy still exists among students.

An example of this, he said, was the meeting held recently between students and senators on the open senate question.

"There were more senators than students," he said. "Out of 18,000 students, there weren't more than 50 at the meeting. At a science symposium I attended recently there were only 60 students from a total science registration of 3,400."

He said a serious problem in our society is the academic gap between the humanities and the sciences.

"There is nothing we need more in the world than a generation of young people who are violently dedicated to social reform."

"The great problem is that the study of social science hasn't kept up with the advances in technology.

"This gap is particularly obvious and unfortunate at the student level. I think the universities should work first to dispel differences in this regard among the faculty, for these certainly do exist."

Armstrong, as well as being dean of applied science, is assistant to acting president Walter Gage. He is deeply involved with the money and space crises currently plaguing UBC.

"Neither operating nor capital grants are adequate this year," he said. "Our position is steadily worsening—we're not even holding our own. We aren't the only university in Canada with these problems. But there's no question the universities in Ontario and Alberta get more money per student than we do."

Asked what the reasons for this crisis are, he said provincial government reluctance, skyrocketing construction costs, and increasing student registration were the main ones.

"We have at present a biological sciences building that hasn't even been started yet, because we didn't budget enough in the last five-year plan to cover the increase in costs."

Armstrong said the biological sciences building was highest on the list of priorities for construction. After that will come a new mechanical and civil engineering building, already in working drawings.

"Beyond those three, priorities have not been firmly established. We may have to revise our way of thinking about construction, in the light of the money crisis and rising costs. We may have to erect buildings to be occupied by several departments or faculties.

"I wish I knew the answer to the problem of getting more money from the government. It's in a serious debt situation, although they say they don't borrow money directly.

"They also won't let us borrow any money for capital construction. But the basic problem is that large universities such as UBC grow away from their local communities. We're no longer a University of B.C., any more than the University of Toronto is strictly a Toronto university. We have become national and international institutions.

"There is less interaction between the university and the community. This is unfortunate but inevitable."

For this reason, Armstrong favors a system whereby the federal government has control over grants to universities. Such a system now exists in Britain and Australia, he said.

"This has been a serious error in our national policy. It will take us a long time to recover from it.

"Creation of a national standard would also eliminate discrepancies in provincial educational systems, although this isn't too much of a problem right now."

Armstrong said the university's public image is probably not at fault.

"But I do think our new president (Kenneth Hare) will be more successful, because of the very fact that he is a new man. This is always the case in the first year of a new man's tenure. I hope he will be able to do more than we have."

Private contributions to the university also do not alleviate the space crisis, Armstrong said.

"There is a strong reaction among businessmen to giving money for capital construction. They're happy to give money for scholarships, but they think the high taxes they pay to the federal government should pay for building construction.

Dean William Armstrong was interviewed at length this spring by The Ubyssey. It is reprinted with permission

"We get large donations from H. R. MacMillan for library books, but not for library construction. This is quite deliberate."

Although the federal government does give grants to the provinces for education purposes, Armstrong said there is no control over the distribution of the money by the provinces.

"This is another reason for having a federal educational system. It also eliminates differences in the attitudes of the provinces. In B.C., the population is less sympathetic to education than say, Ontario's.

"In B.C., the people are less conscious of the values of higher education. This is why many of our graduates go to other parts of Canada to work."

Armstrong pointed out the question of whether any government should have control over education was a very pertinent one.

"In B.C., the people are less conscious of the values of higher education. This is why many of our graduates go to other parts of Canada to work."

"Nobody likes the ideas of the government controlling what the university teaches or what it does. But you have to look at our responsibility to the community. Sometimes the government has to intervene to avoid unnecessary duplication.

"This was done in Ontario, which has a committee to which the universities apply for grants. It's interesting that this committee has brought the universities together, and they are deciding on priorities such as establishment of schools and departments before the proposals reach the government.

"Universities shouldn't put themselves in a position where the government is dictating to them. We should establish better rapport between the universities in this province. They must get together and present a logical case to the government.

"It's basically wrong that they should be competing for funds. This is what is happening now."

Asked about control of university affairs by business and professional men on the board of governors, Armstrong, secretary of the board, said it has little power.

"The main function of the board is financial, and these men are useful to us because of their experience in financial planning and their community connections.

"They have no control over courses or academic programming. It's true you can't institute academic reform if you have no money, but that isn't the board's fault either.

"I'd like to see one or two senior faculty members on the board, to improve direct contact between faculty and the board. This is done at the present by the acting president.

"But I wouldn't apply the same philosophy to students. The board should be a compact group which can make decisions easily, and I just don't think students have any real contribution to make to the board. They haven't the experience to participate in financial decisions." □

Editorial

On Easing

NINETEEN YEARS AGO UBC launched its Institute of Oceanography in one old army hut on West Mall. It's still in that hut today. And the institute has also crammed its research operations into five other adjacent huts. So tightly packed in are the faculty and students (even the crawl spaces are used) that, as one academic administrator said, "it's like going into a rabbit warren". Oceanography occupies one-third the space it would normally be entitled to — but there's no room elsewhere on campus and no money in sight for new accommodation. Hardly a dynamic picture of progress for a society which earns a good slice of every dollar from fishing, is it?

Those six shabby, greenish-grey oceanography huts mutely testify to the desperate financial plight UBC is in today. But although the most dramatic, oceanography is not the only witness. Virtually all of UBC's 67 departments are experiencing the financial squeeze through shortage of space and inability to hire needed new faculty members. For that matter, UBC itself is not alone—B.C.'s younger universities, the University of Victoria and Simon Fraser are in the same bind.

It is time that the taxpayers of this province in general and UBC alumni in particular became more actively concerned with the financial state of B.C.'s major university. It must be patently obvious that UBC has played the beggar's part long enough. For 53 years now the university has rattled its tin cup outside government doors without experiencing any great flashes of generosity. Admittedly, the basic needs have been met, but little has been provided to foster a measure of excellence. For physical evidence of this one has only to recall that 224 huts are still heavily used on campus for classrooms, offices, laboratories and residences—20-odd years after they were brought to UBC to meet the needs of veterans turned students.

The $5 million contributed by the provincial government to UBC for capital purposes in 1968-69 unfortunately will not alter the fundamental problem—though it represents a welcome $1 million increase. At least $4 million of it is committed to ongoing projects and the remainder certainly will not build the urgently needed new biological sciences extension (where oceanography would go) or the new civil engineering building. They were to have been built under the five-year plan ending in 1968-69, but rising costs prevented the money from stretching far enough. Now their estimated cost has doubled to $20 million.

The problem is simply that enrolments and costs have risen faster than the university's resources to

The Financial Squeeze

put up necessary buildings or hire new faculty. And, unless an aroused citizenry demand improvements in higher education financing, the problem could get worse. So far UBC has no more money for new buildings after its present program is completed. That $5 million represents the end of the provincial government's stated commitment to provide capital money to the universities. Yet UBC must find room (and faculty) for an estimated 20,400 students this fall — by 1974 the university expects 35,000 students.

It is easy to criticize the provincial government for failing to provide enough money for higher education, but it is not the sole villain. The federal government is also culpable and has been let off the hook too long. The state of the university today is a clear indication that Ottawa's withdrawal from higher education finance is, as former UBC president John B. Macdonald said, "a tragic mistake".

Credit must be given to the provincial government for the quite considerable increases it has made in higher education grants in recent years—this year they total a good $65 million. Nor should one lose sight of the fact that the government allocates 32 per cent of its budget to all forms of education. Still, there are grounds for serious questions when Alberta found itself able to provide its universities $106 million in capital and operating grants — and that was for 1966-67.

If the provincial government truly wants to achieve the Dynamic Society (particularly before Alberta does) then it will have to invest even more money in higher education. This, in itself, however, will not be enough. Reforms must be made in the present system of allocating grants to ensure that they are distributed equitably among the three universities, with full recognition of the higher cost of graduate and professional training. In addition, the universities must know how much money they will receive over five-year periods in order that planning might be improved.

But more important, that other villain, Ottawa, must be made to recognize its responsibility to universities. The federal government's withdrawal from direct participation in higher education finance in the middle of controversy over constitutional issues was an act of political cowardice which must be reversed. Ottawa, as UBC president Dr. Kenneth Hare has pointed out, does have a major stake in higher education and should be giving extensive financial assistance.

What is at stake, in the final analysis, is nothing less than the quality of Canadian society. And that is too important to leave exclusively in the hands of the provincial governments. It does make a difference, for instance, to whether our society becomes more democratic or class-ridden that sizeable numbers of young people cannot hope to attend university because of the high cost. It could get worse rather than better if the financial bind forces tuition fees higher. And it does make a difference that out of the national manpower Canada apparently can only produce about 600 PhD's annually when it needs double that. How can a society become great if it squanders the talents of its own people and continues to import trained professionals from abroad?

It is not enough for Ottawa to just try and sneak in the back door by aiding university research as is now being done. The federal government, with its extensive resources, must enter boldly through the front door by financially assisting teaching, particularly at the graduate and professional level. Without the financial participation of the federal government the future of Canadian universities looks grim indeed. □

At Home on the Campus

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Alumni News

Branch Speaking Tour

UBC ALUMNI ASSOCIATION launched something of a verbal blitzkrieg at four B.C. centres recently. All in one week speakers were holding forth at alumni-arranged functions in Kamloops, Penticton, Campbell River and Port Alberni. It was all part of the association's expanded branches program.

Dr. John Chapman, acting head of geography at UBC, kicked it off May 13 in Kamloops. He spoke on the past and future of higher education at a Rotary Club luncheon at noon and again in the evening at an alumni dinner. Dr. Chapman spoke again on the same topic two days later at a Rotary luncheon in Penticton.

On the same day, May 15, Dr. Bill Gibson, UBC professor of the history of medicine and science, spoke at another Rotary luncheon in Campbell River and an alumni dinner later. His topic was the significance of the new UBC health sciences centre. And on May 16, UBC physics professor Dr. John Warren addressed a Rotary luncheon and alumni dinner in Port Alberni. He talked about the new TRIUMF cyclotron project at UBC and what it means to people.

An ambitious project set for June 11 in Penticton, however, has had to be cancelled. But the alumni there are not the least bit sad about it. Penticton alumni president David Miller and colleagues had planned to hold a seminar on water pollution then with experts from California and the National Research Council. It would have been a timely event as nearby Skaha Lake has become increasingly polluted by the dumping of sewage into its waters. The city of Penticton, however, recently announced that the practice would be stopped which obviated the need for the seminar. The city's decision was precisely what the alumni had sought.

New California Executive

The UBC Alumni Association's southern California branch has elected a new executive. New branch president is Dr. Jack Lintott, BASc'53, professor of business management at the University of Southern California at Los Angeles. He will be backed up by first vice-president Richard Massy of United Air Lines in Los Angeles; second vice-president Lester McLennan, BA'22, of Fullerton; and secretary-treasurer Donald Garner, BCom'48, of United Air Lines, Los Angeles. The executive will serve two years beginning in May—the same term as the executive of the alumni association.

Revolution in Records

THERE ARE NOW 45,000 recorded graduates of UBC and every once in a while the alumni association loses one of them. In fact, right now statistics show that the association has lost 6,000 of them. Understand, it's not as though we've done anything improper. No, they've simply vanished, disappeared. Quite beyond hope of contact by even the most diligent postie.

Now, we admit it's quite possible we might have misplaced one or two in our own files. But most of them have simply vanished through neglecting to inform the alumni association of new addresses when they move. And UBC graduates are on the move — say about once every three years, which is more than the national average.

The association, however, is in the process of redesigning its system of handling graduate records, which are stored in a UBC computer. The aim is to keep the records up to date more efficiently and cut the cost of tracing graduates when necessary. As part of this process, the association will be sending out questionnaires in mid-June asking graduates for such data as address, occupation, and extra-curricular activities engaged in as students. The operation is a vital one because the university has the responsibility under law to keep the graduate rolls up to date for convocation.

So if any of you "lost" graduates would like to be found, please write the UBC Alumni Association, 6251 Northwest Marine Dr., Vancouver 8, B.C.

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New Alumni President

Stan Evans

THE NEW PRESIDENT of the UBC Alumni Association has called on younger graduates to become more involved in alumni programs. Stan Evans, BA'41, BEd'44, issued the call in a statement declaring his intention to continue the association's drive to strengthen its action programs. Mr. Evans, who is assistant general secretary of the B.C. Teachers' Federation, was elected 1968-69 president at the association's recent annual meeting.

He succeeds Mrs. John MacD. Lecky, BA'38, as head of the association, which represents 45,000 UBC graduates. He will be backed up by a new executive composed of David Helliwell, BA'57, first vice-president; Dr. Walter Hardwick, MA'58, second vice-president; Sholto Hebenton, BA'57, third vice-president; and William Redpath, BCom'47, treasurer.

In his inaugural statement, Mr. Evans emphasized that the role of the alumni association must continue to be to serve the university by promoting its academic and economic well-being through liaison with the graduates, the government, the public, the faculty and students and potential students. Mr. Evans declared that the association eagerly seeks the involvement of younger graduates, particularly for their initiative, enthusiasm and ideas.

"Unfortunately," he continued, "an alumnus traditionally can almost be counted on not to demonstrate an interest in the association until five years after his graduation. The opposite should be the situation. We have been actively endeavoring to involve more younger alumni in the association's affairs. Our board of management, for instance, includes as members graduates of the past four years.

"Last year, through the Young Alumni Club, a number of social events were held which attracted many of the younger alumni back to the campus. One very popular feature was the informal Friday afternoon sessions in which students, alumni and faculty participated at Cecil Green Park. The sessions, held to acquaint the graduating class with the alumni association, will continue in the coming year and I invite graduating class students to attend.

"We intend to continue, and even increase, our efforts to obtain the views of students on the issues facing the association and the university. At present, a representative of the graduating class and two representatives of the student council sit as ex-officio members of the alumni board of management. The UBC Alumni Chronicle editorial committee also has at least one student member. We intend to step up this dialogue.

"An expanded alumni branches program and several on-campus activities will give alumni throughout the province the opportunity to become more closely involved with the association and the university. I urge one and all to attend these functions, which will include seminars on vital issues as well as social events.

"As alumni we will have the privilege of welcoming Dr. Hare to his new position as UBC president. Our contacts with him indicate that he recognizes the value to a university of an active alumni association. We can expect his full support for the programs of the association.

"We have a qualified, dedicated staff under the capable direction of the recently appointed director, Jack Stathers, MA'58. In addition, we have experienced and interested alumni serving on the executive committee and on the board of management. With the active participation of alumni, 1968-69 can be an outstanding year for the association. I invite each alumni young and old to 'Get Involved' in the activities of the association." □

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New Communications Director

CLIVE COCKING, BA'62, has been appointed to the newly-created position of director of communications for the alumni association. In his new role, Mr. Cocking, 29, will work to strengthen communications between the association and its membership, the university, government and the general public. He will continue to edit the *Chronicle* which he has edited on a temporary basis over the past nine months. In addition, he will prepare news releases, newsletters, brochures and reports as required. Prior to the appointment, Mr. Cocking served as a reporter for three years for the Vancouver Sun. In addition to general reporting during that time, he served as a business writer, education reporter and most recently, The Sun's one-man University of B.C. bureau. Mr. Cocking assumes his new position on July 1.

COFFE

Education Faculty Study Launched

DEAN NEVILLE SCARFE HAS LAUNCHED what he hopes will be the beginnings of a revolution in teacher training at the University of B.C. The dean of education has set up a seven-member committee of his faculty to totally re-examine UBC's approach to teacher education. And Scarfe himself is leaving June 21 for a year-long nine country visit to study new teacher training methods. He will visit Australia, New Zealand, India, South Africa, Tanzania, Kenya, Uganda, Turkey and England and send back information. "It's to be a complete revolution," Scarfe said, announcing the study. "It's to be a complete overhaul of the policy, program and outlook of the faculty."

Called the Commission on the Future of the Faculty of Education, the group will investigate faculty organization, teacher education courses, arrangements for student teaching, faculty teaching loads, the effectiveness of the graduate and research program and the faculty's relationship to other UBC faculties and provincial organizations concerned with teacher education. The commission, under the chairmanship of associate professor of education, Dr. George Tomkins, has been asked to report by September, 1969. Other members are Prof. Sam Black, vice-chairman; Dr. Eric McPherson, associate professor of education, and Dr. Le Roi Daniels, Dr. Ernest Fiedler, Craig Gillespie and Miss Shirley Nalevykin, all assistant professors of education.

COFFE chairman Tomkins said the commission intends to solicit the widest possible range of considered opinion on the matter. The commission particularly hopes alumni who received their training in the faculty, whether still employed in education or not, will make known their views. "The commission is interested in learning what alumni regard as the most valuable and the least valuable aspects of the training they received and, more importantly, what they regard as the most likely requirements of educating teachers for the future," said Tomkins. Statements or briefs may be directed to Dr. George Tomkins, Chairman, COFFE, Faculty of Education, University of B.C., Vancouver 8, B.C.

Spotlight

Mr. Justice Nathan Nemetz, BA '34

Heah Come de Judge

MAN, HERE COME SIX OF THEM. And look out, they're all UBC grads. The six alumni were among new appointments to the B.C. bench made public recently. Heading the list was UBC board of governors' chairman Mr. Justice Nathan Nemetz, BA'34. A supreme court judge since 1963, Mr. Justice Nemetz has been elevated to the appeal court. Judge W. Kirk Smith, LLB'49, of the Vancouver county court has been elevated to the supreme court. Two new appointments to the supreme court were Alan B. McFarlane, LLB'49, former Liberal MLA for Oak Bay, and G. Gordon Rae, QC, BA'29. Two county court vacancies have been filled by Ernest J. C. Stewart, BA'32 and Edward E. Hickson, LLB'52.

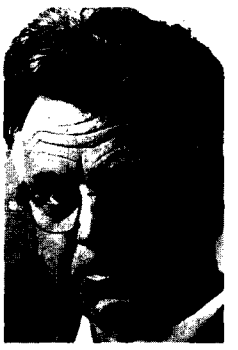
'23-'29

Harry Graham Fulton, BSA'23, has retired after 35 years of service with the Canada Department of Agriculture. As entomologist in charge of the Chilliwack substation, his research was concentrated on the biology and control of vegetable insects in the lower Fraser Valley. Mr. Fulton is past chairman of the Pacific Northwest Vegetable Insect Conference.

UBC's assistant registrar, **Myrtle Kievell,** BA'24, who has attended every congregation for the last 23 years, will be retiring on June 30th of this year. Miss Kievell, who took part in the Great Trek of '22, has seen a large part of the university's history in her 31 years on the staff of the registrar's office. She plans to devote her retirement to volunteer work.

Garrett Livingstone, BA'24, a B.C. Rhodes scholar, recently visited Vancouver for the first time in many years. On his way home to Colorado Springs he stopped in Los Angeles where he met **Lester McLennan** (BA'22) whom he had last visited with in Philadelphia and New York in 1927.

A ten year research program by **Dr. Robert H. Wright,** BA'28, MSc'30, at the B.C. Research Council has resulted in the development of a machine able to measure the insect repellancy of compounds. It will now be possible to create more effective repellants — perhaps a "mosquito-proofing" pill — using this artificial host to discover the chemical basis for the repellant effect.



Dr. Robert Wright, BA '28, MSc '30

Another B.C. agriculturalist has also retired. **George Challenger,** BSA'25, farm services supervisor for the B.C. Hydro and editor of *Farm News,* retired during March. While working for the B.C. Electric Co. he also ran his own farm where he tried out new irrigation ideas and developed an award winning herd of jersey cattle. He was a member of the B.C. Milk Board from 1956 to 58 as well as being an active member of many agricultural organizations.

New director of secondary instruction in Vancouver is **Norman Clark,** BA'29, MA'38, BEd'47. He has been a member of the Vancouver School system for 37 years as both teacher and principal and will be assisting and co-ordinating the work of the secondary principals and will supervise the application of school board policy dealing with class room instruction.

Robert W. Keyserlingk, BA'29, LLD (Ottawa), has been elected president of the Canadian Association of the Order of Malta. The Order, which was founded in the 11th century in Jerusalem and is now based in Rome, has many varied, charitable activities in the 30 countries in which it is active. For many years in international newspaper work, Mr. Keyserlingk is now president of Palm Publishers Ltd. in Montreal.

The University has been represented at recent university presidential inaugurations by three alumni: **Lionel H. Laing,** BA'29, at the inauguration of President Robben Fleming, University of Michigan; **Charles D. Moodie,** BSA'37, at the inauguration of Dr. Glenn Terrell, President, Washington State University; and **David M. MacAulay,** BSW'61, at the installation of Chancellor J. - Louis Lévesque and M. - Adélard Savoie, Q.C., President, University of Moncton.

'30-'39

Burnaby school principal, **Thomas M. Chalmers,** BA'30, MA'42, has been awarded the Fergusson Memorial Award, the highest award made by the B.C. Teachers' Federation. Mr. Chalmers has been active in the field of curriculum development and was president of the BCTF in 1948.

A new appointment as special advisor to the director of the animal pathology division of the Department of Agriculture has been made for **Dr. Wilson Henderson,** BSA'32, MSA'41, DVM (U of T). He has returned to Canada after twenty years at American universities. At Purdue University he was professor of pathology in the school of veterinary medicine and science and head of the animal disease diagonistic laboratory. He will act as advisor to the director on research and diagnostic services related to animal and poultry diseases.

Deputy minister, marine, of the Department of Transport, **Dr. Gordon W. Stead,** BA'34, LLD'45, recently addressed the Fellows of the Royal Commonwealth Society in Vancouver. His subject was the Canadian Coast Guard and its work in the North.

John F. Melvin, BASc'36, has been appointed superintendent of refineries for

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Cominco Ltd. He joined the company in 1936 as an assayer and has held several supervisory posts, the latest being as superintendent of smelting at Trail, B.C.

Dr. John W. Hoadley, BASc'38, MASc '47, PhD (U of T), formerly regional manager, eastern Canada for AMAX Exploration Ltd., will fill the new post of chief geologist, Canadian exploration with the company. Before joining AMAX in 1957 Dr. Hoadley was regional geologist with the Geological Survey of Canada.

B.C.'s first hydrometeorologist is **John B. Wright,** BA'38, MA'40, MA (U of T). Mr. Wright, who has been officer-in-charge of the weather unit at Vancouver airport since 1965, will be making intensive studies of the precipitation readings throughout the province.

A new mining engineering consulting firm has been established in Vancouver by **Dr. William R. Bacon,** BASc'39, MASc'42, PhD (U of T) and **John J. Crowhurst,** BASc'41. Both partners have had extensive experience in the B.C. mining industry. Both were previously with Mastodon-Highland Bell Mines Ltd. as exploration manager and vice-president, operations, respectively.

Jack Davis, BASc '39

A former Rhodes scholar of 1939, **Jack Davis,** BASc'39, BA, MA (Oxon), PhD (McGill), has been appointed minister without portfolio in Prime Minister Trudeau's new cabinet. Mr. Davis, who has been the member for Coast-Capilano since 1962, was parliamentary secretary to Prime Minister Pearson and later secretary to the Minister of Energy.

'40-'45

In London, England, **Dr. William Petrie,** BA'40, MA, PhD (Harvard) has been named chief of the Defence Research Board's staff. A physicist well-known for his studies of the upper atmosphere, Dr. Petrie is a Fellow of the Royal Society of Canada. Before joining the research board in 1952 he taught at universities in B.C., Manitoba and Saskatchewan.

A transfer has made **Alistair J. Drysdale,** BA'41, area geologist with the new uranium exploration group established by the Atlantic Richfield Company. He was formerly exploration geologist with the company.

Simon Fraser University's new registrar is **Harry M. Evans,** BA'42, formerly registrar of the provincial Department of Education. He is a member of the B.C. Academic Board for Higher Education and chairman of the selection committee for B.C. government bursaries and scholarships.

Robert K. Porter, BCom '42

During the spring **Robert K. Porter,** BCom'42, president of the Lipton Tea Co., attended the advanced management program conducted by the Harvard University graduate school of business administration. He is one of the 160 business executives chosen to participate in the course which prepares executives to exercise full leadership responsibilities in senior positions.

Alexander C. Cooper, BASc'44, has been named chief engineer of the advisory board to the director of the International Pacific Salmon Fisheries Commission.

Nicholas Reimer, BA'44, formerly western district sales manager for Monsanto Canada, is now director of sales for the plastic products and resins division of the company. Based in Montreal he will be responsible for business planning and setting objectives for the division.

New United Nations representative in Nigeria is **Hugh Christie,** BA'45, MSW '52. For the past two years he has been executive secretary of the Canadian University Service Overseas and has travelled extensively in under-developed countries. Previously, while warden of Oakalla Prison he took a year's leave of absence to accept a UN assignment as a technical advisor in Thailand.

Thomas G. Willis, BSA'45, MSA'47, is going to be spending a lot of time travelling in his new position as aid co-ordinator for the Canadian Department of Agriculture. He will be co-ordinating Canadian agricultural aid programs including feasibility studies, aid teams and operational projects. He will also be responsible for liaison between his department and the External Aid office, for whom he will be evaluating requests from abroad for agricultural aid.

'46-'49

The new Lord Beaverbrook High School in Calgary has **Leslie W. Roberts,** BA (U of Man), BEd'47, MA'48, as its first principal. The comprehensive school, which will have nearly 2,000 students and staff, is the first built in Calgary for which the principal was freed from his normal duties to be able to act as a consultant for the architects. Mr. Roberts feels that this co-ordination has led to

both cost savings and a better instruction area plan.

An authority on water resources research and planning **Dr. E. Roy Tinney,** BASc'47, MSc (U of Wash), Phd (Minn), has returned to Canada to a new appointment as chief of the planning division of the Department of Energy, Mines and Resources' policy and planning branch. Dr. Tinney was head and professor of civil engineering at the R. L. Albrook Hydraulic Laboratory, at Pullman, Washington before he was appointed director of the Washington State Water Research Centre in 1964. As director he was responsible for planning the Central North American Water Project—a plan to irrigate the great plains from northern Canada to Mexico using the water from the Arctic Ocean.

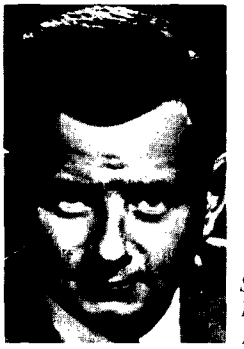
The origin and evolution of western Canadian mountains is the subject of a report given at the annual meeting of the Canadian Institute of Mining and Metallurgy. The new theory on the formation of mountains may prove to be very valuable to the mining industry as well as a contribution to the science of geology. The twenty scientists who worked on the report were headed by **Dr. John O. Wheeler,** BASc'47, PhD (Columbia), of the Geological Survey of Canada.

Dr. Ross H. Hall, BA'48, MA (U of T), PhD (Cam), has been appointed professor and chairman of the department of biochemistry at McMaster University, Hamilton, Ontario.

Allan MacDonald Murray, BA'48, has been appointed vice-president, finance, of Cominco Ltd. and will become the chief financial officer of the company. He has held various positions in the finance department since he joined the company in 1953.

Former president of the Liberal Federation of Canada. **Senator John L. Nichol,** BCom'48, is one of the many UBC alumni involved with the June general election. Senator Nichol is co-chairman of the Liberal national campaign.

Maurice B. Powley, BASc'48, MASc '53, has been appointed an associate professor in chemical engineering at the University of Windsor. During the 15 years that he was employed in industry he published several research papers and was active in the Canadian Society for Chemical Engineering of which he is a member of the board of directors. Prior to his new appointment he was supervisor of chemical engineering for Dupont of Canada Ltd.



Sen. John L. Nichol, BCom '48

Allan W. Blyth, BASc'49, has been named director for the Ontario region of the rural development branch of the agricultural rehabilitation and development act administration branch of the Department of Agriculture. The regional ARDA office will be moved to Toronto where it will be staffed with rural development specialists. Mr. Blyth will be responsible for maintaining a close liaison between the provincial and federal governments in the implementation of the joint rural development program.

Walter H. Dow, BASc'49, has been named a senior economic geologist in the newly created mineral development department of British American Oil Co. He will remain in Calgary where he was attached to the Calgary exploration zone of B.A.

New assistant director of the economics division of the Alberta department of agriculture is **Knud Elgaard,** BA'49. He will also be in charge of their research programs. Before joining the Alberta department he spent 15 years with the economics branch of the federal agriculture department.

Canada's airport planning is now in the hands of **Melvin G. Hagglund,** BA '49, MA (U of T). He has been appointed chief of airport planning and research for the Department of Transport. He will be responsible for liaison with the various branches of the aviation industry in the planning of new airports. He was formerly a superintendent in the department's metrological branch.

Arthur D. H. Henderson, BSA'49, has been appointed chief of the import control section of the plant protection department of the Canadian agriculture department. He has held several positions within the department, his latest being special assistant to the director of the plant protection division.

Former alumni association member-at-large **John D. Taggart,** LLB'49, has been appointed to the Vancouver Police Commission for a four year term. Mr. Taggart, who was made Queen's Counsel in 1964, was president of the Vancouver Bar Association last year and is provincial commissioner of the St. John's Ambulance Association.

'50-'53

George N. Worsley, BASc'50, **John W. Wedler,** BASc'59 and **Robert Noble,** BASc'61, have recently been made principals of Willis, Cunliffe, Tait & Co. Ltd. Mr. Worsley is manager of the community planning and traffic engineering division, Mr. Wedler is assistant to the senior partner in the Nanaimo office and Mr. Noble is manager of the Terrace office.

William J. Connery, BASc'51, has been appointed engineering manager for B.C. Forest Products Ltd. He has held several positions within the company and was recently development manager for the company's subsidiary Alexandra Forest Industries Ltd.

New Secretary of the B.C. Law Society is **Thomas Victor McCallum,** BA '51, LLB'52. After being called to the bar in 1952 he joined Canadian General Insurance Company as claims manager, later moving to the Yorkshire Corporation in the same position.

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Michael Hind-Smith, BA'51, has been named vice-president of Foster Advertising Ltd. with responsibility for media and broadcasting. He joined Foster in 1967 following a period as communications consultant with the Power Corporation of Canada. Mr. Hind-Smith was a producer for both C.B.C. radio and TV, in 1961 being named manager of CBLT in Toronto. He later joined the CTV network as national program director, becoming vice-president, programming in 1962.

John W. Rithaler, BASc'51 has been appointed logging manager of Whonnock Lumber Company Ltd. He has had extensive experience in logging engineering with B.C. Forest Products Ltd. and consulting engineering firms.

In Texas **Dr. Edsel K. Darby,** PhD'52, has been promoted to senior scientist in the exploration and production department of Gulf Research and Development Co. He joined the company as a research geophysist and was named section supervisor in 1964.

The Fisheries Research Board has appointed **Dr. James E. Stewart,** BSA'52, MAS'54, PhD (U of Iowa), as assistant director of the Halifax laboratory.

Director of transport policy and research branch of the Department of Transport, **Raymond R. Cope,** BASc'53, has been appointed a member of the Canadian Transportation Commission. Mr. Cope will organize and direct the development of facilities and research programs within the broad scope of Canadian transportation. He will be succeeded as director by **E. Lorne Hewson,** BA'48, formerly general superintendent, transportation with the CNR's Atlantic region.

B.C. historians now have a new bibliography upon which to base their studies of the years 1849-1899. **Mrs. Gordon Lowther,** BA'53, BLS'65, (Barbara J. Horsfield), examined over 55,000 books, manuscripts and related material during the two and half years she spent researching in the provincial archives, university and public libraries. The results of this research have been published in the first volume of the University of Victoria's Centennial Bibliography — *"Laying The Foundations"*. The project was financed by the university with additional grants from the Canada Council and the Koerner Foundation.

Plans for a superport at Roberts Bank south of Vancouver and export markets for B.C. coal have been recent projects of **John Southworth,** BA'53, MA (U of Wash) as executive officer of the B.C. Energy Board. Before joining the board in 1960 he had been a consultant to the government during a royal commission on the Great Slave Railway, and executive assistant to the president of Inland Natural Gas Co. Ltd.

'54-'55

David James Bremner, BA'54 has been appointed assistant to the general manager of Crown Zellerbach Canada Building Material's Interior operations in Kelowna. He has been with the company since graduation and has held several senior industrial relations posts.

Traffic analysis, market and product research and staff development will be the responsibilities of **Robert C. Gilmore,** BCom'54, in his new position as manager, traffic planning and research, for Canadian Pacific Railways.

In Edmonton **Dr. Charles M. Trigg,** BASc'54, PhD (McGill), and **George N. Woollett,** BA'57, have established a geological consulting firm—Trigg, Woollett & Associates Ltd. Both partners are geologists with extensive experience in the mining industry.

Calvin S. Brandley, BA (Brigham Young), LLB'55, has been appointed as representative for the Alberta Department of Youth in the Lethbridge area. Mr. Brandley, who has worked with several youth groups in southern Alberta was previously supervisor of special services with the Lethbridge office of Canada Manpower.

Lawrence A. Hope, BSF'55, has been named chief forester of the Bulkley Valley Pulp and Timber Ltd. and its associated companies. He will be located at Burns Lake, B.C.

William Blair Little, BCom'55, a faculty member at the University of Western Ontario, school of business administration, has been awarded his doctorate of business administration from the Harvard graduate school.

Peter G. Silverman, BA (Sir George William), MA'55, MSc (Lon. Sch. of Econ.) has returned to Canada after several years in Britain where he held senior positions with a market research organization and advertising agencies. He has now joined Spitzer, Mills & Bates in Toronto as research director.

Edward B. Jakeman, BASc'55 and **Ian McGregor Hyslop,** BASc'59, are now with the consulting engineering firm of B. H. Levelton and Associates Ltd. in Vancouver. Mr. Jakeman will be responsible for cathodic protection and coating technology and Mr. Hyslop for metallurgical and mechanical investigations.

Allan G. Leinweber, BCom'55, BEd (U of Alta), has been elected president of the business education council of the Alberta Teachers' Association for the coming year. Mr. Leinweber has been teaching high school in Stettler, Alberta for the past five years.

Peter J. Peters, BCom'55 has recently been named comptroller of Scott Paper Ltd. Previously he was assistant comptroller with Scott. Following graduation Mr. Peters spent eight years with Price, Waterhouse & Co.

'56-'59

The Youth Resources Society of Vancouver has three alumni on its recently nominated board of directors. **Dr. H. E. (Ted) McLean,** MD'56, is second vice-president, **J. Allen Carr,** LLB'51, BA'56, is legal advisor and **Kenneth P. Bogas,** BA'48, BSW'54 and Dr. McLean are co-chairmen of the professional advisory committee. The aim of the society is to help emotionally disturbed teen-agers through intensive psychiatric and psychological treatment in a group home setting.

In the national office of the Progressive Conservative party **Malcolm Wickson,** LLB'56, BCom'65, has recently been named national director. He has been president of the B.C. Progressive Con-

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servative Association for the past two years. Executive Secretary will be **Eugene Rheaume,** BSW'56, former member of parliament for the North West Territories.

Malcolm Wickson, LLB '56, BCom '65

Ian W. French, BSP'57, PhD (U of T), has been appointed senior biochemist in the research and development division of Smith, Kline & French at Senneville, Quebec. He was formerly an assistant professor in physiology at the University of Ottawa.

Arthur Lorne Leach, BSA'57, has joined Dale Lithographing in Toronto as manager of their marketing services. He has had broad experience in advertising and public relations, as an account supervisor and director of information.

Frederick G. Rayer, BASc'57, has returned to Calgary after a year in Dallas, Texas where he was staff geologist for the Atlantic Richfield Company. He has been named district geologist for the company's southern Alberta - Saskatchewan district of its North American producing division.

W. Craig Clark, BASc'58, MASc'60, has been named production superintendent at the North Vancouver plant of Hooker Chemicals Ltd. He originally joined Hooker Chemicals as plant engineer in 1963.

A new associate editor, **James A. F. Taylor,** BA'58, has been appointed for the magazine, *United Church Observer*. For the last ten years he has been in broadcasting with CJOR and CBUT-TV in Vancouver and most recently as a radio producer with the CBC in Prince Rupert, B.C.

Fraser G. Wallace, BCom'58, MBA, PhD (UCLA), has recently moved to Los Angeles where he is vice-president, operations of Transamerica Computer Co., a subsidiary of the Transamerica Corp. of the United States. He was formerly in New York with IBM as manager of their data resources and management information systems.

An experimental engineering course at the University of Western Ontario has attracted many students. One is **Leslie A. Hill,** BASc'59. The course devotes one-third of its program to law, medicine, political science, biology and geography. Mr. Hill who is attending the school on leave of absence from the consulting firm, Montreal Engineering, feels that both universities and engineering schools would benefit from closer contact with industry.

Alexander L. Peel, BCom'59, MBA (U of Calif) has been named chief economist, railway and highway division, of the Department of Transport's policy and research branch in Ottawa.

John B. Tomlinson, BCom'59, director of media and programming for McCann-Erickson of Canada Ltd. has been appointed a vice-president of the company. He is an active member of the media directors council and the ICA/ACA joint broadcasting committee.

'60-'66

Edward J. Curtis, BA'60, has been transferred to Vancouver as director of sales for the Bayshore Inn. He joined Western International Hotels in 1961 and was most recently director of sales at the Calgary Inn.

Mrs. Dickson (Pat Carney), BA '60

The annual MacMillan Bloedel award for business writing has been won by **Mrs. Gordon B. Dickson,** BA'60, known to 'Sun' readers as Pat Carney. She has now won the $500 award four times. This year her winning series of articles was on the economy of Great Britain.

A plan to further understanding between the British and American people has won a $5,000 award for **Dr. Robin Farquhar,** BA'60, MA'64, PhD (U of Chicago). The contest had over 1300 entries from which two winners were chosen. It was organized by the Edward L. Bernays Foundation, which was set up in 1946 to advise governments, business and professional organizations on international communication. Dr. Farquhar's program includes the establishment of an international commission on Anglo-American relations, which would make surveys and establish programs based on the research findings.

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Glendon R. Stewart, BASc'61, has been named executive assistant to the deputy minister, marine, of the Department of Transport. He was district marine agent for the department at Prince Rupert before his new appointment.

Dean E. Feltham, BCom'62, LLB'65, has recently joined Red Barn System (Canada) Ltd. as senior vice-president, and will be responsible for the company's expansion and development program. Red Barn is a national restaurant chain which recently merged with Capital Building Industries. Mr. Feltham, who was the first winner of the Alumni Award of Student Merit, was previously senior analyst of the Ontario division of British American Oil Co. Ltd.

Head of the finance department in the Faculty of Commerce at the University of Manitoba, **Peter G. K. Pellat,** BCom '62, MBA (Berkeley), will return to Berkeley for the next eighteen months to study for his doctorate in finance.

Wilson Baker, BSc'63, is president and managing director and **Brian Meredith,** BSc'64, senior analyst with a newly established computer firm in Vancouver. Tetrad Computer Applications Ltd., which is connected with a large computer in Richland, Washington offers a consulting service on computer application in both scientific and commercial circumstances.

Ruth E. Berry, BHE '63

Ruth E. Berry, BHE'63, MSc (Penn State), has recently been appointed assistant professor in the department of home economics at the University of Manitoba. She has been a teaching assistant there since September 1967.

Director of the youth representatives branch of the Alberta Department of Youth is **Roland J. Kolbus,** BPE'63. A member of the B.C. Professional Recreation Society, he will direct the work of the representatives developing local programs for youth throughout Alberta.

A National Research Council award of $7,200 for post doctoral study has been made to **Isobel Margaret Stainer,** BSc'63, MSc'64. She is currently studying at the University of California, Berkeley and will later do research work in Quebec.

Lawrence A. Redpath, B.Sc (McGill), B.Arch'64, has recently returned from Montreal where he worked for Affleck Desbarats Dimakopoulas Lebensold on on the national arts centre in Ottawa and Place Bonaventure. He has now opened his own architecture office in Vancouver.

Fraser B. Cooper, BA'65, studying for his doctorate in political science at Duke University has been awarded a Woodrow Wilson dissertation fellowship. The recipients of these awards are chosen on the basis of the best dissertation proposals from among the most highly qualified candidates in each subject area.

Judith D. Forst, BMus '65

Following her performance in the semi-finals of the Metropolitan Opera Auditions **Judith D. Forst,** BMus'65 (nee Lumb) was awarded a contract for the coming year. She and her husband **Graham N. Forst,** BA'62, will leave for New York at the beginning of the summer, where she will join the Metropolitan Opera. Graham, who is on a doctoral program at UBC will be teaching at an eastern university next year.

Editor of Totem 65, **G. Scott McIntyre** has recently been appointed manager of advertising and promotion, trade division with McClelland & Stewart in Toronto. He was formerly an account executive with F. H. Hayhurst Advertising Agency in Vancouver.

John Barry Worsfold, BA (U of Alta), BSW'65, MSW'67, has joined the Department of Youth in Alberta as a consultant. He will study the youth services and programs throughout the province and will assist agencies in determining their most effective role in relation to youth and the family.

Norma J. Scott, BHE'66, is the new home service director of the Canada Starch Company at their head office in Montreal. She was previously with Woodwards in Vancouver as a consumer consultant.

Births

MR. and MRS. ROBERT G. AULD, BASc'59, (Diane Bowman, BEd'59), a son, Jerry William, February 7, 1968 in Calgary, Alberta.

MR. and MRS. LAWRENCE J. FOURNIER, BCom'62, (Rose Marie Ettel, BSN'63) a son, Mark Arthur, February 16, 1968 in Vancouver.

MR. and MRS. NELSON A. FORWARD, BCom '66, a daughter, Valerie Leanne, March 22, 1968 in Montreal, Quebec.

MR. and MRS. LARRY W. HUNT, (Miriam Sheppard, BHEc'62), a son, James David, January 14, 1968 in Sarnia, Ontario.

MR. and MRS. PETER F. MORSE, BSc'63, (Anita Blums, BA'63), a son, Philip Andrew, October 23, 1967 in Montreal.

Marriages

HENDERSON-CARRUTHERS. John Edward Henderson to Mary Ellen Carruthers, BA'60, BSW'61, October 14, 1967 in New Westminster, B.C.

SNOW-LEBLANC. Don Montague Snow, BArch'62 to Linda Ruth LeBlanc, March 16, 1968 in Calgary, Alberta.

WILSON-HARRISON. Philip Henry Wilson to Elouise R. Harrison, LLB'57, October 7, 1968, in Vancouver.

Deaths

Robert James Craig, BA'36, BASc'36, December 12, 1967 in Vancouver. Mr. Craig, senior inspector, environmental control, of the inspection branch of the B.C. Department of Mines and Petroleum Resources, was recognized as one of Canada's leading authorities on the control of mining dust and of silicosis. He had been a member of the engineering staff of Britannia Mining and Smelting Co. Ltd. and a silicosis inspector for the Workman's Compensation Board before joining the provincial department in 1962. He is survived by his wife and son.

Lucille Marie Davis, BA'35, April 1, 1968, in Vancouver. Miss Davis had been a counsellor at Delbrook High School and is survived by her sister and brother.

Henry Rex Retallack, BA'31, BEd'57, March 1968, in Vancouver. A mathematics teacher for 31 years at Lord Byng Secondary School in Vancouver, Mr. Retallack was awarded the medal of merit and the silver acorn by the Boy Scouts of Canada for his service to scouting. He is survived by an uncle and nephews.

Donalda Mae McCharles, BA'31, February 6, 1968, in Vancouver. She is survived by her brother J. Alestair McCharles, BA'28.

Norman Brooks, BASc'49, January 6, 1968, in Ottawa. Following graduation Mr. Brooks joined the Department of Public Works. He was on the staff of the British Columbia district office until 1957 when he was transferred to Ottawa as head of the marine plant section.

Ernest D. O. Hill, BA'47, BSW'48, MSW'51, March 4, 1968, in Vancouver. Director of social planning for the United Community Services of Vancouver and a well known social planning authority, Mr. Hill had lectured at the UBC School of Social Work and had delivered papers at international conferences. He is survived by his wife (Mary A. McLorg, BA'42, BSW'43), five children, mother and sister.

Donald A. Livingston, BASc'44, March 29, 1968 in Vancouver. Mr. Livingston joined ESCO Limited following his graduation. Since then he held various executive positions, being appointed executive vice-president in 1966. He is survived by his wife (Edith Elizabeth Harvey, BA'43), one son and two daughters.

Alumni Fund Report

MORE THAN 58 STUDENTS will be attending university next year with the assistance of scholarships provided by the UBC Alumni Association. They will be sharing $32,300 in awards for academic achievement. The $350 Norman MacKenzie scholarships awarded annually to 48 top students formed the major part—$16,800—of this aid. The 10 Norman MacKenzie American scholarships, each worth $500, also played a big part.

The provision of scholarships is the largest single project of the UBC Alumni Fund, to which alumni contributions hit a high of $210,496 in 1967. The fund is designed to provide services to students and to aid student activities which are not supported in other ways. As a new feature of the fund established in recognition of the financial problems of new graduates, graduating students will not be asked to donate until a year after they have graduated.

In addition to scholarships, another major area of aid was the President's Fund which was allocated $10,000 to assist special deserving projects at UBC. Athletics were assisted with allocations totalling $18,635. The library received $6,461, student union building $1,000 and the Delta Gamma suite for blind students in Brock Hall, $1,182. At the same time, alumni reduced outstanding pledges to the Three Universities Capital Fund by $48,209 and gave $45,513 in other gifts directly to the university.

On another matter, an explanation is due to those donors whose names were missing from the special Alumni Fund supplement contained in the last Chronicle. For many, the reason was simply that deadlines play no favorites and naturally donations continued after we went to press. For a good many others, however, the problem lay in the fact that as they are Three Universities Capital Fund contributors through payroll deduction the necessary information was not available prior to the deadline. Our apologies to:

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