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Publication of The University of British Columbia

ADDRESSES



SPRING CONGREGATION  
ADDRESSES  
*1950*

*delivered by*

*The Rt. Hon. C. D. Howe*

*and*

*Mr. H. R. MacMillan*

CONGREGATION SERIES No. 3



SPRING CONGREGATION  
ADDRESSES  
*1950*

I.

*An address delivered on the first day of the  
Spring Congregation of The University of  
British Columbia, May 11th, 1950, by  
The Rt. Hon. C. D. Howe  
Minister of Reconstruction and Supply*

II.

*An address delivered on the second day of the  
Spring Congregation of The University of  
British Columbia, May 12th, 1950, by  
Mr. H. R. MacMillan  
C.B.E., B.A., M.S.F., F.R.G.S., D.Sc.*

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The University of British Columbia  
Vancouver, Canada

SPRING CONGREGATION  
ADDRESSES  
1950

CITATION

Mr. Chancellor, I have the honour to present for the degree of Doctor of Science, **honoris, causa, the RIGHT HONOURABLE CLARENCE DECATUR HOWE**, whose vision in planning, and skill in marshalling our productive resources, in peace, for war, and for reconstruction, amply illustrate his own great gifts—and the value of engineering disciplines animated by a high sense of public duty. In presenting him, the Senate wishes to honour one who distinguished himself as a brilliant student, teacher and practitioner of engineering science before he mounted—or strayed—into what might be called the “Liberal” Arts.

# CONGREGATION ADDRESS

*of the Right Honourable C. D. Howe*

MAY 11, 1950

First, I would like to thank the President and Board of Governors of the University of British Columbia for the honour being paid to those of us who are receiving honorary degrees at today's convocation. An honorary degree may not carry with it the validity of an earned degree, but nevertheless it enables the recipient to be numbered among the graduates of this University. We, your most recent honorary graduates, are proud of our new association, and we look forward to close and frequent contacts with our fellow alumni.

I congratulate those of you who are being graduated here today. You are fortunate in having obtained your training in a young and dynamic university. I find it hard to believe that so much has taken place on this campus since I walked over the prospective site for the University with my friends Dean Weldon and Stanley Mackenzie, who had come to British Columbia from Dalhousie University in Halifax to advise on the location of the proposed University of British Columbia. Certainly the university of today is a credit to all those who had to do with its founding and its development over the years. Today will witness the opening of your new Applied-Science Building, which is a credit to the University and to the engineering profession.

Today also marks the retirement of your Dean of Science, my old friend John Finlayson. Dean Finlayson and I have a bond in common, in that we were each professors of Civil Engineering at Dalhousie. I will let you guess which of us succeeded the other in that capacity. I will also suggest that you may draw the wrong conclusion from the circumstance that Dean Finlayson is sensible enough to seek retirement, while I am not so sensible in that regard. I know that John Finlayson will be missed from this University, as he will be welcomed back into the engineering profession. He has made a great contribution of service to education over many years.

It has been suggested to me that the accent of this convocation is on science and engineering, and that it is in order for me to address my remarks more particularly to the engineers. Having spent all my private life in the profession of engineering, I find this a very convenient arrangement. Even then, I have had too much experience with young people to attempt to give you advice. When I tell you that I am old-fashioned enough to believe that

personal ambition, initiative, industry, faith, and the willingness to take a chance are still better avenues to personal and national success than the rigid adherence to security considerations and social and economic planning, you may well consider that I really have no advice worth offering to the modern generation. However, I will attempt to discuss one or two matters that I feel are very much on your minds.

The first of such matters is, what of the future? What will the years hold in the way of opportunity, for engineers and for other graduates, and incidentally, you are all in much the same boat as far as the future is concerned. What are your opportunities, not only to make a living, which, by the way, is no base motive, but, of more importance, opportunities to play a part in enterprises that will benefit the people as a whole?

These questions are undoubtedly very much in your minds today, just as they were uppermost in my mind when I was graduated 43 years ago. The same questions have probably been in the minds of all students from the time the first engineers were graduated. I am also sure that the same two types of answers have been given, year after year. There are those who take a pessimistic view, which they describe as realistic, and there are those who are optimistic. Personally, I have somewhat of a reputation for being optimistic. I believe that opportunities for young engineers, and for young graduates generally, are as good, or better than they were 40 years ago. I do think that Canadian industry, and the Canadian economy, will develop at a rate not less remarkable during the next quarter century than during the previous quarter century.

Please note that my belief in opportunities for graduates is an opinion, rather than a fact, but it does have the merit that I believe it to be true and, any way, I am entitled to the latitude usually granted speakers at convocation time. Perhaps I had better support my belief with a few random observations, based on my experience over the years.

When I was graduated in 1907, this continent was nearing the end of a great era of railroad building. To complicate matters further, 1907 was a depression year, the year of the so-called rich man's panic. In Canada, one great transcontinental railway had been completed and two others were nearing completion. At that time, engineering, to most young men, meant the survey, location, construction and operation of railways, and the construction of ancillary structures, such as bridges, terminal facilities, and harbour developments. It was not unusual, in those days, to hear wise and experienced men warn the universities that too many engineers were being graduated, that, with the completion of the transcontinental railways, there would be no more need for engineers. There were perhaps 1500 undergraduate engineering students in the whole of Canada at that time. Today, while the

population of Canada has only about doubled, there are about ten times as many engineering students, and engineering graduates are finding employment far easier to obtain than did the graduates of my day.

This rapid growth in the number of engineering graduates is not accidental, nor is it due to any one single factor, but rather to several factors that are still operating. The normal increase in population is, of course, one factor, although not a major one. The number of people employed in industry and production has only about doubled during the past 40 years. The freight carried on our railroads has only increased four times in the same period. On the other hand, the telephone business has increased eight times, but the increase in engineering students of ten times is still larger than the increase in most other activities. The only item that shows a comparable increase is the national debt, which has grown four times as fast as have engineering students, but I am sure that no one would suggest that there is any association between these two phenomena!

All these figures merely emphasize something that we all know very well, namely, that over the past decade engineers have taken over jobs in industry, in transportation, in general businesses, which are not strictly engineering in the narrow professional sense, but for which engineering is an excellent qualification. You may be surprised to know that when I was teaching and practising engineering in Halifax forty years ago, there were in Canada only a handful of engineers in all the industries of this country. Even the contracting industry employed only a few, and the same is true of the operating, executive and administrative positions of railroads, and government agencies.

The infiltration of engineers into the production departments of industry, into the operating departments of railways, and into the general administrative and executive fields of business, industry and government, has been most pronounced since 1920, with the result that today we find that most contracting companies are headed and staffed by engineers, while in the more technical chemical, electrical and metallurgical industries the same thing is true. Even in general industry and business, the majority of senior posts are now being filled by men with engineering training. I might even mention the fact that when I was first appointed a Cabinet Minister in 1935, I was the first professional engineer to hold such a position in any British government. Today, our Federal Government includes two professional engineers, while there are several professional engineers in our provincial governments. I am even beginning to think about a day when engineers may outnumber lawyers in governments, and I get some comfort from doing so.

Speaking seriously, this invasion by engineers of fields that are not strictly technical, is another proof of the great importance

of science and technology in the industrial and economic life of modern days. This movement will continue, and in Canada, just as happened in Germany, the United States and England, training in some phase of engineering or science will become more and more essential to high executive positions in industrial and business organizations.

In all walks of life, a college education, whether in engineering or otherwise, is much more highly regarded as a qualification for employment than was the case forty years ago. This means, for all of you, opportunity. With your background and education, I am confident that, given an opening into employment, you will not need to be told what to do next.

Many of you may feel, as I did back in 1907, that you were born a generation too late, that all the important engineering work has been finished before you enter the profession. I was interested in reading Burpee's *Life of Sir Sandford Fleming*, who came to this country as a young engineer in the summer of 1845, and looked about for a job. The account reads:

"Day after day his journal is a record of hope deferred. He called on Sir Allan MacNab, and other notabilities, with letters of introduction, but though politely received, he found little or no prospect of employment as an engineer or surveyor. The Canada Company's surveys were completed, and there was nothing to hope for in that direction. Mr. (afterwards Sir) Casimir Gzowski could offer no work in the Department of Roads and Harbours, in fact he threw cold water over the ambitious hopes of the young engineer, told him there was nothing in the province; that the great works were nearly all finished, funds exhausted, that they were paying off men instead of taking them on, that indeed he thought it a very bad country for professional men, and wound up by advising him to return to Scotland, advice which Sandford decided to put aside until every avenue of success in the new world had been explored."

You all know that Sir Sandford Fleming eventually found his opening, and went on to achieve fame and fortune in Canada. It is interesting to note that, one hundred years after his job-hunting experience, Canadian industry has been absorbing all the engineering graduates that the universities can turn out, and has been asking for more. Those of you who have the persistence of Sir Sandford Fleming need have no fear for your future in the Canada of today.

Perhaps some of you will say: "Yes, we are all right during this present period of expansion, but can this last? What guarantee have we that Canada will continue to expand, and thus provide opportunities for college graduates?" The answer is that you are among those upon whom Canada will depend to see to it that the

Canadian economy will continue to expand. In this university you have been given the tools for that job, and it will be up to you to take over and see that the job carries on. The materials for the job are here in abundance: timber, copper, zinc, lead, aluminum, nickel and more recently, petroleum and iron ore and titanium. We in Canada have such materials in abundance readily accessible.

Perhaps one of the most important tools for ensuring that Canada will continue to have a dynamic economy may be found in our scientific laboratories, which have been expanded to ten times their prewar size. Certainly, the major opportunity factor for any country lies in the application of new scientific discoveries. This constitutes the "endless frontier" of your generation. Dr. Vannevar Bush, who during the late war was Director of American Scientific research activities, in reporting to the President of the United States, used these words: "Science offers a largely unexplored hinterland for the pioneer who has the tools for his task. The rewards of such exploration, both for the nation and for the individual, are great. Scientific progress is an essential key to our security as a nation, to our better health, to more jobs, to a higher standard of living, and to our cultural progress."

I like to think that the pioneer spirit is still vigorous in this country, and that, while there may be no territorial frontiers to push back in the second half of this century, the "unexplored hinterland" referred to by Dr. Bush offers fitting opportunities for the pioneering ambitions of the young man of today. To those who prefer to reflect on the bounty of the past, and worry about the future, my answer would be that, much as I have enjoyed my active life, and appreciate the good fortune that has been my lot, I would gladly trade it all for the opportunity which is yours, to start on the road to adventure and service with 1950 scientific equipment.

The building up of vast new technological empires on scientific research and discovery has been one of the outstanding marks of the last century. We all know that the colossal electrical industry of today, with its investments running into the billions of dollars and with its employees numbered in millions, came out of Faraday's experiment in electro-magnetic induction, and there are men now living who knew Faraday well. We all know that there was no chemical industry worth mentioning a hundred years ago, and that research is responsible for the great chemical industries, which today provide sustenance and opportunity for thousands of Canadians. The same has been true of the motor industry, which started its real growth less than forty years ago, and which brought in its train developments in highway construction, in travel, and in transportation, which have revolutionized our way of life, and now provide an abundant livelihood to many thousands of workers. Aviation, radio, and now television, all follow the same path—

scientific research, engineering development, vigorous and courageous exploitation—and they all have led to the same end, a higher standard of living, and more and better jobs for all.

I might mention the employment opportunities created by a wartime need for synthetic rubber. Back in 1941, the fall of Singapore made it clear that supplies of natural rubber could no longer be had. Our chemists had developed in the laboratory stage methods for making synthetic rubber, but their theories had never been tested on a production scale. The war was being fought on rubber, and every avenue to obtain rubber had to be explored. Therefore, the Government spent fifty million dollars in attempting to produce rubber from petroleum fractions. Fortunately, the chemists were right, and rubber was produced of quality and in quantity sufficient to replace natural rubber. That synthetic rubber plant is still operating at full capacity, making a variety of products that are finding ready acceptance in industry, even though natural rubber is freely to be had, at prices lower than prewar. However, the interesting thing is that, since the war, another fifty million dollars have been invested in facilities to utilize further the petroleum fractions surplus to requirements for synthetic rubber, and today we have, alongside the rubber plant, factories for making fiberglass, antifreeze, chlorine, and base material for plastics, with every indication that further application of research in the field of organic chemistry will continue the rapid growth of an industrial community which dates back only eight years.

What of Dr. Bush's "unexplored hinterland"? No one can spell out the future in detail, but in the field of atomic energy alone, we have possibilities for peaceful development that are almost beyond imagination. I rather think that atomic energy, today, is about where the electrical industry was at the time of Faraday, and that the development of its use will have at least as great an impact on society. We know full well that material progress for two hundred years has always been associated with the increase in available capital and available power, permitting the substitution of machines for human effort. First, the steam engine, then hydro electric engines, then internal combustion engines, made progress possible. Now we have this new and almost unbelievably great source of energy rapidly becoming available for use. The military implications of atomic energy have thrown a temporary cloud of secrecy over this development, but already the use of radio-isotopes, as a research tool gives promise of great things, making possible new discoveries in all fields of knowledge that mean a major advance in science and technology. The international situation may delay progress temporarily, but the day will surely come when the peaceful use and application of this new, and fantastically large, source of energy from atoms, will certainly open up a new and potentially great field of engineering, technology, industry and opportunity.

"Science offers a largely unexplored hinterland for the pioneer who has the tools for his task." We, your elders, believe that we have provided the "tools for the task." The task is one of exploiting, for the use and benefit of mankind, the potentials for good that abide in the application of science. I wish you joy in the task.

It is your great privilege today, ladies and gentlemen, not to finish the job, but to play your part in building a greater and better Canada.



### CITATION

Mr. Chancellor, I have the honour to present for the degree of Doctor of Science, *honoris causa*, **HARVEY REGINALD MacMILLAN**, whose career has been built on great energy, clear intelligence, strong judgment, a Scot's faith in the value of sound learning, and a profound belief in his country and its economic development. In presenting this pre-eminent forester and industrialist, the Senate pays tribute to his brilliance as a student and practitioner of the applied sciences, a brilliance which would have guaranteed him equal distinction in the teaching profession had he chosen, when tempted, to adorn it.

# CONGREGATION ADDRESS

*of Mr. H. R. MacMillan*

MAY 12, 1950

Mr. Chancellor, Mr. President, distinguished guests, fellow graduates, ladies and gentlemen:

Your having graduated to this stage has proved your ability to overcome obstacles and solve problems. I congratulate you upon your accomplishments, and am confident that you will meet successfully the challenges that lie ahead of you in finding a useful place in society.

The first problem for many of you will be to sell your services. We older persons here hope all of you will remain in the Province that has done so much for you. Your modern outlook, trained abilities and vitality are needed in the development of British Columbia.

I hear that for some of you jobs to your liking are not easy to find. Possibly the time has arrived when only the lower rungs of the ladder are within reach of some of those seeking employment. If so, it may be a good idea to seek to enter some field of effort at the bottom, in the spirit of taking a post graduate course. For many years students have done this. Mining engineers have started in mines as labourers, and doctors as internes, relying upon natural endowments and superior qualifications to make themselves known as assets, and thus work toward the top. Many have found that the lowest rungs are the firmest base from which to reach the top. There are, in my opinion, more opportunities now in this province than at any time since I arrived as a \$75.00 per month combination compassman and cruiser over 43 years ago.

It can be expected that your educational advantages and the characteristics that led you to bring your training to this stage, will make you a leader of thought in a circle that will widen with the years. Therefore, it will not be long before your influence will be felt.

There is plenty to think about in the community you are entering. For the purposes of this talk my remarks will be restricted to a limited but important aspect of our provincial life. In my deductions I shall be undoubtedly partly wrong. My intent is to stimulate thought and discussion in the spirit of General Eisenhower who said recently, "Only an informed public opinion can win the peace." Similarly only an informed public opinion can maintain British Columbia's economic health. If there is to be an informed public opinion there must be public discussion.

Our population history reveals an interesting trend. White settlement began here in the early 1800's. The only products that

would then pay transportation costs to market were furs and placer gold. By 1871 the population of B.C. was 37,000 (about 10,000 whites). At that time industry had started in the south coastal area—chiefly sawmilling, mining and fishing. By 1881 the population was 49,500, a little over 1% of the Canadian total. Thereafter every decade to the present time showed B.C. to have grown in population more rapidly than Canada as a whole, reaching in 1949 about 1,140,000—over 8% of Canada. This great growth of population occurred in spite of the lack of wide areas of rich arable land, such as drew waves of immigration to the prairies between 1890 and 1920.

British Columbia is the only Canadian province in which industry preceded agriculture as the chief stimulus to growth. The land here was costly to clear. Nothing less than heavy machinery and power backed by capital could cope with the geography and the nature of the resources. People came here in numbers only when capital and management together, in small or large units, arrived to convert to a form saleable in other provinces and countries the accumulated raw resources of the fisheries, forests, and mines. The jobs so provided made the West Coast a mecca from the 1890's to the present time, providing a livelihood not only for the primary workers themselves but also for the great superstructure of merchants, professional men, government servants and other necessary service occupations. This activity gave local markets for the farmers who slowly and laboriously cleared and equipped their farms.

It is clear that without capital in large volume the fisheries, forests, mines and fields of this rugged province, could neither have been converted to the use of mankind nor have been made the sure source of basic income for over one million people.

1938 became the starting year for our greatest boom, which arose from the fact that our chief products—building materials, pulp, paper, base metals and food became necessities for war preparations, for fighting the war and for postwar reconstruction of people and things.

Therefore, stimulated by outside conditions, beyond our control, prosperity has rained continuously upon our Province to a degree beyond the most optimistic expectations. At times a market break has seemed to be in the offing, but before any check became apparent the overall demand for the sum total of our products swept onward and upward. Though experience tells us this will not go on forever, no one can say when an adverse change may begin, sufficient to halt the present rate of productivity, upon which our edifice of personal and public spending is erected. Such a reverse may be months, it may even be years in coming. It does not seem possible that present price levels coupled with full demand for our products will be permanent. Nevertheless our capitalists,

full of faith in our province's future, are investing for greater output of better goods and seeking trained men and women.

During this boom there have been important changes in our provincial economy. Looking about us we see at the end of 1949:

Firstly: Our population has increased by over 300,000 since 1939. This is an increase of over 40%, which is over double the rate of Canada's increase during the same period. Of the 1,140,000 in British Columbia some 405,000 are gainfully employed. The Federal, Provincial and Municipal Governments directly employ approximately 42,500 or over 10% of those working. Probably another 5% are employed directly and indirectly by contractors on government construction works.

Secondly: On the average, the people of British Columbia enjoy, next to the people of Ontario, the highest material standard of living in Canada, the greatest number of motor cars, 'phones, radios, labour-saving devices and gadgets, per 1,000 persons of any provincial population. British Columbia has done well by its population.

Thirdly: We in this province consume a small fraction of what we produce, say about 25% over all, and likewise we produce very little of what we consume. Of all Canadians, we are farthest from self-sufficiency, and are to the greatest degree dependent upon outside markets and outside supplies. We are consequently, of all the people in Canada, the most interested in interchange of goods, interprovincial and international.

During the still-continuing 12-year boom, our outside markets have vastly changed. Great customers of old standing, such as China and Japan, are out of business on a large scale for the long future. The sterling countries, traditional continuous large volume buyers, are buying from us only limited quantities as compared with their pre-war habits.

The shift of British Columbia sales away from the sterling area has been abrupt and spectacular:

	'39	'49
Fish products .....	59% to	8%
Forest products .....	34% to	19%
Mineral products .....	18% to	10%

Consequently, for the first time in her history, B.C. is more dependent on the \$ markets of the world than on the £ areas for her sales outside Canada.

Contrary to the experience of our whole trade history, B.C., selling 32% of her exports in the £ market, is less dependent thereon than Canada which in '49 sold 35% of her total exports to £ countries. We have made the switch from the £ to the \$ markets more rapidly than Canada as a whole. For our purposes the \$ market is the U.S.A.

As our markets have become narrower, our prosperity has become more vulnerable. To quote lumber as an example, in past years in times of American building booms, we sold a high proportion of our output to the U.S.A. The American demand usually ended suddenly—but China, Japan, Australia and the U.K., in those days moving independently of the U.S. economy, continued their buying, thus providing alternative markets. Because of the economic and political troubles of these other customers, they no longer hold out the prospect of providing such a hedge when we may need it in the future.

Fourthly: The large revenues arising from war and post-war prosperity have made it easy for the voters, with no other course forcibly presented to them, to boost to dizzy heights their public spending. They have chosen at election time legislatures instructed and willing to use the public revenues in buying on a steadily increasing scale more generous services for the population. These services are good, useful, and comfortable—it is easy to understand why they are so popular and so effective politically.

The maintenance of government services imposes a serious load on the worker. In 1949 the average income for all Canadians—men, women and children, was \$918. During 1949, the Federal Government spent \$171 for every Canadian or 19% of that average income. The British Columbian Government spent \$90 for every resident of the Province or almost 10% additional of the income; and the City of Vancouver spent \$67 for every inhabitant of the City—almost 7% of the income.

These Governments raised the money to pay for these expenditures by taxing their constituents. The full burden of these taxes is not apparent from the above figures alone. The brunt of this burden is shouldered by those gainfully employed. In Canada (including men, women and children) 1 out of 2.7 persons has a job. It is estimated that the average British Columbian with a job in 1949 paid directly or indirectly, after allowing for duplications, about \$600 in taxes to all levels of government. In 1950, he will be paying even more.

Fifthly: The total personal income of the population of B.C. for 1949 has been estimated to be one billion 160 million dollars. Of this sum, it appears that at least 30% was consumed by costs of government—Federal, B.C. and Municipal. If Governments take 30% of our incomes to pay their expenses in a period of high prosperity, how much will they need in times of adversity? The demands upon government may be even greater in periods of adversity. Such is the theory of cyclical spending. In my opinion, this figure of 30% at the peak of prosperity is dangerous.

Let us take a look at the per capita current expenditures of three provincial governments—Ontario, the richest province

in Canada, with a well diversified economy; Alberta, a young province of expanding prosperity; and British Columbia, a similarly young and rich province but at present slower to develop.

In 1938 on a per capita basis these governments spent as follows: Ontario \$23, Alberta \$27, and B.C. \$39. B.C. spent 70% more per capita than did Ontario in 1938 and 44% more than Alberta. Coming along to 1949, we find that Ontario spent \$49 per capita, Alberta \$51 and B.C. \$90. In 1949, B.C. spent 84% more per capita than Ontario and 76% more than Alberta. (The effects of inflation are the same in all provinces.) Somebody is wrong. If the B.C. policy is right, the other provinces are wrong. If the other provinces are right B.C. is wrong in a big way. Here is an opportunity for you to study what is good for your future and use your influence accordingly.

Sixthly: Our voters throughout the Province are infatuated with the pleasurable feeling of constantly flowing public money irrigating all constituencies. In spite of warnings from leading members of the government and the legislature, they have made it clear that their ideas favor larger, not smaller, government expenditures, particularly on gratifications that will ease today's personal problems and increase today's comforts. So emphatic is the electorate on this point, that in the recent budget the legislature cut the customary investments designed to produce crops for the future in order to find more money to spend on the perquisites of today. This was done when distributing the largest revenues on record. The axe fell on projects to increase or protect future provincial revenue and employment, such as the creation of future forests, building access trails or roads to encourage search for or to reach untapped resources. As far as the provincial economy is concerned, the view of the voter seems to be "after me the deluge."

If our public financial policies are wrong, it is the fault of the voters. If the policies are wrong, you will be here to face the unpleasant consequences. It seems that you have a dominant interest in leading the electorate to a more prudent use of public revenues. You may even have to help them learn the hard way that no society can ever take out more than it puts in.

Based upon the foregoing statements being reasonably correct, as I believe they are, one might fairly say that the chief problem confronting us British Columbians as a whole is not unrestrained public expenditures on health, not more public works, not more social services, until we reach the earning position where we are confident that we can sustain everything we start without starving fundamental necessities such as education. Our chief problem, as

I see it, is to improve and maintain a more dependable, and if possible, higher state of economic health for our Province; it will require determined management and effort, to maintain, even on their present scale, the many desirable and valuable services that have been established in a period of high prosperity in response to the demands expressed by our people at the polls.

This is where you come in. You come in to assist those now thinking and working to maintain our standards.

One can mention various possible contributions to the solution of our problem.

We might expand our population. It has been a widespread Canadian belief that an increase in population would decrease the per capita cost of services. It has not worked that way here. During the past decade our population in B.C. increased over 40%, but the per capita cost of provincial government services increased over 120%. Much of this increase in per capita costs is due to inflation throughout the country. I do not feel, however, that the experience of the last decade offers convincing evidence that a mere increase in population in itself would decrease the per capita burden of taxation. As our population increases we must guard against newcomers or other passengers from amongst us catching free rides on the social services paid for by the workers. You have learned that what is free to one person is paid for by others.

We have no great ready arable areas to which persons with little capital can come to create rapid production. Almost all immigration we might encourage requires the use of capital to create jobs, or is dependent upon more persons coming here with capital upon which they can retire. We will not continue to attract the necessary groups, employers and the retired, if their study of our provincial economy reveals to them the threat of taxes substantially higher than apparent in other places they can go, or higher costs of more onerous conditions. To increase the number of employees we must attract and create new employers. This suggestion is not entirely humorous—should there not be a department—or even a service club—devoted to the starting and cultivation of employers—those key people who are such important sources of taxes and other benefits to the public?

A first objective naturally is to increase the volume of production in British Columbia, of those goods we can sell. If experienced companies, with capital, can be induced to come here to do this, we shall all gain.

Compared with other under-developed regions, there are great opportunities here now, presented by our pulpwood supply, our water powers and the fact that one half million to one million tons of merchant ships come to our ports empty every month in the year. Other possibilities will be uncovered if we strive to find them.

The effect of the increase in freight rates in recent years has been to make it more costly for us in B.C. to sell our products in Eastern Canada. In the case of lumber, for example, Eastern Canada has, in effect, been moved over 20% further away from us by higher freight rates. At the same time our difficulties in selling in the Sterling Area have been increasing. Clearly we must concentrate on producing for the United States market.

Fortunately, the American market has been expanding rapidly. The population of ten Western states has jumped since 1940, from 20 million to 27 million. These customers are on the average only about one-third as far away as our Eastern Canadian customers, they are about three times as numerous and are richer and greater potential consumers of many of our products. Their economy is more complementary with ours than is that of Eastern Canada.

If British Columbians are to unite on a trade policy for their province, it should be on the objective of an easier entry for our goods into the United States. We should have specific plans and objectives such as lower tariffs and reduced restrictions for our canned sea products, fruit and farm crops, base metals, plywood, and a wider range of paper. To succeed in this direction would be the greatest function Ottawa could perform for us. Our plan should include a continued effort to educate the Americans to the benefits of trading on fair and friendly reciprocal terms with one of the few peoples in the world that seeks nothing more costly than an even break.

Concentration on the United States market becomes more urgent as the United States Government, through the Marshall Plan, continues to reduce its financing of Canadian exports to the United Kingdom. In the last nine months of 1948, 80% of Canadian exports to the United Kingdom were financed by the Marshall Plan, in 1949, 50%. The figure looks to be still lower for 1950.

Success in this direction will stimulate the use of our natural resources and increase the number of our workers. Also it could encourage the refining of our manufacturing processes to an end product of higher value—a policy which must continuously be our goal, in which trained men will be employed in greater proportion. We could improve our economy by applying to our rich resources trained minds and science as has been so notably done by the Swedes and Germans dealing with inferior natural advantages.

Britain's lack of dollars leads quickly to lower sales to the Sterling area of British Columbian lumber, pulp, paper, fish, apples, metals, and other commodities. In self defense we must help the Sterling area to earn dollars. This we can do by directing as much as is feasible of our purchasing to Sterling sources. We in the west are more directly interested in such a policy than the people of Eastern Canada.

The best use of our natural resources both as to volume, avoidance of waste, and working up to highest values, may lead to the creation of larger industrial units. Outstanding examples of such beneficent growth are the Consolidated Mining and Smelting Company and the larger companies in forest industries and fishing. Smaller organizations and smaller units could not maintain the research staffs without which new discoveries and savings would be overlooked. Smaller units could not achieve the low costs and higher recoveries, without which our chief products could not compete continuously in foreign markets. Large production units are more likely to be permanent, and to maintain more nearly an equilibrium of employment. They present greater opportunities for trained specialists and thus bring strength to British Columbia.

You and your successors are the great losers where we have failed in conservation. You are also the great beneficiaries of such successful conservation policies as now exist or may begin hereafter. First should come ideals of conservation, accepted by the voter, who if there is to be conservation must at least consent to a part of each year's revenues being invested now for future crops. Then there is still to develop on a higher and more educated level wise management and improvement of fisheries, forests, mines and agricultural lands, to support a growing population at the highest permanent standard of living. Conservation in this Province might include prolonging the life of developed natural resources by extending activities to forest and potential mineral areas in which there is now practically no industry. For instance, it is said that no important working mine has been discovered in British Columbia since 1896. Also it is possible that we can increase our earnings from the sea.

Now, it may occur to some of you, that I have dwelt over long on the problems and difficulties of our times in British Columbia. Let me assure you that I am optimistic and it is my wish to be encouraging—believe me, I am not a pessimist on the future of British Columbia. It is done in the spirit that if you take care of the liabilities the assets will take care of themselves. I suggest to you that if we temper our characteristic Western optimism with realism, we shall be better able to serve our own and the public interest than are those cheerful and agreeable souls who refuse to recognize a hard fact until it has them by the throat.

My message to you in the graduating class—and I urge its importance—is that, in leaving the University, you resolve to give to British Columbia as well as to receive from it. That you study her problems and work for their solution, and that you regard the public business as your business. That you examine carefully and critically those proposed solutions to public problems that emphasize the duty of the state to the individual rather than—what is much more important—the individual's responsibility to society and to himself.

Possibly you should not be satisfied that there are only two UBC graduates in the B.C. legislature.

If British Columbia's future measures up to her great potentialities, it will be proof that her men and women have not forgotten their responsibilities in an unseemly scramble for excessive security purchased by the state. The challenge is yours—to build upon the heritage of the past with courage, realism and unselfishness.

“Go to your work and be strong, halting not in your ways,  
Baulking the end half-won for an instant dole of praise.  
Stand to your work and be wise—certain of deed and pen,  
Who are neither children nor gods, but men in a world of men!”

Will you be equal to that challenge?





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