A STUDY OF THE INFLUENCE OF DR. H. M. TORY ON EDUCATIONAL POLICY IN CANADA

A Thesis

Submitted to

the Faculty of Graduate Studies and Research

McGill University

In Partial Fulfilment

of the Requirements for the Degree

Master of Arts

by

James Robbins Kidd

September 1944

TABLE OF CONTENTS

PREFACE

It is an unusual privilege to be able to study a subject which is one of signal interest and considerable value to the field of education, and yet has been left almost untouched by students of the history of education in Canada. This present thesis is marked by all three of the characteristics mentioned. Keeping the last point in mind, the writer has had an objective from the beginning of the study of searching out as much of the evidence as can be discovered with the hope that, however many limitations this present study may have, there will be an opportunity for others to continue the investigation of this important field, the outlines of which have merely been sketched here.

In mapping out this work in the early stages much assistance was received from Dr. John E. Robbins, Chief of the Education Branch, Dominion Bureau of Statistics, and from Mr. F. E. Lathe, Director of the Division of Research Information, National Research Council, as well as from correspondence with a number of associates of Dr. Tory whose contributions are noted in the text. Generous aid was also afforded by Miss M. S. Gill, Librarian of the National Research Council, and Mr. Frank Matley of the staff of the Library of Parliament. Careful direction was given to the study by Dr. A. B. Currie, McGill

University, whose insistence upon the highest standards of scholarship was most beneficial to the writer, even though the results may not be apparent.

The writer is particularly indebted and grateful to

Henry Marshall Tory, D.Sc., LL.D., D.C.L., F.R.S.C., F.R.H.S.

for providing a subject of both interest and historic value - his life work - and for his generous assistance in this task.

CHAPTER I

Definition and Purpose of the Study

A theme which has long been popular among writers of history and fiction alike is that of the growth and development of Canada. The subject matter for the largest portion of these works has been the adventures of explorers, coureurs de bois, voyageurs, Indians, settlers, and Mounties. Too little attention has been given to the teachers, ministers scholars, scientists, and others whose work has been of considerable importance in the building of Canada.

This thesis is concerned with the life of one who was preacher, teacher, scholar and scientist, Dr. Henry Marshall Tory; a man whose life span corresponds to that of Canada as a nation, one who was the product of the best Canadian schools of a half century ago, and who has been associated with many phases of education during all of his life. A brief consideration will be given to the social and economic milieu in which he lived, and to the changes in Canadian education during these years. In particular, to the degree that this is possible, the growth and change that occurred in Canadian education because of his life and labour will be noted.

This study has for its purpose the consideration of the following questions:

Did Dr. H.M.Tory have an influence on educational policy in Canada?

If so, what was the nature and the character of that influence?

How great is that influence?

Of what value is that influence to Canadian education?

The word influence raises a centuries-old, philosophical problem, namely, the question as to whether man does shape his world, or conversely, whether he is shaped by his world. Many of the great minds of history have grappled with this question. Some, like Carlyle, have assigned to the creative individual a large place in the moulding of social forces and institutions. Others, have believed that the individual counts but little. Quite recently Jawaharlal Nehru, meditating in prison, has written:

> Mighty forces are at work, moving the hundreds of millions of human beings. According to our different temperaments we meet them - some frightened by them, others welcoming them, some trying to combat them, others submitting to the heavy hand of fate, while still others try to ride out the tempest and control it a little and direct it, willingly facing the perils that this involves for the joy of helping actively in a mighty process.[1]

It is not the purpose of this study to attempt to answer these problems. The method of approach used is that of showing a direct and significant relationship between the activities of a man, Dr. H. M. Tory, and certain developments and changes in educational policy during his lifetime.

The word policy also needs some attention. Dictionaries give several definitions to it:

1. "a science of government" - Webster's New International Dictionary

---

1 Jawaharlal Nehru. Glimpses of World History (New York: the John Day Co., 1932) p. 848

2. "prudence or wisdom in the management of public or private affairs" - Webster's New International Dictionary.

3. "a settled or definite course or method adopted and followed by a government, institution, body or individual" Webster's New International Dictionary.

4. "the art of government" - The Universal English Dictionary

5. "method of government" - The Universal English Dictionary

6. "a course of action adopted and pursued by a government, party, ruler or statesman" - Oxford Dictionary.

From these definitions we see that policy has two meanings that have a bearing on this study. It may be used to mean idea - ("the art of government" "wisdom in the management of affairs"). Or it may be used to mean the practice of the idea - ("course of action," "science of government").

These two meanings provide a lead to the way in which the influence of Tory can be estimated. In the first instance it must be ascertained what is his philosophy of education, what are his educational ideas, on whom did they have an effect; how relevant are these ideas to the current climate of ideas in Canada, and how much originality of thought do they contain. Educational ideas can be expressed in a great many ways, in the classroom, in textbooks, in educational journals, through staff association, in educational conferences and on the public platform. Each of these means will be discussed.

A relatively simpler task is to describe how the practice of educational ideas has been directly affected by his work and

thought. Every educational institution is, in essence, an example of the practice of educational ideas. With several of the most important of these institutions Tory had a direct and intimate connection. A large portion of this study is given over to a description of his work in developing these institutions, and a consideration of the character of the education provided. As is the case of most pioneer efforts these institutions have in turn affected the growth and character of others.

Before proceeding to the evidence, some understanding must be reached concerning the phrase <u>educational policy in Canada</u>. The words <u>Canadian education</u> have been used on several occasions already. There is more meaning in these words today than was possible in Tory's boyhood, when there was little enough unity in Canada with respect to education. Section 93 of the British North America Act states: "In and for each Province the Legislature may <u>exclusively</u> make laws in relation to Education." This control of education by the provincial authority was further supported by the listing of provisions in the Act whereby existing regulations regarding denominational rights and separate schools were safe-guarded, and by the trend of Privy Council judgments which have tended to support provincial rights against federal direction. Thus, provincial departments of education control the largest portion of Canadian education, particularly the state-supported

elementary and secondary schools, the publicly supported universities, (including much adult education carried on in Extension Departments), and some technical, commercial and professional schools.

However, two factors have combined to prevent the growth of wide dissimilarities expected to arise from this separate administration by the provinces. There have been successful attempts to achieve a measure of unity throughout all the provinces by the work of such bodies as the Canada and Newfoundland Educational Association and the National Conference of Canadian Universities. Moreover, since Confederation the Federal Government has had to show an ever greater concern with educational matters[1] than could have been foreseen in 1867, and this has had some effect upon unifying the whole system. As will be seen, Tory had no small part in these developments.

In addition to the educational programs supplied by provincial and federal authorities there are also private schools and societies. A much smaller proportion of schools and colleges are under private auspices in Canada than is the case in England, but they are still of some importance. With the most eminent of these, McGill University, Tory was associated

---

[1] e.g. Vocational Education, Dominion-Provincial Youth Training; Canadian Broadcasting Corporation; National Film Board; National Research Council; Education in the Armed Fordes, etc.

for almost a quarter century. The work of private societies in Canada, such as the Royal Society, is also a factor in any discussion of education. Thus, in speaking of Canadian education, that under provincial control, that in which the Dominion gives some leadership and that under private auspices must all be considered.

Plan and Treatment

This study has been in progress for about sixteen months. The task of collecting the data took considerable time, proceeding by three obvious and straightforward steps: one, the laying out of a rough plan on the basis of a series of interviews with men who have known Tory's work intimately; two, the collection of all available primary evidence; three, the collection of secondary materials.

Each of these three steps yielded a substantial amount of material. By the first, through interviews and correspondence with present or former associates of Tory, it was possible to block out all the important areas of work in which he had had a part. This provided a suitable rough plan for the study.

The second step proved to be of most value. Five interviews were held with the subject himself, four of them taking place in his own study where much of the necessary material is found. These interviews served to clear up a good many questions about such matters as the sequence of events, and the reason for certain actions, which had not been clear from

the available data. The measure of assistance provided by these interviews was very great.

It should be pointed out that Dr. Tory is preparing to publish his own memoirs and hopes to have them ready for the press before very long. It is therefore to be expected that he would be chary in passing on material needed by himself for this purpose. Nevertheless, he has been very generous in allowing the writer access to many reports and papers, in particular to a very complete file on the operation of Khaki University and a file of addresses delivered by himself over the past thirty-five years. This material has since been supplemented by collecting other speeches which have been printed or reported in the press, and the books, prefaces to books, reports, pamphlets and other printed works of Dr. Tory. Some of these are in the library of the National Research Council, and in the Library of Parliament. A small but important part is in manuscript form in McGill University. As the Bibliography will show, this material is of considerable bulk although a large portion does not deal with education directly. Much of it consists of the reports prepared for one government or another, particularly during his years in the National Research Council.

Of secondary material there is also a considerable volume. There is correspondence from his former associates, Some books and many newspaper and magazine articles have been written about his work or the work of the institutions with which he was associated. Files of government departments, the

published proceedings of societies, the calendars and reports of the universities, and books on Canadian History have all proved to be good sources. In the case of Carleton College all the early minutes of the organizing committee have been made available from the files of the first acting registrar.

One of the most helpful circumstances is that this evidence, collected from so many different sources, shows a high degree of consistency with regard to such important details as places and dates. This consistency has made simpler the problem of checking upon the reliability of the facts. An extensive sample of the evidence has been quoted in the study and the part included is representative of the whole.

Some explanation is necessary concerning the organization of the study. It will be seen that a large portion of the space is given to a treatment of Tory's relationship with five educational institutions. This is not an unwarranted emphasis; these relationships bulk large not only in the present but also because of their importance for the future. For the sake of clarity and simplicity his other activities are organized into two chapters. His activities in public life are kept separate from those connected with his position as an educator, although both may have been performed concurrently.

That there are some limitations to this study will soon be evident. The subject is both vast and complex. Sixty

years of strenuous and fruitful effort, the building of five great institutions; these cannot be developed to complete satisfaction in the space allotted to this study. For example, the twenty years in which a fully developed university (Alberta) was built on the frontier, and the work of Tory as the organizing president have been described in less than thirty pages. Nor is the data always as complete as one would wish, extensive though it is.[1]

But despite these limitations two facts emerge from the study. It will be established that one Canadian has had a major part in the building of five separate, and somewhat unique, educational institutions, and that he has had a substantial share in developing a public opinion in Canada favourable to the expansion of education and research. And it will be equally clear from this study that the period in which he lived, roughly that three-quarter century since Confederation, has been a time rich in subjects which need further research. Some of these subjects are only touched upon in this thesis and the sources of information for their study suggested. Among such subjects the following are worthy of thorough investigation:

---

[1] As evidence of this it may be pointed out that neither the University of British Columbia nor of Alberta have in their libraries a full documentation of their own history.

A. The development of a provincial university in British Columbia.

B. The relationship of the universities and the professional societies in Canada with respect to professional education.

C. The history and growth of graduate study and research in Canada.

D. The history and growth of Extension Departments in Canadian Universities.

E. The development of educational programs in the Armed Forces of the United Nations.

CHAPTER II

The Times and the Man

Before the accomplishments of Dr. Tory can be understood it is necessary to consider some of the changes that have occurred during his lifetime.

Canada was a very different country in 1867 from that we now know. Many social historians[1] have claimed that there have been more crucial changes of an economic and social nature in this last three-quarter century than in any other period of similar length during the history of man. But for Canada the years have been of special significance as they make up the period of the consolidation of a nation.

At the time of Confederation there were four provinces and about three and a half million people, three-quarters of them living in Ontario and Quebec. At least four-fifths of the total population was rural. Only three cities had a population exceeding 30,000.[2] A large percentage of the people were engaged either in farming or in extracting raw products from the forest and the sea. These basic industries supported some manufacturing and handcraft businesses but these were widely scattered. The farm household was still basically a self-sufficient unit. This self-sufficiency of farm and of small community is best illustrated by recalling that only eighteen percent of the people were engaged in supplying such services

---

1 James Truslow Adams. Frontiers of American Culture (New York: Charles Scribner's Sons, 1944), pp. 99-108.

2 Toronto had 50,000; Quebec, 60,000; Montreal, 100,000.

as government, education, finance, the professions, and the wholesale and retail trades.[1]

Of the many changes since 1867, two, which because of their size and complexity can best be described as movements, will be discussed. The two are related and each has affected the life, the livelihood, and the institutions of all Canadians. One is the rapidly changing and continuously expanding economic organization; the second, that great movement which developed the new lands in the west.

From 1850 on, the manufacturing industry had been growing and was becoming more diversified. The new industrial methods spreading out from England were first established in the towns and villages so that the abundant local supplies of raw materials could be utilized. But with the advent of cheap and improved transportation, and later, with the addition of improved industrial techniques and the perfection of the joint stock company as an instrument for collecting large reserves of capital, there came the development and concentration of industry into large units within a relatively few large industrial centres.

In the first few decades this industrial development proceeded in a relatively smooth and prosperous fashion, though

---

1 Report of the Royal Commission On Dominion-Provincial Relations (Ottawa: King's Printer, 1937), Book I, p. 21.

with periodic booms and slumps. One of these, in the seventies, was even labelled the "great depression". But the slumps were short-lived, for the west was opening up, and foreign capital was attracted to Canada to supply capital goods for this expansion.[1] Railroad building proceeded at a tremendous rate, requiring vast stocks of materials. A phenomenal increase in production, both of raw and manufactured goods,[2] was maintained up until the war years.

These years of 1914-1918 mark a definite break with the past. Canada was now forced to supply herself with many new consumer goods, particularly with food and clothing, a large part of which, previously, she had been importing. Thus a transition ensued from capital development to the production of large quantities of foodstuffs and raw materials generally. This resulted in entirely new conditions by 1919. Gone was the old rural self-sufficiency; a collapse of the wheat market in Europe or an import barrier upon wood-products in the United States could mean hard times for rural and urban people alike. To an unprecedented extent Canada was now dependent upon world

---

1 Grant Dexter. Canada And The Building Of The Peace (Toronto: Canadian Institute of International Affairs, 1944), p. 19.
"In 1912-13 about one quarter of all the labour and production of our factories was engaged directly or indirectly in the production of capital goods. In 1913 foreign investment totalled five hundred million dollars."

2 Donald G. Creighton. Dominion Of The North (Boston: Houghton, Mifflin Co., 1944), p. 394.
Wheat: 1901, 55 million bushels; 1911, 132 million bushels.
Manufactures: 1901, 132 million dollars; 1911, 565 million dollars.

prices which were beyond her power to control. In good years Canadian trade leaped in volume; in bad years lack of foreign trade spelled hardship and suffering for many.

During these years farm acreage had increased very rapidly, from 45.4 million acres in 1881 to 174.8 million acres in 1941.[1] This increase was not confined to the western expansion period but continued during and after the war. And yet the changing economic organization was reflected in a radical transformation in the proportion of rural and urban dwellers. The largest percentage of Canadians were now living in towns and cities.[2]

For many people in the city or on the farm there was little security in the decade after 1929. These depression years have been followed by a different kind of boom period during the present war, one which has produced marked changes in agriculture but which has especially affected the character of our industrial life. Some new centres have become indus-

---

1 F. Shefrin and J. Coke. "People On The Land" (Canadian Affairs, Vol. 1, April 1944).

2 Grant Dexter, op. cit., p. 22:

Percentages of Total Population

	Urban	Rural
1871 -	19.58	80.42
1881 -	25.65	74.35
1891 -	31.80	68.20
1901 -	37.50	62.50
1911 -	45.42	54.58
1921 -	49.52	50.48
1931 -	53.70	46.30
1941 -	55.00	45.00

trialized but there has been a greater centralization than ever before of large-scale factories. With this increase of industrial workers has come an accompanying growth in services. The eighteen percent of Canadians who were engaged in supplying services in 1867 had grown to more than forty percent by 1941.[1] Not only have the types of occupations of Canadians been affected but also the place in which they lived, for the whole western half of the continent had been opened up.

As has been pointed out, the peak of the western expansion movement in Canada took place from about 1890-1913. In 1890 the United States Census had announced that, "in the opinion of the government, the frontier has been closed and ended."[2] This marked the beginning of boom days for Canada, for the largest flow of settlers now went to the Canadian prairies instead of to the American mid-west. There was a sense of urgency about this expansion, a pressure to grow and develop quickly lest precious resources and markets be lost which, now, we can scarcely appreciate. Expansion was as much a mood as

---

1 Report Of The Royal Commission on Dominion-Provincial Relations, p. 22.

2 James Truslow Adams, op. cit., p. 99.

it was a movement. Laurier expressed well this feeling in his reference to the need of new rail line, given before Parliament:[1]

> We cannot wait because there is a transformation going on in the conditions of our national life which it would be folly to ignore and a crime to overlook; we cannot wait . . . They came last year one hundred thousand, and still they come in still greater numbers. Such is our duty; it is immediate and imperative.

This duty of colonization was taken up vigorously by the Federal Government. As Leacock has described it:[2]

> Bountiful harvests and good prices drew a flood of immigrants towards the west, utterly different from any movement seen before. The minister of the Interior inaugurated a vigorous advertising campaign for immigration. Lecturers spoke at fall fairs in the United States and visited the British Isles. Leaflets and maps were sent all over Europe; agencies opened at the ports . . . Immigrants began to move in a flood. As many as 75,000 came to the Western Provinces in 1905, 90,000 in 1906, and in the last four years before the Great War an average of 120,000 a year . . . Saskatoon changed its 113 people to 21,000 and Edmonton's 4,000 increased to 54,000 in the same period . . . It is only by recalling the spirit of the times that we can imagine a country exerting itself to attract so varied a population - Doukabours running naked, Germans founding New Prussia in Saskatchewan, everybody talking everything, schools available for all languages, and people singing Home Sweet Home in all the tongues of Europe.

This was a new kind of land stampede. It was not simply a repetition of the familiar frontier life or a new settlement of European peasantry, alone.

> It was a new feature of the settlement of the north-west in the twentieth century that it did not bring

---

[1] Hansard, 1903, p. 7659.

[2] Stephen Leacock. Canada - The Foundation Of Its Future (Montreal: Gazette Printing Press, 1943), p. 206.

> with it merely the so-called 'working people'. It brought with them the lawyers, the doctors and the clergy, all the round of the learned professions. Alberta and Saskatchewan began where older civilization ends--with Authors' Associations, Browning Societies and lectures on palaeontology. [1]

Because it was not just a movement of the land hungry and the speculator, but attracted men of every class of society from almost every Canadian community, the impact of the movement was all the greater on the rest of Canada. And not only did settlers go from the older communities to the new; the Canadian economy itself was geared to the new demand.

> The settlement of the west, the building of its houses and barns, the provision of its community equipment, the inward transport of its needed manufactures, and the carriage of its products outwards to the markets of the world was a great exciting communal adventure in which all the provinces took a larger or a smaller part. [2]

What, then, has been the effect of these two great movements upon the lives, the opinions and attitudes of Canadians? Perhaps two examples may serve to demonstrate how far-reaching have been the changes. One of these is a considerable transition from the state of mind produced by rural self-sufficiency to that of an acceptance of the social service state. The doctrine usually called laissez-

---

1 Stephen Leacock, op. cit., p. 213.

2 D. G. Creighton, op. cit., p. 394.

faire was widely accepted in 1867.

> An individualist outlook, which relies on the family as the unit of mutual welfare, is nourished in a pioneer society and people readily agree that government action should be confined to the narrowest limits. Accordingly, the principle functions of the state followed the prescription of Adam Smith. Government was thought to have met its purpose when it provided for adequate defense, the enforcement of the general law through the equal administration of justice, and the maintenance of a few essential public works. Within this framework of order provided by public authority, individuals were expected to work out their own destiny unrestrained and unassisted by government. [1]

In Canada the application of this doctrine was somewhat modified, for public funds were often required for railways, harbours, roads and bridges, when private capital could not provide these necessities. Demands from industrialists for tariff protection were another qualifying influence. The first world war produced a further deviation. It brought new economic controls, such as rationing, control against inflation, public marketing of wheat, and a food board. Although the controls vanished after the war the trend was not reversed and the depression and the new war have been marked by a much greater participation by governments in the economy of the country and in social welfare provision. Public pressure upon the government to act in this way has been steadily growing. [2]

---

1 Report Of The Royal Commission On Dominion-Provincial Relations, p. 37.

2 Ibid., p. 111: "The war hastened considerably the acceptance of the philosophy of the social service state in Canada."

A second example is the growth of a concept of Canadian nationality which was first expressed by the Canada First[1] group about 1870. This spirit is evident in the early development of Canadian literature to which Lampman refers.[2] But following the opening of the west this emergent nationalism grew strong and sturdy for a time.

> In this atmosphere of large plans and their successful execution, Canadians began to believe in themselves as a great people. Their work in creating the West gave them a sense of common achievement which marks a nation. They were proud of what they had done and this gave them confidence in the future. Sir Wilfred Laurier merely echoed a widespread conviction when he proclaimed that the twentieth century belonged to Canada.[3]

A somewhat similar belief in Canada and in Canadians was to

---

1 Alfred Leroy Burt. A Short History Of Canada For Americans (Minneapolis: The University of Minnesota Press, 1942), p. 206.

2 D. G. Creighton, op. cit., p. 370:
"Like most young fellows about me I had been under the depressing conviction that we were situated hopelessly on the outskirts of civilization, where no art and no literature could be, and that it was useless to expect that anything great could be done by any of our companions, still more useless to expect we could do it ourselves. I sat up most of the night reading and re-reading Orion in a state of wildest excitement . . . It seemed to me a wonderful thing that such work could be done by a Canadian, by a young man, one of ourselves." Archibald Lampman.

3 Report Of The Royal Commission On Dominion-Provincial Relations, p. 79.

mark the activities of Tory during his entire career.[1]

It is inevitable that some of these modifications in the plan and habits of life and the thinking and attitudes would be reflected in similar changes within the educational system. No attempt will be made, for the purpose of this study, to do more than to sketch some of the trends of these years, particularly those with which Tory has been identified, such as: the effect upon the schools of an increasingly industrialized and urbanized economy, the major additions to educational equipment and curriculum, the question of religion and education, the extension of the public school system, the improvement in the status of teachers, and the development of unity in the Canadian educational system.

During these years there was still a close relationship between religion and education, and this not only in Quebec. But the bitterness with which denominational feuds had been

---

1 D. G. Creighton, op. cit., p. 423.
"The churches, the business groups, the workers had all given their associations a nationalist form and had crossed the continent like governments and railways before them . . . The Canadian Club movement, which expanded vigorously towards the end of the first decade of the twentieth century provided a social and fraternal channel for the spread of the new Canadian national feeling. The popular symbol of this naive, youthful, self-confident Canadian came to be the cartoon figure of Jack Canuck. Jack was a young, clear-eyed, and highly muscular personage, whose rolled-up shirt sleeves, stiff-brimmed hat, breeches, and leggings appeared to suggest a kind of cross between the working clothes of a farmer and the uniform of a trooper in the R.C.M.P., and whose ingenuous and open countenance radiated with honesty and uncorrupted virility, and shining moral purpose."

fought within the Protestant community slowly began to decrease. This had a particular effect upon the development of universities. Many Canadians shared the conviction that the experience of Nova Scotia, where several small denominational colleges had been each obliged to struggle desperately to provide sufficient staff and equipment to do satisfactory work, should not be repeated. The plan adopted at Toronto of a federation of colleges, grouped under a publicly supported university, was in turn followed in Manitoba. During the decade 1905-1915 came the development of three provincial universities in the far west, all of them free of denominational control.

But religion was not forgotten. The separate schools question was a volatile political issue which brought about the defeat of a Conservative government.[1] There were battles in Quebec between the Catholic clergy and those who wished to take away clerical control over education. Sporadic clashes occurred in other provinces over what should be included in the religious instruction given in some schools, over text-books, and over the teaching of evolution in science classes. Still, these were minor skirmishes. On the

---

1 D. G. Creighton, op. cit., p. 377.

whole, changes in economic organization were having a more noticeable effect on educational development than were questions of religion.

Schools and colleges were undergoing a rapid transformation during these years. Teaching methods improved and were systematized. A school experience such as that of Wilfred Laurier in 1852-53 would have been a rarity thirty years later.

> The school in New Glasgow was open to all creeds and was attended by both girls and boys. It was taught by a succession of unconventional schoolmasters, for the most part old soldiers. The work of the first year came to an abrupt end with the sudden departure of the master in April. A man of much greater parts, Sandy Maclean, took his place the following year. He had read widely and was never so happy as when he was quoting English poetry by the hour. With a stiff glass of Scotch within easy reach on his desk and the tawse still more prominent, he drew on the alert and spurred on the laggards." 1

For it was about this period that the pioneer reforms of Ryerson and other educators were beginning to have some effect. The increasing industrialization of central Canada was partially responsible, for from the new middle classes the reformers drew much of their support. Now there was a greater need for the trained specialist, and a steady demand for those who could perform the simple tasks of business. The growth of towns and cities provided tax resources which enabled the equipping of the new and more costly schools.

---

1 O. D. Skelton. The Life And Letters of Sir Wilfred Laurier (Toronto: Oxford University Press, 1921), Vol. I, p. 30.

Gradually the standards of public education improved and this brought an end to many private schools which could no longer match public standards of performance. Emily Carr has described this process as it occurred on Vancouver Island:

> It took a generation and a half for English settlers in Victoria to accept the Canadian public school which they insisted on calling the 'free school'. They turned their noses up at our public schools as if they had been bad smells, preferring to send their children to old, ultra genteel, hard-up English Ladies' Academies . . . But by and by other English settlers began to send their children to the Public School and the High School too; then that old ladies' type of private school of manners faded out of existence because education required a certain standard set by our Public School system if people expected to obtain positions in Canada. [1]

Thus was public education consolidated as the dominant system, although a few private schools remained in every province.

A change in the curriculum content was also apparent in these years, partially attributable to the growing concern that the school should prepare a child for practical life. In 1874 a science room was opened in Whitby and this experiment was followed by the extension of many natural science courses in most of the secondary schools. Manual and domestic arts began to be placed in the curriculum of elementary schools about the same time. Differentiation of courses and the provision of choices of courses became more widespread.

---

1 Emily Carr. The Book Of Small (Toronto: The Oxford University Press, 1942), p. 162.

Agricultural courses and schools had a rapid growth. Following the early work of Croft at Toronto and Dawson at McGill,[1] the development of Science faculties in the universities went forward rapidly. Soon the universities began to devote increased attention to research. The curriculum of all schools was becoming overloaded but still a changing world demanded that the school teach new kinds of skills.

There was much more than a change in curriculum, there was a great increase in school building during these years. This went on constantly until the depression of the Thirties but was particularly noticeable in the west during the flood of immigration. Here the school followed after the first breaking of the soil. Hundreds of new buildings thus had to be built each year. This was a tremendous task but one which was taken up with initiative and vigour.[2]

---

1 H. M. Tory. Ed., The History Of Science In Canada (Toronto: The Oxford University Press, 1942), p. 162.

2 Adam Shortt and Arthur G. Doughty. Canada And Its Provinces (Edinburgh: Edinburgh University Press, 1911), Vol. 20. "In 1876, in Manitoba, 53 teachers taught in 53 schools with an average attendance of 1449 students. By 1911 there were 2868 teachers in 1449 schools with an average attendance of 43,303. . . . Growth in the new provinces of Alberta and Saskatchewan was even more startling."

- Alberta -			- Saskatchewan -		
Pupils	Teachers	School Districts			
1906 - 28,775	924	746	1905 -	896	schools
1911 - 71,044	3,054	3,027	1908 -	1747	"
			1911 -	2873	"

It is not surprising, therefore, to discover that the total costs of education in Canada have risen steeply. Other factors, additional to the new plant developed, have contributed to this increase.

> An equalitarian philosophy demanded the widest possible extension and constant improvement of educational opportunities. The growing complexity of the economy required an increasing variety of skills which could only be supplied by a more specialized and more expensive educational system. Moreover, the predominance of younger people among the immigrants who flowed into the country after 1900 altered the normal age distribution of the population and brought a sharply increasing number of children to the schools in the twenties. [1]

The status of many school teachers during Laurier's school days had hardly been that of a store clerk or hired farm help. Educational leaders, such as Ryerson, saw that improved education could only come with an improvement in the quality of the teachers and in their training. The first compulsory registration of teachers in Ontario came in 1871 in the face of opposition from many of the older teachers. The new normal schools began to give greatly improved training. Another important factor in affecting status came with an

---

1 Report Of The Royal Commission On Dominion-Provincial Relations. Book 1, pp. 39, 106, 127.

Total Expenditure on Education in Canada:

1866	-	$ 1,820,000	1930	-	$119,191,000
1913	-	$ 37,515,000	1937	-	$123,000,000
1921	-	$ 88,057,000			

increasing demand for qualified teachers, particularly from the new schools in the west. This competition for well-trained teachers during 1900-1914 helped to raise salaries.[1] Honour courses given in the university, and specialization in subject matter by teachers, became more prevalent about this same time. Salaries and the social status of teachers continued to improve but the very rapid strides suggested by the above figures were not maintained long and the teaching profession has never received the recognition it enjoys in some other countries.

A large measure of unity in education has been achieved in the past century. Tory himself has recently discussed this point.

> Although the institutions are scattered over a wide area, from the Atlantic to the Pacific, there is a uniformity of curriculum, outlook and purpose running through the whole, regarded as a single system. This may seem remarkable when it is remembered that there are nine provinces in Canada, each with its own educational system, administered from its own capital and by its own educational offices. Certain forces, however, have operated to make this uniformity in diversity substantial and real. [2]

He points out that the effect of organizations such as the Canada and Newfoundland Educational Association and the

---

[1] Adam Shortt and Arthur G. Doughty. Canada And Its Provinces, Vol. 18, pp. 277-403.

	1905	1911
Average male teacher's salary (public school)	$ 514	$ 767
" female " " (" ")	348	518

[2] H. M. Tory. From the Foreword to Educational Institutions in Canada by John E. Robbins (Ottawa: The King's Printer, 1944).

National Conference of Canadian Universities, the exchange of teachers, a similarity of problems and aspirations, and a genuine wish to mould a nation. have all had their part in this achievement.

Thus, in seventy-five years there has developed a nation quite unlike that known by the Fathers of Confederation. It has grown in size, in population, and in importance; its economy has been vastly altered and its institutions have been transformed. In particular its educational system has become extensive and complex, with thousands of schools providing greatly differentiated education but with a thread of unity running throughout which had not been apparent in 1867. It will be seen that Dr. H. M. Tory was identified with a large number of these developments.

Boyhood of Tory.

There was scarcely a more appropriate place for an educator to be born in British North America during Victoria's reign than Nova Scotia. Nowhere else was held so tenaciously a sturdy faith in the worth of schooling, which has so long been characteristic of the Scot. Nowhere else has produced the same proportion of men who have won distinction in the field of education.

Henry Marshall Tory was born in Guysboro County of that province on January 11, 1864, the second of three boys. James Cranwich Tory (later to become Lieutenant-Governor of Nova Scotia) was the eldest and John A.Tory the youngest of the brothers. Tory's ancestors were predominantly Scotch. One of his grandparents had held lowland, High Church, Tory beliefs; the other passed on highland, Low Church, Liberal tenets. These latter principles were those that were held by his mother.

Much has been made, in recent biographies, of the important influence of the mother in shaping the character and the career of noted men. Few better examples could be found of this circumstance than Mrs. Tory. Anorah Ferguson Tory not

only lived for ninety-six years but filled each with tremendous activity. Her keen interest in religion and politics was with her to the final days of her life. Upon her influence and that of the Tory homelife, much importance has been placed by a close associate of Tory in his Alberta days, Dr. J. M. MacEachran:

> In this atmosphere of political and religious intensity, Henry grew up. The whole countryside enjoyed the hospitality of a home ever open to friends and strangers, and many problems of life and death were threshed out in the presence of the young family. The political discussion centred around Joseph Howe on the one hand and Sir Charles Tupper on the other. Here, without doubt, was awakened the interest which the three sons have always manifested in politics, and in questions of public interest generally. It is also perhaps in large measure due to these early influences that Dr. Tory has always been able to be so sympathetic with conflicting points of view, and to exercise at times such a remarkable degree of patience with those who are disposed to be unreasonable, inactive, or hostile, in relation to projects upon which he has set his whole heart. [1]

All three of the brothers have paid tribute to what they learned in their own home, and in particular from their mother. One of the books by Henry has been dedicated to her in words that reveal his own character: "to the memory of my Mother, who taught me that a good cause was worth fighting for and that Life's greatest satisfaction would be found in doing something useful."

---

1 J. M. MacEachran. "Henry Marshall Tory" in The Gateway, student newspaper of the University of Alberta, December 15, 1927.

Each of the Tory children received the best possible education. Schooling commenced in the one-room, "shaked" school-house of Guysboro County. As there was no specified curriculum laid down by the provincial authorities at this time, any particular interests of either master or pupil could be given special time and attention. Henry's bent for mathematics was discovered at an early age. From that time on he received every encouragement to specialize and range ahead in this work. Schooling was supplemented by less formal education, the hard work of the farm and the many forms of recreation which the country afforded--hunting, fishing, swimming, sailing, skating, and snow-shoeing. All of these gave him an added interest and enjoyment in life and contributed to the building of a physical constitution which has given him extraordinary energy.[1]

About the time when he had finished elementary school the Tory family moved to Guysboro town, where Henry took a position as a clerk in a dry-goods store. Three years' attention to this new responsibility, intensified by strong religious influences, whetted an ambition for further school

---

[1] When asked to comment on the reasons for the success which Tory has enjoyed, several of his friends have pointed to his physical and nervous energy, his keen zest in living, and his cheerfulness and optimism, all of which stem from a fine balance of mental and physical health. About the time of his eightieth birthday, when chancing upon a friend who was riding a horse he said to her: "I have never had time for riding but I hope to get around to that some day soon."

work. This amazed his employer who attempted to remonstrate with him: "My dear boy, you do not need any more education for the purpose of this business."[1] But Henry was determined to go on and was encouraged to do so at home. His first step was to attend the Guysboro Academy. Graduation from this school was followed by two years of teaching in rural schools a few miles away. After this experience he returned to the school at home, at some financial sacrifice, so that he might teach the younger members of his own family. He now planned to go on to college.

Although his mother wished him to go to Mount Allison to take Arts and Theology, Henry was persuaded to go to McGill instead. He had already met Sir William Dawson, when the latter was on a geological trip in Nova Scotia, and a relationship between student and principal was established which was to become closer in the latter days of Dawson's life. The decision to go to McGill had important consequences for Tory. Under Dawson's leadership the university had already grown in size and in effective work and the years of most rapid expansion were

---

1 H. M. Tory. Address No. 10. To the Canadian Educational Association. These addresses are listed in the Bibliography.

just ahead.[1]

Tory was twenty-two years old when he arrived at McGill in 1886, and was somewhat concerned about his ability

---

1 Principal Sir William Dawson. "The Canadian Student" (The Annual University Lecture, Session of 1891-92).

> ". . . our number of students has reached 800, and if we reckon the students of the Normal school, which is really a professional college, and those in our affiliated colleges, must exceed a thousand. Since the revival of the university under its new charter in 1852, when the number of students was about 70, and these nearly all in the then well-established faculty of medicine, the students have gradually increased in number, though with some fluctuations, up to the present time and it is an interesting and encouraging fact that their increase has been proportional to, and I believe to some extent determined by, the improvement of our means of instruction, whether in staff, appliances or buildings. The revival and reorganization of the faculty of arts in its new building of Burnside Hall not only in four years doubled the number of students in that faculty, but indirectly caused an increase of students in medicine and law. We had determined when the students in arts should exceed fifty to take possession of the old college building, above Sherbrooke street, and this with the consequent completion and extension of the buildings and improvement of the grounds, caused a rapid increase of students. The Normal school, established in 1857, gave a stimulus to the faculty of arts, by connecting it with the school system of the province. The commencement of our school of engineering and its subsequent extension into a school of applied science not only added students in that faculty, but tended to the increase of others. The provision of a better building and laboratories for the medical faculty has been accompanied with an increase of its already large classes. Our affiliated theological colleges have given us a great influx of new men, and the sudden and marked increase in the members of the applied science faculty in the present session is undoubtedly connected with the princely provision that has been made for its work. I have no doubt that the intended addition of a proper building, with adequate staff and appliances, as a home for our Donalda department (this reference is to Royal Victoria College and work with women) will give a similar impetus to it; and

to succeed in this new life. He therefore gave all his attention to his college work in this first year, which resulted in his taking honours in mathematics and physics. He was able to maintain this standard throughout his student days. Practically all of his tuition fees were supplied by scholarships in the last three years and on graduation in 1890 he won the gold medal in physics and mathematics.

Extra-curricular activities were beginning to develop at McGill during these years and Tory seized upon the opportunities in such programs to supplement his class work. Henry was a keen and regular debater and won considerable success, enough to be chosen class orator in his graduating year. His work as an officer in the student Y.M.C.A. and his leadership of a bible class in a large church continued

---

(Foot-note continued from previous page) - Principal Sir William Dawson -

> the prospect of a new library, with suitable reading and study rooms, now opening to us through the liberality of another of our leading benefactors (Redpath), will give a like and most desirable stimulus to our growth. Thus it seems that Canadian students naturally flock to the institution which provides best for their educational wants, and the lesson is that it is not by boasting or mere advertising that we can attract students, but by making substantial provision for their training."

during his years at McGill. He was actively associated in the founding of the "Rifle Club", and later aided in forming the "Western Club", two large and important early student societies.

After receiving his B.A., Tory took theology at the Wesleyan College, received a B.D. degree, and accepted a preaching charge for two years. But teaching was still the task he felt called upon to do. He accepted a position as lecturer in mathematics at McGill while continuing to study for his M.A., which he received in 1895. His desire to get the best possible training led him to make two trips to England to spend summer months at the famous Cavendish Laboratories at Cambridge. This had an important result, for on his return he was able to supervise the installation of equipment and to help organize the first experimental laboratory work in the physics courses. While continuing to lecture, first in mathematics and physics and later as a specialist in mathematics, Tory still found time for his own study and research in methods of high temperature measurements, for which he received the degree of D.Sc. in 1903.[1]

Three men at McGill had made a decided impression upon Tory. The first was Sir William Dawson with whom he shared

---

[1] Honorary degrees have been conferred upon Tory by ten Canadian universities.

a close friendship in the great Principal's last days. A second was Dr. Clark Murray, Professor of Philosophy, under whom Tory had taken much of his work. Third was Dr. Alexander Johnson, Dean of Arts, a mathematician from Dublin University. In the first few years of the new century, Tory, though nominally an Associate Professor, acted as student counsellor and assistant Dean. Johnson has commented upon his assistance: "Tory has great administrative ability and insight into the requirements of a student body."[1] His life-long association with Dr. Frank Adams, later McGill Vice-Principal, began at the same time.

During these years he also acted as a special kind of extension director. It was the time when McGill was establishing relations with a number of colleges in all parts of Canada and Tory journeyed to British Columbia, to the Maritimes, and to Newfoundland, representing McGill in the negotiations that ensued. Due to his success in developing a University College on a sound basis in British Columbia,[2] Premier Rutherford of Alberta tendered an invitation to him to proceed to Edmonton to develop and preside over a new provincial university there. As student and professor he had spent twenty-two

---

1 Alexander Johnson. This address is printed in the Montreal Star, March, 1908.

years at McGill. He was to hold his new post for twenty more.

During the period of his presidency at Alberta he made several trips through the United States, collecting information and material to aid in the growth of the University. On one occasion, 1913, he travelled as a member of The American Commission For The Study Of Agricultural Credit throughout many European countries. He attended the first meeting of what later became the Universities Bureau of the British Empire and was a prime mover in the organization of the National Conference of Canadian Universities. During the war years he served as director of the Y.M.C.A. educational services, and later, with the rank of Colonel, as director of the Canadian Army Educational Services.

Success in organizing the Alberta Research Council soon after the war led to his election to the Presidency of the National Research Council, which he carried for the first five years in an honorary way. But from the time of his resignation from the University of Alberta in 1928, he acted as full-time President and administrative director of the Council until 1935. During this period he also served as chairman or member of a number of Royal Commissions and in many private societies. In 1942 he came out of retirement to assume the Presidency of the new Carleton College and the Institute of Public Administration, which office he still holds.

These pages have briefly recorded the changes occurring in Canadian life, some of the educational developments with which Tory was associated, and the qualifications with which he undertook his work. The following chapters will examine his relationship to these developments in some detail.

CHAPTER III

Developing New Educational Institutions

i. McGill University College of British Columbia.

While still on the staff of McGill University Dr. Tory had a share in the founding of a new university in the far west. He was never a member of the faculty of this new institution, nor was it officially a university till almost ten years after he left British Columbia. Yet, largely through his efforts, so firm a legal, financial and organizational base had been provided for a college, which was the initial step, that the university was to follow as soon as the time was appropriate. This first task, of establishing McGill University College of British Columbia to give suitable work for the first two college years, was accomplished in the early years of the twentieth century. At this time Tory was acting as a representative of McGill in fostering relationships with colleges outside of Montreal.

As early as 1877 there had been some demand for a university in British Columbia. In that year the Superintendent of Schools, Jessop, "called public attention to the urgent need for providing the youth of the Province with an education which would adequately equip them for their various activities in the life of the province."[1] Not only was there

---

[1] Calendar of the University of British Columbia, Historical Section.

a need of education for teachers, clergymen, engineers, and doctors, but there seemed to be, in addition, an urgent reason growing out of the political situation. British Columbia was seething with unrest in these years as proposals for secession from Canada, union with the United States, return to Crown Colony status, and other measures were being regularly advanced. It was held by some that an institution of higher learning, giving training in common quarters to all young men aspiring to the professions, would act as a force for unity in the Province and would, moreover, stimulate loyalty to British institutions.

But difficulties were many; those that face all new struggling communities with a few extra in addition. British Columbia is a large sprawling province and there are a great many obstacles to normal travel and intercourse. However, gold and trade had opened up many small scattered settlements. A sparse population was spread over many centres with the only concentration around Victoria and Vancouver. More than a quarter of the total population were residing near the latter city. As a result it was inevitable that any services for the entire province would be costly and their administration difficult. Some capital did exist but it was constantly needed for new investment

in the rapidly expanding economy. Then, too, the people of the province were somewhat heterogeneous, although most came from Ontario or England. Therefore there was no strongly unifying educational tradition, and this fact was intensified by the lack of adequate communications which prevented the educated people of the province from having close ties with educational organizations elsewhere. Moreover, another complicating factor was the constant conflict between those on the mainland and those on Vancouver Island. The jealousy was of such intensity that many projects were blocked for lack of agreement on the choice of a site. People living in other localities, too, often little more than villages, were caught up in the enthusiasm so characteristic of this era which led them to believe that their community would soon become a metropolis, and loudly asserted their right to have a courthouse or a university built within their limits. Thus public interest in a university did not find expression in one single positive plan. It is not surprising, therefore, that with but scant resources of teachers and money no serious move was made for several years.

However, in 1890 the legislature passed the "British

Columbia University Act"[1] which proclaimed that all university graduates present in British Columbia at least two months before the Act would constitute the Convocation of a university to meet within four months after proclamation. The Lieutenant-Governor-in-Council was empowered to appoint a Chancellor and Vice-chancellor. The Senate was to consist of: the Chancellor and Vice-chancellor; seven members elected by the convocation; three appointed by the Lieutenant-Governor-in-Council; one each appointed by municipal councils in Vancouver, Victoria, New Westminster and Nanaimo; the Speaker of the Legislative Assembly; the Superintendent of Education; the staff of the University; and members from professional societies. There were to be the faculties of Arts and Science, Medicine, Law, Applied Science, and Engineering. The university was to be non-sectarian and women were to be admitted freely.

But this ambitious plan foundered. The Island versus Mainland jealousy was apparent in the first meeting of convocation and produced a stalemate. A clause which was added as an amendment to the Act in 1891 was the cause of final collapse of the project. As amended, the Act required that a meeting of the Senate should take place within one month of the election of Senators by Convocation. The Chancellor, Dr. I. W. Powell, called a meeting in Victoria on

---

[1] Alexander Robinson. "Education in British Columbia" The Makers of Canada (Shortt and Doughty), Vol. 22, p. 436.

July 2nd, 1891, but a quorum failed to assemble. It proved impossible to get mainland members to come in sufficient numbers for a meeting until the month deadline had passed. Powers of the Senate thus lapsed and this first attempt to establish a university was a discouraging failure.

But, though a disheartening experience, the lessons learned in failure were soon put into effect. The chairman of the Vancouver School Board, Mr. A. H. B. MacGowan, went east to consult with the staffs of leading eastern Canadian universities about the possibility of securing some satisfactory relationship with one of them. McGill University showed immediate interest in this proposal. The reply which he took back to his board from McGill was that a suitable plan would be welcomed, if two special conditions could be met. It was pointed out to him that McGill would have to seek a change in the provincial statute under which it was operating, and that the Vancouver Board should also seek legislative authority for such an enterprise as was contemplated. Special legislation, passed at both Quebec and Victoria, fulfilled these conditions. At Victoria "an Act was passed in 1894 which empowered the affiliation of high schools in the Province to recognized Canadian universities".[1] This was

---

[1] Calendar of the University of British Columbia, Historical Section.

supplemented in 1896 by Section 63 of The Public School Act,[1] providing that

> "any Collegiate Institute Board may enter into affiliation with any one or more of the recognized universities of the Dominion of Canada subject to the sanction of the Council of Public Instruction, which may by its charter and regulations be authorized to admit such boards to affiliation."

Under this arrangement it was permitted to substitute for the Intermediate, Senior and Senior Academic Grades the courses for Matriculation, and the first and second years in Arts respectively. With these provisions secured, Dr. Peterson, Principal of McGill University, visited British Columbia and the formal affiliation was consummated. Vancouver High School became Vancouver College, began University work for the first year in Arts in 1899, and added a second year in 1902. During this latter year Victoria College (Victoria High School) also became affiliated to McGill and began first year work in Arts.

This arrangement worked to the satisfaction of both the school boards and the university. Soon a proposal to extend the plan and develop a full college course was brought forward to McGill by Mr. Lemuel Robertson, who had come from the staff of Vancouver College to do graduate work in Montreal. Robertson first discussed the possibility with Dr. Tory who thereupon corresponded with Principal J. C. Shaw of Vancouver

---

[1] Statutes of the Province of British Columbia, 1896.

College. A meeting was then arranged of Dean Moyse, Principal Peterson, Tory, and Robertson. Tory presented a tentative plan calling for a budget of $5,000-$6,000 which he and Robertson had worked out, both of which were favorably received by Moyse and Peterson. It was agreed that some concrete steps should be taken if the people of British Columbia would approve and Tory was commissioned to make a trip west to further canvass the possibility.

Some explanation should be given for the keen interest in educational development in all parts of Canada, far beyond their own campus, that was shared, at this time, by both the staff and the Senate of McGill University. During the last decade of the nineteenth and first decade of the new century there were phenomenal developments at McGill. Building on the solid work of Sir William Dawson, supported generously by Montreal business leaders such as Sir William MacDonald, new buildings, departments and chairs were added almost every year. This was the period when McGill was becoming the centre of the world for experimental physics and medicine.[1]

While this development at home was proceeding so satisfactorily, it became evident that other parts of Canada

---

[1] Cyrus MacMillan. McGill and Its Story (London: John Lane, 1921).

needed assistance if educational growth was to ensue there. This problem was received as a challenge to McGill. Men there saw in this situation a national need which they believed might best be met by making McGill a truly national university.[1] All other universities in Canada were under political or denominational control and were prevented by these limitations from spreading out in new directions. McGill alone had the freedom, the intellectual, and the financial resources to answer appeals for assistance directed from several provinces at once. Furthermore, it was felt that, as education was entrusted to provincial jurisdiction, some unifying principle must be established to act as the safeguard of national unity. What better method could be adopted than that of bringing colleges in widely scattered provinces under a single national university, a Canadian Oxford, thus unifying college education and setting a national mould upon secondary and primary education through the stamp placed upon the teachers by such training?[2]

Already affiliation had been extended to Morrin College, Quebec; Stanstead Wesleyan College, Stanstead; and St.

---

[1] Annual Report of the Governors, Principal, and Fellows of McGill University, 1908, p. 8.
"It is the aim of McGill University to create a national feeling through education, one which has marked its actions for many years and has become part of its creed."

[2] H. M. Tory. "McGill University in British Columbia" - a private report concerning his work in British Columbia, sent to Principal Peterson. (It is now in the Redpath Library).

Francis College, Richmond[1]; all in the Province of Quebec. In the Maritimes Tory had negotiated an agreement whereby students from Mount Allison and Acadia Colleges were accepted for Applied Science and Engineering at McGill after receiving their first two years' training in the local college. He made another less fruitful trip to Newfoundland with the intention of effecting a similar arrangement there.

How such a development began in British Columbia has already been described. The interest at McGill in this western expansion was very deep. It was recorded in one report:

> Nothing more vital to the interests of the University can be chronicled than the growth of our connection with British Columbia.[2]

The further step now suggested by Tory and Robertson, seemed a logical move to make.

Tory arrived in British Columbia early in the spring of 1905. The months of April and May were spent in visiting each major town and city to interview teachers and business men. In a preliminary report sent from Nelson, Tory observes:

---

[1] Calendar of St. Francis College, Richmond, 1884-85.

[2] Annual Report of the Governors, Principal and Fellows of McGill University, 1904, p. 6.

> I think that I have talked school and college matters with every man in British Columbia whose knowledge would help me to judge opinion on such subjects, and as a result have now a fairly clear view of the whole situation. I have had two sessions with the Executive Council of the Government. I see as a result great difficulty in extending the work of Vancouver College on any basis other than that of assuming control through a specially appointed Board of Management. [1]

He cited many reasons to support this contention. Local jealousies were still strong. Secondary school teachers in British Columbia were already overburdened because of trying to carry a teaching load, under public pressure, that they could not properly bear. One principal in New Westminster in addition to his administrative work, was teaching the entire first year of Arts, University of Toronto, and in one season had taught the second year as well. Many of the school boards were composed of men who did not understand higher education. The teachers, though competent men, were handicapped by the restrictions imposed upon them by the charters of their respective boards. Tory had found that Ministers in the Government had no confidence in the ability of local boards to do higher education. They believed that if this was attempted it would result in heavy additional costs to the province and also feared that a move to establish small sectarian colleges would arise. Moreover, a good

---

[1] "McGill University in British Columbia."

Normal School was needed; it would have to be provincial in character and could not properly be maintained under the Vancouver Board as was the case in the first makeshift arrangement.

Having seen the difficulties and obstacles but also fully aware of the possibilities, Tory was soon ready with a plan.

> The question I asked myself was this: would it be possible to start a university college here in British Columbia after the pattern so well known in England; increase the course of study to meet the present demands; and create the machinery through which it might grow and develop to a full-fledged institution when the increase of population in the province would warrant it? [1]

Tory's first step was to submit a memorandum to the Minister of Education, urging:

> that there should be established in connection with Vancouver College, a college for three years in Arts, namely one year of Matriculation, and the first and second years in the Arts course leading to the B.A. degree; the first two years in Applied Science, the courses to include biology and chemistry. [2]

Students would then be able to go to McGill, get a B.A. in two years, a B.Sc. in Arts and Applied Science in two years, or an M.D. in four years. The board was to be free of local sectional control as it would include the Minister of Education,

---

[1] H. M. Tory. Address No. 1, "The University Problem in Canada."

[2] "McGill University in British Columbia."

the Superintendent of Education, the chairman of the Vancouver School Board, the principal of the College, the secretary of the Faculty, and several representatives at large appointed by the Board of Governors of McGill through consultation with the Council of Public Instruction of British Columbia. This board would have power to impose fees, make appointments and fix salaries. The staff would include the principal of the Normal school, and would consist of eight men in the beginning.

The Government met and approved this memorandum in principle and promised a land grant in aid of the project. The Vancouver School Board also met and passed several resolutions by which they expressed agreement with the proposal to set up an independent board. In addition, financial support was volunteered for the new venture on a scale "at least as generous" as their current expenditure on Vancouver College. The Board also agreed to take care of initial running expenses, and offered assistance in obtaining the necessary equipment.

Armed with these tokens of support, Dr. Tory returned to Montreal. The Board of Governors were well pleased with

his work.[1] On December 13, 1905, the Corporation of McGill University passed a resolution already approved by the Faculty of Arts:

> That the Corporation views with great favour the further extension of academic work in British Columbia and the North West, in connection with McGill University, on the general lines as indicated by Dr. Tory in the report of his investigations presented to the Board of Governors, and expresses the hope that means will be provided to realize it. [2]

As on so many other occasions Sir William MacDonald provided the means, guaranteeing $5,000 each year for three years to start the work. A committee was appointed to submit a proposed draft of legislation to the British Columbia Government and Tory was empowered to return to the west and act on behalf of the University.

The Government in British Columbia were well satisfied with the proposals he brought. No time was lost in preparing a bill and first reading was given early in February, 1906. Not until this first reading did any hitch develop, but at that moment the whole project was enveloped in strenuous, noisy controversy.

From this point of vantage it seems incredible that a

---

1 Annual Report of the Governors, Principal and Fellows of McGill University, 1905, p. 10:
"The operations in British Columbia have been attended with conspicuous success. Mainly through the efforts of our colleague, Dr. H. M. Tory, the co-operation of the Legislature has been secured."

2 "McGill University in British Columbia."

project of such a nature could become a serious political issue and arouse a considerable amount of protest from several quarters--enough so that its success was in jeopardy for many anxious days. Yet opposition came from four different sources. Business men and clergy in Victoria, perhaps stirred because Vancouver was to be the site of the proposed College, tried to raise $100,000 in order to make a counter-proposal to the Legislature, but this attempt failed. Some graduates of Toronto University living in British Columbia made speeches and press statements claiming that McGill was being given an unfair preference by the bill. These were joined by some officials of the Methodist church who claimed that their College (Columbia College in New Westminster) was being slighted and discriminated against by the measure. Political opposition was also strong even though many members of the opposition party privately supported the measure. At this time the Government enjoyed but a three man majority and any issue in which there was any doubt concerning the outcome became a political issue and was fought as such to the end.

For a few days the West Coast newspapers were filled with statements, charges and counter-charges concerning the bill. One opposition meeting was called in Vancouver at which

the most extraordinary assertions were made about the intent of the proposed bill.[1] Some telegrams of protest came to the Government from Toronto graduates in all parts of Canada and petitions were received from the Methodist Church authorities. The newspaper editors also participated in the controversy for a time. An editorial in the Victoria Colonist, February 18, 1906, is of especial interest as it seems to reflect the majority opinion in that city, and because of its forecast of the future:

> The University Bill has created a good deal of interest, and we may even add, that it has been instrumental in creating a situation. The Colonist has not heretofore discussed the question, because we did not desire, by offering any criticism that might have been fairly made, to give the question a sectional aspect. . . . On the face of the bill, it is one solely designed to give corporate rights to an institution to conduct university work in British Columbia. On those grounds we see no objection. . . . So far as Victoria's interest in the question is concerned--that is, as to the location --it is purely theoretical. Though we all know that this city is the ideal site for a university, politically it is an impossibility. The preponderance of the mainland is too great. That is a condition we must face, and all

---

[1] At this meeting, several speakers claimed: that McGill was to be given control of high school education in British Columbia; that McGill was not free but really a Protestant university under sectarian control and would not permit Catholics on staff or board; that it was a foreign institution; that this bill was merely a trick by which the traditions and prejudices of the effete east would be introduced in the west; that the bill was un-British and unBritish-Columbian.

> we can do in regard to McGill University is to see that what is ostensibly a private university, entitled practically to go where it likes, shall not in the effluxion of time be transformed into a provincial university. . . If we are going to have a provincial university by a process of evolution through McGill as the tadpole stage of commencement, we should have due warning. We have no objection to Vancouver or any other mainland city getting a provincial university--if we are bound to have one--in an open competition and in a fair fight, but we do not want them to take it under the cover of darkness.

Tory was anxious to clear up misunderstanding, and spent much of his time in interviewing men to lay the facts before them. One of his visits was to the editor of an opposition newspaper in Vancouver, The World. This was an important interview because on the following day The World came out in favour of the bill:

> Section 8, about which the stoutest battle is waged, permits the Royal Institution to enter into an agreement with any board for the conduct of any part of the higher education work now carried on by such bodies. This clause does not require that McGill College shall have a monopoly of the higher education or that all students who go from the province under the auspices of the Royal Institution shall be assigned to McGill. It merely prescribes that the higher education shall be that of a similar standard to that given at McGill. Any other Canadian university complying with that standard will stand upon an equal footing with McGill. We cannot detect anything unfair in that requirement, and after giving the matter serious consideration the World is strongly of the opinion that the bill should be allowed to become law. 1

Strong editorials also were published by several papers at

---

1 The Vancouver World, February, 1906.

this time, denouncing church influence in the matter and urging that the schools must not be allowed to be subject to denominational quarrels.

But while public opinion, such as was informed on the issue, seemed to support the measure there was still some doubt about whether it would pass in the legislature. The opposition made capital of the point that McGill University was being given a favored position and seemed to be getting control of education in British Columbia. To this, Premier Richard McBride replied:

> Now it was alleged that McGill was to get a preference. Well, if so, she proposed to pay for it, and why should she not therefore get something in return. Honorable members opposite have lost sight of the immense benefits which would be derived by the young men of this province especially in respect of scientific learning for mining. What would be the position if these advantages were repulsed? Toronto University could not offer them; a provincial university could not give them for many years to come. The proposal does not in the slightest degree clash with other universities. The government would hold out both hands to any one who would offer similar advantages. 1

But still, for a time, the decision was in doubt. There was one strong Methodist in the government. Moreover, the small Socialist party which usually voted with the government had turned against them on another bill earlier on the same day. However, second and third readings were carried by a

---

1 Hon. Richard McBride. Debates of the Legislative Assembly, British Columbia, February 1906.

clear majority.[1]

---

[1] There were in reality two bills. The first one read as follows:
"AN ACT RESPECTING MCGILL UNIVERSITY.
WHEREAS it is desirable, in the interest of higher education in the Province of British Columbia, that a college or colleges of McGill College and University be established for the higher education of men and women;
and WHEREAS doubts exist as to the powers of McGill University in that behalf; Therefore His Majesty, by and with the consent of the Legislative Assembly of the Province of British Columbia, enacts as follows:
1. The Governors, Principal and Fellows of McGill College and University may establish, or cause to be establish, or co-operate in the establishment of, a University College or Colleges for the higher education of men and women in the province of British Columbia, and may exercise and enjoy in the said Province all the powers, rights, privileges and functions conferred upon them by the charter granted to them by His late Majesty King George IV in the second year of his reign, and amended by Her late Majesty Queen Victoria in the sixteenth year of her reign."

A plan of organization was developed in the second bill.
"AN ACT TO INCORPORATE THE ROYAL INSTITUTION FOR THE ADVANCEMENT OF LEARNING OF BRITISH COLUMBIA.
WHEREAS it is desirable, in the interest of higher education in the Province of British Columbia, that a college or colleges of McGill College and University be established for the higher education of men and women:
1. William Peterson, C.M.G., L.L.D., Principal of McGill University; the Hon. F. Carter-Cotton, of Vancouver; A. C. Flumerfelt, Esq., of Victoria; and J. W. Creighton, Esq., of New Westminster; together with such persons as they may associate with them for the purpose, are hereby constituted a body politic and corporate, with perpetual succession and a common seal, under the name of 'The Royal Institution for the Advancement of Learning of British Columbia'."

It was also stated that the institution could acquire and hold property for its purposes, establish a college which would give work of a McGill standard for McGill degrees, and take over the work of higher education from other boards if they so wished and if this was agreed to by the Council of Public Instruction.

Satisfaction with the result was expressed in an editorial in the Vancouver News Herald on February 12, 1906:

> It may be well, however, to point out the care exercised by the Government in guarding against anything that might reasonably be claimed as discriminating against any other educational institution or putting any obstacle in the way of the establishment of a Provincial University. That the foundation of a Provincial University, on a scale that would be commensurate with the work that it should undertake is beyond the present financial resources of the Province cannot be denied. This situation will now be changed by the exercise of that liberality and enterprise on the part of the authorities of McGill University which has so frequently been displayed by them in various directions. . . When British Columbia can establish a Provincial university, Principal Peterson said in an interview, McGill will readily retire and bestow upon its successor all the benefits which its action has conferred. That the action of the authorities of McGill is appreciated in British Columbia is beyond question.

Prompt action followed the passage of the bills. A first meeting of the Royal Institution was held in the School Board Room, Vancouver, on Monday, March 19th.[1] The first step was

---

[1] Members present at this first meeting were:
The Hon. F. Carter-Cotton, of Vancouver, president.
J. W. Creighton, Esq., of New Westminster.
Hon. F. J. Fulton, Minister of Education.
Alexander Robinson, Esq., Superintendent of Education.
Wm. Peterson, L.L.D., C.M.G., of McGill University.
A. C. Flumerfelt, Esq., Victoria, treasurer.
Col. Gregory, Victoria.
S. J. Tunstall, Esq., M.D., Vancouver.
Campbell Sweeny, Esq., Vancouver.
D. Robertson, Esq., manufacturer, Vancouver.
Ralph Smith, Esq., M.P., Nanaimo.
W. P. Argue, Esq., B.A., Supt. City Schools, Vancouver,
Frank Eaton, Esq., D.C.L., Supt. of City Schools, Victoria. (secretary.
R. P. McLennan, Esq., merchant, Vancouver.
J. Ramsey, Esq., manufacturer, Vancouver.
J. B. Ferguson, Esq., Vancouver.

the appointment of a finance committee. Immediately thereafter the board discussed and adopted a statement of principle and plan which was published in all the newspapers on the following day.

This was a comprehensive plan[1] with many provisions. It began by stating:

> The Royal Institution, although it has been called into existence through the instrumentality of McGill University, is a British Columbian institution.

Its purpose was stated as being the promotion of higher learning, "especially in those branches of scientific study which lie at the basis of the industrial and economic development of British Columbia." The college was to be non-denominational, without any religious tests for members of the Royal Institution, the staff, or the students. Although the Institution was to remain as a private corporation there was always to be Government representation upon its board. The University College to be established would commence work in the fall of the year in the High School building, giving the first two years of Arts and Applied Science. The complete Arts course was to be supplied as soon as the number of

---

[1] News Herald, March 20, 1906.

students justified such an extension. Several members of the Institution pointed out that money would be required for increased staff, for equipment, and for scholarships to send students east, during the early years. It was agreed that the Theological colleges should be encouraged to take advantage of all courses. The statement closed with a request for support from public citizens in the province.

A report by Principal Peterson, late in 1906, described very clearly the position then held by the McGill authorities concerning the status of the college:

> The time may come when British Columbia may decide to establish a provincial university for itself. When that time comes--if it ever should come--it will have at least a good foundation to work upon, in a college which will have already grown to some stature, and which, while enjoying in all essentials its own autocracy, will have derived manifold advantages from its connection with McGill. [1]

Dr. Tory now busied himself in the necessary work of securing grants which would guarantee the first years of operation, building on the MacDonald gift. These were solicited both from private citizens and from the government. By early 1907 he had succeeded in raising an endowment fund

---

[1] Annual Report of the Governors, Principal and Fellows of McGill University, 1906, p. 11.

of close to $100,000.

With promise of financial support five additional staff members had been taken on the College roll. Work had commenced on this new scale in October, 1906. In the following year there was an increased enrollment and Victoria College also came under the Royal Institution. Several new subjects were added, and the workshop side of engineering was also provided.[1] Slow but continuous growth continued for nine more years. Meanwhile the province was growing rapidly in population and a demand for a provincial university increased. As early as 1908 an Act establishing and incorporating the University of British Columbia and repealing the old Act of 1890-91 was passed. This was consolidated in 1912 and a site selected by a commission which had been appointed in 1910. Preparations were not complete for several more years, however, and the McGill Colleges continued their work till May, 1915.

> When the University opened its doors in the fall of 1915 these colleges ceased to exist, and at the same time the connection of the Province with McGill University in higher education, a connection which had existed for a period of sixteen years and was alike creditable to McGill and advantageous to the Province, was also brought to a close. [2]

But meanwhile Dr. Tory had moved on. Feeling that his work of organization and consolidation was concluded, he left

---

[1] Calendar of McGill College of British Columbia, 1909.

[2] Calendar of the University of British Columbia.

the management of the college in the hands of the Board and its capable principal, J. C. Shaw. Concerning this work of consolidation, the Board of the Royal Institution recorded the following minute, in October of 1907:[1]

> The Board also desires to place on record its appreciation of the eminent services rendered to the College by Dr. Tory. His energy and experience and organizing capacity have been of the greatest assistance to the Board, and to his efforts in no small degree must be attributed the satisfactory progress made already in the work which the college was established to do.

---

1 Annual Report of the Governors, Principal and Fellows of McGill University, 1907-1908, p.11.

ii. The University of Alberta

In one of his last books[1] Stephen Leacock wrote: "The University of Alberta emerged from Fort Edmonton as complete as Minerva from the head of Jove." So it must have seemed to one who observed this growth from the outside. But there is nothing miraculous in the history of the University. It is, rather, a story of foresight, patience and energy. The results, though remarkable, were in keeping with other developments in the west in the early Twentieth Century. Consequently, the chronicle of the University of Alberta offers something better than a miracle. It provides some direction as to the way that future problems in Canada may be tackled.

Little time was wasted in Alberta in 1905! In the very first legislature after provincial autonomy had been granted a "University Act to establish and Incorporate a University for the Province of Alberta" was introduced by Honorable A. C. Rutherford, Premier and Minister of Education. An amendment in the following year authorized the Lieutenant-Governor-in-Council to appoint a president, "to whom was to be given the responsibility, in conjunction with the Senate, of organizing and developing the university scheme."[2] Acting

---

1 Stephen Leacock. op. cit. p. 213.

2 Calendar of the University of Alberta - Historical Sketch.

upon this authority, Premier Rutherford travelled east to select a president, visiting all the universities. Colleagues of Tory at McGill described his work in British Columbia to Rutherford in such terms that he was an immediate choice.[1] Tory left McGill in order to enter upon his new duties on January 1, 1908.

It was a University in name only. The first act had merely created the framework. It stated that the Convocation of the University of Alberta was to consist of all graduates of any British university who had resided in the province at least three months prior to the election of the Senate, and who had registered at least one month prior to this election. Convocation was given the power to elect the Chancellor and five members of the Senate. Other Senate members were to be the Minister of Education, the Chancellor, the President, and ten members appointed by the Lieutenant-Governor-in-Council. The Senate was given control over both business and educational policies.

Meanwhile, by authority of legislation in 1907, River Lot No. 5, containing 258 acres of bush land was secured at Strathcona on the South bank of the Saskatchewan River. Only one building, a decayed barn, existed on the property and no sod was broken until 1909. Tory still remembers these

---

1 F. D. Adams. Address at the unveiling of a portrait of Dr. Tory. See appendix iii.

early days vividly for neither the appearance of the university grounds nor the response of individuals in Edmonton to the plan were very encouraging.

> When I went to Alberta, a site for a university had been bought outside of the limits of the city of Edmonton. I went there alone; there was no building, no staff, and apart from a few individuals, no real desire to see a university develop. One of the most intellectual men in the city of Edmonton said to me shortly after my arrival, "You are not needed here. We are all too busy making a living to think about the development of a university." The reply I made to him, which I remember quite vividly, represents the mental attitude which I had already developed and which I have maintained ever since. I said to him: "Do you think that in the long run it will pay a community to develop only its natural resources to the neglect of its intellectual life, or leave the intellectual life of the community to haphazard development." [1]

Despite the seemingly poor prospects prompt action was taken by Senate and President. At the first meeting of the Senate on March 30, 1908, it was agreed to organize the first faculty to be known as the Faculty of Arts and Science and it was decided that classes should open in September. At the second meeting on July 6 the first faculty appointments were made and four professors named. These were L. H. Alexander, M.A., Professor of Modern Languages; W. H. Alexander, M.A., Ph.D., Professor of Classics; E. K. Broadus, M.A., Ph.D., Professor of English Literature; and W. Muir Edwards, M.Sc., Professor of Science and Mathematics.[2]

---

1 H. M. Tory. Address No. 40. Reply to Dr. Adams.

2 Souvenir of the First Convocation of the University of Alberta, October 12, 1908.

In the fall of 1908 the first session opened in upper rooms of the Duggan Street School in Strathcona. The University on this date consisted of a President, four professors and 37 students, to be increased to 45 before the session was concluded.

One of the first concerns of the President had been to secure a sufficient number of students to justify a university.[1] College education seemed a luxury to young men in the west in these days. The attitude "we are all too busy making a living" which has been referred to above, was very common. It is not surprising that the photograph of the first group of students shows that many were rather mature. Seven girls appear in this first picture among the 33 in the group.[2]

---

1 Dr. Alexander and Dr. Broadus have both described this period in the Gateway (the student newspaper) December 15, 1927.

"He (Dr. Tory) wisely satisfied himself first that there would be a student body; faculties can always be had for the asking but students, they are shy and diffident birds and may not come at all when you throw out the breakfast crumbs."

-- Dr. W. H. Alexander

"Even in the second year of the University, though we lived humbly in borrowed quarters in a public school building, and had netted (I use the word advisedly) only a few dozen students---"

-- Dr. E. K. Broadus.

2 A souvenir of the First Convocation of the University of Alberta.

The securing of a satisfactory faculty was no easy problem. Stephen Leacock writes:

> It is a hidden secret, known only inside colleges, but unsuspected even by college trustees, that the most distinguished university in all the world can be made overnight by gathering to it the most distinguished scholars of all the world. The north-west guessed a part of this secret, and imported, along with its harvest machinery, a working plant of scholarship that brought McGill and Toronto, Harvard, Oxford, and the Sorbonne to the plains of the West. [1]

This quotation leaves the impression that the building of a great university is an easy matter. The relative scarcity of such institutions is proof enough that a very difficult task faced the new president. The problem has been well stated in one of his addresses.

> Here we are confronted with a problem which confronted the first president of Johns Hopkins University. He asked a friend what he was to do in the dilemma: "You cannot have a great university without great men, and you cannot get great men without a great university. What am I to do?" The friend replied: "Your difficulty applies only to old men who are great; these you cannot move; but from the young men of talent, learning and promise you can draw. They should be your strength." Mr. Chancellor, it is from the young men of promise and learning of the continent that our staff has been selected. [2]

A staff of this calibre was only to be found after careful search. Dr. Broadus has written concerning that

---

1 Stephen Leacock. op. cit. p. 213.

2 H. M. Tory. Address No. 2. First Convocation, University of Alberta.

part of the quest which brought to Alberta the future head of its English Department:

> It was across a lunchroom table in a hotel in Boston in the early spring of 1908 that I first met the man (Tory). He was telling me of a university that didn't exist, in a province that I had never heard of, in a country that I had never been to. And then and there, amid an atmosphere of Parker House rolls and staid proprieties, I got an impression which has remained with me ever since as the peculiar essence of Dr. Tory. He had dreamed a dream and there was a passion of fulfilment in him. He didn't quite seem to belong to Boston and he didn't talk Bostonese. He seemed somehow to belong in a place where things hadn't yet been done, and where his restless spirit could loose itself to the doing of them. And he had a way with him which made you want to go along and see him do it. [1]

So satisfactory was this first task of selection that twenty years later three of the original five staff members were still carrying on the work of the university.

The first Convocation was marked not only with the prevailing optimism of the period but with a sense of the responsibility that these pioneers shared in moulding the future. Tory's first presidential address bears this out.

> It is with a profound sense of responsibility that I come before you today for the first time in my capacity as President of your university. Positions of great responsibility and opportunity come to few men and when they do tradition has usually marked out a way, a path well trodden by other men which it is fairly safe to follow. But seldom is it given a man or a group of men to lay the foundations of great institutions, and while doing so, to blaze a path into which an established order will compel other men to walk.

---

1 E. K. Broadus. The Gateway December 15, 1927.

> Three Years ago the Lieutenant-Governor, acting for His Majesty the King and the people of this province, placed upon the shoulders of the Prime Minister and his Ministers the task of making a tradition for the enactment of Law in this part of Canada. With hands practically free, within the limits of the Constitution, they were given an opportunity to show the world what responsible government could do for a country which begins its life with the effect of tradition reduced to a minimum. Similarly, to you, Gentlemen of the Senate and Convocation, and to me as your Executive Head, has been given the responsibility to say what an educational institution starting unhampered by fixed tradition may become. As we build, unless we build so badly that our work must be destroyed, others will build after us. [1]

He was confident that the undertaking would be supported by all the people in the province.

> Men of all political parties have joined together to make this beginning possible; men of all religious faiths have said "Amen" to our efforts. We are starting our work at a time when the university has come to be recognized as an essential factor in the life of every community. [2]

That this optimism of President and Staff was well rooted in conviction was a determining factor in saving the University in the succeeding two years. For these were to be difficult times, ideed. There was much criticism to be faced as is usual with new ventures, especially one so ambitious as a university development on the outskirts of a frontier town. As Dr. Broadus has written:

---

1 H. M. Tory. Address No. 2. First Convocation.

2 Ibid

> Outside of the little faculty there were virtually only two men in the whole province who did not think the establishment of a university in a province only three years old utterly premature. These were the Scotch-Canadian Premier of the Province who had the faith and foresight to make the immediate establishment of a provincial university the cardinal principle of his creed; and the President of the University who had come here to do just that thing, and had the bit in his teeth. 1

To make matters doubly trying a scandal broke out around government deals in connection with the Alberta and Great Waterways Railway. This affair absorbed all the political attention of one entire session of the Legislature. In consequence no supply was voted for the University. The next session met only to receive the resignation of the Government, and again, in a short session, no money was voted. Construction work on the new Arts Buildings had to be stopped. During these hard times an agitation to move the University to Calgary became stronger and more insistent. But the President insisted on going ahead with his plans although the problem of finance was so difficult. Classes were continued and arrangements were made for a larger registration in the fall.[2]

---

1 E. K. Broadus. "Small Beginnings" in Saturday and Sunday Toronto: MacMillan Co., 1935. p. 21.

2 J. M. MacEachran. op. cit. p. 501. "However, the President determined that not only should the work go on, but a residence building should be pushed ahead. Supported loyally by the Senate, he succeeded in making financial arrangements to carry out his plans. When the session opened Athabaska Hall was ready and equipped for teaching purposes with accommodation for 80 students"

That it was possible to proceed with these plans despite the formidable obstacles was partially due to a growing public support which now began to rally to the University. This came about in several ways. Alberta had no graduates as yet.

> But scattered through the province in numbers larger than the casual observer would have suspected, were educated men and women, graduates of McGill and Toronto, of Dalhousie, of Oxford and Cambridge, of the Scottish universities and the universities of the middle west of the United States. If these were not alumni they could at least be made foster-sons; and so Convocation was created, to which every man or woman in the province with a college degree could belong.[1]

Other backing came as the result of early Extension services and still more support because of the very great progress that had been made in the first two years. An editorial in the Edmonton Bulletin urged that all citizens should back up the university authorities because of this satisfactory record.

> From figures recently given out it appears that the cost of the Provincial University for the first year has been $13,159.93. The sum in itself is not large but an equally important factor is that not a dollar of it came from the general funds of the Province nor from the general public....The upkeep of the university has been a charge against special taxes not formerly in existence....That the university has not been made a sink hole for Provincial funds or a burden on the public by no means implies that efficiency has been sacrificed to cheese-paring.

---

1 E. K. Broadus. op. cit. p. 23.

> On the contrary, while no attempt has been made to create a Harvard or a Cambridge, a McGill or a Toronto, the purpose has been kept steadily in mind of creating an institution adapted to the conditions of the day and of the province, and capable of growth and evolution as conditions change.[1]

There were to be many problems and many difficult days thereafter. But by the beginning of the third term the effort that heretofore had been spent in the mere struggle for survival could now be concentrated upon problems of education. By 1910 the university was enjoying the support of a fairly large group of Alberta citizens. Finances were now voted regularly and the agitation for a change of site to Calgary or elsewhere began to disappear as new equipment was continually being added to the college buildings at Strathcona.

The Senate, President and Staff now directed all their energies to a number of new questions, the most important being:

1. It was necessary to amend the University Act.
2. Some decisions had to be made about the standards of education for Alberta.
3. Additions to the curriculum were needed.
4. Growth of the student body and of the curriculum meant that more adequate equipment was necessary.
5. Extension services needed to be developed.

Progress continued in the solution of these until the war.

1 An editorial in the Edmonton Bulletin, December, 1909.

Tory's experience at McGill and in British Columbia in helping to frame legislation was put to good use in developing a new University Act in 1910. Advantage was taken of the recent recommendations of a commission at the University of Toronto concerning a governing body to deal with administration. The new Act,[1] passed by the Legislature in November 1910, set up a Board of Governors who were to be responsible for business management and administration while the Senate was to continue its supervision over the educational work. The powers of Convocation were also

---

1
Calendar of the University of Alberta.
"By the new Act a board of governors was constituted, to consist of the Chancellor and the President of the University, ex-officio, together with nine members to be appointed by the Lieutenant-Governor-in-Council; the functions of this Board to consist of businees management and administration, including the making of appointments to the teaching and office staff of the University, the handling of all University moneys and investments, and the supervision of buildings and grounds. The Senate, by this same Act, was constituted as a body entrusted with the general supervision of the University's educational work. It is defined by the Statute to consist of the Chairman of the Board of Governors, the President, the heads of affiliated colleges, the Deans of the University faculties, all ex-Chancellors or ex-Vice-Chancellors of the University, the senior Principal of the Provincial Normal Schools, and the Superintendent of Education all ex-officio; of faculty representatives, of representatives of all societies whose examinations for status are conducted by the University; and of ten members elected by Convocation. The prerogatives of the Senate include the field of student regulation and discipline, the approval of all educational schedules or programs, and the establishing and conferring of degrees. Convocation is empowered to consider all questions affecting the well-being of the University and to make representation thereupon, to the Board and to the Senate."

outlined. But more interesting than this division of powers was another significant feature of the Act. Legislative authority was provided to all professional societies in Alberta to give over to the University Senate, upon which they would be assured suitable representation, the power, originally delegated to them by the Legislature, of controlling the examinations permitting members of the various professions to practice in the province.[1] Thus the principle of the sovereignty of the university over the professions in matters of education was established. Tory has described how this came about:

> With regard to our relations with the professions a new and unique departure has been made in this province. When the University started to function all the professions of the province were working independently of one another with regulations of their own prepared by their own bodies. This had led to considerable discussion from time to time in the public press as to the justice of a state of affairs which allowed professional organizations to fix standards for themselves independently of public control. The question was finally solved by relating all these organizations definitely in affiliation with the University, and the responsibility for establishing standards of education was put upon the University Senate. In the second University Act, passed in 1910, provision was made for making such an arrangement with the consent of the professional bodies. One by one the professions came into the scheme and today, through the University Senate working in co-operation with the professions, educational standards have been established that have removed all possible grounds of complaint as to the fairness between an examining body and persons to be examined.[2]

---

1 J. M. MacEachran. op. cit. p. 502

2 H. M. Tory. Address No. 3. 20 Convocation, University of Alberta.

A further provision of the Act of 1910[1] was in regard to finances. It was evident to Tory and his associates that a stronger financial base would have to be established before expansion could take place. The new Act specified that fifty percent of succession duties should be turned over to the University Board, twenty percent of the corporation tax, and a portion of the educational tax. In addition, the Board was empowered to borrow money or issue bonds subject to the approval of the Lieutenant-Governor-in-Council, who would guarantee such loans.[2]

Provided with a good constitutional base by this Act the University Senate next tackled the question of standards. Was Alberta to be a small college with standards little above that of a high school or was it to become a real university?

---

1 An article in the Edmonton Journal in June 1914 commented upon this Act.
"In harmony with the elastic and statesmanlike provisions of the Act, President Tory, with the assent of the Senate, has been able to affiliate the Alberta Land Surveyors Association, the Alberta Dental Association, the College of Physicians and Surgeons of Alberta, the Alberta Architects Association, the Law Society of Alberta, the Institute of Chartered Accountants of Alberta, and the Alberta Pharmaceutical Association. It is probably true to say that no such highly unified system of higher education exists elsewhere on the American continent as has been achieved in the Province of Alberta during the past eight years. In the report of the University Commission recently tabled in the Legislature, a warm tribute is paid to what has been accomplished in this matter and of the unification of provincial education under the control of the University in this province."

2 J. M. MacEachran. op. cit. p.502.

If the latter was to be achieved it was necessary to assure three conditions: (1) adequate matriculation standards, (2) good quality in the teaching staff, and (3) freedom from political control of appointments. The last two conditions were met without too great difficulty, but that of matriculation standards required great effort over many years. At the beginning some compromises were inevitable.[1] But it was agreed that improvement was to be affected as quickly as possible.

> With regard to matriculation we determined at the beginning that the standards of matriculation should be the same as that established in the major universities of Canada, and that where students came to us, due to the peculiarities of our school system, fully prepared in some subjects but not prepared in others, preliminary instruction would be given independent of university instruction, for the purpose of completing their matriculation.[2]

Tory had an aim that went beyond this temporary arrangement, and beyond the mere question of matriculation standards, important as these are. The President believed that all educational interests, from kindergarten to the

---

1 E. K. Broadus. op. cit. p. 21.
"It is with no sense of shame that I confess that there were compromises in those days. The only wonder is that there were so few; and if some of the forty-five students who gathered on those attic benches had not been subjected to too rigid an entrance standard, certainly no efforts were spared to help them make up their deficiencies."

2 H. M. Tory. Address No. 3. 20 Convocation.

university should work together.[1] To some considerable extent this was achieved through the work of the provincial Curriculum Revision Committee.[2] In the early stages of this project there was some misunderstanding on the part of a few teachers and superintendents of what seemed to them an invasion of their field by the university. But before long genuine cooperation was achieved and a large number of subcommittees set to work upon different phases of the curriculum. The report that followed was adopted by the department and resulted in a revision of the course of studies.[3] Later a joint Matriculation Board, containing high school and university representation under the chairmanship of the Deputy Minister of Education, was established and this body operated to maintain and improve standards in a very satisfactory manner.

---

1 J. M. MacEachran. op. cit. p. 504.
"It is the constant aim of the authorities that the University should exert its influence over the whole province, and in order to work most effectively in this respect they have endeavored to make it not only the coping stone of the school system but the coordinating power for all the higher interests of education."

2 This point is supported in a private letter from Dr. F. G. McNally, Deputy Minister of Education in Alberta, January 12, 1944. Dr. McNally was a member of the Revision Commission.

3 J. M. MacEachran. op. cit. p 490.
"The work of the committee which consisted of representatives of public and high school teachers, inspectors and superintendents, and of the university, and which was presided over by Dr. Tory, extended over about two years and resulted in the preparation of a report which was adopted by the department of education, providing for a revision of the course of studies."

Simultaneously with this improvement in standards went an extraordinary development of the University, a rapid growth in the number of students, an extension of faculties and departments, and the installation of new equipment of all kinds. It should be noted that the Arts Faculty had been the first established,[1] and not before it was operating in a thorough manner was other work begun. But now growth came thick and fast.

The increase in enrollment during these years was especially marked. One newspaper editorial speaks of this increase as being one thousand percent by 1914.[2] Several buildings had also gone up. Before any construction began

---

1 E. K. Broadus. op. cit. p. 26.
"In both these provinces (Alberta and Saskatchewan) universities were created at about the same time; and because both were prairie provinces, depending upon essentially the same economic conditions, it might have been expected that their university development would have been on parallel lines. Instead a curious paradox developed. The President of the University of Saskatchewan, who had been a professor of Philosophy at Dalhousie, made it his first concern to establish agriculture in the curriculum, on the principle that if the obvious thing were done first all things would be added unto it. The President of the University of Alberta, who had been a scientist at McGill, made it his first concern to establish and foster the Arts curriculum, on the principle that if he did first the thing that was hardest to do in a purely agricultural community, the obvious things would come of themselves. Thus did litterae humaniores generate agriculture, and science become the father of the arts.

2 J. M. MacEachran. op. cit. p. 505.

1908 - 45 students	- 5 staff	1912 - 320 students	- 26 staff
1909 - 82 "	- 9 "	1913 - 433 "	- 34 "
1910 -129 "	-13 "	1914 - 439 "	- 40 "
1911 -185 "	-15 "		

a master plan was drafted in considerable detail. As each new building was added it was built according to this general plan. Three residential halls starting with Athabaska Hall were built first. Instruction and laboratory work were also carried on in these halls in the early years but by 1914 teaching quarters, executive offices, and a library were all located in a main building. One of Tory's first tasks had been to secure books and equipment. He had been given generous assistance in furnishing a library from many sources, particularly in the United States.[1] In addition to gifts all the money that could be scraped from the budget was spent on books and equipment. An editorial in 1914 summed up the rapid growth of the University.

> When the University was founded there was only one faculty - that of Arts and Science. This original faculty has now grown until practically the full scope of modern university work is represented in our midst. There are faculties of Arts and Science, Applied Science, Medicine, Law, a School of Pharmacy, a Department of Accountancy, and it will doubtless not be long until such remaining faculties as Dentistry, Agriculture, and Education are established.[2]

---

1 H. M. Tory. Address No. 23. "Canada and the United States." "In going to Alberta to take up my new duties I visited many of the State Universities and Colleges of the United States. I was told by every one of them that the moment I was ready to receive, they would be willing to furnish me for my library complete sets of all research papers produced by their universities. The department of Education at Washington furnished me with a complete set of the reports of that department. From the geological survey of the United States I received as a free gift copies of all the available official reports of that great department.

2 Edmonton Bulletin, June 15, 1914.

In the Faculty of Applied Science full courses in Engineering were offered as well as Architecture. In addition much research into the industrial and agricultural problems of Alberta had already begun in the University laboratories. Medicine could scarcely be called a faculty in these early years but in 1911 the Provincial Public Health Laboratories were transferred to the University and there was already a close relationship established with a hospital.

The Faculty of Agriculture was not established until 1915 even though the decision to set up such a faculty had been taken by the Senate in one of its very first meetings. Many difficulties had to be overcome before this measure was achieved. Chief of these was the obstacle of achieving unanimity in the choice of a site. It was the practice in many of the American states at this time to place the agricultural college in some other centre than the university, solely to satisfy the ambitions of that other town. The University Senate felt that this would be very unsatisfactory.

> It was clear to us from the first that the only possible way of securing a real university in the Province, capable of doing the highest kind of work was to secure unity of the whole educational scheme, including Agriculture and Education. Our difficulty in this connection was greatly increased by the fact that strife had taken place over the placing of the University in the capital city. [1]

---

1 H. M. Tory. Address No. 3. 20th Convocation.

This question was formally debated at the annual meeting of the United Farmers of Alberta in January 1910. Strong opposition was expressed at the first meeting of the conference to the consolidation of the proposed agricultural college and the University. However the farmers had invited Tory to come and present the point of view of the University. Taking full advantage of the invitation Tory gave a very complete statement of the subject.

In his introduction he said that agriculture had forced itself into the attention of most educationalists, for these men had come to realize that education must be concerned with practical matters, and must help to solve the problems of life as well as to satisfy the desire to know. He showed them that where agricultural colleges had grown up apart from the university farmers and others tended to be suspicious of the standards and these colleges were also slighted by the universities. In addition, this separation led to increased costs and political strife.[1] By having a single institution, he

---

1 H. M. Tory. Address No. 4. "The University and the Agricultural College."
As evidence Tory cited the situation in the states of Iowa and Wisconsin. In Iowa, where the college was separate, the state was compelled to support two institutions and this was very costly. There had been bitter rivalry for public support in and out of the legislature which had only been settled when a common board was provided. By contrast, in Wisconsin, all the people in the state shared in the support of and pride in their university.

pointed out, there is an opportunity for helping to break down rural-urban prejudices through the mingling of students from farm and city in common classes. Moreover, those in teacher training courses were thus enabled to take some work in agriculture, a very important consideration in a province such as Alberta. He reported on conversations with men in both England and the United States, among them men of long experience and wide reputation in teaching agriculture, all of whom agreed that the plan of consolidation was by far the most practicable. An objection had been raised in the meeting that students from farms would not go to the University. Tory refuted this argument by quoting statistics which showed a large increase of students in agriculture in other universities. In conclusion he reported on plans made by the University to serve all the people in the province.

> I can assure you that not the least among the joys which the future has in store for us is that it is to be a part of our task to lighten the burden of your toil and to assist you in obtaining the maximum reward for your life and labour. [1]

At the conclusion of the conference the farmers registered a vote of two hundred in favour of consolidation with seven opposed. As a result of this decision courses in agriculture were soon offered in the University although it was several years before a faculty was organized as such.

---

1 Ibid

Another advance was the bringing together of the the theological colleges. This brought added strength to the University. Tory had previously noted that in the Maritimes the establishment of many small denominational colleges had had serious consequences.

> This tradition, and these early quarrels, based upon religious animosities which have since disappeared have made the growth of a large strong university in the Maritimes probably impossible, at least for a long time. [1]

Recognizing the danger, Tory now worked to prevent a recurrence of this condition. To each denomination he was able to offer a choice site for a college on university property and the resources of the University to assist their work. He challenged them further by pointing out the contribution that each could make to the life of the University.

> State universities have continually been reproached by the church as being "Godless institutions" and President Tory has repeatedly urged upon the churches of Alberta that the most effective way in which they can help to safeguard the higher life of their province is to plant their theological colleges in its midst and exert their influence through them. [2]

By 1913 Alberta College (Methodist) and Robertson College (Presbyterian) were established and others followed soon after. Arts work was given in the University and theology in the colleges under some supervision of the Senate who granted all degrees.

---

1 H. M. Tory. Address No. 1. "The University Problem in Canada"

2 J. M. MacEachran. op. cit. p. 503

In his first presidential address Tory had said:

> The modern state university is a people's institution. The people demand that knowledge shall not be the concern of scholars alone. The uplifting of the whole people shall be its final goal.1

A second objective was that of getting a broader base of support among the people of the province in the difficult early years. Consequently, a great deal of effort on the part of the staff went into Extension lecturing for this program helped in the achievement of both goals. By May 1912 there was a full time secretary of the Department of University Extension, Mr. A. E. Ottewell. But as some of the extraordinary results of this work came during and after the war this subject will be treated later.

The outbreak of war marked the second phase of Tory's Presidency. In these years there was a temporary cessation in the rapid growth of the University. Almost 500 students and half of the professors had left for active service by 1916, and it was not long before other staff members were called to do special government work. The specialization in research which, even at this early stage, marked the work in Science at Alberta had become known outside the province. In consequence several of the professors were called to do experimental work for the war department. So long had Britain, Canada, and the

---

1 H. M. Tory. Address No. 2. First Convocation.

other allied nations depended on Germany for scientific leadership that every trained man was needed.

Tory was himself called in 1917 to a different task, that of organizing educational work in the Canadian Army.[1] This new service had a very strong appeal for him.

> It has never been quite understood why I responded to the call, and I may be forgiven if I state here my reasons. With more students of the University of Alberta in the army than there were in Canada, with fifty percent of the staff also in the active forces of the nation, with the Canadian Army filled with men who were friends, and many of whom were students of other days, the call to see what could be done to help was irresistable. Further, there was this conviction in my own mind, that many of the brightest intellects of the country would be lost to future public service unless they could be brought back into the universities when the war ended. 2

When he first left it was only to make a short survey of the possibilities for education overseas. But it was almost four years before he was able to take up active work again at Alberta.

But it should not be assumed that these were sterile years in the University. It was no mean task in itself to keep the regular classes going but, in addition, some further growth ensued. Agriculture was set up as a full faculty in 1915. In 1917 the classes in pharmacy became a School of Pharmacy. In 1918 Dentistry became a sub-faculty, a Department of Household Economics was created in the Faculty of Arts

---

1 See Chapter III, Section iii.

2 H. M. Tory. Address.No. 3. 20th Convocation.

and Science, and a director of Physical Education for women was appointed. Chairs of Soils, Mining Engineering and Economics were added in 1919.[1]

The third period of his tenure of office following his return from overseas, Tory,himself, has described as "a period of consolidation of the University and the development of research in a practical way."[2] The beginning of this period was characteristic; a thorough survey was made of the University and all its departments so that a revision of the courses of study might be made.

> The general aim of the revision was to secure greater freedom in the election of courses without abandoning in any sense the basic features of a sound education as dictated by long experience.[3]

The development of the "Scientific Association of the University of Alberta" was a significant advance. In the early years a small beginning had been made. Already questions were being forwarded to the University from many parts of the province asking for practical advice about the problems encountered. In 1911 an Industrial Laboratory had been established to provide practical help of this kind. But scientific developments resulting from the war had made such research assistance of much greater importance. The University's "Scientific Association" set to work, as soon as it was formed,

---

1 Calendar of the University of Alberta.

2 H. M. Tory. Address No. 3. 20th Convocation.

3 Calendar of the University of Alberta.

in drafting a set of problems for research. Before a beginning could be made in the solution of these problems additional money was required and the Government was asked for funds. The Ministry was quick to capitalize on this service. The University Farm became an experimental station related to the Department of Agriculture. And the "Scientific Association" was given greater scope when it was merged with a newly created Scientific and Industrial Research Council of Alberta. Two research professorships were granted to the University at the same time.[1] It was this development, fostered to a large extent by Tory, that paved the way for his work with the National Rsearch Council in later years.

Steady growth continued. Agricultural Engineering was added in 1921, and the training of nurses for public health services began in that year as well. Dentistry became a full faculty. A laboratory for plant pathology was provided in 1928 and in the same year a long cherished hope was realized by the addition of the School of Education. During these years the Faculty of Medicine was also developed.

---

1 The first report of the Advisory Council of Scientific and Industrial Research of Alberta gives full recogntion to the leadership of the University in this matter. "The work has been carried on, and can best be continued in co-operation with the University of Alberta." Space for the Council was provided in the University. "In the organization of the University of Alberta the staff of the Research Council constitutes the Industrial Research Department and the Research Council laboratories are referred to as the Industrial Research Laboratories."

The University had been giving some work in medicine for many years. Relationships had been established with a hospital early in 1912 and the provincial public health authorities had transferred their laboratories to the University in the previous year. But no well developed faculty was established until after the war, and then it came only after great pressure.

In 1910 when the Education Act was passed and in subsequent years there was some contraversy between Tory and the medical profession over the question of who should control such matters as the selection of medical students, the prescribed work to be given, and decide the way in which it should be taught. Some doctors felt that the President was meddling with matters which were professional and not the concern of the University, even though the Act had clearly given the University power in regard to standards.[1] Tory had strong views about the responsibility of a university in this matter and had made a very intensive study of all phases of

---

[1] This point has been discussed earlier.

medical education.[1]

During the war no new developments had been possible. But the influenza epidemic at its conclusion was the occasion for a considerable public outcry demanding that the University, as a public institution, should take immediate steps to deal with

---

[1] H. M. Tory. Address No. 33."The University's Function in Medicine."

"The function of the university in medical education became apparent the moment it was recognized that the chemist, the physicist, and the biologist must enter the field of medical instruction along with the anatomist and the physiologist, as men of science and not merely as medical men. Then the university becomes a necessity and not only a necessity but a first necessity for only there are these great sciences taught in their fundamental relations. The university must insist on the fundamental sciences being taught as university subjects, with sufficient intensity to make the student realize that they are not incidental to, but fundamental to a proper medical course; taught by full-time men who are masters of the subject they teach. My memory goes back to the days when physics and chemistry were regarded by medical students as a joke. The courses of study required in these fundamental subjects must be long and continuous courses to afford a firm basis for scientific knowledge. The standards of examinations must be university standards, not special ones designed to help out members of a special faculty....If we are absolutely strict in the matter of intellectual standards I am sure half our task with respect to the quality of men we train would disappear. The University must also function in medicine as the home of research; the university hospital becomes of necessity part of the medical school....

The first step must be the passing of the power of conducting examinations for the practice of medicine over to boards appointed by the university, thus freeing the medical profession from the charge of personal motive."

the situation by creating a medical faculty. Tory's study had revealed to him what an immense, costly enterprise this would be. Still, somewhat against his will, he was forced to act. He agreed to do so only on one condition, however, that there would be money forthcoming to permit the work to be done in a proper manner. To make doubly certain that there would be no mistake he applied to the Rockefeller Foundation for a grant, and was assured that this would be forthcoming if the work undertaken was of sufficient quality. With these safeguards the Senate went ahead with the development of a faculty. But about three years later the anticipated contingency arose. A new government had been elected and there was an immediate investigation of university expenditure with the suggestion that heavy curtailment was to be expected. But by great good fortune, on the very day on which he was visited by the new Prime Minister, bent upon these economies, a very large cheque had also arrived from the Rockefeller Foundation. Reassured by this tangible expression of confidence in the work, the Government quietly dropped the matter of pruning the Medical Faculty and the University was thus enabled to proceed with its growth and development.[1]

---

[1] H. M. Tory. Address No. 24. "Intellectual Cooperation Between Canada and the United States."

Some reference has already been made to the Extension work developed by the University from the first session on.[1] Tory, himself, when later reviewing his life-work, failed to make any mention of his connection with the Extension Department or with adult education. But the decision to begin,

---

1 E. K. Broadus. op. cit. pp. 23-25.

"Meanwhile, the President and faculty began the task of getting into touch with the scattered three hundred thousand, and persuading them that there really was a university in their province. Oh, those days of"Extension lectures!" What a nightmare and at the same time what a revelation they were! We had to keep our regular work going and do justice to it, and we had to travel by vehicle or some little spur-line of the railway to every little rabbit-path of settlement in the province. The railway connections were well-nigh impossible; the hotels were beyond the power of a chaste vocabulary to describe. Sometimes we went to Calgary, the only other sizeable city in the province; but the citizens of Calgary wanted a university of their own and received us with mixed feelings. Sometimes we went down into the extreme southern part of the province, the Mormon country, where the disciples of Joseph Smith had established a thriving colony. Sometimes we followed the drift of the settlement northward, where warily it was beginning to penetrate the edge of the silent places....But the lectures were not without their gratifications. The number of educated men and women, (Scotch, many of them) scattered through the province was surprisingly large. You could never tell, sparse and forbidding though the little settlement might be, what you would encounter there. It was not unnusual to have some shaggy farmer rise after a lecture and bur-r-r a question at you which got to the very heart of your little business, and meant no end of reading and thought on the part of the questioner. And those post-lecture discussions, in uncouth surroundings, and under the light of smoky and sputtering lamps, are among our pleasantest memories."

to continue and to extend the Extension Department all came from the President. Recognition of this fact has been given on a number of occasions by the present director of the Canadian Association of Adult Education, Dr. E. A. Corbett.[1] The success of these lectures and services in Alberta have had a direct influence on the development of similar programs by universities and other organizations all over Canada.

The first few years had been the most difficult. But when, in 1912, Mr. A. E. Ottewell became a full-time secretary of the department, the work increased in volume and importance. The objective in these years, always approached but never quite realized, was to spend ten percent of the revenue of the University in extension work. Lectures, special classes and courses, debating, dramatics, and many other activities were encouraged in every part of the province. By 1914 a newspaper report[2] records that an aggregate of 25,000 had attended lectures, that a weekly bulletin was going to all schools and newspapers, and that 468 package libraries had been mailed to more than a hundred communities giving them material for debates. Travelling libraries were reaching 86 communities at that time and boxed collections, each of 30-50 books, were mailed to many more points. By 1920 this service, despite the war,

---

1 E. A. Corbett in an address to the Citizens Forum, Ottawa, November 25, 1944, said: "Dr. Tory is the father of adult education in Canada."

2 Edmonton Bulletin, June 15, 1914.

had grown to 300 travelling libraries, 15,000 books circulated by mail, and a greatly extended package library of discussion and debating materials. Some short term courses were being given in a few centres and many correspondence courses were offered. Most interesting of all, for such a time, there were several hundred boxes of slides and 100 films in a film library; all this by 1920.[1]

It was at this time that Dr. E. A. Corbett arrived to take over the supervision of the extension work. In their first interview Tory described how the Extension Department fitted into the plan of a publicly supported university.

> This establishment in addition to capital expenditure in buildings and equipment costs the people of Alberta over half a million dollars a year. Many of them will never see the place, much less have an opportunity of attending or having their children attend its classes. Yet we want the citizens of the province to feel that the University belongs to them, that it exists to serve them. The time may come when the existence of a university will depend on the public's assurance that its thinking and research are vital to the community. The job of the extension department is to find out from the people what the university can do for them beyond the classroom and the laboratory. 2

The years that followed witnessed a further expansion in lectures, study groups, pamphlet libraries, travelling libraries, movies and slides.[3] The department continued to

---

1 Report of the Extension Department, 1920.

2 E. A. Corbett. "But is it Education?" Queens Quarterly Winter, 1941.

3 Report of the Board of Governors, 1928-29.
"Total aggregate attendance at lectures etc....299,523
Total circulation of books, pamphlets etc.... 33,488
Total circulation of department bulletins 28,252

utilize the newest educational tools. It was one of the first universities in the world to install a radio broadcasting system.

In his last address to the University the retiring President was able to report:

> It is something to be able to say that the University influence, through the Extension Department has been reaching fifty percent of the homes of the Province of Alberta, and now that we have our regular broadcasting station with our weekly lectures on practical subjects, it is possible that in the very near future a large number of homes will be influenced for betterment through the activities of the University.[1]

He could, in addition, have claimed that some homes in other provinces had benefitted, for this successful work had been the model for that in several other universities.

For four years Tory held the Presidency of the National Research Council as well as his post in the University. But when the Federal Government agreed that the Council should be adequately supported and given the resources of a laboratory system, Tory decided to give full time to the development of this new enterprise. For this reason he relinquished the Presidency of the University of Alberta after twenty years in office there.

---

1 H. M. Tory. Address No. 3. 20th Convocation.

By this time, 1928, the original thirty-seven students had grown to 1,556 and the rented top-floor of a public school given way to a well planned group of university buildings. Staff associates and others in a position to judge have given Tory much of the credit for this growth. Chancellor Rutherford stated in a letter to the students: "The University of Alberta has made a real and lasting progress in the twenty years of its existence - progress due in large measure to the hopeful wisdom and tireless energy of President Tory."[1] The succeeding President, Dr. R. C. Wallace said:

> In the twenty years of Dr. Tory's presidency of this University there has been built up an institution which bears the mark of his administrative genius, his pioneering courage and his sound knowledge of men.[2]

Both Edmonton newspapers commented, in editorials, on this record.

> What he has accomplished since undertaking the task twenty years ago of organizing the University is, it is safe to say, unparalleled in the history of Canadian education. Under his leadership the University has developed from small, and far from auspicious beginnings, into one of large proportions and the greatest usefulness. The place that it has made for itself in the life of the province and the standing that it has acquired in the academic world hardly needs to be stressed. It is an enduring monument to his ability and never flagging energy. A better combination of broad vision and practical insight is seldom found in one man. Alberta was most fortunate in securing his services and is under an immense debt to him.[3]

1 The Gateway. December 15, 1927.
2 Report of the Board of Governors, 1928-29.
3 Editorial in the Edmonton Journal, April 24, 1928.

Special tribute has been paid to Tory by his staff associates, in particular by Dean W. A. R. Kerr.

> Within the University, as nowhere else, we have reason to be aware of his quite unnusual power to win and hold the confidence and affection of his associates; here, as nowhere else, we appreciate his long view and his sense of relations in the shifting problems presented by men and events; here, as nowhere else we know that, while well able to defend his own opinions, his mind is always open to new ideas and considerate of the viewpoints of other people. [1]

Dr. W. H. Alexander has provided a short but memorable description of the character of his work in Alberta.

> But the very best thing that we can say about the President's regime as it closes its second decade is that he has built up an institution with a mind and soul....The University of Alberta has in these twenty years grown in a way which the President then foresaw but which we used to regard as the hallucination of an amiable mind gone wrong on one tack. As a matter of fact, what we thought hallucinations, were really visions. [2]

The students had the last word and it was perhaps as great a tribute as any other. They named their skating rink after him!

---

1 W. A. R. Kerr. The Gateway. December 15, 1927.

2 W. H. Alexander. The Gateway. December 15, 1927.

iii. Khaki University

A remark by the Right Honorable Lord Fisher, British Ambassador to Washington in 1919, caused some surprise at that time: "Education," he said, "was really the greatest discovery made in connection with the war."[1] He was referring partly to the stimulus that was provided to adult education through the success of the army classes and partly to the improvement in morale and fighting qualities noted in the army after the introduction of an educational program. Yet, except for the schoolmaster branch of the Royal Navy there was no regular educational work among the troops of the Allies at the outset of war in 1914, except for regular military drill and training. At the conclusion of the war, four years later, each army of the Empire had a flourishing program and these of course have been re-introduced in the present war. This change has come about partly as a result of the success of an educational effort in the Canadian Army known as the Khaki University.

---

1 Quoted in "Khaki University" Montreal Standard, 1919. The article adds:

"The Khaki University was one of the most interesting developments of the War and one of which Canadians have special cause to be proud. Most things connected with the great conflict were destructive in character, but this was a great constructive movement; being at the same time a conception so striking in character that when once seen in action in the Canadian forces it was adopted in rapid succession by the Australians, New Zealanders, South Africans, then by the Imperial Army itself and finally by the United States. In the standing army of Great Britain this educational work has now been made part of the regular training of every British Regular."

Like many another enterprise, the beginning of this work was small and inconspicuous. It began in a citizen army, the Canadian Corps, where there were no strong army traditions nor the inhibitions which sometimes accompany tradition and prevent experimentation. The work was first started by the Canadian Y.M.C.A. in England.[1] The idea had arisen during a staff conference of the officers of the Y.M.C.A. in London[2] when the discussion ranged around the results of their recent lecture program. Some of the finest lecturers from both Canadian and English Universities had been sent on tour to Canadian Army camps all over England and France, and even though on many

---

1 C. D. May. "Khaki College" in The Canadian Magazine, May 1918.
"Education has always been one of the bulwarks of the Y.M.C.A. With peculiar foresight in the present instance, seeing the great need for action now rather than after the war is over, the National Council last year sent Dr. H. M. Tory, president of the University of Alberta to England to report on the possibilities of giving every Canadian soldier over there a chance to study with facilities somewhat in keeping with what he would have had at home."

2 Report of the Ministry - Overseas Military Forces of Canada. (London: His Majesty's Stationery Office, 1918) p.470.
This has also been described in letters to the writer from:
Dr. E. A. Best - Y.M.C.A. officer in France in 1916-18, now President of Springfield College, December 1943.
Major J. W. Beaton - Senior Officer, Canadian Y.M.C.A. War Services, Feb. 5, 1944.

occasions these lectures were in direct competition with troop shows and entertainment held simultaneously in the same camp, the attendance was in the thousands. More striking was the demand that had been stimulated for books and for more regular lectures. Out of the staff discussion arose the idea of providing regular courses for the men, many of whom had been obliged to discontinue their education by reason of their army service. Funds were or could be made available, it was felt, but there seemed to be no officer who could then be released from already pressing duties to explore the idea further and draw up the plans. It was decided that someone from Canada should be invited to come over to give the necessary direction.[1]

The choice of Tory was dictated by three considerations. His record as a pioneer educator and his long service in the Association were favorably known. In addition he had recently completed for the Y.M.C.A. National Council a report on the

---

1 Ibid. p. 504
"The need for a special effort among army troops, so long withheld from the advantages of the home schools and colleges, induced the Canadian Y.M.C.A. to bring to Europe Dr. H. M. Tory, President of the University of Alberta, to investigate the opportunities for furnishing some scheme of education of which the Canadian soldiers could avail themselves. This idea developed into the Khaki University." Also note the Address by H. M. Tory in the Appendix.

needs of returned men and how they were being met at that time (1916)[1]. Tory accepted the new task and arrived in England in July 1917. He then made a thorough tour of camps in both England and France, inspecting many Y.M.C.A. classes.[2] On the conclusion of a six weeks survey he prepared a report for the Executive Committee of the Association.[3]

As this report shows, he first satisfied himself that the need was genuine. The first unique experience at a camp at Whiteby where two hundred men asked, at the conclusion of a religious program, for special courses to fit them for leading useful lives after the war, had been repeated in several other camps. Moreover he found that the officers, especially the junior officers, were not only in favour of such an undertaking for their men but wished to benefit from it themselves. He

---

1 Special Report Concerning Men Discharged from the Canadian Army. Prepared by H. M. Tory for the National Council, Y.M.C.A. 1916.

2 These Canadian Y.M.C.A. classes now had an aggregate attendance of 300,000 a year and were growing steadily.

3 Report of an Educational Program for Soldiers in the Canadian Army, 1917.

therefore developed a plan of a broad program designed both to meet immediate requirements and for the period of demobilization. His observations in the previous year, made while preparing the report concerning discharged men, had convinced him that the period of demobilization would be a trying one if there were not some such provision for the men. For immediate needs his report favored the organization of a scheme of popular lectures, the promotion of small study groups within the units (similar to those already being conducted by the Y.M.C.A. and by the chaplains in religious classes), the promotion of reading groups in tents and billets, and a library service. The topics he suggested for discussion were those which would give a better understanding of the war and the nations involved, with the addition of suitable material related to life in Canada after the war. Wherever possible this material was to be presented with the aid of lantern slides, maps, diagrams, and other such teaching aids. Good books were to be ordered, even if this meant a smaller total number of volumes. The report concluded by pointing out that the demobilization period would require a much more ambitious and comprehensive plan, including the provision of courses on a university level.

This report was accepted with enthusiasm by the Y.M.C.A. and while plans were being made to raise funds to carry out the recommendations Tory was invited to become director. But first he had to return to Canada to secure a leave of absence from the University of Alberta, and to get support for this educational work from Canadian universities. This latter important assignment was accomplished with despatch:

> "Since my return to Canada, the scheme has received the endorsation of all the universities consulted. It will, in course of a few weeks, be laid before the remaining universities of the Dominion. There is every reason to believe that the fullest co-operation will be given. The plan has received the unqualified approval of Sir Robert Borden, the Prime Minister of Canada.[1]

The Universities agreed[2], to appoint an advisory board, (to be headed by Sir Robert Falconer) that would be representative of the universities, to provide additional teaching power, and to accept the certificates of men who would return from overseas, providing that the work they had completed while in the army was of an equivalent grade.

While Tory was in Canada making these arrangements, the educational work in Britain was progressing under the direction of Captain McKinnon of the Chaplains Services and a number of Y.M.C.A. officers. Some work had also begun in France.

---

1 H. M. Tory. "A Khaki University for Canadian Soldiers" in the University Magazine, December 7, 1917.

2 Report of the Ministry Op. cit. p. 473

Because of the size of the undertaking in Britain and the need for co-ordination, a plan setting up a separate educational section under a Military Education Committee, appointed by General Turner, was adopted. The formal relationship of the Y.M.C.A. to this new work which was now to be carried on under the distinctive name of Khaki University was also worked out. The Y.M.C.A. while relinquishing control of the project agreed to continue to supply the means by which the work could be carried on.[1] Thus, when Tory arrived to commence his new duties

---

1 Charles W. Bishop, The Canadian Y.M.C.A. in the Great War (Toronto: Printed for the National Council, Y.M.C.A.'s of Canada, 1923) p. 103: "That the National Council of the Y.M.C.A. having had an important part in originating the Khaki University has undertaken to assume towards the whole educational work overseas the relationship of a co-operating agency:

1. by loaning secretaries from its staff for various functions in the educational organization as requested.

2. by placing its purchasing and supply department at the disposal of the Khaki University for the securing and handling of supplies and equipment.

3. by placing its Accounting Dept. at the disposal of the Khaki University for the keeping of its books and the handling of funds.

4. by undertaking to secure in connection with its war Service Campaign in Canada the funds required for the Khaki University on the basis of the budget drawn up by Dr. Tory."

in January 1918, he found some organization, a guaranteed budget, and most important of all, some means of getting the transport and supply which is always a serious problem in working with a mobile army. With the assurance of support which he had received from Canadian universities he believed that the time for expansion had come.

Further organization was now pursued energetically. By May 1918 there were schools in the centres of Seaford, Witley, Bramshott, Shorncliffe, Epsom, Basingstoke, Bexhill, Sunningdale, Buxton, and London, and there was also a correspondence department. General arts subjects had a registration of 2,789; engineering subjects, 1,503; commercial subjects, 2,351; and agricultural subjects, 1,365; for a total of 8,006 registrations. Popular lectures in this six months period totalled 849 to an attendance of 185,156 in England alone and 93 libraries were established in schools and Y.M.C.A. centres in France and England.[1]

In France work had been going on in some camps under the direction of Professor Hurd of the YMCA, in others through senior officers of the Third Division. In a move of co-ordination the Y.M.C.A. program and staff was turned over to the University of Vimy Ridge under Captain Oliver and this famous

---

[1] Ibid. p. 345

institution began its notable service right in the battle area, halted only by the great German offensive of March and April 1918. On this occasion Director Oliver stated: "The University of Vimy Ridge still exists but our books are packed and stored. As soon as the little business of fighting is over we will carry on again."[1] Continuity of class work was suprisingly good considering such hazards to supply and to class schedules. The character of the work of this period has been described by one who visited the classes.

> These wartime colleges are thorough, both in purpose and equipment. They have a chancellor, a president, a senate, a staff of professors, a brigade school, other features common to most colleges, and some that are peculiar to themselves.[2]

It was at this time that officers from the Imperial and American armies came to inspect the educational work, and soon began to

---

1 Ibid. p. 199

2 C. D. May in the Canadian Magazine - May, 1918

develop similar classes among their own forces.[1]

In the late summer of 1918 re-organization and consolidation of all the work in both England and France took place. The educational work of Khaki University became the "Educational Services of the Canadian Overseas Forces" under the General Staff of the Canadian Army. This was done by a Government Order-in-Council of September 19, 1918.[2] The government made no direct grant of money to the Educational Services,[3] but authorized the transference to the services from other army units of "two hundred and forty officers and other ranks for the purpose of organization and teaching in the newly constituted Educational Services."[4] The establishment for

---

1
Interim Report of the Khaki University of Canada, July 9,1919.
"The Khaki University of Canada has been the pioneer of an educational movement which, it is believed, will have a lasting significance. Its influence has spread rapidly not only in the British Army groups - the Imperial Forces - the Australian, New Zealand and South African, but also to the American Army. All have been generous in their acknowledgment of the Canadian as the pioneer organization."

Also see Charles W. Bishop. op. cit. p. 548

2
Op. Cit. Report of the Ministry, p. 475

3
The financing and the supplying of most of the equipment and transport continued to be performed by the Y.M.C.A.

4
In addition to securing from the Army many men who had previously taught in Canadian universities, some men came from universities in Canada to England expressly to do this work.

France was to be ninety officers and hundred other ranks. The administrative staff now consisted of: Col. H. M. Tory, Director of Educational Services; Lieut.-Col. Frank D. Adams, Vice-Principal of McGill University, Deputy Director of Educational Services; with Majors McKinnon and Gill as Assistant Directors for England; and Lieut.-Col. Oliver as Assistant Director for France. This re-organization was just completed in time. The Armistice, six weeks later, brought new opportunities but also grave new responsibilities.

The demobilization period was a tremendous challenge to educational services for two important reasons; the one, positive, the other negative. It was a time of preparing citizens-soldiers for their return and readjustment to civil life; in itself an educational process. Moreover, it was a time when the restraints of army discipline and of the long period of waiting to be demobilized after action had passed made men so restless that serious rioting broke out at Kimmel and other centres. An educational service was one of the best means for keeping men so engaged in worthwhile pursuits that the interim could become a period of valuable training rather than of frustration. For security reasons the full story of this period has never come out in detail but the Khaki University held an honoured place in maintaining good order and morale among

Canadian troops.[1]

At once a most elaborate educational organization was developed, in Britain, in France, in Belgium, even in occupied Germany. Schools were enlarged in the regular camps at the places already referred to, and in addition new schools were begun at Bovington, Gooden, Kerrimuir, Orpington, Ripon and Ripon Area, and at several centres in London. The correspondence section and the Extension Department were both greatly extended. Some instruction in reading and writing was provided for illiterates and there have been many touching stories concerning men who read or wrote their first letter from home in these classes. For those who had had some previous education there were choices of agriculture, elementary enginaering, commercial, and university subjects. All of these were taught by the most practical methods and every opportunity for study by actual experience was utilized. Many men were given practical farm training on good stock farms in south England and special farm machinery was brought in from Canada for actual demonstration and practice.

At Ripon arrangements were concluded in the South Camp to provide university grade work. Officers and men wishing to take

---

[1] This interesting period is discussed in the memoirs of Dr. Tory, as yet unpublished.

these courses were transferred and attached to the Khaki University there.

> This was really a Canadian University carrying men through the regular courses of the first and second years in the Faculties of Arts; Applied Science and Theology and through the first year in the Faculties of Law and Medicine. There were eight hundred men in this unit. For men who had already completed the first two years in a Canadian University the Khaki University made arrangements for the continuance of their courses in one of the British Universities. Three hundred and fifty-five men were placed in such courses. Here the university had thirty or more standard huts, grouped together in a block. A large double hut was built and equipped as a library. The Faculty of Theology gave their lectures in the Ripon Theological College which was situated near the camp.[1]

A list of the directors of departments at Ripon will give some estimate of the quality of the teaching.[2]

A sample report of one school in London for May 1915, gives a good impression of the kind of work going on although

---

1 "A Khaki University" in the Montreal Standard, 1919. This is also discussed in Worlds' Work, January 1919.

2 Charles W. Bishop. op. cit. p. 544. Organization of Khaki University at Ripon:

Department	Head		University
History	Professor	Wrong	Toronto
Mathematics	"	McKillan	Alberta
Classics	"	Rose	McGill
Modern Languages	"	Sonet	Alberta
English	"	MacDonald	New Brunswick
Drawing	"	Burgess	McGill and Alberta
Physics	"	Rimmer	Birmingham
Chemistry	"	Cowper	London

it had not reached the peak which was to follow the Armistice.[1] But this expansive program did not proceed without many difficulties. A report from the Shorncliffe

---

1 Report of Khaki College, London, to Colonel H. M. Tory, May 1918.

Subject	Registrations	Hours	Total Attendance
Agriculture	47	13	344
Agricultural Bookkeeping	22	3	50
Agricultural English	5	3	12
Bookkeeping, Elementary	43	8	232
" Intermediate 1.	8	6	15
" " 11.	5	10	20
Shorthand	11	8	49
Economics	31	8	170
Commercial History	5	5	16
French Senior	10	5	30
French Conversation	6	5	21
Spanish	10	6	44
English Literature	56	5	425
Geometry	19	4	70
Algebra and Elementary Mechanics.	19	4	70
Practical Engineering	19	10	67

\- - - - -

Summary for May

Number on register.....260
Hours of teaching.....103
Total Attendance.....1655
Hours of private tuition..97
Registration for sports..318

Camp mentions some of the problems encountered.[1] The obstacles in the way of securing sufficient books and pamphlets was another matter which was so serious that for a time it threatened curtaiment of the entire program. It proved almost impossible to import these educational tools so it became necessary to prepare and print them in England after a

---

1 Report of the Shorncliffe School to Colonel Tory, May 1918.

> Work to date has been valuable mainly as groundwork. Considerable numbers of men have expressed their wish to go on with more work of this kind, and very many young fellows have been able to do some invaluable 'brushing up' on school subjects. A great need is found for more work of Public School grade; many ofnthe men registering in courses are found to need grounding. Nearly a thousand men have shown an interest in this opportunity. All kinds of men are being reached. It is noteworthy that business courses and French are very popular....and these are not frequented by men of the academic type. There are, however, quite a number of school (high school) boys trying to complete junior matriculation. There are middle aged men who read ordinary English with difficulty and there are keen young fellows looking ahead to the days when they will have to resume civilian employment. This area presents some special problems. Unless our position becomes somewhat more certain we have ample teaching power, but with any increase beyond the present, with large new classes opening in Etchinghill Hospital, we could do with several new teachers. If we can be sure of a teaching staff we can go ahead arranging for accomodation for classes. With both elements unstable we are handicapped. We are working at a considerable disadvantage even now, with teachers being removed. Our two best courses in the Shorncliffe School were practically broken up recently with the removal of teachers. It is bad enough to have classes 'cleaned out' twice in three weeks by drafts, but the repeated loss of teachers is almost fatal. We can carry on here just now, with the diminished area, but if we are to extend the strengthening of the teaching staff is a sine qua non."
> (The problem of transfers was simplified after the Armistice)

special priority for use of paper was secured. More than $200,000 was spent on books and pamphlets. alone and 250,000 books and 1,500,000 pamphlets were used, 67,000 of which were all that it was possible to import from Canada and the United States. Law pamphlets were especially prepared for the Canadian law students by certain barristers in London.[1]

Tory, in his first report to the Y.M.C.A. in 1917 had pointed out the need for normal training, medical instruction (particularly the application of new facts discovered through battlefield experience) legal training and physical education. All of these were now provided in one form or another. He had placed strong emphasis on the use of slides and films, and on securing apparatus for experimental work in the sciences and agriculture. Special stress was also laid on the necessity for a proper library service and a full Extension Department, which, more flexible in organization, could serve some of the remote areas that otherwise would have been neglected. His director of Extension at Alberta, Captain A. E. Ottewell, established this latter service throughout most of the stations where Canadian troops were established. The Extension lectures thus organized reached an aggregate attendance of 641,137 before the work was brought to a close.[2]

---

1. Charles W. Bishop. op cit. p. 345.
2. Ibid p. 347.

One other project, though it is not especially significant in itself, is nevertheless an indication of how comprehensive was the work that was undertaken by the University. This was the special department of Home Economics, provided for wives and fiancees of soldiers to help them prepare for their new experience as settlers in Canada. The report of June 1919 shows 243 registrations in the London area taking such courses as millinery, tailoring, dressmaking, embroidery, home upholstery, infant care, home nursing, first aid, boot repair, several classes in cooking, laundry work and agriculture. These practical courses were supplemented by illustrated lectures on life in Canada.

One of the most interesting "extra-curricular" projects was The Beaver - "A Live Weekly For Canadians in Khaki Dealing with Demobilization and Reconstruction." This was the official organ of Khaki University and was published monthly between December 1918 and June 1919. The college at Ripon had their own newspaper for several months entitled the"Khaki Varsity." Sports were also prominently featured in every camp and tours and educational trips were arranged on every possible occasion in connection with railways, mining and electrical engineering, cold storage, fishing and other subjects. Another special service was in establishing the government information bureaus in the same buildings as the schools of Khaki University, thus building a link between the men in England

and the schools and agencies at home in Canada.

All of these special features were not only of value in themselves but were of some considerable importance in making the re-adjustment of men in the camps somewhat easier, as has been recognized officially: "A gratifying result of the combined programs (of the Khaki University) has been the very great interest taken by the men in the various schemes for resettlement after the war."[1]

As might be expected and as evidenced by reports such as that of the Shorncliffe school, the quality of work done varied a great deal in the different centres. Some men were able to get a year's standing, a few found it possible to complete even more, but a great many were not so successful. The great value in this work, however, was not in the amount accomplished at that time but rather in the stimulation of men to make a start in preparing themselves for the civil life to which they were returning. Many who were unable to complete even one course have mentioned that this small beginning gave them a determination to go on.[2] Large numbers have been influenced in this way as we see from the records that

---

1 Report of the Ministry - Overseas Military Forces of Canada p. 580

2 A successful lawyer living in Montreal writes in a private letter that the start he made in Khaki University was responsible for his continueing his studies when he returned to Canada.

50, 189 different individuals took part in some class work during this period.

As men returned home the Canadian universities were informed of the progress that each had made and arrangements were made for many to continue their work, some on scholarships from unexpended funds. Khaki University, itself, was closed up as soon as the men for whom it had been designed were on their way home. Its existence was very brief. There was scarcely more than two years between the time of the original survey report and the final closing. And yet this "university" can claim a prominent place among Canadian educational institutions. For it has had a large share in three important results: the development of educational programs among armed service personnel in many countries, the maintenance of a healthy morale, and the assistance with their re-adjustment of Canadian troops in 1919, and the encouragement of a great many Canadians to continue their education which, otherwise, they might have abandoned.

iv. National Research Council

The inclusion of the National Research Council in a list of educational institutions may cause some momentary surprise. The work which the Council has performed in encouraging agricultural research and its spectacular scientific inventions of the present war are fairly well known. But relatively few Canadians have heard that the Council supplies grants for the staff and equipment necessary for research projects in Canadian universities and dispenses large funds in scholarships for graduate students, even though this is one of its most significant functions. Originally a product of co-operative work by men from the universities, the National Research Council in a measure greater, perhaps, than that of similar institutions in other countries, has had a close relationship with Canadian universities during all its twenty-eight years of existence. That this is so is attested by the fact that it is represented by one or more official delegates at the National Conference of Canadian Universities.[1] The development of research and of graduate faculties in these universities has gone forward parallel with the expansion of the Council. Consequently, the growth and the development of the National Research Council will now be described briefly, for it was by

---

[1] See the Constitution of the Conference of Canadian Universities.

this means that Dr. Tory was able to assist, to a significant degree, the extension of graduate work in the science departments of Canadian universities.

Prior to the last war research in Canada was rather meagre. The lack of facilities for research and for the publications of findings had been listed by Dr. J. W. Dawson as one of the reasons for the founding of the Royal Society of Canada in 1882.[1] Nor did the situation improve for many years. Canadians were too busy with immediate problems to wait for the results of painstaking and time-consuming research. Neither laboratories nor trained men were available in much quantity even at the time when Rutherford was startling the world with his researches at McGill. The growth of research work in Alberta under Tory had begun prior to the war but did not proceed very far for some time. It was difficult to move when strong opposition came from those who feared that some particular interest

---

1 J. W. Dawson. Proceedings and Transactions of the Royal Society of Canada, 1882.
"With the exception of the somewhat meagre grants to the Geological Survey and to the Meteorological Service, the Government of Canada gives nothing in aid of scientific research. What is done for scientific education by local societies must, under our system, be done by the separate Provinces, and is necessarily unequal and imperfect. Few large endowments have been given for scientific purposes. We have no national society or association comparable with those in other countries. Yet we are looking forward to a great future ....."

would be endangered, or from those who were distrustful of any change.[1] The situation in most Canadian universities with respect to research showed many weaknesses. In the main the basic scientific teaching was sound and substantial as proved by the success which Canadian students continued to have when taking graduate work in other countries. But there were four defects:

> 1. The budgets of our universities have been absorbed almost entirely in undergraduate work.
> 2. Our teaching staff in the main has been appointed with a view to a rather heavy toll of undergraduate teaching.
> 3. As a consequence of the foregoing, our graduate schools have been slow in maturing and the amount of time available from ordinary university teaching for graduate instruction and research has been very limited.
> 4. We had no adequate system of scholarships by which graduate students could be assisted.[2]

Outside the university the picture was even worse as there were few industrial laboratories.

A similar situation existed in England. Tory had been struck, on a visit to Europe in 1912, with the contrast between

---

1 H. M. Tory. Address No. 14 "Progress of Industrial Research". Following a speech by Tory in Alberta on one occasion the chairman said: "We have listened with pleasure to the Doctor, but I want to tell you that God made the world and I guess He knew what He was doing and the Doctor can't change it. And even if he could, what would we do with all the stuff we would grow if we followed his advice?" Another protested later at the attempt to separate the bitumen from the tar sands of Alberta. "God has been mixing the tar and sands for thousands of years, and probably knew more about the business than the fellows at the university."

2 H. M. Tory. Address No. 14 "Research and Agriculture".

the status of the students and research workers in Germany, where rapid progress was taking place, and the conditions in a very large factory in England where the manager boasted to him about a recent invention of his "scientific Johnny", a mechanic who did experiments whenever his regular work was completed. This contrast was an example of a condition which nearly brought catastrophe.

> In 1914, under the stress of war the call went out throughout the British Empire for highly trained research men and it was then discovered that there were more trained scientists in a few great German industries than could be found in the whole British Empire.[1]

This called for action. On the advice of the British Government, Canada established, late in 1916, the Honorary Advisory Council for Scientific and Industrial Research. The council was composed of fifteen scientists, most of them men of the universities plus a few men from industry, all serving on an honorary basis. The first chairman was Dr. A. B. MacAllum, the second, Dr. F. D. Adams. They were charged with promoting researches which would develop the industrial life of Canada with particular reference to war needs. A survey was undertaken by the Council in 1917 which disclosed two significant facts:

---

1 Report of the National Research Council 1916-26.

> First, that industrial research was at that time practically non-existent in Canada, and secondly, that the supply of research men with such post-graduate training as to enable them to effectively undertake independent investigation, was entirely inadequate.1

The next step was to deal with these two problems. Two proposals were agreed upon. One was to establish a scholarship-fellowship-assisted research plan which would bring the universities co-operatively into the whole enterprise. The other was to provide national laboratories from which the work could be directed.

The proposal put forward by the Council was sent to a special committee of the House of Commons who called witnesses from Canada and abroad and studied the matter thoroughly during two parliamentary sessions. Their final report was given unanimous approval by the Committee and was presented to Parliament on April 27, 1920. A strong recommendation was included in the report:

> That a National Research Institute for Canada, endowed with the functions and of the character indicated be established in the vicinity of Ottawa, on a site fifty acres in area, of easy access and conveniently located for water, gas and electric power.
>
> That there be appropriated to Parliament $500,000 for the purchase of the site and the construction of the building, $100,000 for the scientific equipment of the Institute, and $50,000 for salaries and maintenance during the first year of its operations.

---

1 Ibid.

> That legislation be enacted at this session to provide for same.[1]

However, action in this matter was delayed till the next session. Meanwhile boards of trade and service clubs in many cities in Canada gave endorsation to the report of the Parliamentary Committee. Finally a bill was prepared and on May 10, 1921, was given its final reading in the House of Commons with scarcely a dissentient vote. But at this moment, when it seemed that four long years of planning had produced satisfactory results, the project was killed in the Senate, or at least that second part of it which dealt with the setting up of a Research Institute with all the necessary laboratory equipment. For several days the Senate gave a rather lengthy debate[2] to the bill and did grant a qualified approval to the proposal regarding scholarships and fellowships. But the debate on the second part of the measure showed that several Senators had no understanding of the possibilities in the plan that was before them.[3] Some were opposed because of the expense

---

1 Report of the Special Committee of the House of Commons to consider the matter of the development in Canada of Scientific Research, April 27, 1920.

2 Debates of the Senate, 1921, p. 415, 454, 493, 565, 592, 626.

3 Ibid. One Senator actually said: "Now, honorable gentlemen, there was just one value in the former research institution in Canada, and that was the salary paid to the chief. That is all there was in it for anybody. It is absolute nonsense." P. 506.

involved and others seemed to feel that since a Conservation Committee had been abolished in that same year, the Research Council must also fail. For these two reasons the section of the bill providing funds for laboratories and equipment was vetoed.

This action deprived Canada of national scientific laboratories for more than ten years, but its immediate effect was almost more serious. Although the grants for special research and scholarships were not cut off, the Council was very discouraged. The members of the Council had been labouring under considerable difficulties for a number of years. Their work was all voluntary, carried on in addition to heavy responsibilities in the universities. A line from a report in the previous year, when it seemed that the government was delaying legislation indefinitely, shows that the strain had been great. "It must be confessed that the hope which stimulated the Council in its work from 1916 on, during the early part of last year seemed in danger of defeat."[1] And now had come this seemingly unwarranted action by the Senate. It is not surprising that for a while it seemed that the entire project would be abandoned.

But it was just at this time, in 1922, that Tory was appointed to the Council. His life-long enthusiasm for research had been reinforced by his observations of its value

---

[1] Report of the National Research Council, 1916-26.

during the war, and more recently by the early successes of the Alberta Research Council. Such enthusiasm was what was needed by the National Council at this time and in the following year he was elected as President, taking office on October 5, 1923.

His first action was characteristic.

> I had a rapid survey made of pressing problems that it seemed to me should be undertaken..... We found these everywhere especially in Western Canada. We selected the urgent ones and organized the machinery for having them tackled. In doing this, we extended the contact with the universities which had already been made, first, in the foundation of a system of co-operation with the universities which could be made the basis for training of men. It gives me pleasure to recall the promptness of the response we had from practically all the universities of Canada.[1]

A three point plan was now put into effect. Scholarship funds were enlarged as rapidly as grants could be secured. Additional funds were spent in assisted researches in the universities. The Council itself began to undertake research projects as a small staff and some temporary quarters were now secured. Some of these investigations were carried on co-operatively with the provincial governments as well as the universities. One of the first of these, utilizing the united effort of universities and government departments, was that which finally ended the toll of prairie wheat crops caused by rust. The startling success won in this field demonstrated

---

1 H. M. Tory. Address No. 40. Reply to Dr. Adams.

what could be accomplished by such a plan.

A campaign was now carried on through the press, the universities and on the lecture platform to convince the public that Canada could not afford not to spend more money on research. In Parliament itself the task was one of convincing some members and Senators that the program of research was not just another political game. One member of Parliament had protested against government grants for research in universities, claiming that men who were thus engaged would not do fair work but would consider themselves pensioners of the state. The level of some of the criticism met can be gauged by inference from one section of a report.[1] Meanwhile some newspapers and industrial organizations were beginning to call for a better provision for research.

> The necessity for increased attention being given to the question of scientific research and its development in Canada is clearly indicated from the fact that public organizations of all shades of opinion have petitioned the government to take immediate action to place research on a permanent basis in Canada.[2]

---

1 Report of the National Research Council, 1916-26. This is a quotation from a special leaflet describing the work of the Council.
What is the President of the Research Council paid?
nothing
What are these Research directors paid?
nothing
What are the Members of these committees paid?
nothing
What are these professors paid?
nothing.

2 Ibid.

One fact that stirred editorial opinion in favour of a stronger Council was the loss, every year, of trained men who left Canada for graduate work abroad and did not return. The Toronto Globe stated on June 15, 1926:

> We are lamenting the departure of university trained men from Canada. Many of them have been drafted by countries spending millions of dollars annually on research work while we spend not more than a quarter of a million. The field awaits them at home to their own profit and that of their country, but we do not provide it.[1]

The Globe went on to point out that although rust had cost the western farmers $25,000,000 in eight years, Parliament would only authorize a salary of $2700 for a trained pathologist to study the problem.

These petitions and editorials had an effect, coupled as they were with a series of special explanatory reports prepared by the President to establish how effective a proper research council could be in developing the Canadian economy. On July 19, 1924, a Research Council Act had been passed which provided the legislative framework upon which organization and function of the Council could proceed. By April 24, 1928, the government had agreed to a substantial extension of equipment, staff and services of the Council. On that date the Honorable James Malcolm, Minister of Trade and Commerce described the new plan for the Council in a Canadian

---

[1] Editorial in the Toronto Globe, June 15, 1926.

Press interview.[1]

Up until this move Tory was serving as President in an honorary capacity and had continued to guide the University of Alberta. He now determined to give his full attention to the further development of the Council, and resigned from the University to become the first salaried President on June 1, 1928.

Soon after this date he made a world tour. His object was to make a thorough study of the laboratories in Japan, Britain, United States, France and Germany. Much of his time was spent in the National Physical Laboratory and the Advisory Council of Science and Industrial Research of Great Britain, the Kaiser Wilhelm Institute at Dahlem, Germany,

---

1 In the Montreal Gazette, April 24, 1928.
The Council was to have the following functions:
"First. The co-ordination and standardization of research work.
Second. The granting of financial assistance to qualified research workers to carry on investigations of approved problems of national importance. This work has been carried out mainly in the laboratories of the universities of Canada, and of federal and provincial governments and has been made possible through the co-operation, without remuneration, of the highly trained staffs of these laboratories.
Third. The building up in Canada of a corps of highly trained scientific workers by the awarding each year of approximately 50 post-graduate scholarships for training in science and research.
Fourth. It has now been decided to establish, under the Council, national research laboratories."

and the Bureau of Standards and the Mellon Institute in the United States. This investigation went on for more than a year and Tory claimed, later, that the time he had spent in preparation for the building of the Canadian laboratories was the most intensive period of study of his life. On his return he developed a general plan for the building. It was agreed that the laboratories should combine two primary functions, both of a bureau of standards and of a centre of research for industrial purposes.

Once the Government was in agreement on the project[1] they supplied the money for a splendid structure with 270,000 feet of floor space, costing about $3,000,000. These laboratories were built during the worst years of the depression, in spite of some opposition by a few newspapers and several members of parliament, who maintained that such equipment was an extravagant luxury which Canada could ill afford. These men mocked at the size of the new Council building and claimed that it would never be fully used.[2] But on June 8, 1932, The Prime Minister, The Right Honorable R. B. Bennett, opened the laboratories, saying, "The purpose of this building is to

---

1 That Tory had some measure of success in keeping the Council free of political control is seen in the fact that the Liberals were replaced by the Conservatives in government at this time but the work of putting up the laboratories went right on.

2 For several years after 1932 the space was not all used but in later years, particularly during this war, one building has not been sufficient and a large new unit has been added.

determine how industry and mankind can best be served."[1] In his own statement on the same occasion Tory referred to the need for trained men:

> It has been the aim of the Research Council to assist the Universities in maintaining a standard of graduate training which will make possible a succession of trained men capable of dealing with the problems of the nation.[2]

With the new space and equipment Tory was now able to gather a staff about him worthy of the magnitude of the task. B ut there were still several anxious years in the period between the erection of the laboratories and his retirement, when it seemed that grants would be cut and some of the work stopped. Tory thus had two tasks: the development of the work of the Council and the maintenance of favorable opinion among parliamentarians, business men, and the general public. By continuing to give a good many addresses and by publishing a number of special reports which interpreted the work of the Council he was able to ensure substantial support. In one of these reports,[3] specially prepared for the Senate as an answer

---

1 R. B. Bennett. Address at the Opening of the National Research Laboratories.

2 H. M. Tory. Address No. 19. At the Opening of the National Research Laboratories.

3 Special Report on the work of the National Research Council, prepared for the Senate, 1932.

to some critical speeches made in that House, he described several important accomplishments of the Council. The report disclosed that a thorough study of scientific development in every major country had been made. The Council had brought a corps of highly trained specialists to the service of the state and a national library of science had been developed both for the use of the Council staff and for all scientists in Canada. The publication of the Canadian Journal of Research now brought recognition to all Canadian research workers and provided facilities for the study of the scientific literature of the world. Almost two million dollars had been spent in direct grants to individual investigators and a scheme of co-operation between the governments, universities and industrial firms had been fully implemented. The results of these efforts of interpretation are seen in the fact that even in these depression years the Council continued to grow in effectiveness although some of its services had to be curtailed.

The work of the Council has been given considerable praise on many occasions by men from outside Canada. In a radio address in 1932 Sir Ernest Rutherford expressed his great hopes for its success.

> I am glad to know that a corresponding government department has been formed in Canada. I am sure that this Research Council of which my old friend Dr. Tory is director, will prove invaluable to the welfare and development of your great country.[1]

---

[1] Proceedings of the Fifth Pacific Science Congress, p.137.

That these hopes have been realized to a considerable degree, especially during the war years, is the opinion of one who studied the work of the Council in 1940.

> No such institution has as yet been set up by the national government in the United States. It is fortunate for Canada that the instrument for making a policy of co-ordination effective has been created this early in the course of her national development. And as pointed out earlier, the hopes of usefulness by the Council were fulfilled beyond expectation when the challenge to scientific resourcefulness came with a second world war.1

Attention has already been drawn to the fact that the Council was first organized by a group of scientists from the universities. Some of the research projects carried on in co-operation by the universities and the Council have also been mentioned. These major research problems have been tackled through Associate Committees, about thirty in number, containing almost five hundred scientists from the universities, industries, and departments of government. Twenty-four of these committees have pursued investigations into such matters as magnesium production, aeronautical design, and weed control, while others have dealt with personnel problems such as the training of scientific personnel.

But while the development of the Council and of these co-operative researches are both important from the point of view of the universities, the most noteworthy contribution has been the achievement of the Council in raising standards

---

1 James C. Miller, op. cit. p. 580.

of graduate work through the granting of scholarships and fellowships.[1] Research grants to assist the carrying out of researches in universities were also on the increase during these years.[2] In 1931 this work was carried out in twenty-five departments of science in eleven Canadian universities.

---

1 Op. cit.
Report of the National Research Council.
"Four classes of scholarships have been established: bursuries of $700.00 for students entering graduate work, studentships of $1000.00 for students with one year graduate work, fellowships of $1200.00 for those considered worthy to continue, and a few Foreign Travelling Fellowships of $1500.00."

2 Scholarships and Grants-in-aid of Research from 1916-1935.

Year	Grants-in-aid of Research	Scholarships
1916-17	$ 163.00	$ ----
1917-18	8,344.79	5,550.00
1918-19	19,519.96	7,150.00
1919-20	38,815.24	20,850.00
1920-21	61,731.24	17,700.00
1921-22	24,795.46	38,575.00
1922-23	39,472.25	35,725.00
1923-24	60,854.04	37,830.00
1924-25	50,972.25	40,101.00
1925-26	61,931.65	40,082.00
1926-27	79,233.00	41,105.00
1927-28	110,797.00	41,855.00
1928-29	196,510.00	43,720.00
1929-30	220,442.00	49,990.00
1930-31	178,923.00	59,335.00
1931-32	166,898.00	38,490.00
1932-33	61,062.00	17,605.00
1933-34	90,406.00	9,160.00
1934-35	130,700.07	11,825.00
1935-36	158,968.48	13,205.00

Almost three-quarters of the Council budget was being spent directly on research.[1]

A study of the grants shows what substantial amounts these funds were. This provides a factual demonstration that Tory's concern for the development of graduate work[2] in the universities was given a practical application. These grants and scholarships have enabled the universities to expand their graduate work particularly in the departments of chemistry, physics, and biology, where most of the scholarships have been awarded. By 1932 the number of students who had been assisted in this way was 342. Before Tory retired from the Presidency, on May 31, 1935, the Council had spent $570,053.66 on 685 scholarships to 385 students.[3]

Men in the universities such as Dr. A. N. Shaw[4] and Dr. R. C. Wallace[5] have given credit to the Council for a substantial

---

1 Proportionate distribution of budget in 1929.

Grants to Research	61.2%
" " Scholarships	13.5%
Books and library	1.3%
	76.0%

2 See Chapter IV.

3 Report of the National Research Council.

4 A. N. Shaw. Fifty Years Retrospect. Royal Society of Canada, 1932.

5 R. C. Wallace. "A Land of Universities" Canada. (London: The London Times Press, 1939) p. 232.
"The National Research Council has assisted the universities very materially by co-operative relationships, by grants, and by scholarships."

share in the growth of scientific work within the universities. As has been seen, the Council policy with respect to the assistance of the universities was established in 1916, and this policy has not been altered since. But, though Tory was not responsible for the original policy, to an appreciable extent the results attained are due to the work of the President who took office at a period when the status of the Council was most unsatisfactory, and who has contrived an effective instrument by which the policy of the Council could be implemented.

v. Carleton College and The Institute of Public Administration

A good deal of interest has been aroused in Canada in the development of Carleton College and The Institute of Public Administration. These two schools have been established in Ottawa under the same auspices, the one for college work and the other for professional training for civil servants.

In an address at the time of his retirement from the Presidency of the National Research Council, Dr. Tory spoke these words:

> I just want to say to you that I do not regard my work as yet done. Any man who has studied as intensely and has worked as diligently as I have tried to do, cannot but sense the immensity of the problems that lie before the people of Canada before she realizes her national destiny. In the solution of some of these, I hope that I may still be permitted to participate.[1]

Probably no one who heard these words believed that in just a few years, when he had passed his 80th birthday, Tory would once more be the organizing President of a new educational venture.

Two institutions in Ottawa have for some time been giving higher education, the University of Ottawa and St.

---

[1] H.M. Tory. Address No. 40. On the Unveiling of his portrait.

Patrick's College. But both of these are Catholic schools, and although there was a Protestant population in Ottawa of over 80,000 in normal times,[1] there was no non-sectarian college. A great many of the civil servants have been to university and desire the same opportunity for their children, but the young people were forced to go away for further training, or were denied this if their financial circumstances did not permit the higher costs that education, away from home, usually entails.

The serious nature of the situation had been apparent to all those in Ottawa who understood young people and their needs. For some years there had been a strong committee at work in the Ottawa Y.M.C.A., headed by Dr. H. L. Keenleyside, preparing plans for the development of a college which could supply the necessary instruction. It was realized as well, that in some fashion both general and professional training should be provided for the civil servants of the Federal Government. Real progress in planning the type of institution needed, in preparing a curriculum, and in securing public support was being made when war came to put a stop to the work as the full resources of the Y.M.C.A. were now thrown into Auxiliary

---

1 There has been a substantial increase during the war years.

Service work for the troops. The idea, though shelved, was not forgotten and one pledge to the future was taken when it became necessary to appoint a new program secretary. Choice was made of Mr. L.R. Shaw, who had some of the training and personal qualifications necessary to help launch a college project. Shaw visited a large number of colleges and universities in the United States during his first year and spent some time examining the evening classes for adults in Sir George Williams College, Montreal, for it was deemed expedient that the college in Ottawa should begin by giving work in the evening.

It was at this time, as Dr. Tory has told so often since, that "a college was developed on a street corner", through a conversation between two elderly gentlemen, Tory and an Ottawa businessman, Mr. W.M. Connor. The latter, as Chairman of the Council of Social Agencies and as a member of the Y.M.C.A. board, was keenly aware that some provision should be made to ensure that the young people resident in Ottawa and those coming from every Canadian province who were crowding into war-made positions with the Civil Service, could continue their education. It was Connor's view that the war was a <u>reason for</u> immediate action with regard to the college, rather than an obstacle. As Tory was of the same mind he readily agreed to work with the Association Committee and other interested persons in studying the matter further.

Thus was renewed a partnership between Tory and the Y.M.C.A. which had been so fruitful in the organization of the Khaki University during the previous war.

On December 2nd, 1941, a committee was convened to explore the possibilities of immediate action in regard to college work. As there seemed to be a good deal of support for the venture it was decided to form a standing Committee on College Grade Education with Tory as chairman. During the next five months this committee held many regular and sub-committee meetings. Minutes of the first regular meeting on January 28, 1942, reveal the extent and the types of problems faced when a new educational institution is established. The question of making a start in wartime came up again at this meeting for a final decision, and a long discussion was held. One member pointed out that, although young people were putting in a great deal of overtime work, still suitable leisure time activity was lacking for many of the fifteen thousand temporary civil servants. Another observed that a start made at the present on a small scale would provide valuable experience and a basis for expansion later. Moreover it appeared certain that there would be a need of widespread educational and training facilities in the period following the war. After reviewing these facts

the decision to proceed was unanimous.[1] At this first meeting an objective of 100 students was set for the first year. A second consideration was the need for recognition of the work of the students by Canadian Universities as it was intended that in the first few years only junior college work would be provided. A special study of the law in Ontario regarding the chartering of colleges and the granting of degrees was needed, and a committee was appointed for the purpose. The matter of instructors did not seem to provide a serious obstacle as many college professors were in Ottawa on special duty for the duration of the war. Temporary classrooms had been offered at a satisfactory rate in one of the city collegiates. A sub-committee on curriculum was now appointed, consisting of Dr. Tory, Dr. Robbins, Mr. Patten and Mr. Shaw. As the securing of funds for the college was to be a major undertaking, much time was spent in drawing up a list of men and women who could contribute both time and money to the enterprise.

Subsequent meetings were spent in the follow-up of work laid out at the first. Tory took as his special

---

[1] It will be recalled that the mood in the early years of the war was to postpone many projects "for the duration". It is all the more remarkable that a decision to initiate a new college was taken at such a time.

The determination of Dr. Keenleyside to proceed and the experiences of Sir George Williams College, as recounted by Dr. A. Norris finally decided the question, according to L. R. Shaw.

responsibility the vital matter of securing recognition from all the eastern universities. While no definite action was taken by any of these immediately when he approached them, yet a favourable reception was accorded his request in every case.[1] News of such support assured the Committee that a proper standing could be secured by the College. The legal questions and the matter of staff had both been explored and neither presented any impediment. Best of all, once the decision had been taken, a great deal of encouragement was given to the Committee for their foresight and energy in initiating the project. Sixty-five of the first sixty-six individuals approached had offered their help, and financial support had also been promised. At a meeting on May 28, 1942, the Y.M.C.A. Committee on College Grade Education became the Carleton College Committee.[2] In order to be able to appeal more freely for support to the entire community, it had been decided that a separate board should be organized. The Ottawa Y.M.C.A. relinquished control over the project to a new body, The Ottawa Association for the Advancement of

---

1 The Calendar of Carleton College for 1944-45 announces that: "The following universities have agreed to accept the courses passed in the First Two Years of Carleton College as equivalent to their own: Acadia, Mount Allison, Dalhousie, New Brunswick, McGill, Queen's, Toronto, Western Ontario, McMaster, Manitoba, Saskatchewan, Alberta and British Columbia."

2 Minutes of the "Committee on College Grade Education", of the Ottawa Y.M.C.A. May 28, 1942.

Learning. Pending an Act of Incorporation, Articles of Association were drawn up in June,[1] in such a way that the

---

[1] From "Phenomenal Beginnings at Carleton College" in Food For Thought, February 1943, The Articles read:

1. The name of this Association shall be "The Ottawa Association for the Advancement of Learning."
2. The Association shall be deemed to have commenced on the eighteenth day of June, 1942.
3. The Association shall have for its purposes and objects:
   (a) the promotion of learning in any or all of its branches;
   (b) the organization and establishment of a non-sectarian college of higher learning in the City of Ottawa;
   (c) the organization and establishment of an Institute of Public Administration;
   (d) the promotion of the intellectual, social, moral and physical welfare of its students, graduates, teaching staff and others interested in the Association, and of the community in which it operates.
4. The Association shall have its Seat at the City of Ottawa.
5. The Association shall be governed by a Board of twenty-one to be known as the "Board of Governors." In acknowledgment of its interest and assistance in the organization and establishment of the Association the Ottawa Y.M.C.A. shall have the right to name and be represented by four members on the Board of Governors at all times.
6. Any person of good moral character may become a member of the Association or otherwise admitted to interest or participation in the activities of the Association, subject to approval by the Board of Governors. Members of the Association may retire from membership, upon three months' written notice to the Chairman. The heirs, executors or administrators of deceased members shall be relieved and indemnified against all liabilities of the Association by continuing members.
7. The interests and activities of the Association shall be open to men and women on equal terms.
8. The Association shall otherwise be governed by a Constitution and By-Laws which may be amended, repealed or added to, in the manner and under the provisions therein stated.

Association might undertake educational work in the public interest generally, as well as establish a college.

By June 18th so much progress had been made that the Association was called together and a Board of Governors was named.[1] This body met the same day, to approve of a first calendar,[2] and to decide on the inaugural date of September 14, 1942.

During the period of summer and early fall Dr. Tory, Mr. L.R. Shaw the acting registrar, and one assistant were the only administrative officers. But they were aided by several of the Board of Governors who gave some of their time in registering students and other urgent matters. Anticipating an enrolment of perhaps one hundred to one

---

1 The first Board consisted of:

Dr. P.D. Ross, Honorary Chairman
Dr. H.M. Tory, Chairman

Mr. W.M. Connor, Treasurer
Mr. E.J. Jenkins
Mr. David Lewis

Dr. H.L. Keenleyside, Vice-Chairman
Dr. J.E. Robbins

Mr. Charles Cowan
Dr. McGregor Easson
Col. C.M. Edwards
Mr. C.C. Gibson

Lt. Col. Fraser Hadley
Mr. F.C. Jennings
Mr. W.S. Kidd

Col. O.M. Biggar
Dr. W.C. Macartney
Mr. T.R. Montgomery
Mr. Frank G. Patten

Mr. H.S. Southam
Mrs. Phyllis Turner
Mr. Norman Wilson

2 First Calendar of Carleton College, 1942-43.

hundred and fifty, they were almost overwhelmed by the response of citizens in Ottawa to their courses - more than seven hundred registering in the first few weeks. Freshmen and graduate students, some still under twenty and some over fifty, swarmed in to begin college work, to follow up some intellectual interest, or to secure better training for their work in the Government Service.

This, of course, meant that several hectic weeks were spent in organizing extra classes and in securing additional instructors. This task was done thoroughly and well. These Officers of Instruction are men of high calibre most of whom have taught in some university before. A great deal of interest centred around foreign languages[1] and seven of these were offered, with Spanish, Russian, German, and Oriental languages all drawing large registrations. Attendance at classes kept up well throughout the year and examination results at the conclusion of the term were very satisfactory.

After this year of trial, the Board of Governors felt ready to launch a second venture. From the beginning it had been felt that there was a unique opportunity afforded in raising the standards of government in Canada by providing suitable training for civil servants. Public Administration

---

[1] As Ottawa is the home of many foreign embassies and legations the interest in languages is very understandable.

courses have scarcely been developed in Canada.[1] An American, Miller, studying the Canadian system of education in 1939 had urged that such courses should be a consideration to be given high priority in any new developments and pointed out that Ottawa was a logical place for such instruction.[2] On April 23, 1943, the Board of Governors approved the plan of offering instruction in the Institute of Public Administration during the Session 1943-44. Separate Educational Directorates were set up at that time for the two schools, both under the supervision of the one Board.[3]

It was decided that a modest number of courses should be offered at the beginning with no special academic pre-requisites and that more would be added on the basis of experience and proved usefulness. The first courses were:

---

1 Some courses are offered at Dalhousie, at the University of Toronto, and more recently at Queen's.

2 James C. Miller National Government and Education In Federated Democracies (Lancaster: The Science Press Printing Co. 1940) p. 606.

3 These directorates were:

For Carleton College	For the Institute of Public Administration
Dr. H.M. Tory	Dr. H.M. Tory
Dr. J.E. Robbins	Dr. J.E. Robbins
Dr. McGregor Easson	Dr. H.L. Keenleyside
Mr. F.G. Patten	Mr. C.H. Bland
Mr. F.C. Jennings	Mr. C. Fraser Elliott
Mr. L.W. Shaw	Mr. W.S. Woods

Principles and Practice of Personnel Management, Introduction to Statistical Method, Population Trends and Social Policy, Advanced Calculus and Differential Equations, World Organization, Advanced Accounting, Social Science, and Town Planning. When registration began in September 1943 the response was similar to the enrollment for college work in the previous year and was again beyond expectation, 205 students coming forward when fifty had been anticipated.

Already it was agreed that the experiment had justified a proper charter and so incorporation was sought. The application was approved on June 19, 1943 and the Letters Patent granted, constituting The Ottawa Association For The Advancement of Learning a corporation for the purposes previously set forth in the Articles of Association, with the necessary powers of making by-laws, and the general administration of the Corporation.

In June 1943, the Ottawa Association For the Advancement of Learning met for the first time under its new incorporation, re-electing its members and its Board of Governors. The officers were all re-appointed, Dr. Tory as chairman, Dr. H. L. Keenleyside as vice-chairman, Dr. J. E. Robbins as Secretary, and W. M. Connor as Treasurer. Plans for fall courses were soon well developed. By the end of October when the first convocation exercises were held all classes were well under way. An Ottawa Citizen report

described the unique nature of this gathering:

> Impressive in its individuality was the occasion last evening as Carleton College and the Institute of Public Administration held its initial commencement exercises in the Assembly hall at Glebe Collegiate.
>
> Unlike convocations at older, more seasoned colleges, there were no degrees conferred, no presentations, no decorations to distinguish last night's gathering. Instead there were many people all interested in the furtherance of education in Canada's Capital, doing honour to the institution on its first anniversary.[1]

The Governor-General, The Earl of Athlone, referred to the importance of education for adults:

> What matters is not the amount of information that is offered, but the amount that is absorbed, and the great value of adult education lies in the fact that the mind, being more mature, is more likely to retain what it learns than it is in earlier years. I should like to congratulate especially Dr. Tory, through whose vision and, if I may say so, youthful energy, the remarkable success of Carleton College is so largely due.[2]

Throughout the second year the results have again seemed to match the promise of registration day. Attendance has been regular and interest has been keen. The Board have therefore been able to consider further services. The President had suggested such advances in two statements in the fall of 1943:

---

1 Report in the Ottawa Citizen, October, 1943.

2 Ibid.

> Students here have said that they have received no better instruction anywhere. I feel that there is room in the City of Ottawa permanently for this type of school. After the war Canadian Universities will be crowded as never before, and with continued public support I can see nothing that will stop us from continuing with our work here.[1]

To a reporter he later confided:

> As an evening college it will always remain in Ottawa, now that it has been started. But there is room for an arts college here that could grant degrees, and would have a wider scope than at present. Of course, there would be the matter of a building of our own, and a permanent staff. Still, perhaps something can be done.....[2]

Some definite action in this matter is now promised, according to a report of a Board meeting held on June 23, 1944.

> The question of establishing day classes especially to meet requirements of servicemen from the Ottawa district returning to Canada was discussed, and it was decided to take measures in that direction. A committee consisting of Dr. H. M. Tory, C. C. Cowan, Fred Bronson, Col. Edwards, W. M. Connor and H. S. Southam was appointed to consider the matter. It is expected arrangements will be completed in time to start day classes in the autumn of 1945.[3]

At this same meeting some further announcements were made. The college and the Institute had been carried

---

1 H.M. Tory. As reported in the Ottawa Citizen October 1943.

2 Lawrence Earl "White Collar College" in The Montreal Standard April 1, 1944.

3 A report in the Ottawa Citizen June 24, 1944.

for the second year without a deficit. Twenty-four courses in languages are now being offered with special emphasis on Russian, Chinese and Japanese. The major advance planned for the season 1944-45 is that of an Extension Department. Five courses are already announced in this department and others are under consideration. Those mentioned in the Calendar are Modern Trends in Education, Town and Regional Planning and Housing, Journalism, The Far East, and The Evolution of Knowledge. It will be of great interest to many people in all parts of Canada to know that the instructor in this last course, "The Evolution of Knowledge", is to be the President himself.

The Institute of Public Administration has also planned changes and additions for the new season. Most important is the development of a fully integrated plan of study.[1] A Graduate Certificate in Public Administration, B.P.A. (Bachelor of Public Administration) will now be issued to students meeting the following conditions:

---

[1] "A Study of Education for Public Administration" made in 1943 by the Public Affairs Committee of the Ottawa Y.M.C.A. states that courses offered ad hoc are not satisfactory; they must be articulated and if possible, allow for practical work. Preferably, they should also be on a post-graduate level.

> 1. Holding a Junior College graduation certificate from Carleton College, or having obtained equivalent standing elsewhere, including two courses of Economics, Political Science, Psychology and Philosophy.
>
> 2. Obtaining satisfactory standing in ten of the courses outlined.
>
> 3. University graduates desiring to obtain the B.P.A. certificate may do so by selecting courses supplementary to the courses already taken in Arts. Credits for courses in Arts will be arranged on application in each individual case.[1]

Sixteen courses are now offered under the following sections:

A. Personnel Problems
B. Public Finance
C. Accounting
D. Political Science
E. Economics and Sociology
F. Statistics
G. Advanced Calculus and Differential Equations.

This is an impressive record. In the midst of war, financed only by fees and through the assistance of friends of young people, with a total administrative staff of less than half a dozen, with a President who is over eighty, with no permanent teaching body, in rented quarters, the Ottawa Association for the Advancement of Learning are operating two institutions of higher education enrolling about a thousand students. Four accomplishments are of special significance; the beginning of a college for people

---

[1] Third Annual Calendar of Carleton College and The Institute of Public Administration, 1944-45.

in Ottawa for whom there had not been satisfactory provision, presenting the opportunity of further study to young people temporarily in Ottawa during war years who would otherwise have missed the chance, the development of perhaps the most unique modern language department in Canada, and the start of an institution by which comprehensive professional training of high quality will be provided to public servants. What will yet be done here will be watched with great interest.

CHAPTER IV

The Educator

In addressing the student body of the University of Alberta in 1928 Premier Brownlee told them:

> If Ispeak of productive scholarship, or constructive citizenship, of the social value or the sterling worth of work, or of untiring search for truth and knowledge, I can point to the retiring president as an example.[1]

The many sides and many interests of Tory have been a source of astonishment even to those who have known him well. He is not one who can easily be fitted into a single mould.[2] He has not only taught an ideal of the well-rounded life but has been able to give a creditable exemplification of that ideal.

The obvious importance attached to his work in building up new institutions tends to obscure, somewhat, the usefulness of his other activities. However, as the evidence in this

---

[1] J. E. Brownlee. Address reported in the Edmonton Journal, May 15, 1928.

[2] H. M. Tory. Address No. 41. "The Advancement of Learning and Human Welfare."
"In a round about way, shortly after I had accepted the Presidency of the University of Alberta, I was informed by a distinguished graduate of Queens that he did not see on what grounds I had been appointed, as McGill might be a good place to train men for the headship of a coal mine or an engineering institute, but not for the University Presidency. It was hinted that a good Scotch Presbyterian, trained in philosophy under Watson would have brought to the task the ideal combination. There was this justification for the statement: most of the principals of Canadian Universities had hitherto been trained in the Presbyterian tradition and it was somewhat assumed that a sort of right had been established. Though Scotch, I was a decided innovation."

chapter and the next will show, a strong claim can be established that his influence on educational development in Canada has been substantial even if his pioneer work with new institutions was to be ignored. His educational ideas, the way in which they were expressed, his qualities as a teacher, his efforts to secure scholarships and facilities for graduate study and his contributions to educational conferences are all significant.

It is not the intention, for the purpose of this study, to examine, in any comprehensive way, the educational philosophy of H. M. Tory. However, it is important to know about some of the educational ideas to which he devoted a great deal of attention; in particular his belief in the value of education, in the importance of the individual, and in the necessity for educational unity.

During his lifetime Tory has made countless speeches to all kinds of audiences on the theme of the importance of education. There have been so many of these that on several occasions he would apologize for constantly "harping on the same theme".[1] During the war the one criticism made most frequently of Khaki University by army and auxiliary service

---

1 H. M. Tory. Address No. 13. "Education and Research".

officers was that the President had what they called a "messianic" conception of the place of the educator. Half in jest, half in earnest it would be said: "The educational scheme is alright enough in its place but we can't let him clutter up the war."[1] Exaggerated or not, it is perfectly true that Tory has always believed that little else, if anything, was of the same value for individuals and for the nation as education. All the media open to him have been used to express this idea, personal correspondence, the classroom, the press, the public platform and the radio. Nor has he missed any opportunity to defend education from unwarranted attacks, sometimes in the bluntest of terms. In a year when the American Chamber of Commerce passed a score of resolutions urging the pruning of expenditure on public education, some of which resolutions were repeated in Canada, Tory charged that "anyone who would curb intellectual activities is a traitor to his country."[3]

His presentation of the case for the primary value of education has seldom been abstract or philosophical but has been directed, rather, to answer the kind of objections which are usually raised. During his lifetime much of the criticism

---

1 In a private letter from a YMCA associate of Tory.
2 Interview with the Victoria Times, January 26, 1933. In the same year he told a group of teachers in Ontario: "As teachers do not hesitate to strike hard at such reactionary doctrines as would limit educational efforts."

directed against education in Canada, coming particularly from business men and farmers, has been that it does not prepare youth for practical life and is therefore much too costly a luxury. It was these charges he was able to combat most vigourously; he had encountered them first from his own initial employer and was to meet them again on many future occasions.[1] He soon discovered that such an argument was most easily countered by pointing out the economic advantages of education and of research, for the two were always closely related in his own mind. In addressing the Alberta School Trustees Association he told them:

> A careful investigation of the actual results in wealth production, resulting from education in the various industrial callings was made some years ago in the United States. By this investigation it was clearly demonstrated that on the average a man whose education is limited to that given in the public schools increases his earning power only to the age of twenty-five, and henceforth works through life at the level reached at that age. The man who takes an additional training of three years in some type of high school work increases his earning power until he reaches the age of thirty-five, at which age his earning power is double that of the one with the more limited education. Further, the man who takes additional higher education necessary to fit him for the greater responsibilities on the average continues to increase his earning power indefinitely and far beyond that of either of the men in the other two classes.[2]

---

[1] H. M. Tory. Address No. 13. "Education and Research".
"We were collecting some money in connection with a certain institute connected with the university, and went down to a certain business house where we soon found that it was not wise to say much about the university. Mr. Birks introduced Dr. Adams and myself to a certain gentleman, who had moderate amount of wealth, as Dr. Adams and Dr. Tory. He said: "These are university men". Then the look of blank astonishment on the gentlemen's face led him to protect himself by adding: 'I am not a university man myself.' The gentleman looked up and said: 'Well, I thank God for that'."

[2] H. M. Tory. Address No. 5. "Some Aspects of Technical Education."

He, himself, believed that education must be practical, that it must "be so directed as to stimulate interest in the necessary vocations that men must follow to make a living".[1] Early in the century he was advocating that the economic pursuits of the community should form part of the core of the curriculum, and felt that this idea was particularly applicable to rural schools. In discussing the need for suitable equipment for such work he told a group of teachers: "Had I my way, there would not be a single school in this province less than ten acres".[2]

In the founding of the University of Alberta the test of practical usefulness was also applied to any proposed courses. The Arts work was the first to be established as Tory believed that these courses are basic to all intellectual effort. Subsequent developments in science and research did not come about without a struggle.

> We who are directing the forces of our universities are still finding ourselves hampered by the old tradition that a university should not deal with things that relate to industry and commerce. It is a curious fact that in a new university like our own it looked for a time as if public opinion would force us into the traditional groove in spite of our wishes in the matter. The modern university, however, is the most practical of all modern institutions. It aims not only at the development of the intellect on the cultural side, but at the solution of every practical problem which requires the trained mind and hand.[2]

---

[1] Ibid.

[2] H. M. Tory. Address No. 6. "The Value of an Education".

Of course there is an obvious danger in any attempt to justify education on the grounds of its economic return, either to the individual or to the state. For such an argument can give a greatly misleading interpretation to the significance of education. Critics are not lacking who charge that it is this emphasis which has been the most serious mistake of educationalists in both Canada and the United States and that the result has been the training of citizens with a sadly warped standard of values. Tory was not unaware of the danger and was always somewhat apologetic when using such an argument.

> I have been in the habit myself, occasionally, of using the economic arguments when trying to convince people that they should spend more money on education.[1]

But he was quite clear as to where the emphasis should be placed.

> "The thoughtful men, the great educational pioneers of this continent saw its spiritual significance and recognized its relation to society as a whole, quite apart from economic values..... I beg to say that we must, if necessary, learn again the lesson that the end of education is the acquisition of moral and spiritual power. If this fact could burn itself once again into our minds we would cease to apply the dollar mark and the measuring rod as indicators of value."[1]

Another theme to which Tory returned, again and again, was that of the importance of the individual person, the worth of the Man. He maintained that this principle should be the foundation stone in the development of any educational system. During one entire year he laboured with the greatest of intensity

---

1 Ibid.

upon the preparation of the building and laboratories of the National Research Council, yet, at this very time, he drew a sharp distinction between the importance of the new buildings and that of the men who would use them.

> I am not inclined to say very much about buildings. I have lived too long and worked too long with men to know that buildings may mean little -- it is the men that count.[1]

He frequently cautioned his staff:

> If you let <u>one</u> brilliant student slip through your fingers for want of encouragement and help you are committing a crime against your country.[2]

And although he dealt mainly with adult and university students he was equally concerned about the individual response of every school child.[3] He was exercised, too, about the responsibility which each individual has in society, holding that:

> Education is wholly inadequate if it does not contain something which makes possible a better conception of citizenship. An education without a sense of responsibility may make a person more dangerous to the community in which he lives than if he were wholly illiterate.[4]

To him the unfolding and growth of the person has a social as well as an individualistic meaning. These were the beliefs which spurred him to take action in every movement for scholarships in Canada. Another expression of this belief is the organization of the Extension Department as one method by which

---

1 H. M. Tory. Address No. 14. "The Progress of Industrial Research".
2 H. M. Tory. Address No. 22 to Canadian Teachers Federation.
3 W.A.R. Kerr. "The President As An Educator", <u>The Gateway</u> Dec. 15, 1927.
4 H. M. Tory. Address No. 7. "Education and Self Control".

the university can discharge its obligation to all the people.

The rural areas were a special challenge to him.

> I believe the problem of rural life is the greatest problem we are facing today....If we create a keenness for intellectual effort through the use of our country schools we will do more to solve our rural problem than can be done by any other means. That necessitates the employment in our country schools of highly trained and well equipped teachers.[1]

But provision for all did not mean to him that there should be uniformity for all. He fully understood the need for a differentiated curriculum on many levels and helped to bring about an application of this idea in the curriculum in Alberta.[2] He warned teachers to beware of dull uniformity.

> The greatness of a nation with respect to its development in both wealth and culture depends as much upon the special training of the few as upon the general training of the many.[3]

That some of these ideas are now more commonly accepted than was the case forty years ago is in some part due to the success with which he presented them.

It has been pointed out on many occasions that in a country as large and diversified as Canada, with the regulation of education in the hands of nine provincial authorities, and its administration in the hands of both public and private bodies, the attainment of some measure of unity within the total system is of critical importance. Aside from the more obvious grounds for such a conclusion, Tory had two special reasons for an interest in furthering educational unity. He had seen at first

---

1 H. M. Tory. Address No. 11. "Research and Agriculture."

2 As Chairman of the Committee on curriculum revision in Alberta.

3 H. M. Tory. Address No. 5. "Some Aspects Of Technical Education".

hand the problems that had arisen in Nova Scotia through disunity among the denominational colleges and he was never to forget that lesson.[1] In addition, he was at McGill in the time of Principals Dawson and Peterson when a large measure of unity was being forged there where, formerly, faculties had had considerable independence,[2] Moreover, one who held as he did, that so much was possible for the development of the human mind and spirit through education, was certain to believe that education might be the force that could bring about the much needed national unity within Canada and put an end to sectionalism and racial and religious conflict. To this object he devoted a great deal of attention, especially on the public platform.

---

1 H. M. Tory. Address No. 1. "The University Problem in Canada".

2. Principal Sir William Peterson. The Annual University Lecture For 1904.
"McGill is "more together" today than it used to be. If I have been able to contribute in any way to this desirable end, it has not been only because my instincts pointed in that direction, but because I did not fail to take to heart the wise words of my venerable predecessor in office, Sir William Dawson, when he spoke as follows:- 'The operations of McGill are now (1893) so extensive and complicated that the dangers of disintegration and isolation have become greater than any others.'....Only in proportion as we sympathize with our fellow-seekers after knowledge and truth, even while cultivating for ourselves each his little corner of the fruitful field, do we realize the attitude of mind that ought to be the distinguishing mark of an academic community. There is a certain unity of purpose running through our diverse operations that ought to inspire in all of us a consciousness of common sympathies. If, on the other hand, we lose ourselves in our special preoccupations, holding as of little account all other studies and pursuits, we shall pay the penalty in a limitation of mental view that will debar us from enjoying the true communion of spirits."

> Our educational system should stimulate unity of feeling between the various elements of our population. It should stimulate the town to lean upon the country and the country to lean upon the town. It should result in Protestants trusting Roman Catholics and Roman Catholics trusting Protestants. It should be the greatest unifying force in our modern civilization by leading men to respect the opinions and vocations of people who differ with them.1

He realized, too, that teachers themselves, had to find a greater unity of purpose and action. On one occasion when discussing the cleavages in Canadian national life such as the French-English clashes and the sectional economic stresses he added this thought:

> Is it not possible that we are overlooking the essential unity of our educational endeavours from top to bottom, the individual system of education which begins with the elementary school and ends with the university?.... There is not enough co-operation within the institutions that go to make up our own provincial organizations. We are too critical of one another. I would like to see a society formed of educational men who would hold up their hands to heaven and solemnly declare that they would never utter a word of criticism in public of other educational people but would stand together for the purpose of promoting educational policy in which we believe.[2]

He, himself, had made special efforts to bring about a measure of this unity by initiating and heading the provincial committee on curriculum revision to which reference has already been made.[3]

On the score of educational unity he felt some personal responsibility for helping to resolve some of the controversies which were sharp at the time, one of them being the dispute

---

1 H. M. Tory. Address No. 5. "Some Aspects of Technical Education".
2 H. M. Tory. Address No. 10, to the Canadian Educational Assn.
3. See Section on The University of Alberta.

about evolution.[1] Another was the age-old issue between special and general education.

> We are engaged in the modern world in reconciling an ancient conflict between special and general education. In the very dawn of educational systems this conflict was seen... It was believed that only those should be educated who belonged to a specific class, that it was wiser that all the rest should be ignorant....We have come to see that general education and special education are in reality one and the same thing, are component parts of one whole.[2]

On one point he was very firm and not willing to compromise, that of the dominant role of the university. While holding that each part of the educational system had intrinsic importance, that all parts must be co-ordinated, that many types and stages of education should be provided for all children and adults, yet he maintained that the key to the entire structure is the university.

> The university, functioning as the place of higher training, makes possible our modern high schools, and these in turn relate themselves to our elementary schools, and without the university at the top, the whole system would be inefficient....It was only after the founding of the universities in Nova Scotia that the work started which, with all its faults, has made Nova Scotia famous in the educational history of Canada.[3]

He believed that the universities held a heavy responsibility and it was therefore imperative that the university professors have very special and outstanding qualities.

---

1 H. M. Tory. Address No. 2. First Convocation, University of Alberta. "Religious leaders in England and America were terrified when the theory of Evolution was published. Yet out of all this chaos came Cosmos. Materialism, it is true, for a while seemed to lift its head; then died. Out of it all a richer life has come to man. The search for truth can injure none. The power to appreciate truth is God's greatest gift to man."

2 H. M. Tory. Address No. 5. "Some Aspects of Technical Education".

3 H. M. Tory. Address No. 9. "The University and The Nation".

> The selecting of men for university positions is, therefore, an important matter. In seeking men for such positions there are certain questions regarding a possible appointee which must be answered in the affirmative. Is he a master in his own field of knowledge? Has he the character and capability suitable to the responsibilities which he must assume? Is he in a position to properly represent the branch of knowledge in which he proposes to give instruction before a critical public which holds the university responsible for his activities? And not the least important, has he the temperament which will enable him to co-operate reasonably with others?[1]

Men of this stamp could only be secured and retained if their gifts were respected. "To such men the largest freedom must be given....they will temper freedom with discretion."[2] This position of his in regard to academic freedom was stated in almost his first public appearance in Alberta. Only once did he face government interference and he was able to win his point.[3] This is an important victory, for it has often been charged that state supported universities would inevitably be dominated by politics and politicians.

As was shown in the preceding chapter, Tory believed that the university must give the lead in all educational matters and must therefore control professional education as well. This led him into rather sharp controversy with the medical societies in Alberta until the fact of university leadership was finally accepted, and the relationship between the university

---

1. H. M. Tory. Address No. 10. To The Canadian Educational Assn.
2. H. M. Tory. Address No. 2. First Convocation, University of Alberta.
3. H. M. Tory. Address No. 3. Twentieth Convocation, University of Alberta.

and the professional societies was worked out equitably. Universities in nearby provinces and states were much interested in the way these policies were developed and some of their staff members consulted with Tory as to the methods by which they were achieved.[1]

Tory was never one who merely talked about education and research. He had a distinguished record for scholarship during his undergraduate days at McGill University, securing the largest part of his fees through scholarships. When he came on the University staff he began a series of researches[2] which brought him further academic degrees, and to the attention of several prominent scientific bodies in North America.[3] In addition he made two important contributions to the teaching of physics.

These were very stirring days at McGill, a time of rapid growth and many new discoveries. The period was distinguished by three things in particular, the generosity of a philanthropist who supplied the funds for new equipment, the high calibre of a group of scientists on the McGill staff, and the genius of one of that group. Money was needed for the equipment necessary both for teaching and research and it came from Sir William MacDonald, who financed the Physics, Chemistry and Mining,

---

1. H. M. Tory. Address No. 33 "The University's Function in Medicine."
2. Some of his researches were mentioned in American Men Of Science J. McKeen Cattell. (New York: The Science Press) 808 pp. A full list is included in the bibliography.
3. Tory was an early member of the American Physical Society and the American Mathematical Society.

and the Engineering buildings.[1] The great genius was Sir Ernest Rutherford whose important work on the atom was only one achievement of many. But although the period may now be remembered chiefly for Rutherford's great discoveries, it was the able work of all the men on the staff that made possible the extraordinary achievements.[2] These men were as active in private laboratory work as in the classroom and the scientific papers growing out of the research of this period are voluminous. Tory has often referred to these days, and well remembers two of the more important occasions. "I was personally present," he said, "when the first signals were sent by wireless in Canada between two rooms in a laboratory."[3] A Gazette reporter has recorded another incident.

> Dr. Tory recalls one morning entering the laboratory of Sir Ernest Rutherford and finding him jumping around the room in high glee. He had made an important discovery sensing the presence of an alpha particle, a thing so small it could not be seen through the most powerful microscope.[4]

Dr. A. N. Shaw has since given an explanation for this extraordinary flowering of scientific discovery.

---

1. Cyrus MacMillan. McGill and Its Story. (Toronto: Oxford University Press, 1921) 304 pp.
2. Some of the men most active in this period: H.T. Barnes, R.W. Boyle, H.L. Bronson, John Cox, H.L. Callendar, A.S. Eve, J.S. Foster, J.A. Gray, Otto Hahn, D.A. Keys, L.V. King, H.E. Reilly, A.N. Shaw, F. Soddy.
3. H.M. Tory. Address No. 12. "Scientific Research".
4. Montreal Gazette. March 28, 1928.

> The provision of more than one chair in physics, the frequent additional financial support given to worth while projects, and the general belief in the canon that university teaching without the accompaniment of original work must necessarily fall below par, have been in part responsible for the good fortune which has attended this laboratory.[1]

Like many of his associates, Tory had been to Cambridge for training while studying for his M.A., working in the Cavendish Laboratories under the general direction of Sir J. Thompson. On his return he was able to put his study immediately into use as he was made personally responsible for the supervision of the installation of the new laboratories in the MacDonald Physics Building.[2] These at the time were as well equipped as any in existence.[3]

In addition he was able to give a new direction to the teaching of Physics at McGill. He has described the situation when he was a student.

> In my own student days at McGill University, physics was a lecture subject only, and the only apparatus seen by the students other than honour students in mathematics and physics was that used on the lecture tables, which students were not permitted to touch.

He now gave special supervision to laboratory demonstration work with undergraduate students and a few years later, when the

---

1 A History of Science in Canada. Op. Cit. p. 142.

2 J. M. MacEachran. "Henry Marshall Tory - Boyhood and Student Days", in The Gateway, Dec. 15, 1927.

3 In the Annual University Lecture, 1904, Principal Peterson refers to a study of universities made by the Mosely Commission who had reported: "While thoroughly equipped and doing excellent work on the literary side, McGill is particularly rich in science and applied science, and possesses in physics, chemistry, engineering and mining a staff and laboratories which are unsurpassed by those of any American university."

assumption of new responsibilities forced him to give up this work,[1] he collaborated with F. H. Pitcher on the first Physics Laboratory Manual of its kind.[2] This text and the methods described were used at McGill for many years to come. Another task which gave him great pleasure was aiding in the founding of the Physical Society of McGill University.[3]

In spite of his success in the research laboratory, Tory was known and preferred to be known, primarily, as a teacher. He had once introduced himself as belonging "to that despised fraternity, especially in Anglo-Saxon countries, the fraternity of teachers"[4] but there has never been any doubt about his own valuation of the contribution made by the educator. To an audience in Vancouver he once said: "In respect of teachers the whole fabric of our modern civilization rests upon their work". He then proceeded to outline the standards which ought to be reached:

---

1 He became a specialist in Mathematics and assumed other duties in the University.

2 H. M. Tory and F. Pitcher. A Manual of Laboratory Physics. (London: Chapman and Hall, 1901) 298 pp. (New York: John Wiley and Sons, 1901). The very brief foreword states: "The method of treatment is an outgrowth of experience in teaching large classes with a limited number of instructors". The Annual Report (McGill University) 1900-1901, p. 30 states: "The Laboratory Manual of Messrs. Tory and Pitcher is the result of many years experience and will be of great value in dealing with practical classes. It has been favourably received."

3 The first minute of the McGill Physical Society, Sept. 25, 1897, reads: "A meeting to form a Physical Society was held in the MacDonald Physics Building, the following being present: H. M. Tory, F. H. Pitcher, L. W. Gill, R. W. Stovel, R. O. King. Mr. Tory acted as Chairman for the evening, Mr. King as Secretary."

4 H. M. Tory. Address No. 1. "The University Problem in Canada".

"Is the teaching effective in producing moral and intellectual discipline. Is the standard of work such that only worthy men reach it, and does it create an atmosphere of work?[1]

Although his own teaching was given about forty years ago there e been several comments about its high calibre. Professor Beatty written in his chapter, "The Progress of Mathematics":

We come now to consider those who either as inspiring teachers or research workers have been most influential in furthering progress of mathematics in Canada....At McGill, Professor Alexander Johnson and Professor George Chandler gave by their teaching and example a noteworthy impetus to mathematical study. The traditions which they established were ably maintained by Professor H. M. Tory.[2]

Dr. A. N. Shaw has said substantially the same thing in his pter on Physics in the same book. A similar comment was made by who has known him for many years, Mr. F. E. Lathe, Director, ision of Research Information of the National Research Council.[3] her former pupil, and later a colleague at the National Research ncil wrote to him:

No one could be long in contact with you without sensing the driving power in your life or without having been stirred by it to greater effort. You never urged us verbally; the urge of your example was always with us.[4]

Some of Tory's influence over students came because he knew so of them through his work with student societies and through his r duties at McGill as secretary of the examining board for the ciate in Arts, secretary of the University Matriculation Board, etary of the University Board of Examiners, secretary of the ittee on Graduate Studies and, as a Fellow of the University.

. M. Tory. Address No. 5. "Some Aspects of Technical Education".

History of Science in Canada". p. 154.

rivate letter from Mr. Lathe.

. M. Tory. Address No. 40. Reply to Dr. Adams.

It is not altogether surprising that Tory has long been interested in securing more scholarships. All three of the Tory boys had been obliged to struggle in order to get the education that each desired. Henry never forgot these early difficulties nor their effect in delaying his start in university work for several years. Almost fifty years after entering McGill he said:

> I was compelled to secure my education by strenuous personal effort. The early struggles left upon my mind a deep desire to see the facilities for higher education made available more broadly to the youth of Canada.[1]

During all his life he has worked towards this end. He has taken it as a personal responsibility to seek out the poor boy with ability but slender means.

> We have made a very great departure from the methods of the older institutions in that we have come to recognize that higher education is not the monopoly of any class....The university of today makes a call to the bright boy irrespective of social standing to come and receive the training which is offered.[2]

He has no reservation about the ability of Canadian students.

> There is no better intellectual raw material anywhere than in Canada, but we must learn to value it and provide for training it, and we must use it when trained.[3]

He has long been critical of the inadequacy of scholarships presently offered[4] and has engaged in every program which has attempted to remedy the situation, particularly in the

---

1. Ibid.
2. H. M. Tory. Address No. 9. "The University And The Nation".
3. H. M. Tory. Address No. 12."Scientific Research".
4. "In Canada the establishment of scholarships has been rather regarded as a luxury to be enjoyed by a few". In a radio address to The Canadian Teachers Federation.

preparation of a case for National Scholarships presented before parliament.[1] Later he gave assistance to a campaign for scholarships led by the Canadian Student Assembly.[2]

Tory's interest in graduate work dated back to his days at McGill, to the first of many enterprises in which he was associated with Dr. Frank Adams. With the latter as chairman, and Tory as secretary, a Committee of Graduate Studies and Research was organized,the first of its kind at McGill. It was a difficult task at first. Few innovations come without some opposition and this was no exception. Tory recalled later:

> It was a pioneering task. The graduate school was not created in a day. It had to face the opposition of the ultra-conservative and incompetent elements on the teaching staff.[3]

But interest in graduate study was never to dim for either man and they were to be again associated in the same work as members of the National Research Council. The connection between the work of the Council and the development of graduate work has already been described. Tory's own position in this regard has been clearly stated:

---

1. "I was associated with Dr. Tory in urging the Government and Parliament to accept a proposal that consideration be given to the establishment of a system of national scholarships. I was greatly assisted by the material which Dr. Tory supplied and by the suggestions made by him." From a letter from Paul Martin, M.P., March 12, 1944. (Although this proposal has not yet been accepted it did have some effect on the launching of the Canadian Youth Training program)
2. National Scholarships (Toronto: Canadian Student Assembly) Feb. 1939. 24 p.
3. H.M. Tory. Address No. 40. Reply to Dr. Adams.

> I am as much interested in seeing our schools and colleges and universities brought to the highest pitch of development as I am in the research work we are doing. As long as I remain at the head of the Research Council it will be my interest to assist in every way possible with the development of our graduate schools.[1]

He was able to show that the universities had been materially assisted by this means,[2] a point which has been corroborated by others.[3] One self-assumed task was to struggle against an attitude, too common in Canada, that it would be impossible to keep the best brains at home anyway, as they would always be attracted to positions in the United States or in Britain. As a member of the Committee on Graduate Studies and Research of the National Conference of Canadian Universities he presented a paper, "Whom We Train We Keep", quoting statistics to show that when proper provision was made in Canada for

---

1. H. M. Tory. Address No. 13. "Education and Research".
2. H. M. Tory. In a Memorandum on Industrial Research prepared for the Dominion-Provincial Conference, 1927. "The universities have been able to secure much of their research equipment through grants made by the Research Council and, in addition, the presence of graduate students holding scholarships has materially assisted in the development of such post-graduate organizations as now exist."
3. A.N. Shaw. "The Progress Of Physics In Canada". In Fifty Years Retrospect. The Royal Society of Canada, 1932. "Further reference is due to the work of H. M. Tory. In the educational and scientific activities of the Province of Alberta, in the policies of the National Research Council, and in the development of their impressive laboratories he has contributed more than any other individual. An appreciable part of our recent scientific development and improved conditions of training must be regarded as a direct consequence of his organizing ability, foresight and energy."

graduate study by far the largest part of the students remained and pointing out that making this possible was a national duty.[1]

Tory found a further opportunity to work for improved facilities for graduate study in a series of conferences on education attended by men from all parts of the empire. The Universities Bureau of the British Empire was convened first in 1912 to "spread knowledge of the universities of the empire among the universities themselves". Achievements at this first meeting were none too encouraging. Tory's impression, as a Canadian delegate at this first session was:

> first, how little we knew of each other and secondly, how little we were even willing to help each other.

But the years of war were instrumental in modifying the situation somewhat. Following the Canadian experiment of Khaki University, as other Imperial forces began to set up educational work. there was a need for consultation about common problems. To this end an Imperial Education Committee was formed in London, called, in the first instance, by Tory and the educational director of the New Zealand forces. So successfully did this

---

1. H. M. Tory. Address No. 13. "Education and Research". "That some at least of our leading educationalists felt rather pessimistic about the situation because of lack of financial assistance is shown by the fact that not very long since, at one of our Universities' Conferences, when this matter was being discussed, the statement was made by one holding a very responsible position in one of our universities that we could not hope under present circumstances to be able to hold our best men for post-graduate work in our own schools, that we would have to be content with providing graduate facilities for students of second grade. My own personal attitude in the matter is that we have a national duty to perform in making the necessary provision for our best men and that we must continue striving for it until we succeed."

committee function that it was decided that ways of making similar co-operation possible in peace-time should be explored. Accordingly, an Imperial Education Conference was called by the chief of the Imperial General Staff on June 11 and 12, 1919.

In his address, which opened the discussion at the Conference, Tory urged that the Universities Bureau should take on the functions of an Imperial Education Bureau, giving attention in particular to the distribution of the following kinds of information:

a. listing the precise information concerning men who would be capable as instructors
b. information about appointments that were open
c. information about junior men who seemed to have promise

and to act as a place of contact between men going from the Dominions to Britain and the British Universities. He and other Canadians urged that the British Universities should seize their opportunity to secure and train graduate students who would formerly have gone to Germany. The Universities Bureau agreed to assume as much of this responsibility as their small staff was able to discharge.

Two subsequent conferences were also held, one at Cambridge and the other at South Kensington. On each occasion Tory made the same plea. He pointed out that there were a hundred million English speaking people on the American continent and that many students in America were accustomed to go to Europe for some graduate work. But, he pointed out, the

British Universities were not equipped to give the kind of work that was required, nor was the degree of Ph.D., which many expected, to be secured. He was confident that if suitable work could be provided, capped by the degree, then many students would go to Britain rather than to Germany. These suggestions were received with interest by British educators but there was some questioning of the proposals.[1] At one point in the second conference a suggestion was made that a Ph.D. degree might be established, but only for students from the Dominions. Tory and other Dominion representatives were quick to point out that any degree which did not require the highest quality of work would be worthless. The conferences did not produce any immediate sweeping changes in the organization of the British Universities. No one had expected that. But the discussions were fruitful because of the healthy exchange of opinion and because some British universities were encouraged to make adaptations which would stimulate the entry of overseas students. Meanwhile Tory continued to serve as Canadian representative in the Universities Bureau,[2] and for many years supplied the

---

1 One old dean of classics said to Tory: "You ask us to gain the whole world but lose our own soul". The conferences were on such a friendly, intimate level that Tory was able to reply, without offense, that he doubted if the soul was worth saving.

2 Report of the Executive Committee of the Universities Bureau of the British Empire. London: 1931.

information on Canada which the Bureau published concerning professional schools, scholarships, and subjects of theses. Tory has long been an active member in another series of university conferences, the National Conference of Canadian Universities. The work of the Canadian Universities in this war has been characterized by a remarkable unity of purpose and of action. Yet in the early years of the century there were several sharp clashes between universities when one president felt that the activity of another was jeopardizing some special interest. This is not surprising when we remember how intense had been the religious differences which were responsible for the establishment of so many small colleges. Some of the credit for this changed condition must go to the National Conference of Canadian Universities. Up until 1910 there had been few serious attempts by the men of the universities to reconcile their differences or to work out common standards.

At that time two universities were in a dominant position in Canada, Toronto and McGill, and each was so occupied with the problems of its own growth that little attention could be spared to the work of other colleges, except as these were closely related or affiliated. It is not surprising to find, therefore, that the initiative in bringing about a first conference of universities was taken by men in the newer universities. President Murray of the University of Saskatchewan and President Tory, each working in the far west in a new province, were the first to realize how much might be gained by all if each would share his experiences and problems. Others

were prevailed upon to come to the first conference, called in the names of Principals Peterson and Falconer and held at McGill on June 6, 1911.

This conference was short in duration but the agenda was very full. The first problem to arise was the need for attaining some uniform matriculation standards. A standing committee was appointed to study this matter in some detail. Other questions included were: the way in which professors might be exchanged, the relation of the alumni to the university, the problem of special and general education, and the role of the university in relation to professional societies.

It was not until 1915 that a second conference was called, this time in Toronto. Much of the time was again given to the matter of matriculation standards and Tory was appointed chairman of a committee to study all existing systems and standards. This committee continued to meet for several years, though with a changing personnel, until their objective "to secure as great a degree as possible of equivalence in the subjects of Junior Matriculation" was realized. At the 1915 conference a constitution committee consisting of Presidents Peterson, Falconer, and Tory were appointed and the constitution was adopted in the next year.

There were many subjects of some considerable importance in these early years including discussion of courses of instruction for medicine, annuities and insurance for university instructors, and the matter of the organization of The Scientific

and Industrial Research Council.[1] In 1917 Tory was not present but a report of his educational work overseas was given in his stead by Lieutenant Colonel Gerald Birks of the Y.M.C.A. and a resolution supporting this work was adopted.[2] In the following year his full report on Khaki University was read to the Conference. By this time the Conference was meeting at regular intervals so that a proper exchange of ideas between all the responsible university heads could be achieved. On his return from Europe Tory was a particularly active member, first as a representative of the University of Alberta and later as a delegate from the National Research Council. In 1920 he served as Vice-Chairman, in 1922 as Chairman of the Conference. A study of the contributions he made to the Conference sessions, as recorded in the official reports, are very revealing as it shows him in a familiar light. Some others took a larger share in the delivery of papers although he made several important

---

1. This is discussed in the section on the National Research Council.
2. "That this Conference of Canadian Universities heartily endorses the Khaki University for Canadian soldiers, under the principalship of Dr. H. M. Tory, resolves that a committee be appointed to consult with President Tory concerning the contemplated curriculum of the said University and urges Canadian Universities to accept the recommendation of this committee with reference to the courses given at the Khaki University with a view to their acceptance as the equivalent of <u>similar</u> work done by them, in the case of students of this University who may desire to continue their studies after the war."

addresses.[1] But in the work of organization, in such administrative committees as the nominating committee, the resolutions committee, the constitution committee, and the executive committee, where the solid work of any conference is usually done, none had a fuller share.[2]

A study of the Reports of the National Conference of Canadian Universities reveals what substantial progress has been made in the universities in the past thirty years. Because this development was proceeding steadily, the opportunity of an interchange of ideas which the Conference afforded to the men of the universities was a factor in this progress. The contributions of Tory to the other conferences mentioned, through the educational ideas which he advanced, through his teaching, and through his efforts on behalf of graduate students were important for the same reason. They occurred at a time of growth and development and were well calculated to increase the speed of the growth and give direction to it.

---

1. Some of the addresses delivered by H.M. Tory to the National Conference of Canadian Universities: "Opportunities in Canada For University Graduates"; "Whom We Train We Keep"; "Methods and Work Of The National Research Council"; "The Canadian University In Relation To Community Problems"; "University Maintenance".
2. Official Reports of the National Conference of Canadian Universities.

CHAPTER V

The Educator in Public Life

Chapter V

An Educator in Public Life

In 1932, at the Convocation of the University of British Columbia, President Klinck in presenting Tory for an honorary degree, spoke these words:

> Mr. Chancellor, six universities have preceded us in enrolling Henry Marshall Tory, President of the Fifth Pacific Science Congress, among their honorary graduates. They have so paid tribute to the building of a noble university, to services on many national commissions, to the direction of a great educational movement in wartime, to labours in the cause of peace, to the establishment and guidance of the National Research Council. The Senate directs that the University of British Columbia follow the just example of its fellows and confer upon this distinguished Canadian the degree of Doctor of Laws, honoris causa.[1]

It will be noted in Dr. Klinck's selection of accomplishments that three of the five are what might be termed educational attainments while the other two are for service as a citizen. On every appropriate occasion Tory has urged that an educator has a duty as a trained citizen in the state as well as to his profession. And few Canadian educators have been more active in their country's service. Political office he could have had on more than one occasion, but he preferred the role of private citizen, taking action in voluntary societies

---

1 Proceedings of the Fifth Science Congress. Toronto: University of Toronto Press, Vol. 1, p. 174

and public commissions to further objectives that seemed desirable to him. In the best sense of these words he has been teacher and preacher outside of pulpit and classroom as well as inside.

Some consideration will be given in this chapter to the way in which Tory was able to exercise an influence on educational policy by his public activities. His ideas on Canadianism and the way in which these have been expressed, his activities on the public platform, and his work on Royal Commissions, and in voluntary societies, are all important to this end.

To no other single subject has Tory given more thought than to the meaning and responsibility of citizenship. His concept of citizenship is distinctively Canadian. He was an early, and has been a life-long member of the Canadian Club. In the early days he came vigorously to the defence of the Club against those who suspected it "of being a separatist movement."[1] He felt, and stated it on many platforms, that Canada could never play an effective part in the world, nor in the Commonwealth, until it had become united and until it was completely "master in its own house." Addressing the Canadian Club on one occasion he said:

---

[1] H.M. Tory. "The Canadian Club Movement". Address No. 30.

> I would suggest that in no country in the world is an intellectual understanding of the meaning of loyalty more necessary than in Canada.....With regard to this I am bound to say that, having lived at various times in five provinces of the Dominion and knowing somewhat the reaction of the parts, one to the other, I am confident that the necessary unity of feeling and sentiment is being brought about. But we must turn from our narrow provincialism.....Some of our political discussions do not help us in this regard. I remember distinctly my feeling when one of our foremost public men, speaking in a town in the West, referred to a certain place in Nova Scotia as a "God-forsaken place in eastern Nova Scotia." It happened that the place mentioned was the town and district in which I was born and spent my boyhood, one of the most gloriously beautiful on the North American continent. About the same time, a distinguished orator, speaking in Montreal, was joyously cheered as he referred to the men living on the prairie as "the prairie parasites."[1]

On another occasion he said: "I am a Canadian, if there is one in Canada."[2] He felt keenly any irresponsibility, any pessimism, any sign of weakness or inferiority when manifested by Canadians. "We, in Canada, have been too much inclined to lean on others," he told a reporter in Hamilton.[3] When visiting in New York he seized on the opportunity to discuss this problem with Canadians living there. "These comparisons with the United States have given many young Canadians a sort of a feeling that their own country is not quite the equivalent of other countries," he told them. "I don't like

---

1 Ibid.

2 H.M. Tory. Address No. 13. "Scientific Research."

3 Interview with the Hamilton Spectator, April 29, 1929.

to use the word 'inferiority complex' but that is what they have. It is a kind of looking toward this country which is not wholesome."[1] This speech was criticized by the editorial writer in the Mail and Empire who seemed to find in it an evidence of pessimism on the part of Tory. But such an observation was far wide of the mark. In the same year, in Toronto, a speech was reported in The Globe in which this striking passage occurred:

> I say to you that if we would throw off the mantle of pessimism which has possessed us, and risk the use of the trained and trainable intelligence of our own people, in one generation we would add to the national assets of our common country the equivalent of our national debt.[2]

This confidence in the man-power and brain-power together with the wealth in natural resources of Canada was a force which strongly motivated his actions. It partially explains why he has driven himself for more than half a century to provide training for young people, and why he has given much time on commissions in his country's service.

Much of Tory's most effective work has been done on the public platform. One of his primary objectives when he first went to organize the University of Alberta was "to establish ourselves in proper relation to public opinion." He

---

1 H.M. Tory. Address No. 31. The New York Canadian Club - reported in Mail and Empire, Toronto, February 18th, 1926.

2 The Globe, Toronto, June 15th, 1926.

worked toward this purpose by taking the platform himself in many parts of the province to explain his policies, hopes, and problems. It has already been described how the crucial issue of the inclusion of the Agricultural College within the University was debated by him with the farmers at their annual conference. Month in and month out he continued to tell farmers, business men, school trustees, service clubs, lodges, women's clubs, and anyone else who would listen, that their great struggle to develop the new land would be fruitless unless they made immediate provision for the training of the young.

In later years there was little cessation in the number of addresses given. Now they were presented in every province to an even more varied assortment of groups. Usually his subject was something related to education or research but on many occasions he was asked to talk about citizenship.[1] Although no orator, his speeches were very effective.[2]

---

1 In an address, "The Place of Science in our National Life," given to the Canadian Laundry Association, Tory reported: "On one occasion I felt fairly nonplussed as to what to say. I was to be guest at the Undertakers' Association and was given the subject of "What the Canadian Undertakers can do for Canada."

2 A reporter in the Financial Post, May 4th, 1928, wrote of him: "Tory has the gift of luminous speech. No man can portray the achievements of Science to a popular audience better than he for he has, in an extraordinary degree the power to articulate technical facts in common terms."

Those who heard him were impressed with his clarity of thought,[1] his humour, and his earnestness. This sincerity was attractive to his audience even though his approach was often very direct. One listener vividly remembers some of these addresses.

> I heard Tory several times in Service Clubs, in the years after the war. It was a great pleasure to me to hear a man "talk turkey" about the need for education. He used to tell them: "You do not want to be too mean with your money, you people who have plenty of it." They seemed to take it without any resentment.[2]

In a time when there were many changes occurring in education it has been well that the supporting public were kept informed about the need and the opportunities of Canadian education.

Tory has served on a great many public commissions. As early as 1913 he had gone to Europe as a member of the American Commission for the Study of Agricultural Credit and made a thorough investigation of European land-banks on this occasion. Consequently he was a natural choice when someone was needed to study agricultural credit in Canada and this research went on for two years, 1923 and 1924. His report[3] shows an understanding of the grave problem of farm debts,

---

1 Dr. Klinck said of Tory at the Pacific Science Congress, (p. 187): "He has that happy faculty of giving in a very few words a comprehensive view of the things for which he and the Congress stand."

2 Private letter from a former Y.M.C.A. Secretary in Alberta.

3 Report on Agricultural Credit. Ottawa: King's Printer. April 4, 1924.

the resulting loss of farms in Canada, and the consequent serious effect upon rural people. He urged more generous federal assistance and a proper co-ordination of federal and provincial measures. For a number of years he served as chairman of the Alberta Tax Committee being particularly concerned with the way education could be supported in a more appropriate way. At Ottawa he served as chairman of a Royal Commission investigating the Nova Scotia apple industry in 1930 and later prepared important submissions to a Dominion-Provincial Conference and to the Price Spreads Enquiry.[1] In 1936 his report as Royal Commissioner on Anthracite Coal dealt sharply with monopolistic practices in that industry.[2] Tory felt that Royal Commissions were of considerable value.[3]

---

[1] Report on Price Spreads. Ottawa: King's Printer. pp 5091-5144.

[2] Report of the Royal Commission on Anthracite Coal. Ottawa: King's Printer. February 3, 1937. p. 120.

[3] H.M. Tory, as reported in the Vancouver Province, June, 1933. I heard a distinguished American clergyman, English-born, define the difference between the Englishman and the American in terms of a creed. The Englishman's creed would be- "As it was in the beginning, is now, and ever shall be, world without end, Amen." The American's creed would be- "As it was in the beginning, is now, and by gosh it's got to stop." Then he turned to me and asked: "Can you fit Canada into the scheme?" I said: "Yes, I think I can. The Canadian creed would go something like this: "As it was in the beginning, is now, and, ladies and gentlemen, if we are going to make any changes we will appoint a Royal Commission to tell us how it is to be done." Now as I have served on a considerable number of Royal Commissions at various times, I am bound to say that the Canadian method is a good one. I am happy to say that in recent years both Britain and the United States are following our example.

But even more important, perhaps, than the merit of these studies and of the reports presented, these tasks gave Tory an opportunity to demonstrate the worth of trained intelligence in the country's service and the chance to urge upon the government and the public the need for more adequate training to make this kind of service possible.

Tory has held membership in a number of societies which have, as one of their purposes, the prompting of public opinion to take an interest in education and research. At quite an early date he became an Associate in The American Society For The Advancement Of Science and The American Physical Society, and contributed to their journals. He has been a member of the Federal Conservation Committee and was later president of the Dominion Fire Prevention Association. Through each of these organizations he urged that scientific research could save natural resources from exploitation. His interest in adult education has led him to work with the Institute of Public Affairs and the Institute of International Affairs. Since the beginning of the war he has been a member of the board of the Canadian Legion Educational Services. During 1944 Tory has been engaged in a campaign of health education in his capacity as President of the Ottawa Branch of the Health League of Canada. The substantial part that he has had in the religious and educational work of the church and of the Y.M.C.A. has already been mentioned.

For a number of years he has held membership in the

Royal Historical Society and the Royal Society of Canada, being invited into the latter society in 1909 as a Fellow of Section III. On a number of occasions he has served as a Council member and on special committees such as the one which studied the problems of radio broadcasting in Canada prior to the work of the Aird Commission.[1] In 1928 he presided over Section III and was elected President of the Society for 1939-40. His address on that occasion dealt with a theme that has always been a firm conviction with him, that of the real unity of all intellectual movements. He pointed out that this had been signalized in the organization of the Royal Society in 1872.

> The point which I wish to emphasize is that the two approaches to knowledge - one dealing with material and external things, the other emphasizing the personal and the subjective - both sprang from the same source, the progressive, ever curious human mind. Both promoted human progress and together they form an harmonious whole. Any real conflict between them is only due to over-emphasis of one aspect or the other.

One of the tasks which gave him some special satisfaction was his Presidency of the Fifth Pacific Science Congress, in 1933. Tory had gone as Canadian representative to an earlier Congress, held in Japan in 1926.[2] The Fifth Congress,

---

1 Proceedings and Transactions of the Royal Society of Canada, 1931.

2 Tory returned from Japan with a profound respect for the extraordinary progress that was being made in that country in Science and for the excellence of their scholarship system. Some fifteen years before Pearl Harbour he continued to urge that Canadians should not underestimate Japan in any way.

held in British Columbia, was characterized by the vast number of papers presented and by their quality. In addition to the planning and the arrangements for the Congress, all of which were borne by Tory and his associates on the National Research Council, he was responsible for overseeing the preparation of the five volumes of Congress reports.[1]

Tory is still an active participant in the work of the League of Nations Society of Canada and was national president for many years. In this work he took as his personal responsibility the task of enlisting scientists and teachers in the common effort to build better understanding between nations. The present war years are not the time from which to judge the worth of this Society. But one subsidiary of the League, The Institute of Intellectual Co-operation, may have important consequences for education in the future. In 1920 the League Assembly had urged closer co-operation between nations on intellectual matters. A sub-committee was formed to work on university relations, which later gave some assistance to continental European countries where the educational systems had been well-nigh destroyed. After 1926 the work of the Institute was that of a clearing office for matters

> "in the fields of education, science, international

---

[1] Proceedings of the Fifth Pacific Science Congress. op.cit.

> artistic life, organization of museums, wireless broadcasting, films, activities in the fields of letters, and the scientific study of international relations from the political, economic and juridicial standpoints."[1]

Some progress in this formidable task had been achieved prior to the war.

Canada did not establish a member committee till 1939, but in that year Tory assumed the chairmanship of the Canadian Committee on Intellectual Co-operation, and the Canadian Department of External Affairs designated the Education Branch of the Dominion Bureau of Statistics, as the National Centre of Educational Information for the purpose.[2] War hampered the activity of the Committee at first but soon new opportunities and responsibilities were presented. The distress of children in Europe and the menace of totalitarian educational systems to the future of the world have prompted educationalists in many countries to consider, as one remedial effort, the establishment of an International Educational Office, somewhat on a parallel with the International Labour Office. A preliminary Conference,[3] held at Harpers Ferry,

---

1 The League of Nations and International Co-operation. Geneva: A special League bulletin, 1937. 64 pp.

2 J.E. Robbins. "International Planning for Education" (Ottawa: Canadian Council Of Education For Citizenship, 1944.)

3 Education For International Security. New York: Report of the International Education Assembly, 1943. 40 pp.

U.S.A. in September, 1943, has been followed by a succession of conferences, with this purpose in view. To this matter the Canadian Committee have been giving their attention. As a result, for almost the first time Canada is being consulted on international educational developments. If, in the next decade, Canadians have some part in international movements in education, the setting up of the Canadian Committee on Intellectual Co-operation may seem even more significant than it now appears.

In a democracy, where continuous progress in education depends, in the final analysis, upon public support, it is not easy to estimate whether a man's contribution is most effective within school walls or in giving a lead to the thinking of his contemporaries about education. Both are certainly necessary, and Tory is one educationalist who has been able to perform both services.

CHAPTER VI

Conclusion

In his reply to Dr. Adams[1] on the occasion of the unveiling of his portrait which now hangs in the Library of the National Research Council, Dr. Tory said:

> There is a sense in which I have been a pioneer all my life, a pioneer in the field of education.

This word pioneer provides the most apt description of Tory's influence on educational policy in Canada.[2] Although it is now used rather loosely, its original meaning was - one who goes forward in advance of the main body with the purpose of preparing the way for their advance.[3] In this strict sense, then, with an emphasis on the sense of purpose, pioneer is a one word review of Tory's life and work.

The purpose of this thesis has already been stated.[4] From the evidence presented it has been clearly shown that Dr. H. M. Tory has exercised a significant and widespread

---

1 This address is printed in the appendix.

2 Note Dr. Broadus' comment concerning his first impression of Tory: "He seemed to belong to a place where things hadn't yet been done, and where his restless spirit could loose itself to the doing of them."

3 In the Concise Oxford Dictionary. pioneer - "One of a body of foot-soldiers marching in advance with spades to prepare the road for the main body; beginner of enterprise; from pionnier."

4 The purpose is:
Did Dr. H.M.Tory have an influence on educational policy in Canada? If so, what was the nature and character of that influence? How great was that influence? Of what value was that influence to Canadian education?

influence on Canadian educational policy, both upon the ideas of his contemporaries and upon the practice of those ideas.

It has been pointed out that he affected three groups, - his students, his associates, and the general public. As a teacher he left a noticeable mark upon his students.[1] Both as a fellow-teacher and administrative head his relations with his colleagues were such that they were attracted to him and spurred on by his leadership. Dr. Kerr has described how his flexibility of mind enhanced good staff relationships.[2] Because of his zeal and unfailing optimism associates took heart from him when dealing with the many difficult situations which they faced together.[3] He was successful, too, in gaining their support for two of his basic principles, the need for sound scholarship at all times, and the worth of the individual student. Like Egerton Ryerson, Tory believed his work was but half done until he was able to bring an awareness of what the schools were attempting to accomplish to many of the people of Canada. Probably no one has ever talked to

---

1 Reference has already been made to the judgment of Mr. Lathe, Dr. Shaw and Proffesor Beatty on this point.

2, Reference to this is found both in Chapter III and in the appendix.

3 One striking example of this is the marked growth of activity that took place after he became president of the National Research Council.

more Canadians about educational needs. That these words were not wasted is evidenced both by the growth in public support of the organizations with which he was associated and by the more common acceptance among Canadian people of the ideas which he was expressing. The importance of this accomplishment, in which he had so large a share, can be better understood when it is recalled what kind of opposition he encountered in his early days. But Tory was not satisfied with speeches alone. He used a more direct approach in bringing forward his ideas. With educators he worked in many conferences[1] and committees;[2] with politicians he shared in the framing of legislation[3] and in the preparation and study of reports.

It can be seen, therefore, that his impact upon the educational ideas of a great many Canadians has been substantial. Some of these ideas have taken root outside of

---

1 Such as the National Conference of Canadian Universities, the Canadian Educational Association, the Rural Teachers Association, Conferences on Intellectual Co-operation between United States and Canada, and the Imperial Educational Conferences.

2 The two most important were the committees in Alberta on curriculum revision and matriculation standards.

3 Tory wrote the first draft of many bills dealing with education, e.g. those setting up the University College in British Columbia, the University Act of 1910 in Alberta, and legislation dealing with the National Research Council.

Canada.[1]

His influence upon the practice of educational ideas is even more unique. Outstanding in this connection is the development of five different educational institutions,[2] which is one of the most absorbing chapters in the history of education in Canada. It is quite apparent that his contribution to the building of the University of Alberta is the most significant of the five. Yet the establishment of a solid foundation of organization, legislation, and finance upon which a university was later to grow, (British Columbia); the organization of an educational service for the armed forces of Canada soon to be widely copied by other nations, (Khaki University); the development of an institution by the aid of which the graduate departments of every Canadian University have been assisted; (The National Research Council); the application of years of institution-building to a new college thus giving it a proper start in its course, (Carleton College); and the provision of a comprehensive program of studies for Public Service, (The Institute of Public Administration); these are contributions to Canadian education that can scarcely be over-estimated.

---

1 e.g. Education among the other allied armies

2 It is worth repeating that Dr. Alexander credited Tory with building an institution "with a mind and soul".

When considering the nature and character of Tory's work, one obvious conclusion is immediately reached. The extent of his interests and accomplishments is quite unusual. His work as a teacher, both in rural elementary schools and in universities has been highly commended. As a scholar and research worker he has won renown, both in the university and later in public service. As an interpreter of education to the Canadian people he has been active all his life. As an administrator he has shown marked ability in many institutions under widely differing circumstances. As a legislator his work has had important results even though he has never held political office.[1] This is a long list; Tory has touched education and touched life in many places. But there is none of the shallowness and the superficiality which sometimes accompanies breadth. Patience and thoroughness are traits just as distinctive of him as his versatility. He was trained as a research worker and he carried over this capacity for mastering detail into his other work.

---

1 In chapter V it was seen that Tory has framed much legislation dealing with education, has been a Royal Commissioner on many occasions, but perhaps most important of all, has demonstrated the value to the state, of using a trained scientist and educator in these commissions and services. The use of the best minds in the service of the state is a much more common practice now than it was fifty years ago in Canada.

A second leading characteristic is his Canadianism, not narrow and jingoistic, yet marked with pride of country based on a faith in the wealth and brain-power of Canada, the existence of which no one knew better. Living and working in five different provinces helped him escape the provincialism that has been found in so many Canadians. In his lifetime he has had the dual opportunities of interpreting Canada both to the outside world and to herself, and has seized upon each.

At the outset of this chapter it was stated that Tory can best be summed up by the word pioneer. This is as apt a description of his educational ideas as it is of his work as a builder of institutions. His was not, however, a mind which ranged far ahead of his time to discover new truth by insight or by induction. As is the usual case, most of his ideas were formed through his associations with those about him, his parents, the men at McGill, and his colleagues; although in addition his reading was wide. His mind has always been responsive to new ideas; he has welcomed rather than feared them. But his peculiar contribution has come through his knack of taking hold of an idea and developing the practical machinery by which that idea can be expressed and put to service. In this sense he has been the educational statesman, rather than the educational philosopher.

However, this distinction should not be drawn too sharply. For part of the genius of Tory is found in the balance and proportion of his life which has been distinguished by vigorous physical and mental activity, judgments by insight matched with a temperament for patient research, and a respect both for the idea and the hard labour needed to its expression.

It was this balance which made possible his attainments as a pioneer, for educational pioneering, like any other kind, is often accompanied by discouragement and frustration. As we have seen, he possessed the qualities of foresight and imagination, and was skilled in organization and administration. Matched with these were health and vigour and an optimism of mind and spirit. As has been said of another,[1] Tory was one "who believed in his country, worked for his country with all his might, and had a good time doing it." This cheerfulness and zest of living is a characteristic which explains much of his influence over his colleagues. His was an optimism rooted in a faith in his country and a faith in man itself.

For, as has been shown, a further characteristic of Tory's work has been the consistent expression, in both word

---

1 This was said of Justice Oliver Wendell Holmes in Yankee From Olympus, by Catherine Drinker Bowen. (Boston: Atlantic Monthly Press, 1944)

and activity, of his belief in the prime importance of the individual personality.[1] As both teacher and preacher he has continued to draw attention to the fact that there are many more possibilities within man than have yet found fulfilment. He had a strong conviction that this could be realized, to a large extent, by a better provision for the education of Canadian youth, which would result in a higher standard of living and a richer cultivation of the mind and spirit. This was not just a theme for addresses; it was also the motive which has driven him to a lifetime of labour in seeking to provide more schools, more laboratories, and more scholarships. There was nothing narrow or petty about his conception of education, and its relationship to man.[2] Moreover, his own

---

1 Note his warning to staff associates that if they allowed even one student to go away without help they were "guilty of a crime against your country." Note, too, his insistence on special training of the few as a complement to general training for the many.

2 Tory has said on several occasions that the aim of education is the attainment of "moral and spiritual power". The three attributes he has listed as being most necessary for teachers are character, a temperament which makes it possible to co-operate with others, and mastery of one field of knowledge.

life has served, in no inconsiderable way, to demonstrate what he believed and taught.

In character, then, Tory's contributions to Canadian educational policy have been distinguished by the breadth of subject over which he has ranged, the distinctive Canadian cast they have been given, their balance, and for the consistent expression of a central, basic idea, - - the worth of the individual.

It is no easy matter to weigh all the evidence in order to estimate <u>how great</u> was Tory's influence upon Canadian educational policy. A mere listing of the institutions which he had a part in building is perhaps all that need be said. But the indirect effect of this pioneer work upon other institutions that followed[1] may be just as important. An illustration of this is Khaki University. It has been established that educational work in the other allied armies was developed somewhat on the model of the Canadian plan. Now it is clear that such services are so essential to the morale and the military skill of troops that their organization would have come about, sooner or later. Still it is a fact that these services came at an earlier date than would otherwise have been the case, and that they had the benefit of the prior Canadian trial-and-error experience. This

---

[1] Tory was well aware that one institution influences another and was conscious of the responsibility resting upon himself. In Alberta he said: "As we build, unless we build so badly that our work must be destroyed, others will build after us."

significant contribution must therefore be added to whatever value is set upon the work of Khaki University among Canadian forces.

A similar observation might be made about the other pioneer ventures in which Tory was associated: the development of the other educational institutions, the installation of new laboratory equipment at McGill, the text-book on experimental physics and the exploratory work that was signalized by that text, the committee on Graduate Study at McGill, the Extension Department in the University of Alberta, to name some of the more important. Each of these had experimental features and each was copied elsewhere, some very widely. All of them might have taken place eventually without his prior work, and for several of these enterprises the original idea was supplied by someone else. But it is no coincidence that Tory was associated with each of these developments, for he supplied many of the essential qualities of imagination, organizing skill, and hard work that made them possible. Without such leadership the result might have been very different.

It should also be repeated in this connection that Tory's work has been carried on for <u>sixty</u> years in <u>five</u> provinces, a noteworthy record in itself. A very large number of students have come under his influence as have teachers on the staffs of five colleges and universities. Business men, army officers

scientists, and politicians were his intimate associates on a number of important projects. In a much less direct but still a significant way he has reached thousands of Canadians by his activities on the public platform. It is inevitable therefore, that where such opportunities such as these were offered for almost two thirds of a century, an aggressive leader, such as Tory, would exercise a large degree of influence.

More important evidence bearing upon this matter comes from the judgments of his associates. Statements have been quoted already from men who knew him under widely differing circumstances.[1] The references to his work in Alberta are specially important as it is quite evident that the men who had seen his work at first hand were well aware of its value. The opinion of Dr. F. D. Adams[2] is also of consequence because Adams and Tory were so closely associated for more than half a century.

---

1 Some of those who have been quoted as commending Tory's work are:

The Board of McGill University
The Board of McGill College in British Columbia
Dean Johnson of McGill
Dr. W. H. Alexander
Dr. J. M. MacEachran
Premier J. C. Brownlee
Dr. A.N. Shaw
Sir Ernest Rutherford
F. E. Lathe
Paul Martin, M.P.
Dr. E. K. Broadus
Dean W.A.R.Kerr
Hon. A.C.Rutherford
Dr. R. C. Wallace
National Council YMCA
President L.S.Klinck
Professor Beatty
Report of the Ministry - Overseas Forces of Canada

2 Found in the appendix.

One judgment is lacking before a full answer can be given to the question of how great is the influence -- the judgment of history. But it is certainly safe to say that only a very few Canadians in the present or past have made a similar impact upon educational development and policy.

At least two generalizations may be hazarded as an estimate of the value of Tory's influence upon Canadian education. It is evident that his work has been peculiarly suited to the times in which he lived. And it is just as clear that this work will have a lasting effect in the future.

It has been pointed out that Tory's contributions can best be understood as that of a pioneer, one who prepared the way for others to follow. But to a very large extent he became a successful pioneer because he was so much a part of his time. So thoroughly has he understood the problems and possibilities of Canada in this era that he has been able to draw the blueprints and build the buildings for the future. On several occasions, it is true, critics have called him an impractical dreamer.[1] Yet each time the work he planned was needed for the present as well as the future.

---

[1] The National Research Council building was much criticized for some years and Tory was blamed for the "impractical" plan.

This was true when he helped develop new laboratories and new techniques at McGill. Again, in British Columbia, it seemed to some that McGill College at Vancouver was too ambitious a school for a new and remote province; yet a few years later a full university was needed. The rapid expansion of buildings and faculties in Alberta was also decried but it barely kept ahead of growing demands for university services. The history of Khaki University shows how timely was that development. With the present war has come a need for scientific inventiveness which could never have been met had not the National Research laboratories been built and staffed, though ten years before some men had forecast that they would never be fully used.

In a broader way the ideas which he thought most important were singularly appropriate to the stage of Canadian development of the last half century. His insistence that truth can only bring good rather than harm was and is timely.[1] In a country in which materialistic goals were and are still dominant it is well that there has been a strong voice demanding that education and scholarships be

---

1 "The search for truth can injure none. The power to appreciate truth is God's greatest gift to man". His favourite motto has been: "Prove all things. Hold fast to that which is good."

given a very high priority. His views that education has a very practical function and that general and special education are parts of the same whole are ideas well suited to a country much of which has only recently emerged from the frontier. Valuable, too, has been his expression, and indeed his examplification, of the idea that the good life requires the cultivation of intellect, body, and spirit, and still may only be attained if full responsibilities of citizenship are discharged.

These ideas were given a vigorous and consistent expression, backed by strong institutions which put them into effect, in a period when a new nation was growing in population, wealth and status. Canada needed and was ready for ideas and principles which would aid in bringing about maturity. Out of this circumstance has come much of the value of his work.

But the influence of Dr. Tory has value in yet another way because, not only is it timely, it is certain to be timeless. The work that he has performed, his impact upon the ideas and personalities of students, staff associates, and so many others, is in turn passed on. This kind of immortality is even more true of the institutions which he built; there are few more lasting memorials to the man nor permanent contributions to the nation than the establishing of a college or a university. Few men can claim so many monuments.

Appendices

1. ADDRESS - "A Khaki University" ..... Dr. H. M. Tory
(Delivered to the Montreal Canadian Club, Nov. 5th, 1917.)

We are living in a world, in an age, when the despised University Professor of twenty years ago is coming to his own. It is a fact also that even as late as 1912 the chief argument used against the now President of the United States in the election campaigns was that he was not a man of the world--he was a mere University Professor. But times have changed since that day. The Prime Minister of France is a University Professor; the Prime Minister of Italy is a University Professor; and for the first time in the history of the British Empire there is a University Professor at the head of the Education Department in England. This is the first time that the man at the head of the Education Department really had any professional experience.

I thought you might be interested, and I hoped to be free to tell you something about, a plan that has been in the minds of a few of us for some time, with respect to the education of the soldiers in England and France during the demobilization period.

Last year, Major Birks, the head of the Young Men's Christian Association in England, was here; and, gentlemen, I would just like to say this word--your applause indicates an appreciation on your part of a man who is a credit to the city of Montreal and to Canada. There is pride in the armies of France and England in the work that has been achieved under his direction. When he was here in the spring he came to see me, and he said he had been conscious for some time that probably there was a place for some intellectual effort of a more organized kind in the army than was then being carried on, for promoting thought and interest among the men during their leisure hours. He said that not having had the necessary educational experience he was anxious that the matter should be studied, and he asked me to go to England for that purpose. I confess going to England was not a very attractive thing then--it is not very attractive now, but it was less attractive in the spring than at present. I had a feeling that one should not put oneself in the way of crossing the ocean and using food and ship space on the way over unless he had a very important mission. Well, Major Birks impressed me with the fact that it was really worth while and I consented to go. When I first landed in England I spent three weeks quietly going around the army areas in England and the camps, going in and out among the men, attending their meetings, listening to their discussions, seeing the significance and meaning of the YMCA there, becoming acquainted, as far as that was possible among so many thousands, with the things they were

thinking about, to see whether I could make up my mind whether an educational effort on a big scale would be valuable, if it were possible to carry it out. In various ways, by consultations with the men, by meeting groups of men and talking with them, it grew upon me that it was not only possible to organize an educational effort among the men, but that it would meet a need of which the men themselves were becoming conscious. The glamor of the early days of the war had passed away, the daily routine had made its mark upon the lives of the men, and their minds were naturally turning once again to the problems of their ordinary life, and they were wondering when they were going to come back and how they were going to come back. After studying the matter for a time in England I was fortunate enough to get permission to go to France. My time there was extended from ten days to three weeks, so I had an opportunity of going about among the camps in France, talking to a great many of the men. For the first time I started talking to them publicly. I met their officers in rifle practice and associated myself as intimately as possible with men and officers. The impression that the time was ripe for something to be done in France grew upon me, but I did not want to make up my mind definitely, so I went back to England and I finally came to the conclusion there that I could prepare a programme that would be useful both for the time now when the war is on, and more so for the work of the future.

The impression in England was then that demobilization was not as far off as it looked to be, and there seemed to be need for immediate action if we were to have time to make the necessary preparation to do any sort of definite, concrete work. A scheme was therefore planned and is now in operation in England and France, broadly speaking as follows. Lectures are being given in all the camps in England and in France, a regular, organized system of popular lectures dealing with the subjects which I believed the men would be interested in. A great deal of interest was manifested in the study of the local history of the places where they were. In France there was a great demand for the story of the Somme Valley, its history was a fascinating study to the men. Then there is discussion on the war, not in the sense in which we discuss it here, but of the campaign of the war. This was of intense interest. Then I found them most interested in things about home. When I first spoke before a body of soldiers in one of the YMCA tents in France, well at first I simply felt I could not speak to them. As I looked upon that body of men, knowing what they had been through, I felt that my words would be very poor words to utter to them, so I said: "Men, I don't know what to talk about, but I should like

to tell you something about home if you would like to hear about it." And they nearly took the roof off. The deepest thought in the minds of the men is the thought of Canada and the people at home and the homeland and the love they bear for it, every hour getting stronger as the horrors of war go on. I was the only man they had seen for a year in civilian clothes, so I got a great reception, and I went on: "Another thing I feel is that you men have no desire to go home until you have finished the job you set out to do," and I got exactly the same kind of applause. In planning our work, therefore, we planned not only studies of a historical character but something relating to war, a group of studies relating to the British Empire, and to the problems that are now agitating the minds of the people of Canada, with lantern slides and the finest lecturers that could be obtained in England. They are going on in England and they will soon be started in the camps in France. Then, in addition to that, I saw that there was a need for one other thing, that men should have the privilege of getting together in groups for the study of actual subjects in which they were interested.

Two hundred men in camp one afternoon came together as a result of a religious meeting. Five hundred men had attended this meeting, and I asked the speaker if he would ask that men who would be willing to meet me and talk about their life in Canada after the war should remain after the meeting. Two hundred men remained. I did not want to get discussing the matter with them in an impulsive way, so I said; "Now, I will come back this day week, in the afternoon after you are through with your day's work, and we will talk matters over then," and I proposed to them this question: "How many of you would be willing from now to the end of the war, and after demobilization begins, to begin consistent and consecutive studies?" When I came back I found that every man of that two hundred was willing. I wanted to find out what course they would be particularly interested in, so I asked how many would be interested in an intensive course in agriculture, and sixty men signified their interest; and I asked them to meet me outside, as I wanted to be sure that I was dealing with serious men. Then I asked how many men were thinking of religious work after they got back, and I found forty men and I turned them over to Captain Clarence MacKinnon and he dealt with them. And so I went through the list, and every man had something definite that he wanted to study now during the time of the war and particularly after, when the long idle days had begun and they were waiting to get home. Out of the sixty men who wished to study agriculture I found that forty had been born on farms in Canada, had lived on the land until they were about seventeen or so,

had then gone into the towns and villages and cities of Ontario and the West, and then had gone to the war. They had a feeling that they could not go back to the occupations they had before the war; they did not want to go back to the office and the store. They said; "If we could get an opportunity to prepare ourselves for farming on a scientific basis, and could be sure provision would be made to settle us properly on the land, that is exactly the thing we are looking for." I was exceedingly anxious to find out whether that was a common feeling in the army, and I asked the YMCA captain in that camp if he would detail an officer to meet the men of one brigade and ask them to give him a statement of what they wished to do and make up the statistics for me. I said "Do not hurry, but take plenty of time to do it, and send me a cable when you get the information." Three days ago I received some information. It is a long job examining personally four thousand men, particularly when they are on duty from 5 o'clock in the morning until 4.30 in the afternoon. However, he had examined 1875 men, nearly half of the brigade, and out of that 1875, 1360 expressed a desire to have educational work undertaken for their benefit during the demobilization period, and they gave assurances that they would attend classes. Let us be conservative and say that fifty per cent of the men would be willing to put themselves under tuition, and somewhere between thirty or fifty per cent were willing to put themselves under intensive instruction looking to some definite occupation. Since I came away the question of group study has received our attention and we have made a plan; then the whole matter was left with MacKinnon to make it a permanent thing. I have word today that about a thousand men are organized in classes. Forty men have been taken from the army, men who were teachers, schoolmasters, etc., men from the chaplain service, and these forty men are engaged in teaching every night in the week in that camp alone, and there are a thousand men in the classes. Matters have become so complicated in that camp that they have had to organize a sort of faculty, and a cable came to me recently through Mr. Birks which pretty nearly said; "Tell Tory to hurry back, we are in need of help." We felt the need, also of proper library facilities for the men, and before I left we had arranged to put a library in every hut in England and in France, in every army area. During the winter fifty to one hundred thousand books will be made available in these areas. Also any man coming and asking for a book--and the call for books during the last six months has been very great--any man who wants to get a particular book can come and ask for it, and it will be made available to him on the shortest possible notice. I had word yesterday from the man who is looking after this phase of the work and he

said, "We are searching for books and dealing with the applications that are coming in, and we are so overwhelmed that it is impossible for me to give proper supervision to the work at all."

That gives you a general idea of what is being done, under the direction of the YMCA, helped out by the Chaplain service, and a willing hand being lent to it by every officer of the army who is interested in the welfare of his men. But the larger scheme that seemed to grow upon me was the idea of planning for the demobilization period, and I put it to myself somewhat in this way. If we could bring to bear on these men during that period the educational forces in the army and in Canada, establishing in their camps the equivalent of one of our modern universities, a sort of Khaki University, as Mr. MacKinnon suggested, for those who want to do intensive study in one area, and carrying out our work in an Extension Department in all areas, it would not only be good for the men in that trying period, but it would have lasting significance for them in relation to the problems of the home life after the war. So I set myself to prepare a plan which could be made useful to them. It involves the suggestions I have made in the report I have handed to Major Birks, suggestions that came from my intimate relations with the men. The suggestions involve in the first place the establishment of an agricultural college. If we can plan in England an agricultural college that would handle five to ten thousand men, we would be doing a work equivalent to five years' work in all the agricultural colleges of Canada put together. I am informed that there are forty thousand farmers in our army and not five per cent of them have ever seen the inside of an agricultural college. If we could bring to bear upon ten per cent of those men intensive work and a broad course of training, a work would be accomplished equivalent to five years' work in every agricultural college in Canada put together. Then I want a college for instruction in business. I find hundreds of men in one brigade alone wishing to take up practical business training, and sixty men did organize themselves into a class to study shorthand, typewriting, commercial geography, business arithmetic, business correspondence, etc. Scores of men have started in business only having had a common school education, and they are anxious to use this time to improve themselves. A man who had been the head of a commercial college in Canada, in the city of Toronto, and who is now in the army, has been asked to organize ways and methods of dealing with problems of that sort. I asked him, with the permission of his superior officer, if he would undertake the work, and he is doing so, and we

intend to extend and intensify that program during the demobilization period. Then we must have some provision for men who wish to prepare to enter or go back to the university. Scores of men, boys from McGill and my own university and other universities, feel that everything they have ever learned has gone out of their brains, and they are wondering how they are ever to get back to their studies, and I asked them if they would take the opportunity if it were given to them, and you can imagine the response. I am confident that we can redeem the remnant of the army of young men of that category if we would put in an intensive program for them and go to it in the right spirit.

There is a great work to be done in organizing these groups of men and bringing to bear upon them all the intellectual force we have at our command, making them realize that they must not take a lower line of life than they had planned for themselves at first. We must restore them to the attitude of mind where they will have hope for the future. So I went through the series of things that might be done. There is a large body of men who had only partly finished the University course; for to the credit of the Canadian boys be it said that the universities and colleges emptied themselves into the army almost at the beginning. They are the finest young men in Canada, and I asked them, man after man, whether they would be willing to engage and carry forward such work as I proposed and they said they would be only glad of the opportunity. In my scheme all such subjects as history and economics, etc., can be readily undertaken, and where it is necessary for men to have laboratory work I am confident that the universities of England will be open for them. It seemed to me that the program was so large--it grew upon me as I thought of the various groups of men that could be dealt with--that I said to Major Birks, "This is a job for the universities of Canada, and I am going to approach them and see if they would not undertake this thing as an educational program." I have not met a single rebuff. I have discussed the matter with Sir William Peterson and I do not suppose he would like me to say that he would commit himself, but I have his assurance that everything in his power he will do, and of all the teachers I have spoken to there was not one who did not say to me; "We will be glad to do anything at all in the interests of the men overseas," and I know that teachers will be at our disposal. That is the kind of message I have from all the universities, McGill, Toronto, Manitoba, Saskatchewan, Alberta, and all. But this is a very big problem, and the question came up, if the universities are willing, would the Government be willing to co-operate? On Satur-

day a deputation consisting of your Chairman, Dr. Frank Adams, Mr. Woods, the National Secretary of the YMCA and myself waited on Sir Robert Borden and put before him the plan and I cannot tell you how heartily he acquiesced in the suggestions, and gave us the assurance that so far as the Government of Canada was concerned, it would have its most cordial cooperation, but of course military necessities must be considered first. That is the position we are in today.

The plan is that we should organize the equivalent of a Board of Governors, representing the Universities of Canada, and having on it representation of the YMCA who gave the original suggestion, men from McGill, Toronto and Western Universities, a group of men who will be the equivalent of the ordinary governing body, an educational committee composed of the principals of our great universities. These men having been approached have all of them expressed their willingness to go overseas and help out with the task when the time comes. The plan has not yet been launched, it has only been outlined. There is a large piece of work to be done in creating the machinery by which it can be organized. I have put before myself six problems to be faced. First there was the question of facilities, and I have the assurance that all the machinery available in England now for the purpose of giving instruction to officers would be made accessible to us. In addition to that an Extension Dept., organized on a more definite and wider basis than our own, will carry out lectures and instruction in every camp, thus relieving the men from some of the monotony of military life. Then I have the assurance of the army that men in the army who are teachers will be made available for that purpose if they are willing to serve. I have the assurance of every such man in the army that they would be willing to be transferred for this service during any period. So I feel that that question is fairly well met. Then the question of equipment has to be faced. Fortunately, London is the center of the bookstores and educational equipment of the world almost, and it seemed to me that it would be an easy matter to get the necessary equipment for carrying out the program in the way I have outlined to you. Then there is the question of cost. I do not like to say much about the cost, but I will tell you one thing. It will not cost as much as it appears on the surface. The largest part of the teaching staff will be supplied either from the army or from the universities without cost, except travelling expenses, and I am confident of this, that the money the war is costing Canada in a day will run this whole service to the army

during the whole demobilization period, and I am confident the public of Canada will be willing to subscribe that sum of money for that purpose.

ii Articles from The Gateway

University of Alberta

December 15, 1927

"Twenty Years" - Dr. W. H. Alexander

As people get older they are said to get into the habit of repeating themselves. One begins in course of time to realize why; it is all due to the anniversary habit fatally attached to the human race. We have a fifth anniversary, then a tenth, then a fifteenth, and, while possible some new things were said at the fifth and the tenth, certainly all hope of such a possibility had died away by the fifteenth and twentieth. What must be the state of affairs at the fiftieth one shudders to contemplate. The only saving feature is the possibility that at each of these several occasions there may be some new faces in the audience to whom aged remarks and jests feeble with senility may seem new, for the simple fact that they, the auditors, were not around the last time these death's heads were trotted out.

Twenty years ago, come the first of January, President Tory took office as President of the University of Alberta. At that time, January 1, 1908, there was nothing to preside over except a stenographer, but Dr. Tory was charged with the duty of going forth to find both a faculty and a student body to justify his title.

He wisely satisfied himself first that there would be a student body; faculties can always be had for the asking, but students, they are shy and diffident birds, and may not come to you at all when you throw out the breakfast crumbs. Then he selected a professorial body (I rather like that phrase) of four, fifty per cent of which, as the statistically inclined say, is still with us. Of the students in sight in the spring of 1908 thirty-five turned up in the fall, and thus was set going the University of Alberta.

Now just notice; on that day, September 23, when classes began there was really but one Faculty, Arts and Sciences, and in that Faculty but four departments.

Just try out your intelligence by seeing how many Faculties you can name as now existing around here, and within each of these how many departments; you ought to be able to do something with the names of the Faculties anyway, because they become individually responsible for some dance or other, don't they, so that in the usual undergraduate course, you should get to know four of the Faculties, at least, while a double course person might even get to know them all, especially if he were ploughed a couple of years. The scheme, once so simple, has grown complex now; it is the story of an evolution from a little backwoods college to what is at least the frame-work of a University as in modern times conceived.

Materially in those far-away days the University's possessions were represented by River Lot No. 5, a handsome stretch of 258 acres with a decayed horse-barn on it. (I hope the printer doesn't displace that hyphen.) Classes met, to begin with, in four rooms of one of Strathcona's public schools, and later for over two years in the present Strathcona Collegiate Institute. It was not until the fall of 1911 that we took possession of Athabasca Hall, our first actual college building; it was a general utility structure, as indicated by the fact that my office was in a shower-bath room. True, its uses as an office and a shower-bath were not coincident but consecutive; none the less my desk sloped the way the water would eventually run. I am not sure but what I got a permanent bias at that time, something like that of the sidehill ploughman.

Since then buildings have come along quite numerously, and of the President one may write as of Sir Christopher Wren: If you are looking for something to remember me by, why, just take a glance anywhere around you. When you hear visiting professors congratulate us on our facilities for study and research, remember it is not all hot air; the President has succeeded in giving the University a quite decent corporeal presence, considering its youthfulness (scrawny, undeveloped, gangling are the usual epithets) and the poverty of its parents.

That is no minor matter; we all like to be comfortable or as nearly comfortable as possible. But the very best thing that we can say about the President's regime as it closes its second decade is that he has built up an institution with some kind of brain and soul; now there are collegiate foundations which possess these only in very rudimentary form. But the University of Alberta really means something in those ways; it is able to give to those who want it a genuinely liberalizing education in a way which the University of Toronto did not even

feebly suggest when I was an undergraduate there. But you cannot have a liberalizing programme if your head is anti-liberal; that seems certain.

Let the two of us, Professor Broadus and myself, who have been with President Tory through most of these twenty years, be given the opportunity of saying just this, that the University of Alberta has in these twenty years grown in a way which the President then foresaw but which we used to regard as the hallucination of an amiable mind gone wrong on one tack. As a matter of fact, what we thought hallucinations, were really visions.

"President Tory as an Educator" - Dr. W. A. R. Kerr

It was the theory of the nineteenth century determinists---notably of Hyppolite Taine---that the individual man is the product of three great decisive factors---la race, le moment, le milieu. Probably nowadays we are not ready to admit so simple an elucidation of our complex selves, but there is no doubt that the three constituents named, broadly interpreted, go surprisingly far to account for the make-up of the most of us.

Let us then remember that President Tory was born of Nova Scotia U.E. Loyalist stock, came to maturity during the later Victoria Era---a moment of great intellectual and industrial expansion---and that during his own lifetime he has been subject to the influences of an unusually stimulating and many-sided environment.

These facts may not serve as a complete explanation, but they do help to make more easily understood Dr. Tory's deep-rooted Canadianism, his energy and driving power, his comprehensive outlook, and---a natural consequence of these qualities---his outstanding position in Canadian education.

A brief review of his career will illustrate his wide experience of life and the large contribution which he has made to that cause of learning whose advancement has since

youth always been nearest to his heart.

Beginning as a young man his professional service by laboring for three years as a teacher in the primary schools of Nova Scotia, President Tory has never lost his sympathetic interest in the largest, and in many respects the most important, of all fields of educational effort--- the common school.

Urged forward by his own desire for further training he went to McGill University, and after a brilliant career there as a student joined the mathematics staff of that institution. Continuing his work as a scholar he gained in due course his doctor's degree.

Meantime his gifts of organization and administration were being utilized in his own university, and were soon to receive recognition beyond the boundaries of his adopted province. In 1905 on behalf of McGill and at the invitation of the Government of British Columbia, Dr. Tory spent a year on the Pacific coast in connection with the establishment at Vancouver of a University College and arranged its affiliation with McGill. As is well known this institution developed later into the present University of British Columbia. A somewhat similar mission later called Dr. Tory to the Maritime Provinces. He there completed negotiations which brought about, for the purpose of higher study, especially in the domain of engineering, the affiliation of Acadia and Mount Allison universities with McGill.

It was therefore a man with a wide knowledge of the whole field of Canadian education, a trained scholar and an administrator already well versed in the problems involved in the relations of institutions of higher learning to public life, who was called in 1908 to Edmonton, to organize and develop the newly-founded University of Alberta. Those who are familiar with the pioneer conditions of twenty years ago in this province understand better than is possible for the rising generation of today the difficulties of the task entrusted to the new principal. Few in the West at that time realized the vital and vitalizing function of a university in the life of a modern community; others, better informed, feared the whole project still to be premature. Public sympathy had to be enlisted and consolidated before adequate financial support could be expected from the Legislative Assembly. At first the road was hard, but as time passed prospects improved, and from the opening of Athabaska Hall in 1911 the situation became more stable and development more rapid.

In 1913 President Tory was asked by the Alberta Government to proceed to Europe to study and report upon the question of agricultural credits. His authority in this field was recognized again when the Government of Canada commissioned him to investigate a second time the same problem in 1926 and to suggest a basis of legislation by Parliament.

The outbreak of the World War confronted the young University with new and formidable difficulties and threatened a general breakdown in the professional education of the youth of Canada called overseas. Deeply concerned with this serious outlook, Dr. Tory, at the invitation of the National Y.M.C.A., and with the sanction of the Dominion Government, went to Europe to investigate the problem at first hand. The result of his report was ultimately his undertaking to organize and administer the Khaki University. By means of the instruction thus made available, fifteen hundred men received a year of college work and many thousands of others were given training in commerce and agriculture which enabled them to make a fresh start in life on returning home after the signing of the Armistice.

In late years large demands have been made on President Tory's time and strength by calls for public service outside the University. Under his chairmanship the whole work of the National Research Council has been revivified and a new momentum and precision given to its activities. At present he is presiding over the Provincial Tax Commission, out of whose labors it is hoped may come some rational and comprehensive plan for the raising of a buoyant revenue based on an equitable distribution of the necessary financial burden.

Within the University, as nowhere else, we have reason to be aware of his quite unusual power to win and hold the confidence and affection of his associates; here, as nowhere else, we appreciate his long view and his sense of relations in the shifting problems presented by men and events; here, as nowhere else we know that, while well able to defend his own opinions, his mind is always open to new ideas and considerate of the viewpoints of other people.

All said and done, there can be no doubt that President Tory's permanent title to remembrance will be his development of this University and of his imprint upon it of those ideals of scholarship, of the search for truth, and of consecration to the public which it enshrines. These it has largely drawn from the inspiring educator who we hope may long remain its distinguished head.

"Si monumentum requiris circumspice."

"Boyhood and Student Days" - Dr. J. M. MacEachran

Henry Marshall Tory was born in Guysboro County, Nova Scotia. His ancestors were predominantly Scotch. One grandmother came from the north of Ireland. They were followers of Prince Charlie. They came to America just before the Revolutionary War, and to Nova Scotia after the American War of Independence. The grandfather on the father's side was Lowland Scotch. He was a High Church Tory of the Old School. He had those qualities, so characteristic of the Lowlander---the quiet temperament, the reserve, and the strong views on politics and religion. His attitude to politics gives perhaps an interesting sidelight on the political life of Nova Scotia of the early days. The first representative of Guysboro Confederation, was an orthodox Tory like himself. When on the occasion of the second Dominion election, a Liberal candidate had the audacity to contest the Guysboro constituency, the grandfather indignantly declared that he should be horsewhipped out of the country. The grandparents on the mother's side were Highland Scotch, and inherited the energy and fire characteristic of the Highlander. They were Low Church and Liberals, and equally strong in their religious and political opinions. The mother possessed the characteristic qualities of her forefathers to a marked degree, and always remained intensely loyal to their religious and political convictions. She is still vigorous, and at the age of 92 is keenly interested in everything that is going on. She is still an ardent Liberal. When, at the last election, the Liberals of Nova Scotia, were swept out of power, after a tenure of office of about 40 years, she refused to believe the first reports, and when she finally had to realize the truth, it seemed to her that the whole world had gone wrong.

In this atmosphere of political and religious intensity, Henry Marshall Tory grew up. The whole countryside enjoyed the hospitality of a home ever open to friends and strangers, and many problems of life and death thrashed out in the presence of the young family. The political discussions centred around Joseph Howe on the one side and Sir Charles Tupper on the other. Here, without doubt, was awakened the interest which the three sons have always manifested in politics, and questions of public interest generally. It is also perhaps in a large measure due to these early influences that Dr. Tory has always been able to be so sympathetic with conflicting points of view, and to exercise at

times such a remarkable degree of patience with those who are disposed to be unreasonable, inactive, or hostile, in relation to projects upon which he has set his whole heart.

The parents were determined that the children should have the best education possible. The school house was about a mile away. The sides and roof were shingled. It was built before the days of the saw mill. The farmers split the shingles from blocks of wood with axes, and shaved them by hand. Every day at noon time the mother might be seen going to meet the children half-way between the home and the school carrying a hot lunch. She encouraged them with their studies, and inspired them with her boundless energy and rich personality. She was the outstanding woman in the whole countryside. She was kind and affectionate, but discouraged all weakness, and tolerated no sham.

During his school days young Tory not only applied himself diligently to his work---he learned to play. The Guysboro country offered a wonderful environment for the nurture of those qualities in a boy which proved so valuable in later years, as a refuge from the more serious side of life. It was a rugged country, abounding in hills, streams, and small lakes. Behind his father's farm was a large forest of oaks, elms, maples, beeches and birches. The boys roamed through the woods sometimes with their guns, hunting partridge and ducks. At other times they followed the streams, whipping them for the trout in which they abounded. In the winter they skated and snowshoed. In the summer they went daily to swim in the surf, to buffet the waves and dive under the rollers which swept in on the beach. They sailed all sorts of craft, and more than once almost came to disaster. Frequently long before sunrise they borrowed fishermen's boats, and went out to try their luck for fish in the deep sea. They entered all these pastimes with the greatest enthusiasm.

Dr. Tory has never lost this boyish enthusiasm for play. He can leave all the worries of his office behind, and go to the golf course, on a hunting or fishing trip, or take a hand at bridge, and be a boy again. This ability to throw off all care during his hours of recreation is one of his most remarkable qualities, and no doubt has carried him safely over many periods of intensive work and anxiety.

The sea had a wonderful influence on young Henry Marshall. It fascinated him. Very often he felt its call. It stirred his imagination, and aroused in him strange feelings, which were later to translate themselves into a deeper urge toward a larger life of creative activity. He has the courage

of the seafaring man, and has during his career weathered many a storm. Indeed he seems to be in his element when contending with difficult situations, measuring his strength with hostile forces. In one of his favorite recurring dreams, he amuses himself by fighting strange monsters that never lived on land or sea, and he always emerges victorious.

After finishing his school work, the family removed to Guysboro town, which was about four miles from home, and is one of the most beautiful spots in Nova Scotia. Here young Tory spent three years in a store, where he experienced a sense of responsibility for the first time, and began to see visions of bigger things ahead. These were deepened and intensified by religious influences, under which he came at this period. He made up his mind to go through what was then often regarded as an apprenticeship for college life---a period of school teaching. He went to High School for a year, then became a teacher in an elementary school. The work proved to be a joy. He was conscious that he had made a success of it, and after two years, he decided to go to his home school, in order that he might be able to teach the younger members of his own family.

What could have been a finer experience for the budding educationalist, who was destined to organize a University, and the National Research Council of Canada?

The mother was anxious that her son should go to Mount Alison, but through the influence of a graduate from McGill University he found his way to McGill, which he entered in 1886. He took honours in Mathematics and Physics through the whole university course. After the first year, he practically paid his way with scholarships which he won. He graduated in 1890, winning the gold medal in Mathematics and Physics.

Young Tory, however, did more than work at his studies. He took an active part in what student activities existed. The student body was not organized as a whole, but there were good literary and debating societies. He was throughout the university course active in these societies. There were in those days no debates on political or religious subjects. Such debates were, in fact, not allowed. There was no system of student government to find fault with, and thus to provide a subject for debate. The debates were of the conventional type, and subjects were drawn mainly from history. Young Tory won the reputation of having made the most brilliant defence of the beheading of Charles the First

in the history of old McGill. This was a remarkable achievement for a young man whose ancestors had followed the Bonnie Prince Charlie. At any rate, he seems to have settled the question, and vindicated the honour of British Justice for all time on this point. The subject was dropped from the list of debatable questions, and young Tory was unanimously elected orator of the graduating year, an honour which was much coveted by aspirants to fame in those days.

Three men in McGill made a great impression upon young Tory. The first was Sir Wm. Dawson, Principal of McGill. In this case, the relation of professor to student grew into a very warm friendship in Sir William's old age. The second was Dr. Alex. Johnston, Dean of the Faculty of Arts, a graduate of Dublin University. He was of the old school of mathematicians. The third was Dr. Clark Murray, Professor of Philosophy, a brilliant teacher and delightful human being, under whom young Tory did considerable work.

One year after graduation, Tory was called back to McGill as Lecturer in Mathematics. Later he left for Cambridge, where he spent two terms in the Cavendish Laboratories under Sir J. J. Thompson. Returning to McGill, he set up the new equipment in the Physics Building for undergraduate courses. He carried on research in comparative methods of high temperature measurements, and in 1895 received the degree of D.Sc. In 1897 he elected to continue in the Department of Mathematics, and was appointed Associate Professor, which post he held till he was called by the present Chancellor, Dr. A.C. Rutherford, then Premier of Alberta, to organize the University of Alberta.

iii ADDRESS

by

DR. F. D. ADAMS

ON THE OCCASION OF THE UNVEILING

OF A PORTRAIT

of

HENRY MARSHALL TORY,

MAY 20th, 1936

Mr. Chairman, Ladies and Gentlemen:

When asked to deliver the presentation address on this happy occasion, I accepted the invitation with pleasure, for Doctor Tory is one of my most intimate friends and I have known him from the time that he was a very young man, when we were both lecturers together at McGill University, and I have from that time until quite recently been closely associated with him in connection with the work of the Commission of Conservation, the Research Council of Canada and on other Committees and Commissions.

A friend of mine told me that he was at a funeral recently and when the minister in his funeral address commenced to enlarge upon the good points in the character of the departed, a young lawyer who sat next to my friend, leaned over to him and whispered-- "The case for the defense is now being opened". Here, however, there is no funeral: Doctor Tory is in sound health and has many years of productive work ahead of him; nor does the defence here need to attempt to put forward any case, for Doctor Tory's career needs merely to be set forth in order to win from everyone a high meed of approbation and praise.

Doctor Tory, like so many other Canadians who have attained distinction, came from Nova Scotia. His father was a farmer near Guysboro, and his mother was one of those altogether admirable women whose children justly rise up and call her blessed. There were three brothers in the family, all of whom achieved notable success in their respective

walks of life--the eldest, James Tory, entered the service of the Sun Life Assurance Company of Canada and rose to the position of Vice-President of the Company; also for many years he represented Guysboro in the provincial Assembly of Nova Scotia, and eventually was appointed Lieutenant-Governor of that Province. The second brother, John Tory, also rose to a very important position in the Sun Life Assurance Company; while the career of the third brother, Dr. Henry Marshall Tory, I am to speak of this evening:-

Doctor Tory, having received his preliminary school education in Guysboro, entered the faculty of Arts of McGill University, and graduated in the year 1890 taking the gold medal in Mathematics and Physics. He was then appointed to a position on the teaching staff of the University. I was also lecturer there at the same time, and Doctor Tory and I were associated in a movement for the establishment of a school of graduate studies in McGill University.

Doctor Tory remained on the staff of McGill University for a number of years and won golden opinions among his colleagues, not only as an excellent teacher but on account of those abilities as an executive and administrator which he had already commenced to display.

About 1906, when in British Columbia it was being felt that university facilities should be made available in that Province, McGill University having in mind what had taken place in some of the older provinces and in many states of the neighbouring Union, in order to prevent the simultaneous foundation of several small universities in different centres, none of which could hope to secure adequate financial support, organized in Vancouver and Victoria a McGill University College of British Columbia with a definite understanding that so soon as the Province was in a position to establish a provincial university, McGill University would retire from the field. This it did on the establishment of the University of British Columbia a few years later. Doctor Tory was selected by the authorities of McGill University to organize this McGill University College, and going to Vancouver he carried out this task in an admirable manner.

A little later, in 1907, after Doctor Tory had returned to McGill, I received a call one morning from the Honourable Mr. Rutherford, Prime Minister of the Province of Alberta, who informed me that it was proposed to establish a provincial university in Alberta, that he had come East to find a president for the new university and asked me whether I knew of any one to whom the organization and development of

this new seat of learning might be safely entrusted. I told him at once that in my opinion Doctor Tory was the outstanding man for this position and that while I thought the Governors of McGill University would be very ill advised if they allowed him to go, I would, if I were in Mr. Rutherford's place, use every effort to take him from McGill and appoint him to this new position. He evidently got the same advice from others, for shortly afterwards Doctor Tory received, and accepted, an offer to be President of the University of Alberta.

It is unnecessary here to point out how successfully he carried out his work and how, starting from nothing, he brought the University of Alberta to the high position which it occupies at the present time.

One of the first professors who was appointed by Doctor Tory was Edmund Kemper Broadus, who assumed the duties of Professor of English. An interesting glimpse of the first beginnings of the University of Alberta is given in an essay entitled "Small Beginnings" which appears in the volume bearing the title "Saturday and Sunday", which was written by Professor Broadus. The passage reads as follows:

> "On a day in June, 1908, the president of a university not yet in being, in a province which I had never heard of, in a country which I had never visited, came to Harvard and offered me the professorship of English. The offer sounded like midsummer madness. I think that what I accepted was, not the position or the salary, but the man. There was something about him that made me feel that to whatever no-man's land he went, there--somehow--the kind of university I should like to have a hand in would get to be. When I came to Edmonton in September of that year, I found him ensconced in the attic of a small brick public-school building. There assembled the four of us who were to constitute the faculty--veritable philosophes sous les toits--and he, and we, and it, were for the nonce the University of Alberta."

Later on, in the time of the Great War, Doctor Tory was appointed Director of the educational services of the Canadian Overseas Forces, with the rank of Colonel, and provided short courses of study for over 50,000 men in the Canadian forces, and as part of these services organized the so-called Khaki University in the South Camp of Ripon, where some seven hundred students from the Canadian Universities who were enlisted in the Canadian Forces were drafted, immediately upon the close of hostilities, into this University

Unit and followed regular courses of academic study under sixty professors--also taken for the most part from the Canadian Overseas Forces--for a period of some six to seven months which elapsed before the troops could be returned to Canada.

Doctor Tory thus enjoys what I think is the unique distinction of having been instrumental in founding three universities.

Doctor Tory's distinguished abilities and attainments were by this time widely recognized. He received the degree of "doctor" (Honoris Causa) from no fewer than nine of the leading Canadian universities, and was appointed a member of many important Commissions and Committees.

From 1912 to 1926 he was a member of the Executive Committee of the Universities Bureau of the British Empire; he was a member of the Canadian Commission of Conservation; a member of the American Commission for the study of Agricultural Credit in Europe; a member of the Imperial Educational Committee; Commissioner on Agricultural Credits for the Canadian Government; Special Commissioner for the Canadian Government to the Pan Pacific Science Congress, Japan; Chairman of the Committee on Taxation, Province of Alberta, Chairman of the Royal Commission to study the Fruit Industry in Nova Scotia.

This brings us to the consideration of another and the last great accomplishment in Doctor Tory's career, namely, the development of the work of the Research Council of Canada, and the erection of the magnificent centre and home of research in which we are met this evening.

The Great War, showing as it did what scientific research had accomplished to enhance the power and influence of Germany, moved the authorities of Great Britain, who were always slow to appreciate the value of science and the services which it can render to a State, to take steps for the encouragement of scientific research and investigation. As a result, the British Government established the British Council for Scientific and Industrial Research and invited the overseas Dominions to follow their example in this respect; as a consequence of this the government of the Dominion of Canada, by an Act passed in 1916, established the Canadian Council for Scientific and Industrial Research, with Dr. A.B. Macallum as its first chairman. For eight years the Council did excellent work in the organization and development of an extended system of industrial and scientific research throughout the Dominion, linking up in its programme the universities and industries of Canada from one end to the other of the

Dominion, and thus preparing the way for the further development and enlargement of this work.

This development and enlargement took place under the provision of an Act entitled "The Research Council Act" which was passed by Parliament in 1924, Doctor Tory having shortly before this time become President of the Council, though he did not resign his position as President of the University of Alberta until 1928.

Under Doctor Tory the Council moved to obtain Research Laboratories of its own. For the first seven years after the passing of this Act, only temporary laboratory accommodation on a small scale was secured, but in the year 1932 the great National Research Laboratories--in which we are now meeting--were erected, and by the end of the following year were provided with the necessary equipment for the use of the excellent staff of research workers who had been carefully selected by Doctor Tory--having been drawn for the most part from the various universities of the Dominion.

There is not time here to consider in detail the research work which has already been carried out under the Research Council, but its extent is briefly summarized in the last report of the National Research Council as follows:-

> "152 researches have been completed, some of major economic importance. Approximately 100 are now being carried on, some of which are nearing completion, while others will extend over a considerable period of time.
>
> Over 500 scientific papers have been published in Canadian and foreign journals as the result of the work of the staff of the Council and subventions granted to university laboratories. In addition, 382 men have been trained or are training under the scholarship system inaugurated by the Council. Further, every university in Canada where facilities for research exist has been stimulated to participate actively in the study of scientific problems related to the development of our natural resources.
>
> It can be said without fear of contradiction that the National Research Council has already returned to the people of Canada, in economic benefits, far more than the total expenditure, both current and capital, made to date."

In his admirable life of Charles Dickens, Professor Leacock contrasts the slow and even movement of human life in

Victorian times with its course in the times in which we now live. He says:-

> "We live now in a badly damaged world. It is a world of flickering shadows, tossed by electric currents, of a babel of voices on the harassed air, a world of inconceivable rapidity, of instantaneous effects, of sudden laughter and momentary tragedy, where every sensation is made and electrocuted in a second, and passes into oblivion."

In fact, a greater change has taken place in human society the world over, within the past fifty years, than in any other period of equal duration in the history of the world since man appeared upon the globe. This has been brought about chiefly through the discoveries and applications of modern science. Furthermore, this period of scientific discovery and advance is not drawing to a close. It is evidently in full flood and some of the most remarkable discoveries have been made within the past few years; while others, not less remarkable, are in the act of birth at the present time.

All the leading nations of the world are vying with one another in programmes of scientific research. The development of their resources and the efficiency of their manufacturing process depend upon it and these are of vital importance to their very existence.

Canada must keep pace with other nations in these critical times, or fall behind and lose her place in the sun. And so, we should all realize the importance of this great centre of research in our Dominion and would, I am sure, urge upon the government and all the thinking people of Canada the vital necessity of giving it adequate and indeed abundant support.

Now, I must draw this already too lengthy address to a close, for I call to mind at this time an incident mentioned by President Nicholas Murray Butler in a speech which he made at the dinner on the occasion of the annual meeting of the American Institute of Mining & Metallurgy, recently held in New York. President Butler said that at a meeting held only a short time ago in one of the western cities of the United States, after two lengthy addresses had been delivered, a third speaker commenced his oration; but after he had been speaking for a quarter of an hour a member of the audience sitting on a chair directly in front of him became so exasperated at this long continued flow of words that he drew a revolver and shot him dead. Not wishing, however, to shield himself from the consequences of his deed, he left the

room and went across the street to the sheriff's office where he gave himself up and informed the sheriff of what he had done. The sheriff looked at him, slowly shook his head and said--"I am afraid you have come to the wrong office. You must go up the street to the office of the Treasurer of the County. He is the one who pays the bounties".

Doctor Tory's friends, desiring that a suitable memorial of him should be placed in this building, which owes its existence largely to his efforts and in which some of his fondest hopes are enshrined, have had a portrait of him painted by Mrs. Lilias Torrance Newton of Montreal. This is to be hung in the library of the Research Council, and it now gives me much pleasure to unveil this portrait.

DR. TORY'S REPLY

Mr. Chairman, Ladies and Gentlemen:

I confess I find myself in a very difficult position. I would be less than human if I were not deeply moved by the generous action of the many friends who have made possible the gift of this portrait to the National Research Laboratories. A reply to the very kind and appreciative words of Dr. Adams is not easy to make.

I need hardly say that I am especially gratified that Dr. Adams was chosen to make the presentation. He is an old and tried friend. Retiring, as he did some years ago, from the Vice-Principalship of McGill, he left a record of achievement in his own science unsurpassed in the history of Canada. If the memory of high accomplishment is the most substantial reward which life offers, and I personally believe that to be so, then he must be having a happy time in retirement. I am greatly honoured by his participation in these proceedings.

It is rather difficult for me to decide what to say to you. Perhaps as I am really speaking to a group of more or less intimate friends, I might be given the privilege of saying something of my own work. There is a sense in which I have been a pioneer all my life, a pioneer in the field of

education. I came from a little section of Nova Scotia settled by revolutionary war veterans. The early pioneers were, by the very nature of the circumstances, cut off for a long time from contact with the outer world. I was compelled to secure my education by strenuous personal effort. The early struggles left upon my mind a deep desire to see the facilities for higher education made available more broadly to the youth of Canada.

Dr. Adams referred to our early association in the development of the graduate work at McGill. To show how recent in Canada is the idea of organized graduate study, I need only state that Dr. Adams was the first Chairman of the Committee on Graduate Studies in McGill, the first Dean of the Graduate School which grew out of the work of the Committee, and I was the first Secretary. It is a pleasure to recall that association in a work which has meant so much in the promotion of advanced study in Canada.

It was a pioneering task. The Graduate School was not created in a day. It had to face the opposition of the ultra conservative and incompetent elements on the teaching staff. At that time there was a very small group of brilliant men carrying on research in Canada, but as yet research had not become a conscious part of university training. I personally set up the first laboratory equipment in McGill in a building especially designed for the teaching of physics. I believe a book I published on Laboratory Physics was one of the first of its kind published in Canada. Before doing that I spent two terms mastering the methods used in the Cavendish Laboratories, Cambridge.

The contrast between those days and the present is plainly seen in the conditions we were able to lay down for researchers in the National Research Laboratories, viz., for senior posts we demanded at least ten years of research activity following the degree of Ph.D. or D.Sc., and we were able to secure in Canada the men required, though many had gone abroad for their graduate work.

Dr. Adams has referred to the work in British Columbia. It is interesting to recall today the incidents associated with the British Columbia effort. British Columbia was one of the rapidly growing provinces without any facilities for higher education. There was a school affiliated with McGill which took the matriculation examinations, and the question was asked whether the time had not come for us to stimulate an interest in higher education in British Columbia. I was selected to make a survey of the whole situation. The privilege was given me to place before the younger generation of British Columbia the temptation to seek training. I

confess I was stimulated intensely by the effort when I found so many of the youth of the country whose situation was so similar to that through which I had personally come. It was here that I tried my first effort at persuading governments to assist in the development of higher training. It was also my first realization of the political difficulties which one has to face in promoting such effort. I have always remained intensely sympathetic with the position of public men, standing, as they do, between the uninterested public on the one hand and the zealous minority on the other.

Out of that effort, the McGill University College of British Columbia came, later to become the University of British Columbia. From my own personal point of view, there came also the realization of capacity to handle such problems, coupled with a determination to seize every future opportunity to promote similar efforts.

Alberta was especially a pioneering adventure. It came to me, as Dr. Adams has said, without my own knowledge, but I have no doubt somewhat as a result of my pioneering work in British Columbia. When I went to Alberta, a site for a university had been bought outside the limits of the City of Edmonton. I went there alone; there was no building, no staff, and, apart from a few individuals, no real desire to see a university develop. One of the most intellectual men in the city of Edmonton said to me shortly after my arrival, "You are not needed here. We are all too busy making a living to think about the development of a university." The reply I made to him, which I remember quite vividly, represents the mental attitude which I had already developed and which I have maintained ever since. I said, "Do you think that, in the long run, it will pay a community to develop only its natural resources to the neglect of its intellectual life, or to leave the intellectual life of the community to haphazard development?" I personally deemed it the duty, not only of the Government but of all good citizens to see that, running parallel with the material development of the country, should go its intellectual development.

One of our first acts on the completion of a staff was the drafting of a programme of problems on which we considered research should be undertaken. This grew out of the fact that constant appeals were being made to us to answer questions related to possible material development to which no ready-made answer could be given. On the staff of the Research Council are two men who worked with me on the drafting of a set of problems for research, Dr. R.W. Boyle and Dr. Robert Newton. We took the ground from the very beginning that the basis of all real development must be knowledge. We

stated a set of problems on which we considered research should be undertaken, and presented them to the Government of the day. If the University of Alberta flourished and early became recognized as a worthwhile institution, it was because we relentlessly pursued the policy of working at those urgent problems. We did not consider that it was our duty to wait until we were asked to do something. We considered ourselves to be in the best position to decide what should be done. Naturally, such aggressive policy brought us both friends and foes. Those who were wedded to ancient ways, of course, were opposed, but fortunately, the type of people who settled in Alberta was virile enough to realize that such work as we were undertaking would ultimately be to the advantage of the Province. I am happy to think that the organization under the direction of my successor, Dr. Wallace, still carries on. When I left Alberta in 1928, after twenty years of service, a fully organized university, modern in equipment and outlook, was in being with over 1600 students in attendance. That is the answer to those who criticized.

Dr. Adams has mentioned the Khaki University. It was certainly a pioneering effort, the creation of an educational organization in an army under field conditions. The purpose was to keep alive the intellectual ambitions of students and teachers in the army during the war in order that they might again take up intellectual pursuits on returning home. That to some extent we succeeded, cannot be denied, for, as Dr. Adams pointed out, over 50,000 took courses in commerce and agriculture, etc., and approximately 1,000 were given a year's university work while waiting to be demobilized. The memory of it all is very precious to me. Altogether, it is really too intimate to say much about.

My relation to the Research Council began in 1922 when I received, quite unexpectedly, a unanimous invitation from the Council to permit my name to be submitted to the Government for appointment on that body. The Research Council was then passing through a very difficult time. On accepting the Honorary Presidency in 1923, I had a rapid survey made of pressing problems that it seemed to me should be undertaken. In doing this, we were moved by exactly the same idea that prompted the survey made in Alberta some years earlier. We believed it was our duty to determine the sort of work that should be undertaken.

We found pressing problems everywhere, especially in Western Canada. We selected the urgent ones and organized the machinery for having them tackled. Emphasis was especially

laid upon the solution of technical problems which could be made the basis for profitable production. In doing this, we extended the contact with the universities which had already been made, first, in the foundation of a system of scholarships for the training of men, and, second, in securing the co-operation of the universities in the solution of those problems which could be made the basis for the training of men. It gives me pleasure to recall the promptness of the response we had from practically all the universities of Canada. Many committees were formed for the purpose of tackling major problems on a co-operative basis. I think there are thirty now in existence, made up mainly of men from the universities. The result was the rapid extension of graduate studies in the universities.

Following upon our scholarship system and a scheme for making grants to university professors who would undertake specific problems, the time soon came when the problem of a national laboratory system had to be faced, and I was forced to make a choice between carrying on in a university already organized, giving part time to the Research Council, or giving up my whole time to an extension of research and the development of research laboratories under the direction of the Council. I chose the latter because I believed it was more consistent with my own intellectual outlook and because it afforded me a new opportunity for creative effort in the interest of Canada.

I have always been a "Canada first" man, if by "Canada first" is meant creating the conditions which will enable Canadians to do their own intellectual work, thus assuring their intellectual equality with the whole world. There are a lot of little Canadians who think otherwise. They see in expenditure for the extension of research and education only money wasted unless it brings grist to their own particular mill. With such I have no fellowship.

Before these laboratories in which we are meeting to-night were built, an intensive study was made of the laboratory systems of Europe and America. Perhaps the eighteen months that were associated with the preparation and building of these laboratories were the most intensive period of study in my life. I had only the beginnings of a staff under my own control and the right to secure appointments was exceedingly slow in coming. I fear that many parliamentarians of the time were doubtful both as to the wisdom and the necessity of what I was trying to do and, viewing it from even this short distance of time, I do not wonder that they looked askance at my enthusiasm and regarded me as overzealous.

There are three men, however, whose vision of the future especially made possible these laboratories. I refer to the Right Honourable W.L. Mackenzie King, the Honourable James Malcolm, and the Honourable Charles Stewart, all of whom sensed the importance of the research movement and backed the activity of the Council in trying to realize upon it.

We planned for the three great departments of science a Division of Physical Science, a Division of Chemical Science and a Division of Biological Science, and beside these a Division of Research Information. In addition, in the lower floor of this building will be found two great halls which were intended to be exhibition halls. I had hoped that the time would come when we could set up an exhibit of the products growing out of scientific research in Canada and, perhaps a bit too fondly, that I might be permitted myself on retirement to remain associated in some way with the establishment of these rather extra activities. Let me, however, say this: This building was planned as a research building. It should never have been used for any other purpose. The office accommodation in it was made as limited as possible in order that men working in it should always realize that it was intended as a research institution. I hope I may live to see the day when every extra activity which is now going on in this building will be driven out and the building put clearly and definitely to the purpose for which it was intended. I know there are some who have spoken as though it were unnecessary. A civil servant, high in the Service, meeting me on the street when the building was nearing completion, said, "You are building a white elephant." A certain cabinet minister, speaking to me concerning it, in a not unfriendly way, said, "You know very well this effort is too great for Canada." Such statements are the result of utter ignorance of the whole forward movement of research that is going on in the world, and the complete absence of understanding of the place which research has in the material and intellectual development of a country.

The plan was, ultimately, to have a staff of 250 employed in these buildings, dealing with the great scientific problems that present themselves on every hand in a country as new as ours. This will not seem large to you when I tell you what is going on in other countries. Much is being said today about the rise of Japanese industry. May I give you one of the reasons why? In Japan there are sixty-nine research institutions, forty-five of which are supported by the Government and twenty-four by private industry, and over six thousand men are engaged in the scientific and technical researches relating to their industry. If you want to see one of the major reasons for Japanese development, you have

the answer. Russia offers another major example of intense scientific activity. There are over eight hundred research institutes already in existence in Russia and over forty thousand men employed. Only last year Russia added, as the output of her universities, over eight thousand workers to her national technical staff. In the division of plant biology alone, over a thousand men are at work. Some day we shall hear complaints about the produce of Russian industry coming into Canada, and every reason but the true one will be given. In England the same thing is going on. Last year over £700,000 was spent under Government auspices on researches related to the industrial life of the country.

Dr. Adams has quoted, in his presentation address, a statement made in the last annual report of the Research Council which I had the honour to write, viz.,

> "It can be said without fear of contradiction that the National Research Council has already returned to the people of Canada in economic profits far more than the total expenditure, both current and capital, made to date."

I have not time to go into detail, but, ladies and gentlemen, that statement stands tonight unchallenged.

We have the men to put to work. The only reason why they are not at work is the lack of foresight on the part of those who ought to know better.

Yes, it has been a great pioneering effort and, in spite of all the handicaps and anxieties that have been associated with it, I rejoice tonight in the fact that Canada does possess the facilities which the Research Council and this institution offer, and that no matter what short-sightedness may be associated with policy connected with it, its future is secure.

Now I think I have said enough on policy. May I add just a final word. For forty years I have given my life, the best that is in me, to the development of those aspects of our national life which I have been emphasizing tonight. I have never waited for someone else to give me the lead as to what should be done. Whether at the head of the University or at the head of the Research Council, I regarded it as my responsibility to give as intensive a leadership as it was in my power to give. I regarded neither the post as head of the Research Council nor the post as head of the University as an administrative position. I believed it was my responsibility to set an example of that type of intensive activity in regard to those problems which the nation was facing that

would be expected from those whose responsibility was more directly associated with details of the work.

In a letter sent me by one who was an old student of mine in McGill days and who has later worked with me at the head of one of the divisions of this laboratory, are the following words:

> "We who worked for you and for the cause which you yourself had at heart, have greatly profited by that association. No one could long be in contact with you without sensing the driving power in your life, or without being stirred by it to greater effort. You never urged us verbally; the urge of your example was always with us."

I could wish for no greater reward than that my own activities should have so affected those with whom it was my good fortune to be associated.

As I said before, I had hoped that when the time for retirement came I might have remained associated with some of those aspects of the Research Council's activities which lie outside the immediate work of research. That opportunity, however, has been denied me and I am content. I just want to say to you that I do not regard my work as yet done. Any man who has studied as intensely and has worked as diligently as I have tried to do, cannot but sense the immensity of the problems that lie before the people of Canada before she realizes her national destiny. In the solution of some of these, I hope that I may still be permitted to participate.

Again permit me to say, I am profoundly grateful to the friends who have made this gift to the Research Council possible. A great English statesman who visited us some years ago described this building as a "Temple of Science." If the men who work here toil with a sense of devotion to truth, aiming at the well-being of Canada, then the name suggested, with its implied religious ideal, may well be regarded as intensely appropriate. I shall continue to watch the progress of this institution with the keenest interest.

iv Carleton College

Message from H. M. Tory

In the First Issue of

the Carleton College Year Book

Carleton College is a new departure in education. Established during the greatest war in history, it was founded for two reasons: first, in the hope that it would help to keep alive the love of study in the hearts and minds of many whom the fortunes of war had taken away from school and college, bringing them to Ottawa to serve their country; and second, to create a new and permanent center of higher education for the City of Ottawa and the adjacent districts. That it has been so warmly welcomed in the community is a source of gratification to those responsible for its promotion. We believe that in the post-war world, education will occupy a much larger place in the thought of Canadians, and that a place of great usefulness will be found for Carleton College.

It has been a great source of pleasure to me personally to be again among students. I deeply appreciate the consideration shown by all of you under the trying conditions of a new departure. Next year, with a somewhat enlarged curriculum and a year of experience behind us, I am sure that we will all find the road a bit easier. That so many of the Universities of Canada have agreed to accept our work as an equivalent to their own is a source of gratification and an assurance of our future. Happy days will return again after the scourge of Hitlerism has been banished from the earth, and a reign of freedom and progress again established.

There will be a large place in the New World for educated men and women. The problems of democracy are complex; success in dealing with them will depend upon the sincerity and unselfish devotion of those whose education fits them for leadership. We must never forget that the trained intelligence of a nation is its greatest asset, greater than any material resource. To the students I would say: Don't be afraid of knowledge. Keep your hearts clean and your heads high. Let duty to God and Country occupy a first place in your thoughts, and an honorable and useful future awaits you.

BIBLIOGRAPHY

i. Books and Journals

Abbott, Maude E. S., McGill's Heroic Past. Montreal: McGill University Publications, 1921. 30 pp.

Adams, F. D., Address - See appendix iii.

Adams, James Truslow, Frontiers of American Culture. New York: Charles Scribner's Sons, 1944. 364 pp.

Alexander, W. H., "Twenty Years". See appendix ii.

Bishop, Charles, The Canadian Y.M.C.A. in the Great War. Toronto: National Council of the Y.M.C.A., 1924. 446 pp.

Broadus, E. K., Saturday and Sunday. Toronto: The MacMillan Co., 1935. 260 pp.

_____, "The President - An Appreciation". In The Gateway, University of Alberta, December 15, 1927.

Burt, Alfred Leroy, A Short History of Canada For Americans. Minneapolis: The University of Minnesota Press, 1942, 279 pp.

Creighton, Donald G., Dominion of the North. Boston: Houghton, Mifflin Co., 1944. 503 pp.

Corbett, E. A., "But is it Education." Queens Quarterly, Winter, 1941.

Dexter, Grant, Canada and the Building of the Peace. Toronto: The Canadian Institute of International Affairs, 1944. 176 pp.

Earl, Lawrence, "White Collar College." Montreal Standard, April 1, 1944.

Kerr, W. A. R., "President Tory as an Educator" Appendix ii.

Lathe, F. E., "The National Research Council". The Canada Year Book. Ottawa: King's Printer, 1932.

Leacock, Stephen, Canada - The Foundation of its Future. Montreal: Gazette Printing Press, 1943. 257pp.

MacEachran, J. M., "Boyhood and Student Days". Appendix

MacMillan, Cyrus, McGill and its Story. London: John Lane Co., 1921. 304 pp.

May, C. D., "Khaki College." Canadian Magazine, May, 1918.

Miller, James C., National Government and Education in Federated Democracies. Lancaster: The Science Press Printing Co., 1940. 655 pp.

Skelton, O. D., The Life and Letters of Sir Wilfred Laurier. Toronto: Oxford University Press, 1921. 2 Volumes. 1061 pp.

Shortt, Adam, and Doughty, Arthur D., Canada and Its Provinces. Edinburgh: Edinburgh University Press, 1914. 22 Volumes.

Wallace, R. C., "A Land of Universities". Canada. London: The Times Press, 1939. 226 pp.

Published Works of H. M. Tory.

Pitcher, F. H., and Tory, H. M., — A Manual of Laboratory Physics. London: Chapman and Hall. New York: John Wiley and Sons, 1901. 298 pp.

Tory, H. M. Ed. — A History of Science in Canada. Toronto: Ryerson Press, 1939. 152 pp.

_____, — "A Khaki University For Canadian Soldiers". The University Magazine, December, 1917.

_____, — "The Place of Industrial Research". Industrial Canada. January 1931.

_____, — Forword to - Educational Institutions in Canada. J. E. Robbins. Ottawa: The King's Printer, 1944.

_____, — Forword to - "International Planning for Education". J. E. Robbins. Ottawa: The Council of Education For Citizenship, 1944.

_____, — Forword to - "Announcement of Fifth Pacific Science Congress". Ottawa: King's Printer, 1930.

Some of the more important Scientific Researches of H. M. Tory.

A Research in Thermo Electricity by means of the Platinum Resistance Pyrometer.

On the Verification of Platinum Thermometer Formulae at High Temperatures.

A Direct Reading Air Thermometer.

The Standardizing of the Thermo Junction

Researches of H. M. Tory continued.

Comparison of the Platimun Thermometer and Certain Thermo Junctions.

A comparison of the Platinum Thermometers of different degrees of purity. In the Philosophical Magazine October, 1900.

A Comparison of the Le Chatellier and the Platinum Resistance Pyrometers.

The Effects of Dissolved Gases on Metallic Surfaces.

Special Reports Prepared by H. M. Tory.

1907	"McGill University in British Columbia" A confidential report sent to Principal Peterson, now in the McGill Library. Typewritten. 75 pp.
1908-28	Annual reports of the University of Alberta.
1916	Report on Discharged Service Men, prepared for the National Council of the Y.M.C.A.
1917	"Report on an Educational Program For Soldiers in the Canadian Army". Prepared for the National Council of the Y.M.C.A.
1919	Interim Report on Khaki University.
	Special Report on Khaki University, prepared by Tory, but presented by Col. G. Birks, to the National Conference of Canadian Universities.
1922	Report on Research Problems, Province of Alberta. Edmonton: Alberta University Press.
1923	Report on Agricultural Credit. Ottawa: King's Printer.
1924	Supplementary Report on Agricultural Credit.

Reports of H. M. Tory continued.

1924 - 1935	Annual Reports of the National Research Council. Ottawa: King's Printer.
1927	Special memorandum prepared for the Dominion-Provincial Conference.
1927	Report on Taxation, Province of Alberta.
1930	Report of the Royal Commission on the Apple Industry in Nova Scotia. Ottawa: King's Printer.
1932	Special Report on the National Research Council prepared for the Senate. Ottawa: King's Printer.
1934	Special submission to the Royal Commission on Price Spreads. Ottawa: King's Printer. pp. 5091-5144.
1937	Report of the Royal Commission on Anthracite Coal. Ottawa: King's Printer.

Addresses of H.M. Tory.

1. "The University Problem in Canada". - Canadian Club, Vancouver, August 28, 1907.
2. To the first Convocation, University of Alberta, October 6, 1908.
3. To the twentieth Convocation, University of Alberta, May 15, 1928.
4. "The University and the Agricultural College". United Farmers of Alberta, January, 1910.
5. "Some Aspects of Technical Education". - Alberta School Trustees Association, January, 1913.
6. "The Value of Education" - National Council of Education, Toronto, November, 1913.
7. "Education and Self Control". - National Council of Education, Toronto, November, 1913.

8. "Scientific Research and Industry". - Alberta Industrial Association, February, 1920.

9. "The University and the Nation". - Saskatchewan School Trustees, February 24, 1921.

10. To the 11th Annual Convention, Canadian Educational Association, Ottawa, November 2, 1922.

11. "Research and Agriculture". - Rural Teachers Association Toronto, March, 1925.

12. "Scientific Research in Relation to Industrial and Agricultural Development". - Canadian Chamber of Commerce, November 17, 1925.

13. "Education and Research". - At the laying of the cornerstone of the Pulp and Paper Institute, October 13, 1927.

14. "Progress of Industrial Research". - Canadian Manufacturers Association, June 6, 1929.

15. "The Place of Science in our National Life". - Canadian Laundry Association, January, 1929.

16. "Science - Is It Worth While?" - Canadian Club, Ottawa, January, 1929.

17. " Applied Science - Is it Worth While?" - Professional Institute of the Civil Service, April 18, 1929.

18. To the Dominion Fire Prevention Association, Ottawa, June 8, 1932.

19. On the Opening of the National Research Council Laboratories, June 8, 1932.

20. Opening of the Fifth Pacific Science Congress, Vancouver, June 1, 1933.

21. On the Opening of the Institute of Parisitology, MacDonald College, June, 1934.

22. To the Canadian Teachers Federation (radio) , February 4, 1935.

23. "Canada and the United States" - The Dry Farming Congress, Lethbridge, October, 1912.

24. "Intellectual Co-operation Between Canada and the United States" - A Conference on Canadian-American affairs at St. Lawrence University, Canton, N.Y.

25. "Industrial Research" - The Dominion-Provincial Conference, Ottawa, 1927.

26. "Certain Phases of the War Problem." - to service men at the Empire Club, Toronto, February 3, 1915.

27. "Some Aspects of Internationalism." - Municipal Research Association, Montreal, 1930.

28. "The Disarmament Conference." - The League of Nations Society of Canada, 1932.

29. "Facts and Ideas as Factors in Progress." - The University Club, Ottawa, December, 1933.

30. "The Canadian Club Movement" - The Canadian Club, Montreal, 1932.

31. "Progress in Canada." - The Canadian Club, New York, 1927.

32. "A University in Khaki." - The Canadian Club, Montreal, 1917. See appendix i.

33. "The University's Function in Medicine." - American Congress of Medical Education, February, 1926.

34. Address, (as Chairman, Section III) to the Royal Society of Canada, 1928.

35. Presidential Address to the Royal Society of Canada, 1940.

36. To the first Convocation, Carleton College, October, 1943.

37. "Our Place in the Sun." The Letland Lodge, Toronto, September 22, 1939.

38. "Functions of an Imperial Education Bureau." - To the Imperial Education Conference, London, June, 1919.

39. "Whom We Train We Keep." National Conference of Canadian Universities.

40. Reply to Dr. F. D. Adams, at unveiling of portrait in the library of the National Research Council, May 20, 1936.

41. "The Advancement of Learning and Human Welfare." Queens University Convocation, October 29, 1938.

42. "Why Science is Worthwhile." - The Ontario Educational Association, 1934.

Miscellaneous.

Bulletins of the National Research Council. Number 1-19.

The Beaver) Newspapers of Khaki University,
The Khaki Varsity) published in 1918,1919.

Calendars (Annual) of the University of Alberta. 1908-28.

Calendars (Annual) of McGill College in British Columbia. 1907-15.

Calendars, (Annual) of McGill University. 1886-1907.

Calendar of the University of British Columbia, the Historical Sketch.

Calendars, (Annual) of Carleton College and The Institute of Public Administration. 1942-44.

Canadian Journal of Research 1928-35.

Debates of the House of Commons concerning the National Research Council. 1921, 1924, 1927, 1932.

Debates of the Senate concerning the National Research Council, 1921, 1932.

Minutes of the McGill Physical Society. 1897-1908.

Proceedings of the Fifth Pacific Science Congress. Toronto: University of Toronto Press, 1935. 5 Volumes.

Proceedings and Transactions of the Royal Society of Canada.

Report of the Ministry - Overseas Forces of Canada. London: His Majesty's Stationary Office, 1918. 504pp.

Report of the Royal Commission on Dominion-Provincial Affairs. Book 1. Ottawa: King's Printer, 1937. 259 pp.

Reports, (Annual) of the National Research Council.

Report of the Special Committee of the House of Commons to Consider the Development of Scientific Research. April, 1920.

Report of the Executive Committee of the Universities' Bureau of the British Empire, 1916-32.

Reports (Annual) of the League of Nations Society of Canada. 1927-44.

Reports (Annual) of the Montreal Y.M.C.A. 1895-1905.

Repprt of the Imperial Education Conference, London. June 11, 1919.

Reports (Annual) of the Advisorary Council of Scientific and Industrial Research, Alberta. Edmonton: King's Printer, 1920-23.

Report of the Board of Governors and the President of the University of Alberta, 1928.

Reports (Annual) of the Governors, Principal and Fellows of McGill University, 1895-1908.

Reports (Annual) on Education and Research in the Canada Year Book.

Reports of the National Conference of Canadian Universities.

Statutes of the Dominion of Canada, 1921 and 1924; of the Province of British Columbia, 1906; of the Province of Alberta, 1906 and 1910.

Who's Who? Fellowships, studentships and bursaries of the National Research Council, 1931,1932.