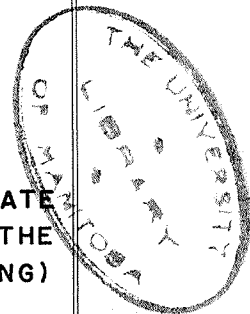


A DEVELOPMENT PLAN FOR
THE UNIVERSITY OF MANITOBA

A THESIS PRESENTED TO THE FACULTY OF GRADUATE
STUDIES IN FULFILLMENT OF THE REQUIREMENTS FOR THE
DEGREE OF MASTER OF ARCHITECTURE (COMMUNITY PLANNING)



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MAY 1955

ACKNOWLEDGEMENTS

My sincerest thanks to the following persons for contributions given by them in the development of this thesis:

Dr. H. H. Saunderson

Mr. W. J. Condo

Mr. R. Syme

Professor J. A. Russell

Professor V. J. Kostka

Professor S. J. Borgford

Professor A. G. Larson

Professor G. L. Shanks

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I N T R O D U C T I O N

To insure a clear understanding of the thesis title a comprehensive definition of the title may prove valuable at the beginning of this report.

The title of the thesis is, "A Development Plan for the University of Manitoba".

The meaning of "The University of Manitoba" is the Fort Garry Site chosen to be the permanent site of the University in 1929.

The meaning of "a development plan" might best be given by quoting the definitions given by some Town Planning Authorities.

S. E. Sanders and A. J. Rabuck in their book entitled "New City Patterns" have this to say about a development plan;

"The purpose of a development plan is so to control urban development and redevelopment as to bring about the highest possible degree of economic and social well-being of all the people of the community. Manifestly, a development plan prepared with the greatest technical skill and painstaking care will not benefit the community unless it is carried out. Unfortunately, metropolitan plans, like other city plans, are not self effectuating. If they are to guide urban development and thus benefit the people they must be put to work; and the primary responsibility for this rests on the shoulders of the planning agencies."

"The Planning process, for which planning agencies are responsible, comprises both plan making and planning administration. Both these phases of the planning process must be regarded as continuous. The development plan must be continually revised to meet unforeseen, as

well as, new and changing conditions, and it must be applied in accordance with social and economic needs, and ability to finance."

Frederick Gibberd in his book entitled, "Town Design" defines the development plan as follows;

"After the survey is complete and matters of broad policy settled, a forecast of future development is made in the form of a map, or series of maps: the master plan or development plan. As no one can be certain when the development will be required, the plan is regarded as being a flexible pattern to be amended as the need arises. In Britain the 1947 Act requires planning authorities to review the plan at least every five years."

"The plan is never a complete and fixed thing, but rather one that is continually being moulded and adapted to the changing needs of the community for whom it is designed. Until quite recent years town plans were always made as inflexible patterns, but history has shown that a plan of this description inevitably breaks down in time, unless of course the town's life becomes atrophied."

"As the development plan is so very much of a diagram, and so very much subject to change it might be argued that no aesthetic selection is necessary at all, that it is best determined scientifically, and that town design really starts after the development plan has been prepared. Nothing could be further from the truth, for, however broad the plan may be, it is the structure upon which all future development is to take place, and it is a structure which even though it can be seen in its entirety only from the air, can be sensed on the ground. It is a

structure which decides such large-scale aesthetic effects as the juxtaposition of a built-up area with natural landscape, the swing on an arterial road, or a distant prospect. Above all it is a structure which gives the town an over all character and unity. Unless aesthetic sensibility is exercised in determining its over-all pattern, in giving it a prevailing idea, and unless it is exercised in determining its major effects, the town can never be a really fine place to live in."

Professor V. J. Kostka in his notes on "Planning Procedure" has this to say about a development plan;

"The broad objective of a development plan is to provide for the future development and growth of a community in such a manner as to make it a better place in which to live and to work. A well-co-ordinated development plan will provide a framework for healthy development of the community."

The preceding quotes have been included here to give a clear definition of development plans for cities or towns. The purpose of a development plan for a university would be similar to that of a development plan for a city or town.

The following is a brief summary of pertinent facts that have been stated by the authors of the preceding quotes;

- (1) The purpose of a development plan is to control development in order that the best possible layout may be achieved.
- (2) The development plan must be looked upon as being flexible.
- (3) The development plan must be more than just a plan on paper. It must be used effectively to guide development.

Why is a development plan for the University of Manitoba needed? This question might best be answered by comparing the growth of our cities and towns in Canada with the growth of our Canadian Colleges and Universities since the war.

Let us first consider the problems of congestion and rapid expansion of our cities. What has been done to alleviate these conditions in our Canadian cities? Until very recently nothing has been done. Our cities have been expanding with very little foresite to the future. Realizing the dangers of uncontrolled development our larger cities, like Montreal, Toronto, Winnipeg, Edmonton, Calgary and Vancouver, have established in their organizations, planning departments of one sort or another in an endeavour to promote sensible development and to correct mistakes that have been made in the past. Many larger cities, like London, New York and Chicago, have found that the costs of correcting mistakes, some of which could have been avoided by planning in the past, are very great.

Although the planning of university campi is perhaps not as important or complex as the planning of a city or town, there is, however, a need for future planning to prevent expansion that might prove impractical or costly in the future. A number of our universities have been built within cities or cities have encompassed them in such a manner that their expansion will involve the purchase of expensive property. It is fortunate that the University of Manitoba will not be faced with this problem. Owing much land vicinal to the Fort Garry campus, the University of Manitoba will be able to expand its facilities without encountering this problem. The University of Manitoba does, however, need to be planned with an eye to the future as its facilities will have to be

expanded in the near future to accommodate a greater number of students as well as a greater number of facilities.

This thesis will endeavour to suggest a practical and sensible development plan that will guide future development. It is important for the administration to realize that this development plan should be revised as often as future expansion warrants such revision.

H I S T O R Y

H I S T O R Y O F
C A N A D I A N U N I V E R S I T I E S

C H A P T E R O N E

University work in Canada began in 1789, when the University of King's College was founded in Windsor N.S., but most Canadian Universities date from the 19th century. In Western Canada all Universities except Manitoba were opened in the 20th century. In many cases, University status has come to institutions that had already operated for many years as educational centers, often as preparatory schools or Theological Colleges. In Western Canada, the work of the provincial Universities was anticipated through the existence of Colleges, and through the establishment of Theological Colleges. These have now become affiliated with or absorbed into the Universities, but the pattern has not entirely disappeared.

It is to be remembered that the term "Canada" is nationally applicable only since 1867. The Universities of the Maritime Provinces were for the most part established when Nova Scotia and New Brunswick were not part of Canada. "Canada" prior to 1867, referred only to the territories embraced by Quebec (Lower Canada) and Ontario (Upper Canada). The Western Universities were established, as a rule, shortly after the provinces were created out of the western territories. Something of the origins of Canada's population is reflected in the curricula, e.g. the greater emphasis on classical studies in the centre and east, and the offering of Scandinavian languages in the west.

The term "University" is used somewhat loosely in Canada, and a complete legal list would not reflect actual conditions. In at least three cases, University charters are in abeyance except for Divinity, by reason of federation; in some other cases, institutions that operate essentially as Colleges have charters entitling them to University

powers; and in others work done under the College Title is of a range comparable to that in a number of smaller Universities.

Whatever their origins, Canadian Universities have in general a constitutional pattern differing from that in Great Britain and some other Commonwealth countries in that salaried members of the Universities other than executive heads may not sit on the Board of Governors, which has the financial direction of each University, and which makes or confirms academic appointments, determines salaries, manages investments, erects buildings, sets fees, etc. These Boards are variously elected or appointed and may include government appointees, representatives of the graduates, or members elected by church courts or religious orders. In some cases, they are wholly or in part self-perpetuating bodies. Teaching members do, however, sit on, and in practice usually dominate, the Senate of a University, which body decides questions of admission, examination and curriculum, authorizes degrees, and has all academic questions as its province, acting usually on the advice of the academic staff on its Council. The executive head of a University is generally Chairman or leader of the Senate, but is almost never Chairman of the Board.

While there is no case in which the appointment of the executive head of a University is made, or is subject to review by a political body, all Universities operate under Acts or Charters granted by governments and must, if changes in authority, organization, etc., are desired, secure the necessary enabling amendments. Within the terms of the various Acts or Charters, the Universities have full autonomy, the

relative powers and membership of Boards and Senates being outlined in the Acts. Senates are in all cases elective or appointive bodies of limited membership, there being no such thing as Senate membership belonging of right to all or certain graduates.

Except in Western Canada, nearly all Canadian Universities were established by or with the active support of church bodies, but the majority are now private or quasi-private foundations. One might divide Canadian Universities into (1) those which are legally controlled by or connected with a religious group; (2) those that are essentially provincial universities, with varying degrees of state direction; (3) independent foundations, depending on endowment and private benefactions, usually with additional state support.

Higher education in Canada has a recognizable pattern and atmosphere, but there is no uniformity in entrance standards or curriculum emphasis. Canadian higher education shows clearly the marks of Canadian educational and political history, and the influence of British and American models. The marks of Canadian history can be seen in the existence of a distinct system of French-language University education; in various federation plans that have brought together Colleges of denominational origin and of secular foundation; in the existence of a number of Universities that have maintained to a greater or smaller extent, denominational ties; and in the unusual number of degree-conferring authorities in the Maritime Provinces, as compared with the Western Provinces. A few Universities operate under Royal Charters, but most have been incorporated by provincial legislatures.

Recent developments of note have been the growth in undergraduate numbers, increased graduate studies, extension services and financial assistance to Universities by the Government of Canada.

Growth in undergraduate numbers has been due to increase of population, rising standards of living and increased opportunities for professional training. In the fifteen years between 1933-34 and 1948-49, the number of full-time undergraduates increased about two and one half times. Allowing for recent recession of numbers, after the graduation of ex-Service personnel receiving special benefits, the numbers to-day would be approximately double those of 1933, about 60,000. Staffs and buildings at Universities have been increased to care for these larger numbers, except that in Medicine it is impossible to train sufficiently greater numbers.

Financial aid to Universities from the Government of Canada began in 1951, subsequent to the Massey Report, when \$7,000,000 was made available under Order-in-Council, and divided among Universities and Colleges according to the population of each Province and the number of full-time students in each University within the Province.

H I S T O R Y O F T H E

U N I V E R S I T Y O F M A N I T O B A

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The University of Manitoba was established by Act of the Manitoba Legislature in 1877. Prior to its establishment there had been in existence three Church Colleges, offering higher education, but without the power to confer degrees. The new institution was conceived on the model of the University of London as an examining and degree-conferring body, the instruction being offered in affiliated Colleges. The control of the institution was vested in a Chancellor appointed by the Lieutenant-Governor-in-Council, the body of University graduates resident in the province, known as Convocation, and the Provincial Board of Education. The three Colleges already in existence, viz., St. Boniface College in connection with the Roman Catholic Church, St. John's College in connection with the Church of England, and Manitoba College in connection with the Presbyterean Church, were affiliated with the University at its inception. Subsequently, other colleges were affiliated and received representation on the governing body. The Manitoba Medical College, founded by a group of practising physicians and surgeons, in 1882; Wesley College, in connection with the Methodist Church, in 1888; the Manitoba College of Pharmacy, in 1902; the Manitoba Agricultural College, in 1907.

1900 - An amendment to the University Act gave the University power to offer instruction. Six professorships were established in 1904 and the new appointees began their work in the building now known as the Old Science Building, Broadway, which had been erected in 1900 and opened in January 1901. These were all in the fields of Science (including Mathematics) and Medicine. Two professorships in Science were subsequently added, as well as two in Engineering. In 1910 provision was

first made for Arts teaching by the establishment of Departments of English, History, and Political Economy. In the same year Home Economics was established as a department at the Manitoba Agricultural College. In 1913 the Department of Architecture was established. By 1914 the program of work offered in Arts had grown sufficiently to make it possible for the University to offer the full work for the Bachelor of Arts and Bachelor of Science degrees, through its own staff of instructors. In the same year Manitoba College withdrew from Arts teaching.

1914 - The University and the Law Society of Manitoba established under their joint auspices The Manitoba Law School to carry on instruction of students seeking admission to the practice of law and students desiring to qualify for the University degree of Bachelor of Laws.

1920 - The Manitoba Medical College passed out of existence and became the faculty of Medicine of the University.

1921 - Separate Faculties of Arts and Science and of Engineering and Architecture were created.

1924 - By Act of the Legislature, the administration of Manitoba Agriculture College was transferred to the University and its instructional work taken over by a Faculty of Agriculture and Home Economics.

1929 - The site in Fort Garry, already occupied by Manitoba Agricultural College since 1913, was chosen as the permanent site of the University. Arts and Science Buildings were constructed to accommodate Senior students in Arts and Science, students of Architecture and graduate students. At the opening of the session 1933-34 the work of the second, third and fourth

years in Engineering was transferred to the Fort Garry site.

1931 - St. Paul's College, in connection with the Roman Catholic Church, was affiliated with the University.

1935 - A Faculty of Education was created and provision made for a diploma and degree in Education. In the same year the University took over the conduct of examinations in Music and set up a scheme of examinations, culminating in the issue of diplomas in Music.

1937 - The University launched a course in Commerce, creating two new departments and establishing the degree, Bachelor of Commerce.

1938 - A course in Interior Decoration was instituted under the Faculty of Engineering and Architecture, leading to a diploma in this field.

1943 - The various departments giving instruction in Home Economics were organized into a school in the Faculty of Agriculture and Home Economics. In the same year a school of Social Work was established. A Department of Slavic Studies was established, offering courses in Russian, Ukrainian and Polish.

1951 - With the completion of the university gymnasium, a one-year compulsory programme of physical education was introduced and coincidentally a student health service and health examination were made available. The School of Pharmacy was created within the Faculty of Arts and Science.

1952 - In a series of events which took place during the period October 26th to 30th inclusive, the University celebrated its 75th Anniversary.

1953 - The Department of Agricultural Economics was established in the Faculty of Agriculture and Home Economics.

On September 26th the Library was officially opened.

The campus was developed around two courts with the Administration Building as the central building. The court south of the Administration Building is flanked by the Students' Residence, the Arts Building, and the Engineering Building. The court north of the Administration Building is flanked by the Science Building, the Chemistry Building and the Home Economics Building.

The Agricultural Buildings were built along Dafoe Road extending south and west of the Administration Building.

The building materials used generally have been stone and brick. There was no architectural style maintained. The architectural style of the buildings was changed through the years creating many varied styles on the campus.

INVESTIGATION

18.

UTILIZATION OF
ACADEMIC SPACE

CHAPTER THREE

The following is a portion of a survey prepared by J. D. Woods and Gordon Limited, Management Consultants.

The purpose of the survey was to determine the present space utilization and possible capacity for academic purposes.

The survey was carried out as follows:

- (1) Each lecture room, laboratory and drafting room was inspected for its seating capacity and student accommodation. In some cases consideration was given to possible change in layout and the construction of additional facilities.
- (2) Time tables were obtained from each Faculty or School and where necessary additional information was developed.
- (3) The number of students enrolled in each course during the 1953-54 term was obtained from examination records.
- (4) The above information was developed to provide the overall picture of space usage.

Graduate student and student extra-curricular activities were not considered in this study. Graduate student activities interfere to a very limited extent with the academic facilities of the University. Undergraduate student activities take place mainly in the Student Union Building.

- (5) Deans of the Faculties and Directors of the Schools were interviewed to obtain their general opinions of the present usage and also to obtain from them details of any difficulties which they have encountered in obtaining adequate space. Numerous discussions were carried out with the various members of the University Time-Table Com-

mittee, throughout the course of the survey.

General Conclusions of the Survey.

(1) The table on the following page indicates the present utilization and the possible capacity of the various Faculties and Schools in the University. In some cases relatively inexpensive additions or changes are required in order to permit the total capacity to be used.

(2) As enrolment increases in the next few years at the University, it will be necessary to provide for more movement of students between buildings, and also for the movement of demonstration materials.

(3) Present custom dictates that lectures take place during the morning and laboratory work during the afternoon. As enrolment increases it may be necessary to change this practice to some extent, and have laboratories and lectures throughout the day.

(4) Consideration should be given to a change in the layout of certain laboratories and drafting rooms to accommodate more students.

(5) For purposes of this study a 39-hour week was used in arriving at possible capacity. However, additional capacity could be gained by taking advantage of the noon hour and the period from 4:30 to 5:30 p.m.

(6) Various common rooms are located in the campus buildings for the use of the students. With the construction of the Student Union Building, the need for these common rooms has been reduced and when requirements for extra office space occur, these common rooms should be considered for this purpose.

(7) The Time Table Committee determines the academic use that is made of the facilities of the University. To carry out its work effectively the Committee must be given the authority to make the possible use of available rooms and laboratories. For this purpose, emphasis should be

given to the fact that all such facilities belong to the University and not to individual departments.

(8) No long term plans have been made for the future expansion of the university. We think that such a plan is most desirable to avoid interim adjustments that may not fit in with longer term requirements. The development of such a plan should include careful consideration of the design and location of each future building, in order that the maximum flexibility in its use is obtained, and particularly that the movement of students and materials between buildings is facilitated.

C H A P T E R F O U R

EXISTING FACILITIES
AND FUTURE NEEDS

The Department of Architecture was established in 1913. In 1938 a year course in Interior Design was instituted under the Faculty of Engineering. This building has been expanded and remodelled, giving the Home Economics' students ample space. The present percentage of possible capacity now used is 50%. The School of Architecture and Fine Arts was changed to "The School of Architecture". A five-year course of instruction replaced the four-year course in Architecture; and the three-year Division course in Interior Design was replaced by a four-year course leading to the degree of Bachelor of Interior Design. Since 1913 the School has developed and firmly established a nation-wide reputation which extends far beyond Kansas itself. Architects from coast to coast continue to give unsolicited and abundant praise for the high calibre of Kansas graduates.

It is surprising that the school should produce graduates of such a high calibre considering the decentralized and temporary accommodations which it has for its use. The credit must be given to the staff for overcoming the many problems that arise because of the school's decentralized and temporary quarters.

The staff members of the School of Architecture, headed by Professor J. J. Russell have now for a number of years been endeavoring to have an architecture building constructed. If the money is given to continue producing graduates of a high calibre it will have to be moved into permanent quarters.

The following is a portion of a letter to The Board of Governors from Professor J. A. Russell regarding a new building:

The school cannot continue to fulfill its requirements educationally in its present decentralized and temporary accommodations. There is no