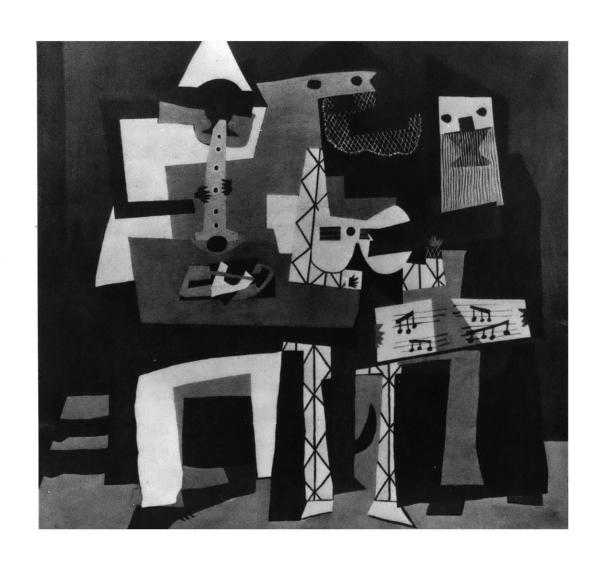
A MUSIC CENTRE FOR WINNIPEG, MANITOBA

Submitted in partial fulfillment of the requirements for the degree of Master in Architecture, August 1955

R. Douglas Gillmor Bachelor of Architecture University of Manitoba

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A MUSIC CENTRE FOR WINNIPEG, MANITOBA.

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Pietro Belluschi, Dean School of Architecture and Planning Massachusetts Institute of Technology Cambridge, Massachusetts

Dear Dean Belluschi:

In partial fulfillment of the requirements for the degree Master in Architecture, I herewith respectfully submit a thesis entitled "A Music Centre for Winnipeg."

Sincerely yours,

R. Douglas Gillmor 227 Westgate West Cambridge, Massachusetts

Abstract of thesis

A Music Centre for Winnipeg, Manitoba, a thesis presented by

R. Douglas Gillmor, and submitted for the degree of Master in

Architecture to the Department of Architecture on September 1, 1955.

It is the first purpose of this thesis to provide an architectural setting which will serve to promote high standards of participation and appreciation in the musical life of Winnipeg.

It is the purpose of this report:

to scan the history of musical forms and the conditions under which they grew;

to examine the background and present status of the musical groups in Winnipeg, and their activities in relationship to the city and the Province;

to present a proposal to accommodate the requirements of these groups.

Good music always has a carefully planned architecture, and indeed, such a relationship exists between the two arts, that the pursuit of the one is actively and passively enhanced and enriched by the surroundings of the other. Of the artistic endeavours of this city, the greatest degree of participation and the highest quality of appreciation is in the field of music. Thus, to enjoy and applaud the magic of the masters, to discover and nourish genuine talent, that is the purpose to which such a groupd of buildings would be dedicated.

ACKNOWLEDGEMENTS

I wish to acknowledge the criticism and advice given during the thesis by

Dean Pietro Belluschi

Prof. L. B. Anderson

Prof. R. B. Newman

also the sound advice offered in the preliminary stages by

Prof. W. H. Brown

Prof. H. L. Beckwith

Prof. E. N. Gelotte

Prof. K. Liepmann

and the time and effort expended in proof reading and typing by

Miss S. H. Hemenway

"Music is an integral part of all Civic life.

It is the medium through which people commune on a plane of universality, through which their souls vibrate understanding that transcends words and ideas and which obliterates the cancer of prejudice and the humiliation of class. It is not surprising, therefore, that Johann Sebastian Bach should have written a cantata in the occasion of the municipal elections of Leipzig.

Music unites where ideas separate people, and inspires hope where sadness and discouragement ravage the substance of life. The inspiration and life of many a city has been built around its music."

"Civic Art" by Carol Aronovici

p a r t l sketch history of musical forms

p a r t | sketch history of musical forms

Introduction

The history of art in general is the history of man's efforts to express his emotions and to achieve beauty by the arrangement of lines, colours, masses, words and tones. These efforts have given rise to the art of drawing and painting, scuplture and architecture, literature and music.

Although rigid comparisons and parallels between the arts are somewhat dangerous, it has been said that music does show some analogies with its sister arts. For instance, the order of notes consecutively into melody and the combination of melodies into counterpoint resembles the art of drawing; the placing of 'subject matter' in contrast and its

effective alternation and repetition has parallel in the art of architecture; contrasting tone qualities, the grouping of phrases and sentences, have some analogy in the arts of painting and poetry.

These resemblences thus existing, it seems a little strange that music should have reached adequate artistic development so much later than did any of the other arts. The nations of antiquity possessed noble buildings, beautiful sculpture and moving poetry and drama, but their musical development was crude by present day standards.

Now after the passage of a few short centuries, music as an organized cultural endeavour to be enjoyed by everyone is firmly established. But unlike the spell-binding of a great conductor, whose triumph is fleeting, that of the architect abides both in time and space, a permenent and essential background whereby the other arts may find apt expression.



The earliest musical efforts were in the form of the plain-song, or simple melodic line sung in complete unison. The form was well established in the early Christian liturgy of the loth and llth century.

The succeeding steps in music dealt with harmony and counterpoint, giving the expression more depth and greater colour. It is interesting to note that the use of counterpoint in music was nearly contemporaneous with the new principle of perspective in painting. (circa 1425, beginning with Massaccio)

Up to this period and indeed for a century later (up to 1600), the attention of composers was largely concentrated on choral writing; little effective composition remains for the solo voice, or chorus with instrumental accompaniment, or for instruments without voices.

As the sixteenth century came to a close, the phase of pure choral writing rose to a brillant climax. At the time when the great effort towards the attainment of perfect freedom, beauty and expression in the pure choral style was reaching its culmination, an effort was similarly taking place in the devising of effective techniques for instrumental performances.

From this, the logical development of music was its application to the purposes of drama - either secular drama acted, or religious drama in which the acting is implied. The introduction of these two forms resulted in OPERA and ORATORIO.



chamber music

Before public concert giving began in the late 17th century, set musical performances fell into three classes, those of the church, those of the theatre and those of the halls of the royalty and the aristocracy. These latter, whether of vocal or instrumental nature, fell under the heading of chamber music.

In the earliest chamber music, there can be recognized a composing procedure distinctly choral in nature, and indeed during the 'golden age' of chamber music, the voice was often used. From Hayden to Brahms, chamber music was essentially instrumental in nature and the use of the voice was virtually discontinued. However, modernists such as Schonberg once again make use of the voice.

From Hayden's first chamber music about 1752 to Brahms' death circa 1900, this form of music was extensively developed. Chamber music was and is today the most exacting and difficult of any of the executive forms of music. Because of this fact, it is essential that, in order for the listener to hear the perfection of tone balance and interpretation, the enclosing space must transmit the sound with great clarity and the utmost fidelity.



music - symphony

Regular concerts in the presence of a paying audience were not customary before the 18th century. The first recorded instances are the 'Concerts of Vocal and Instrumental Music' staged in England by Bannister, Britton and King. Before this, audiences outside the church were confined to gatherings at the court, or to the masses of bystanders during festive processions, carnivals and the spectacle in the street. We must, then, turn to the 'Age of Reason and Enlightenment' for any approximation of current conditions.

As the tone nuances of the host of new instruments were increasingly explored by the composers, the music became more and more complex, and the orchestra was forced to add more instruments and furnish a more disciplined response.

In Germany, Switzerland and other countries, the so-called Collegia Musica began giving concerts in approximately 1700. The beginnings of The Concert Spirituels in Paris in 1725, under the direction of Philidon, marks the turning point in the history of music and audiences.

The 16th century also witnessed the rise of the Symphony Orchestra which was nurtured in Germany. Orchestral conductors and symphonies developed with the new organization. A new system of dynamics, a modern expression and a new orchestral style and tradition were created.

Concert in the United States had its beginning in Boston as early as 1731. Apparently the early concerts were closed with a ball - one can easily imagine the atmosphere of grace and conviviality that must have prevailed on these glittering occasions. In 1762, Charleston, S. C.

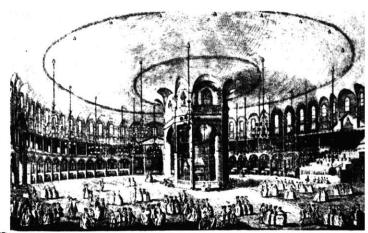
formed a concert-giving society. It was a rather expensive society with an annual subscription of twenty-five pounds.

New York has, of course, now become one of the great concert cities of the world, and the music critic's life there is even more taxing than that of his brother in London, since the season is shorter and more concentrated. Every travelling virtuoso now looks to the United States as one of his best fields for remunerative work.

Concerts were novelties in the 18th century. They gave the musicians more social and economic freedom than they had hitherto. In the early part of the century, music had been the plaything of the nobles and the royal entourage, but the political ferment of the Revolution and the Napoleonic era heralded a new life for music. Though the first giants of musical composition, Mozart and Beethoven, were dependent on royal favour and support, their works were the bridge from aristocratic and royal support to public patronage. It was Beethoven who first broke from the royal favour by striking off the dedication to Napoleon in his Third Symphony. As long as the musicians were dependent on the bounty of princes and noblemen, public concerts made their way with difficulty.

During the 18th century, concert-giving was largely in the hands of the aristocratic and 'society groups' - the audiences often consisting of definitely enrolled subscribers or elected members.

However, one other type of 18th Century concert activity requires mention in order that this impression of exclusiveness not remain too pronounced - the music of the 'Gardens' and similar resorts, particularly Ranelagh and Marylebone in London. Very good music was given in these places often to immense crowds, and the best musicians of the day took part. But the prices of admission were often high and the wide popularization of concert-going did not take place until the 19th century.







Concert halls as a distinctly different building type from opera houses and theatres, are scarcely more than a century old. Their first appearance in Europe was in response to increasingly larger and more disciplined orchestras, and by a cultivated audience which was prepared for the newly created masterworks of Handel, Hayden, Mozart and Beethoven. Curiously enough, the genealogy of this institution goes back to the days of the Puritan regime in the 17th century when organs, being banished from the churches, were bought by the tavern keepers. In Pepys and other writers of the period, we find evidence of the existence of tavern organs and organists; and a French traveller whose work was translated and published says:

"That nothing may be wanting to the height of luxury and impiety of this abomination, they have translated the organs out of the churches to set them up in the taverns, chaunting their dithyrambics and bestial bacchanalias to the tune of those instruments which were wont to assist them in the celebration of God's praise." 1

The early opera houses, ballrooms, hotel rooms and even riding schools were pressed into service since concert halls per se were not yet in existence.

The first concerts open to the public for a payment at the door were those given by a London violinist, John Bannister, at his house in Whitefriars in 1672. At some of the early concerts, the hearing of good music was combined with the taking of food and drink, an admirable

¹ The Oxford Companion to Music, Sholes, Percy A. P. 600
Oxford University Press, 2nd Ed. 1943

custom which the architects of the Royal Festival Hall have prolonged, in a fashion, with the provision of spacious bars and restaurants.

Leipzig's famous concert hall, Gewandhaus, takes its name from the building in which concerts were given for many years. Leipzig concerts had their beginnings in 1743, at first in a private house, later at a town tavern. In 1781, an unused floor in the local Cloth Hall (Gewandhaus) was transformed into a concert hall and concerts were given there until 1885 at which time they were transferred to the present imposing structure.

Spohr complained in 1819 that there were no suitable concert halls in Berlin; as late as 1846, Wagner's proposal to build a suitable concert hall was turned down. Those halls that were built were designed in the classic manner and invariably contained shapes that were full of accoustic faults. Several such were found to be unusable for concerts.

A new era in concert-giving began with the Crystal Palace Concerts held every Saturday afternoon during the winter seasons from 1885 until 1901, under the baton of August Manns; altogether, he directed 20,000 programs and more than any other single individual, he taught the British people to love the orchestral classics and not to be too timid in making acquaintance with the contemporary music.

A room that had once been suited to the size and simplicity of the royal concert was now too small for the sophisticated and loyal audience that presented several demands: a large and comfortable hall

with good accoustics and sight lines; and ample auxilliary space surrounding the hall where the audience could disport itself to the best social advantage. These remain today the main criteria for concert halls as a building type.

			HEIGHT FLOOR TO CEILING	TOTAL AUDIENCE
	LENGTH	BREADTH		
ROYAL FESTIVAL HALL, LONDON (1951) Partly fan-shaped seating area within rectangular plan. fully raked auditorium. stepped stage, reflecting area in front. suspended canopy	170 Pc.	loo Ft. between walls so Ft. at front	65 – 40 Ft.	3,165 + 280 standing
			:	
COVENT GARDEN, LONDON (1858) Horse-shoe plan slightly ramped floor; coved ceiling 5 tiers of boxes, and galleries	95 Ft. to safety curtain	90 Ft.	56 Ft. average	2,052
KLEINHAUS, BUFFALO, U.S.A. (1944) Megaphone-shaped · raked floor · flat stage · one gallery	170 Ft.	125 Ft. average	50 - 45 Ft.	3,000

			HEIGHT FLOOR TO CEILING	TOTAL AUDIENCE
	LENGTH	BREADTH		
GEWANDHAUS, LEIPZIG (1886) Rectangular · flat ceiling and floor · one continuous balcony at sides and rear · wooden reflector panels	124 Fc.	62 Pc.	48 Pc.	1,340
QUEEN'S HALL, LONDON (1893) Rectangular · two surrounding galleries · flat auditorium floor and raked stage	115 Fc.	87 Ft.		2,420
SALLE PLEYEL, PARIS (1927) Megaphone-shaped · slightly raked floor · two galleries	164 Ft.	48 Ft.	80 Ft.	3,000

Future of Music

The development of the concert having now been briefly sketched, it may be asked, what of the future? One pessimistic observer has put forward the following statement: that there may be no future for concerts given in public halls. Radio (and television) broadcasts may conceivably utterly destroy the concert. And of course, the wealth of recorded music is now within easy reach of every listener. However, on the credit side, recorded music, although passive and once removed from life, does have the great advantage over radio, and even live performances, that you can choose your own music when you want it, repeat the selections at will, consult the score of music before and after the music has been played.

Professor Klaus Liepmann, in a lecture at M.I.T. in April, 1955, made the observation that 'the average person in this room has heard more good music than the great composers heard in a whole lifetime, and that the modern listener is in danger of becoming saturated so that live performances will have a lesser effect on him'. And again, as stated in Professor Liepmann's book, The Language of Music:

"It has been said that the modern music student is familiar with more music than his predecessors of former generations.

"However, while it is true that an immense and varied literature is available to him on records, this very multitude of 'perfect performances on ice' is also a danger. When Bach had to hitchike 300 miles in order to hear the greatest organ masters and composers of his time in North Germany, this trip was more of a revelation to him than the avalanche of music at our fingertips is today for us." 1

Then what of the future of music? On the optimistic side, we may say

The Language of Music, Liepmann, Klaus P 351
The Ronald Press Company, New York

this: it is clearly up to the audience to create gradually the 'minor leagues' in music which are lacking in the United States and Canada today. Once we have an opera and symphony orchestra in every city of more than fifty thousand inhabitants, we will create employment and proving grounds for our composers and musicians. Audiences will grow in quantity and quality because they will watch the development of an indigenous musical culture and participate in it.

Professor Liepmann concludes his book with the following statement:

"It is rather in our communities that the future of music lies. Every year hundreds of well-equipped musicians and potential musical leaders graduate from colleges and conservatories. They are qualified and eager to bring chamber music and symphony concerts, opera and oratorio performances, to thousands of communities in a way which might make music a daily occurrence, a way of living rather than a luxurious pastime for a certain leisure class There might come a time when we all will pay gladly not only for street cleaning and defense expenditures but also for what, among other things, we all should strive to defend and to keep alive as an active force for the good: the speaking and understanding of the language of music."

part II winnipeg's musical background

Background of Musical Groups

The Winnipeg Symphony Orchestra

The beginnings of the Winnipeg Symphony go back to 1923, when a young British musician, Hugh Ross, was brought to Winnipeg as leader of the Male Voice Choir. The following year, he organized an orchestra known as the Winnipeg Orchestral Club. When Mr. Ross left for New York to direct the Schola Cantorum, the orchestra was disbanded.

Three further attempts to form an orchestra were made in the years 1930, 1932 and 1939. None of these efforts was able to achieve any degree of permanency.

In 1945, a spontaneous interest in the formation of a symphony was apparent in musical circles and in the following year, a general meeting was called by the Civic Music League. Twenty-three musical organizations were represented. A provisional committee was appointed and after a survey, it was agreed that no permanency could be assured without substantial financial support.

The foundational foundation was established by the Winnipeg Symphony Orchestra Limited to which non-profit shares were sold at \$5.00. To date, it has been possible to operate the orchestra without disturbing this capital reserve.

The first problem of the new board in 1948 was to engage a conductor. Mr. Walter Kaufmann, a native born Czechoslovakian and composer in his own right, was chosen.

Under Kaufmann's conductorship, the Winnipeg Symphony Orchestra has

grown in six seasons to become one of Canada's four leading symphony orchestras. During the past seasons, the orchestra has presented some of the world's leading artists as well as some of the promising younger Canadian musicians. The concert season now includes ten regular concerts, portions of which are taped and broadcast on the Sunday evening concert hour on the C. B. C. as well as the Mutual Network in the United States.

One of the most important and noteworthy activities of the symphony are the annual students' concerts. Each concert is played three times to meet the demand for tickets. 18,000 students from Winnipeg and the surrounding area see and listen to the Winnipeg Symphony each year.

Although the Winnipeg Symphony Orchestra has gained wide support in its brief history of seven seasons, ticket sales only meet a portion of the annual budget. Other income is gained from broadcasts by the Canadian Broadcasting Corporation and an annual grant from the City of Winnipeg.

It is hoped that plans may soon be made for out-of-town appearances of the orchestra in order to be of greater service to the surrounding areas in the Province.

The Choral Clubs

The history of the choral clubs in Winnipeg, although covering less than forty years, is a distinguished record of achievement and service.

The Choral Club was founded on December 11, 1915, as the result of the desire of a group of musically minded men to get "some kindred spirits together in a club for the purpose of making and listening to music they like."

The scope of the Club's activities during the "first period", which extended from the Club's inception to the end of World War I, was entirely internal. The promotors' first desire was to make and listen to some worthwhile music for music's sake. Accordingly, a series of Saturday night recitals was arranged and these were presented and enjoyed by club members and their friends during the winter season until the mid-thirties. In the first four months of the Club's existence, two actions took place which led to the "second period", when the scope of the Club's activities entered into the field of public service. A small male choir was formed to present male voice part-song music at the recitals, and the Club acquired, through a series of circumstances, a lease on a large old residence, formerly used as a club, and renamed it the Music and Arts Building. This building was equipped with studios and a recital hall, available to music teachers and other music groups, and soon became a center of real musical activity. Winnipeg's first music center was in action. The male voice choir developed rapidly until, on April 3, 1919, it marked the emergence of the Club into public service with a concert, assisted by a guest soloist from New York. The choir, now nearly fifty strong, was known as the Winnipeg Male Voice Choir.

In subsequent years, under the inspiring batons of a succession of English conductors, the Male Voice Choir earned an enviable reputation, and reached a peak in its career under the brilliant direction of Hugh Ross, now of the Schola Cantorum in New York. In 1922 and 1923, the choir made tours of the principal Eastern American cities.

1925 saw another step by the Club in the "promotion, extension and elevation of the art of music" in the city, with the organization of the Winnipeg Boys' Choir. The annual spring concerts of the Choir which followed delighted audiences and displayed a high musical standard of performance and discriminating taste in programme preparation.

In 1929, the Club took over control and management of the Philharmonic Society, now the Philharmonic Choir, the city's leading mixed choral body, again exemplifying readiness to assume responsibilities in the interests of music in Winnipeg. At the same time, the Club was interested in organizing a series of orchestral concerts. This was done in conjunction with the Club Choirs in the season 1930-31. In the following two seasons, an orchestral series was given under the direction of Bernard Naylor. The Male Voice Choir functioned along its own specialized line, while the Philharmonic Choir, 200 strong, gave highly satisfactory performances of the "Messiah" and the

"Creation", with orchestral accompaniment.

During the late thirties and the World War II years, the Philharmonic and Male Choirs deteriorated somewhat for lack of choristers and a suitable conductor. The Male Voice Choir was then disbanded and the Club's weekly recitals were discontinued. Finally, the Music and Arts Building was sold, and the Club lost one of the most necessary components of its organization, a place in which to function.

Thus, the situation at the end of World War II was not a very happy one for the Club. However, it was not long before the Winnipeg Symphony was organized. Their new conductor, Walter Kaufmann, agreed to take over temporarily the conductorship of the Philharmonic Choir and the reorganized Male Voice Choir. This interim arrangement, while not entirely satisfactory musically, served to get the choirs on their feet again. In the meantime, the Club was looking for a new English conductor, thoroughly schooled in choral conducting technique. As a result of their search, Mr. Donald Leggat arrived from England to assume the conductorship of all the Club Choirs, including the Winnipeg Boys' Choir, now divided because of numbers, into Juvenile Boys, Senior Boys and the more recent Junior Male Voice Choirs.

The stage is now set for the revival of the thrilling musical achievements of the twenties in Winnipeg. However, the task is difficult and aggravated by the fact that the Club no longer possesses a music center in which to function.

The Manitoba Music Festivals

In May, 1919, the Manitoba Musical Competition Festival was inaugurated. Two distinguished musicians from Eastern Canada and the United States were brought in as adjudicators, the first of a long line, mostly from England, whose inspiration over the years has stimulated the extraordinary development of the performances at the Festivals. It was the feeling from the beginning, that the Festival had elements of strength that, in time, would wield an influence for better music-making in the community.

The Music Festival grew continually from the time of its beginning both in numbers of competitors and attendance. The list of eminent British adjudicators, who were brought out each year, and whose criticism has been such a stimulus to competitors and audience alike, grew longer and more impressive.

The Festival is a tremendous undertaking, when it is realized that the Manitoba Festival is the largest of its kind in the British Commonwealth, comprising over 19,000 competitors. Work on a Festival of this kind must begin in the fall of the previous year, when selection committees meet to choose the test pieces for the next year's Festival. A syllabus must then be published and distributed in time for the teachers and entrants to choose their selections and make their entries. When entries are all in, the gargantuan task of arranging the programme, which lasts for two weeks, falls on the shoulders of the

Secretary. This job also takes two weeks of concentration and manipulation, in an attempt to accommodate adjudicators, and to provide evening sessions of interest to the audience. The programmes are printed and distributed for sale. All the entries have, in the meantime, been checked and registered, and admittance cards have been mailed to the entrants. All this takes place before the Festival has even begun.

During the Festival weeks in the Spring, the city is the scene of great activity. Children and young adults from all points in the Province flock to the Festival and audiences in great numbers attend the evening sessions. Instrumental and vocal soloists, choirs and choral groups all compete for the highest honors in their class. This Festival has been a great impetus in the development and appreciation of good music in the city.

Present Status

Present Status

In this section, I will endeavour to briefly outline the activities of the various musical organizations in the city of Winnipeg, showing their present status and conditions under which they now function.

The Choral Clubs

The Mens' Musical Club controls and manages five choirs.

1. Philharmonic Choir

The Philharmonic Choir is the largest choir and is the Club's mixed chorus. It exists for the preparation and presentation of large choral works such as oratorios as well as larger secular works. It gives two concerts in a season, as a rule and at the present time is in rehearsal once a week for a performance of S. Coleridge-Taylor's "Hiawatha", with the Winnipeg Symphony Orchestra. The Choir is administered by its own committee.

2. Male Voice Choir

The Winnipeg Male Voice Choir, a reincarnation of its famous prewar forebear, is the choir which brings good music to music lovers outside the city, through its tours of the smaller centers of the Province. Here is a practical example of the Club performing a service outside the city. The Male Voice Choir usually presents two city concerts a season in addition to its

tours. The Choir rehearses once a week as a rule but more often when concerts are imminent. This Choir is administered by its own members.

3. Boys' Choirs

The Juvenile Boys' and the Senior Boys' are the development of the original Winnipeg Boys' Choir and have come into existence as a result of increased membership over the years. The boys are very enthusiastic and set a fine example of attendance at rehearsals for many adult choirs. The Boys' Choirs prepare groups of the best choral music for their range which they present at the request of various programme organizers. They also present an annual spring concert, and appear in the Musical Festival, where they have consistently won high honours.

4. Those boys whose voices have broken, continue to enjoy singing in the Junior Male Choir. The Club is anxious to retain these young men as potential choristers in the larger choirs, hence this outlet. The Junior Male Choir appears in concert with the younger boys. The Boys' Choirs are administered by a committee of Club members set up for that purpose.

All these choirs carry on their rehearsals in the outdated and uninspiring Trinity Hall. Surroundings are shabby, uncomfortable, lack sufficient washroom facilities, a canteen or kitchen for the preparation

of tea or coffee, and are far from satisfactory accoustically. Choristers leave the rehearsal on a cold winter's night, either to go home or hurry in small groups to a nearby coffee shop to get some warmth. These conditions are not sufficient to build an esprit de corps, and proper facilities with the attendant amenities would greatly assist in this necessary part of any organization, to say nothing of improving the general standard of musical achievement.

The Manitoba Musical Festival

The headquarters of the foundation of The Federation of Canadian Musical Festivals is presently located in the basement of the Old Law Courts Building, an example of a period in architecture described by Sir Steuart Wilson, the famous British adjudicator, as "Early Manitoba Bloody". This office is woefully overcrowded and the small quarters contain in all the Club's whole music library of choral music and Festival test pieces, a grand piano, and all the stenographic space. Committee meetings must be held here unless they are held in private homes. The music selection committee must meet here because the library is here. People must come in to try over choir test pieces on the piano and the stenographer must carry out her work here. The whole picture is one of overcrowding and confusion.

The halls, where preliminary sessions of the Festival are held, are scattered several blocks apart in outdated and unsatisfactory quarters, usually in various church halls. When the adjudicators arrive, if they

are new to the city, they must be accommodated at a hotel and entertained if they are not too worn out from their work. During the day, they must dash from one to another of these halls, in an attempt to reach the right hall on time and remain fairly well nourished. This is not easy when one realizes that an adjudicator may be listening to 97 children in the Grade II piano class before lunch and 34 advanced Beethoven performers after lunch at a different hall.

Adjudicators are usually dead tired when they arrive here from the Eastern Festivals, and the prospect of being whisked around to several Sunday receptions, followed by a night in a noisy downtown hotel, would not be a very happy one if they knew what was in store for them. The accommodation for adjudicators, or any visitor connected with this work, as well as their resident conductor, is a problem which, under present conditions, is particularly pressing.

Proposals

In view of the varied activities and responsibilities of the musical organizations of the city, it is natural to think that something should be done to remedy the situation, and wonder how these organizations have achieved such success under such intolerable conditions. The old Music and Arts Building served its purpose well and long in its day, but it became outdated, run down and finally sold. Long before this, however, these groups repeated their plea for suitable facilities in the city. In the early days, public concerts were given in a converted freight shed adjacent to a railway yard. When the decision came to build a new auditorium, these groups, particularly the Mens' Musical Club, played an important part in negotiations with the design committee. The Civic Auditorium, while not measuring up to the ideas of the musical organizations as to what a concert hall should be, nevertheless proved an important factor in the life of the community.

However, facilities for rehearsals and small recitals were still lacking. At the same time, there were no facilities for private studios outside the few in the old Music and Arts Building. A year following the opening of the new auditorium, a prominent local architect was approached to draw up sketch plans for a new Music and Art center. The proposals were monumental in character, more typical of the thought of the architect than current thought in architecture, and provided for studios and a small concert hall and an art gallery.

However, nothing materialized and the architect shelved another proposal.

In 1947, the President of the Mens' Musical Club wrote to the Finance Committee of the City Council to ask that something be done in the matter of a 'Community Cultural Center'. The need for such a structure was growing by leaps and bounds. Suggestions were made as to size of halls, location of site and methods of financing. Once again the proposal was shelved. It soon became clear to the executive members that the venture would have to be done on an investment basis, with some financial organization supplying the capital.

In the summer of 1953, one final occurrence added to the already desparate need for musical facilities in the city. A group of music teachers were forced to abandon their downtown studios, this last blow all but wiping out any facilities for the teaching of music privately. This situation has only brought with it firmer determination to arrive at some solution of finance as soon as possible.

Now, in 1955, another rally is under way . . . this time with more influential backing and more widespread determination. A study of the city's cultural needs has been conducted by the Humanities Association; the Junior League of Winnipeg has done a great deal in forming an Arts Council which will set up an administrative body to

See reproduction of this letter in the Appendix

consolidate the needs of the various organizations and begin the realization of the Arts Center. Interest runs high this time and there is evidence of a great deal of spirit. This fall the Arts Council will have been set up and negotiations with the City and Provincial Finance Committees will begin.

As of this date, some of the proposals are sketchy but all show the hard core of determination which will bring the idea into realization. For instance, John MacAuley, Q. C., newly elected president of the Winnipeg Art Gallery, issued a press statement as follows:

"Winnipeg has reached the stage in its progress and development where an Arts Center is essential. It would not only give tremendous impetus to the (art) gallery, but to music, the ballet, the theatre and the symphony. A concerted effort on the part of the government, the city and the citizens would be required to bring such a center under one roof."

Professor C. R. Hiscocks, Chairman of the Humanities Association, gave on February 25th, 1955, a lecture entitled "An Art Centre for Winnipeg" in one of a series of lectures given at the University. Some of the excerpts from this lecture are reproduced here since his remarks are so very pertinent to this problem. On the subject of "Why Does Winnipeg Need an Art Centre?", Professor Hiscocks says there are three irresistible reasons why it does.

"First, Winnipeg needs a centre such as this, because it

¹ Reprinted from the Winnipeg Free Press, April 21, 1955. See Appendix

is destined to be a centre of Art. From East to West, it is the main cultural centre between Toronto and Vancouver. The Centre I have in mind would be the symbol, the proof of our cultural faith, and the concrete sign that we realize our geographical destiny that is required at the present stage of the citizens of Winnipeg, Manitoba, of the City authorities, and of the Provincial Government.

The second reason why we need such a centre is that in every branch of artistic and cultural activity in Winnipeg, existing organizations are in need, at this stage, of the practical help and encouragement that such an endeavour would provide. Winnipeg is destined, not only geographically, but owing to the quality of the character of its people, to be a great cultural centrenowhere have I found such a combination of spontaneity, enthusiasm and the pioneer spirit in relation to the Arts in the broadest sense.

The third reason is that it gives us a magnificent opportunity, from the point of view of architecture and town planning for improving our city. There have been some terrible mistakes and lost opportunities in the past. For example, the opportunity presented by our two rivers has been completely thrown away, so the visitor hardly realizes that the rivers are there. A fine Centre in a central position with well laid out surroundings would be an immense addition to the beauty and dignity of our City." 1

Perhaps these above inducements have not been harnessed and rendered effective by good organization. However, on the whole, Winnipeg has had more than average good fortune as regards organizers and administrators.

1 'An Art Centre For Winnipeg', Lecture given by C. R. Hiscocks, Professor of Political Science and International Relations, February Lecture Series, February 25, 1955.

Finances

The methods proposed for the financing of this project are yet very sketchy at best. In this section, I will endeavour to present the most recent proposals and these will only represent a framework into which more concrete details can be drafted at a later date.

According to Mr. R. W. Cooke, Secretary of the Mens' Musical Club, the Mayor of the city has been asked to appoint a committee to investigate the possibilities of building an Arts Center. It is hoped that the City itself will sponsor this project and secure financial support from the Provincial and Federal Governments. Once the buildings are erected, they should be able to support themselves through studio rentals, etc.

Professor Hiscocks, of the Humanities Association, would prefer to see the money raised in a different and more difficult way. He says:

"I should like to see the center come into being as a result of combined private and public enterprize. His alone would reflect the nature of the need to be filled. I should like to see rich and poor citizens, the City of Winnipeg, and the Province of Manitoba give to the people of Winnipeg, and the great area which the centre would serve, the amenities and stimulus they need and deserve. Ideally one could aim at getting contributions . . . from about 20,000 people; that is to say, about 2-1/2% of the population of the province, several thousand larger contributions, a few very large contributions and substantial support from the City and from the Province.

"It would not be very difficult for the City and the Province each to contribute to an Art Centre 1% of their annual revenues, and especially if their contributions were spread over two or three years, and in the history of Manitoba and Winnipeg, the memory of such an act of foresight and wisdom would long outlive those responsible for it."

1 op. cit. C. R. Hiscocks

part III the problem

The Site

The site for any civic program is always accompanied by a set of prerequisite conditions which should be met in order that the building may fulfill its function. These conditions may be stated as follows:

- (1) Accessibility for all citizens by public transit;
- (2) Visibility from important thoroughfares;
- (3) Proximity to existing civic core;
- (4) Beneficial effect on surrounding area;
- (5) Visual aspect of the site itself.

Considering the above conditions, three sites were chosen. The first two sites proved to be inordinately expensive in expropriation costs to justify their development on any other than a commercial investment basis according to Eric W. Thrift, Director of the Metropolitan Planning Commission.

The third site offered a number of advantages. It is large enough to support a dispersed scheme if this proves desirable. It offers a chance at the civic redevelopment of an area which has long marred an otherwise grand avenue. That the rickety stands of the baseball stadium have been tolerated next to the grounds of the Legislative Building until now is a curious fact. During 1952, the old stadium was closed and Winnipeg's new stadium was built in St. James, West Winnipeg. The old site is now ripe for redevelopment. This site borders the Legislative Buildings, the Law Courts, the Civic Auditorium - the civic heart of Winnipeg. The

advantages offered by the City's two rivers have often been dismissed.

On this site, there is an opportunity to exploit this advantage in a fine architectural setting.

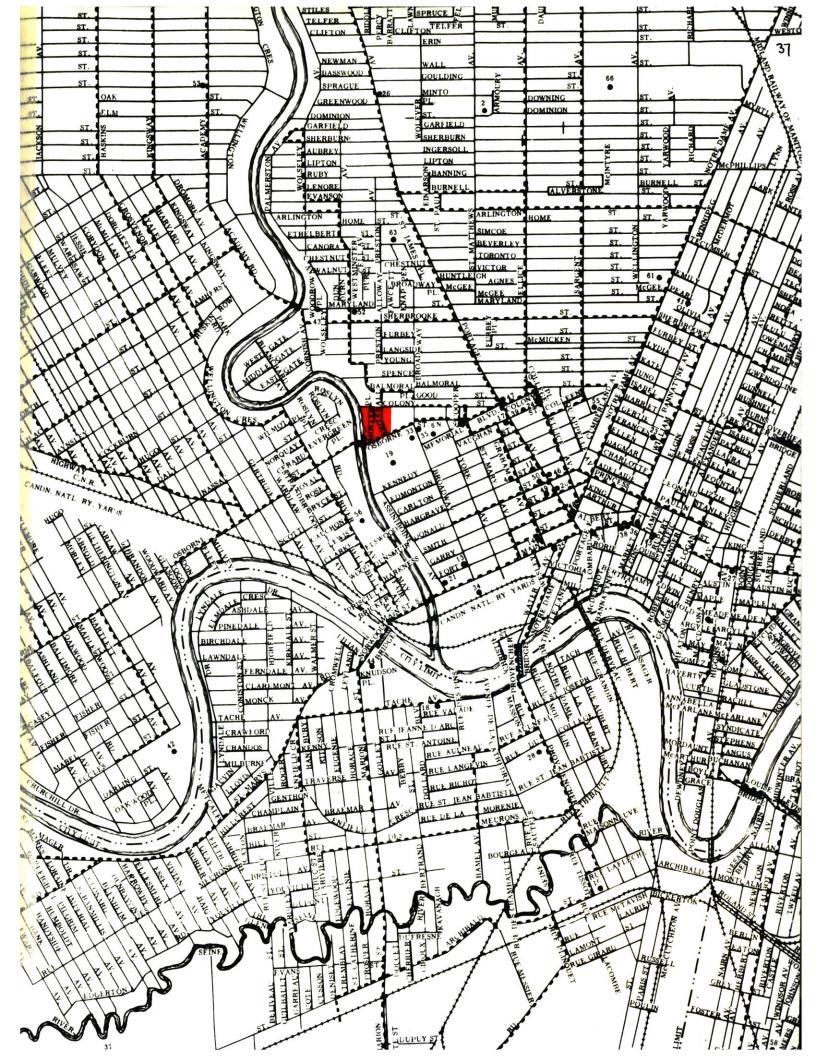
Physical Features: The site occupies 549,300 square feet, or approximately 12.5 acres of land, and is relatively flat except where it meets the Assiniboine River. Here it drops about 30 feet to the river's edge. This bank profile served to keep the site dry even at the peak of Winnipeg's worst flood year in 1950. The river's edge is well treed and there is a fine line of trees along Osborne Street. Reference to the following paragraphs will further explain the physical espects of the site.

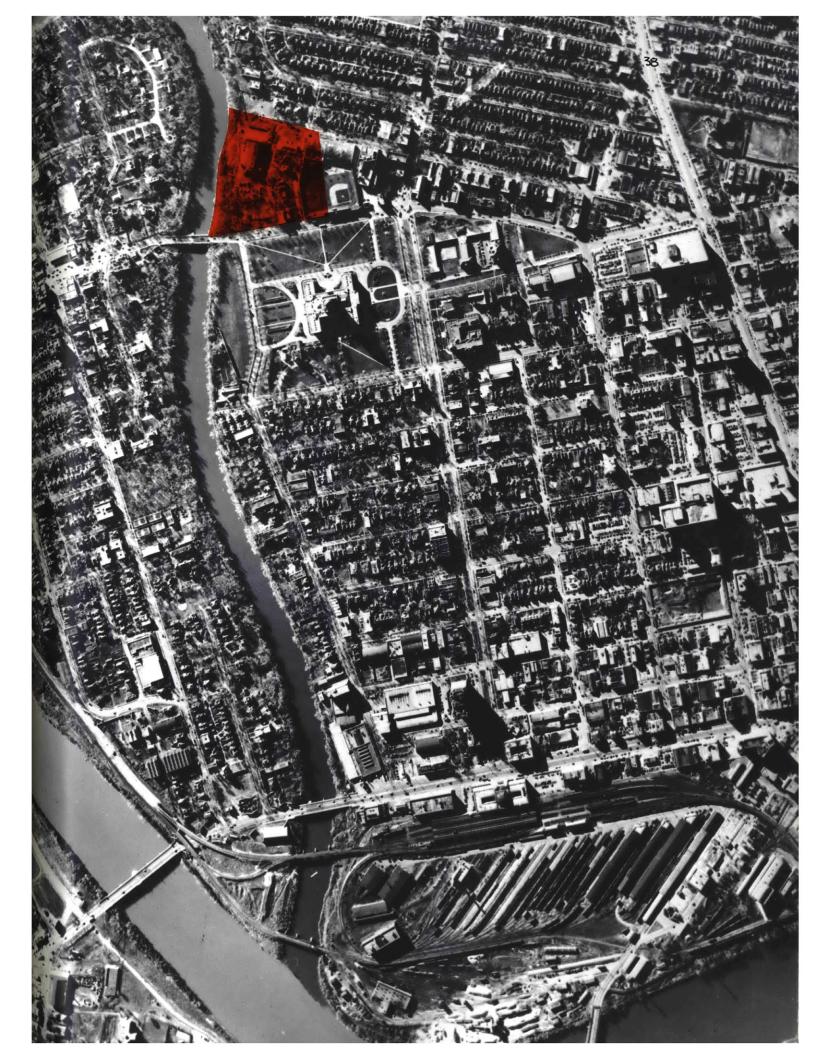
Location in the Zoning Pattern: The site lies three blocks from the central business district on Osborne Street, the main thoroughfare to south Winnipeg. This location is well served by public transit. To the east lie the government buildings, the Law Courts and the civic auditorium this is Winnipeg's civic core. To the west there is a residential area and south across the river is one of the City's finest old residential areas on Roslyn Road.

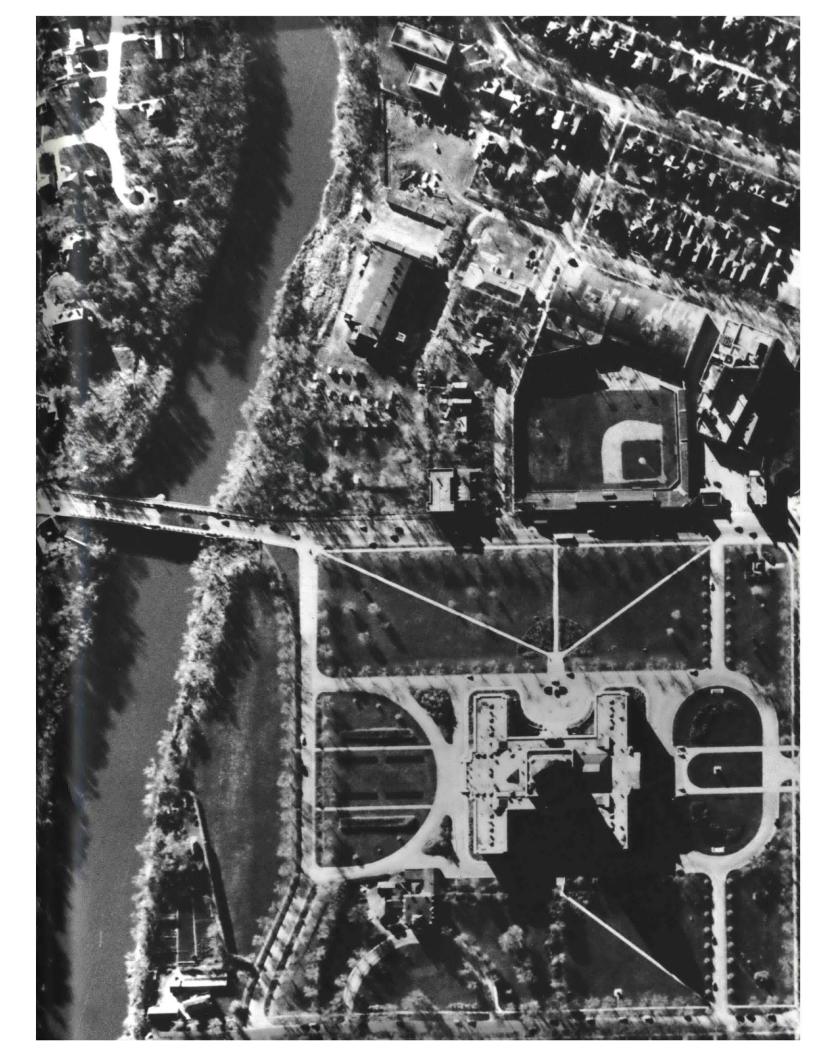
The site is zoned for use as follows: 1

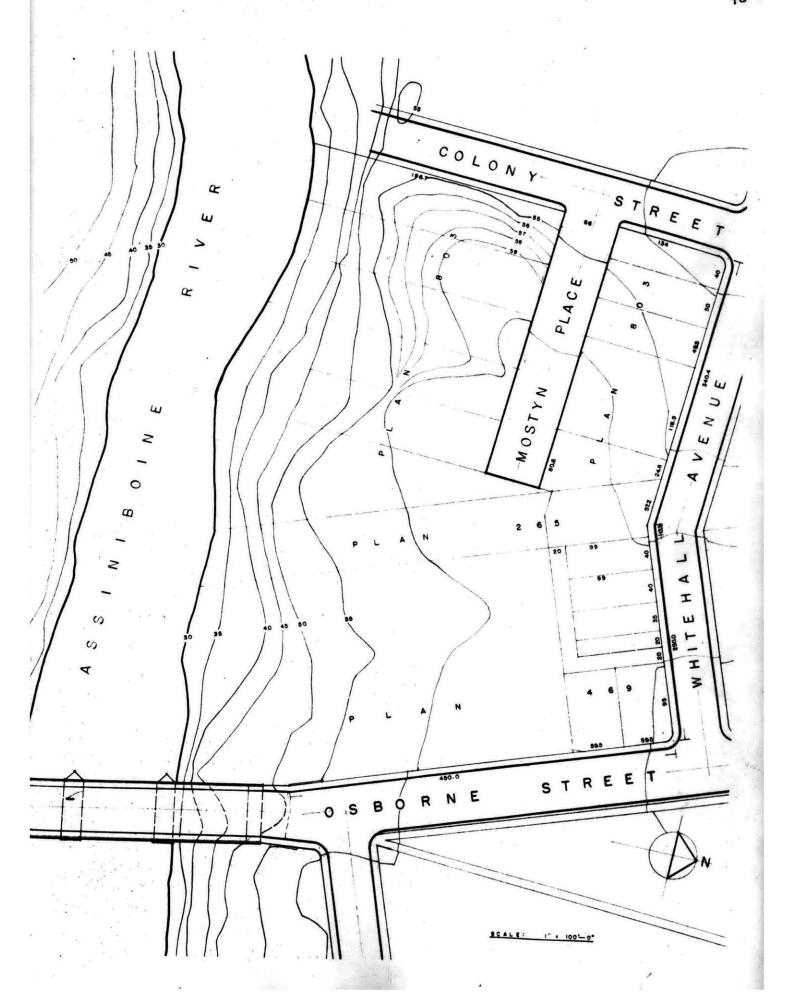
Multiple dwellings, boarding and lodging houses, hospitals, hotels, clinics, institutions, private clubs, fraternity houses, lodges, etc., permitting a structure of 6 stories and total height of 75 feet.

Proposed district map, Summary of Recommendations, Comprehensive Plan Greater Winnipeg, 1950, Metropolitan Planning Commission









From the Site Looking West to The Legislative Buildings

From the Site Looking Northwest to the Legislative Buildings

Looking South down Osborne Street Site marked below arrow



From Grounds of Legislative Buildings Looking West to Site



From Corner of Osborne Street And Assiniboine Avenue Looking Northwest to Site



From Legislative Grounds Looking Southwest to Site



From Osborne Bridge Looking to River's Edge of Site

On Site Looking East

On River's Edge Looking North on Site



•

The Program

The program of requirements for this thesis has been complied on the advice of the executive members of the musical organizations in Winnipeg. Each group has offered a rather ambitious building program and it was found, in the last analysis, that various functions and facilities overlapped and requirements would have to be pared. The formation of the Arts Council in Winnipeg has done much to organize and consolidate the demands of the various groups with the result that a more coherent yet flexible program has been brought forward.

A fine distinction has had to be drawn between functions of a civic nature and those which would serve private interests only. For instance, the Manitoba Registered Music Teachers' Association strongly desire a group of teaching studios in this enterprise. It was felt that these demands would be more likely to be supplied on a commercial basis rather than by public subscription and government subsidy.

The program put forth on the following pages represents the closest interpretation of the city's musical needs. I must acknowledge the assistance of Mr. Stewart Thomson, Winnipeg architect, and musician in his own right, whose twofold advice was invaluable in formulating the program for this study.

General Requirements

1. Halls and Facilities

Large Concert Hall - capacity 2,500 persons, to be used primarily by:

The Winnipeg Symphony Association for their winter concert series;

The Mens' Musical Club for their staging of the larger choral works and oratorios;

The patrons of the Celebrity Concert Series

The final sessions of the Manitoba Musical Festival

Chamber Music Hall - capacity 750 persons, fur use by:

Chamber groups, both instrumental and choral;

Festival preliminaries, amateur drama groups;

Small Recital Hall - capacity 250 persons, to be used by:

Various music groups such as the Wednesday Morning Musicale, Young Women's Musical Club and such groups who would welcome a hall which is well suited to their ticket selling capacities;

The Literary Societies, such as the Browning Society, the Dickens Fellowship and perhaps the Cine Club;

Music teachers for pupils' recitals and scholarship concerts;

Also for use in the Festival preliminaries

None of these halls will be limited strictly to the above uses but will be interchangeable, depending on the size of the performance and the ticket selling capacity of the sponsoring group.

Adjunct facilities to the concert halls will include:

- Lounges for choristers and musicians
- A large rehearsal room for choir and orchestra
- Public lounge space and bar
- Public restaurant and tea room
- An outdoor concert court for use during the Festival week and for public concerts during summer months

2. Administration

Executive offices for officers of the Synphony Association and the Mens' Musical Club

A Festival Test Library

A Music Library

Committee Rooms

Private Dining Room and Kitchen

3. Mechanical Equipment

No boiler required since on this location the city's central steam supply can be tapped;

Allowance for fan equipment for handling air supply to halls and public spaces;

Space Analysis

I Concert Hall:

Total capacity of the auditorium to be 2,500 persons. Preliminary disposition assumed to be 1,600 persons on the main floor and 900 in the balcony;

Provide approximately 230 cubic feet per person and 7-1/2 square feet per person, including aisles, crossovers and orchestra-choir platform;

Code Requirements 1

(1) Exits: Above ground floors, there shall be one unit of exit width (22") per 60 occupants

On ground floors, there shall be one unit of exit width per 100 occupants; the above figures apply to doors, stairways or ramps

(2) Washroom Facilities:

Men: 1 W.C./urinal per 150 persons

1 Lavatory per 300 persons

Women: 1 W.C. per 150 persons

1 Lavatory per 300 persons

Foyers and Lobbies: A good recommendation is to provide 4 square feet per person for at least 2/3 of the audience capacity

The above recommendations apply to the other places of assembly and so will not be repeated for the Chamber Music Hall and Recital Hall.

II Chamber Music Hall:

Total capacity of this hall to be 600 persons, all disposed

1 National Building Code, National Research Council, Ottawa, Canada

on one floor;

Provide approximately 200 cubic feet per person and 7-1/2 square feet per person including aisles, crossovers and chamber platform;

Cube	•		•	•	•	•	•	•	•	•	•	120,000 cu.	ft.
Square	:	•	•	•	•	•	•	•	•	•	•	4,500 sq.	ft.

III Recital Hall

Total capacity of this hall to be 200 persons;

Provide approximately 200 cubic feet per person and 7-1/2 square feet per person, including aisles and platform;

Cube .	•	•	•	•	•	•	•	•	. •	•	•	40,000 cu.	ft.
Square	•	•	•	•	•	•	•	•	•	•	٠	1,500 sq.	ft.

IV Adjunct Facilities

(1) Changing Rooms

2,500 sq. ft.

At the present time the choir and orchestra memberships are as follows:

Philharmonic Choir	200
Male Voice Choir	50
Junior Choirs	150
Winnipeg Symphony	85

It is doubtful if all these groups would require changing facilities simultaneously and peak would occur during oratorio performances by the Philharmonic Choir and the Winnipeg Symphony Orchestra, in which case total would be 285 persons

(2) Lounge for Choristers and Musicians 800 sq. ft.

(3) Dressing Rooms 800 sq. ft.

Soloists, 4 @ 150 600 sq. ft. Conductor 200 sq. ft.

(4) Broadcasting-Recording 800 sq. ft.

A booth for the Canadian Broadcasting Corporation for radio transcription and televized broadcasts

Note: Allow access to various levels and points around the concert hall; this will allow simultaneous televized broadcasts from at least two points in the hall.

(5) Organ Chamber

1,000 sc. ft.

(6) Cloakroom

1,000 sq. ft.

(7) Instrument Store

400 sq. ft.

Include piano lift

(8) Locker Rooms

300 sq. ft.

Facilities for doormen, program boys, ushers and cloakroom attendants

(9) Green Room

500 sq. ft.

For use in conjunction with Recital Wall

(10) Green Room

800 sq. ft.

For use in conjunction with concert and chamber hall

(11) Bar

575 sq. ft.

(12) Large Exhibit Space

3,000 sq. ft.

For use in conjunction with foyers and lounges; to be used also for receptions for visiting adjudicators and concert artists

All the above facilities have been estimated to be used in conjunction with the concert hall; however, during the design process, it may be found that a dispersed scheme will offer some advantages in which case some of the facilities mentioned will have to be repeated for the Chamber Hall and Recital Hall.

V Rehearsal Spaces

(1) A large rehearsal hall is required for the full Philharmonic Choir and Symphony Orchestra . . . This room should approximate conditions in the concert hall as closely as possible.

(2) Practice Rooms for soloists and chamber groups.
These spaces must be accoustically isolated.

6 Rooms totalling 1,500 sq. ft.

VI Administration

(1) A general office

800 sq. ft.

Will function as a box office for the Celebrity Concert Series and Winnipeg Symphony Series

(2) Private offices

800 sq. ft.

Four offices - Conductor and Assistant Conductor
Manager and Assistant Manager
Secretary, Winnipeg Symphony Association
Secretary, Winnipeg Choral Society

(3) Committee Rooms

800 sq. ft.

For 30 persons 500 sq. ft. For 15 persons 300 sq. ft.

These rooms may be designed for use in conjunction or for separate use.

(4) Libraries

400 sq. ft.

One portion to be used as a Festival Test Library and to contain table, chairs and a piano, and Festival Test Pieces

A music library containing books, scores and recordings available to the public; this space to contain stacks, study space, 2 record playing booths. librarian's desk and a workspace

(5) Private Dining Room

800 sq. ft.

This room will be used for meetings of the Choral Societies, Winnipeg Symphony Association or Festival executives; to be used also for receptions and private dinners in the event of visiting artists or adjudicators; designed for 30 persons.

VII Restaurants

(1) Public Dining

5,000 sq. ft.

This space will be used by concert patrons before and after performances; there will be generous allowance for terrace areas to be used in conjunction with this room; the pleasant aspect of the river views should be exploited in orienting this room. designed for 120 persons.

(2) "Tea Room"

1,200 sq. ft.

For 30 persons; this room will be part of the above space but will allow separate control since a room of this type may operate when dining room closes.

(3) Kitchen

600 sq. ft.

To serve above spaces.

VIII Services

(1) Superintendent's Office

150 sq. ft.

(2) Locker Room for 20 persons

500 sq. ft.

(3) Travelling equipment storage and loading dock

2,000 sq. ft.

(4) Mechanical Equipment

Note: Central steam supply will be utilized for heating purposes; make allowance for fan rooms to handle air supply to halls.

IX Parking

(1) Grade parking for 400 cars

Note: Since land cost is cheap, the decision was to $\overline{\text{allow}}$ surface parking for vehicular traffic. It is felt that during the winter concert season, the majority of people will arrive by taxi and public transit since this method is less of a nuisance than cold weather driving.

Accoustics

"Music has had to be expressed through the medium of the four classes of instruments, with their combination in the orchestra as the fifth. Now to this is added a sixth, the hall, the 'containing instrument', as scrupulously fashioned for its role as any in the orchestra whether string, wood wind, brass or percussion. That, surely, will have its effect, not only on the music we hear and on our pleasure in it, but also upon new music yet to be written." 1

One of the two intentions in the undertaking of this theses was to document and later exploit all the known facts concerned with the accoustic fashioning of a concert hall. To this end, I will endeavour to treat this subject in the following manner, first to comment on the desirable attributes of a concert hall and later to offer some critical comments on existing halls which may serve as a guide to this problem.

Unfortunately, musical criteria themselves are still difficult to establish because musical views have seldom been linked to scientific studies, but the following facts seem now to be significant:-

For the performers: The players and singers must be able to hear one another well in order to play in good ensemble and intonation.

For the audience: The output of all departments of the orchestra should be heard in all parts of the house in the balance intended by the conductor.

C. William-Ellis, Royal Festival Hall, London, Max Parrish 1951, p 83

Definition should be clear; tone should be 'full' and have a 'singing' tone.

From consultation with musicians on these matters, it has been ascertained that, in Britain at least, tone is regarded as the paramount consideration, definition next and balance third. Tone is the most difficult term simply because it is still ill-defined as an accoustic attribute, but it seems to depend mostly on a fairly long reverberation time, and on a certain relation between the reverberation time at low, middle and high pitches. Definition depends on how effectively the high frequency sounds from each instrument can be heard. Balance depends on hearing all departments equally well.

Definition and fullness of tome seem to be slightly conflicting requirements, and it is not known for certain whether the two are fully compatible in the larger halls; or, if they are compatible, what exact balance should be struck between them. (Definition requiring a rather short reverberation time, and a fullness of tone implying a rather longer reverberation time). On the subject of balance, a factor which can now be taken into account is the compactness of the orchestra. If the distance from the front to the back of the orchestra platform is more than forty feet, sounds from rear players will reach many listeners so long after sounds from the front players, there will tend to be an impression of blurring and of ponderous performance, and sometimes of bad synchronization. To some extent, there is a similar problem with

¹ This view expressed by W. A. Allen and P. A. Parkin in "Accoustics and Sound Exclusion", The Architectural Review, 109:377, June 1951

the width of the orchestra and sound reaching audiences on either side of the hall.

In a hall seating up to 3000 people, it is not particularly easy to get the volume large enough to ensure sufficient reverberation, considering the absorptive power of the audience. Additional volume is expensive and the larger indoor distances lead to the risk of echoes. The problem is not to get reverberation time short enough in a large hall, but to get it long enough.

A major difference exists in designing large concert halls. A few old halls like the Gewandhaus, Leipzig, was designed to hold audiences of 1,000 to 2,000. The present day requirement is for halls with a capacity of 2,500 to 3,000 or more. As halls increase in size, orchestras are decreasing and it is clear that it is difficult to keep reverberation time sufficiently long to maintain quality of sound.

Recently in Britain, The Accoustics Group of the Physical Society held a discussion based on the three most recent concert halls built in that country, the Free Trade Hall in Manchester, Colston Hall in Bristol (both reconstructed) and The Royal Festival Hall in London. Each of these halls was designed accoustically in collaboration with the Building Research Station, and indeed, The Royal Festival Hall is probably the best example in existence of the practical application of up-to-date accoustical science. This discussion was of paramount interest for the simple reason that it formed a post-mortem group composed of architects, engineers, musicians and conductors, whose objective criticism will be

of great value to future designers.

Some interesting comments regarding design layouts in the Festival Hall were recorded. For instance, Sir Malcolm Sargent suggested that the console of the organ was badly placed, taking up valuable space in the center of the choir and dividing the singers. It was suggested to place the console somewhat to the left of the conductor where the organist could watch the beat, and also to so attach the console to a long cable so that it could be moved to the orchestra platform for recitals.

Three independent comments were made on the canopy over the orchestra. It was felt that in a very beautiful hall, built as an entity, it was a disfigurement, an excrescence and, as one put it, 'an expert's admission of defeat.'

Comments were also made concerning the orchestra arrangement, suggesting in every case, an experimental attitude in the various placements of wood wind and strings for best effect.

On the accoustic qualities of the hall, the statements were almost unanimous in the fact that the reverberation time was too short, or, to put it in other terms, no fullness of tone, lack of bloom and shortness of resonance. The notes end almost at the moment they are born. Essential gaps (breathing times) in the woodwind sections are embarrassingly pronounced. However, they all qualified these statements by adding that such faithfulness and clarity will certainly better musicianship and more exacting performances.

In answer to these criticisms, Mr. W. A. Allen stated the basic dilema involved.

"The reverberation time in the Hall is nearly as long as it could be, considering the size of the audience, for the audience is the principal absorbent. The only way to get much longer reverberation time is by more volume, which costs money and increases the risk of echoes.

"Concerning the canopy we need a large volume, but if we have a high hall without a canopy over the orchestra, then you are going to introduce the risk of echoes from overhead. You must also have a reflector low enough to enable the players to hear themselves. That is why one sees a canopy even in a new hall. It resolves the conflict between needed volume for reverberation and low reflection over the orchestra."

There remains one more consideration under the heading of accoustics and that is <u>material</u>. Some of the materials used in accoustic control today have been developed through a small amount of science and a great deal of intuition. For instance, conventional wood and plaster panelling, battened out an inch or so from the wall, had been used in a great many halls without anyone knowing exactly how they helped 'accoustical tone.' Now wood panelling can be used to supply a close control of the low frequencies by a variation of the panel size and thickness, bracing and air space behind.

In a recent study of The Royal Festival Hall, it was found that 2" of solid plaster on the ceiling areas provided a great deal more absorption

^{1 &}quot;Musical Quality in Concert Halls", The Journal of the Royal Institute of British Architects, 59: 47-51, December 1951, Series Three

than was anticipated. Now the statement may be made that any lining of less than 4" thick must be studied as an absorbent.

There is also a special absorber known as the Helmholtz resonator which has a physical shape much like that of a bottle, and by choosing an appropriate size, absorption can be ensured at any frequency.

It is now possible to 'tune' a hall by a flexible arrangement of materials. This has been achieved by the use of hinged and removable panels, and prebored panels in which removable plug inserts are set. And there still remains a wide range for the imaginative and flexible use of these elements.

Soil Conditions

The entire Winnipeg area is underlaid with limestone bedrock. This rock varies from as low as 100 feet below grade to as high as about 50 feet below grade.

Just above the good bedrock is a thin strata of pink rock, made up of decomposed limestone and commonly called shale. This stone is usually about 18" thick and must be cleaned off to get good bearing for caissons. Above this is a deposit known locally as 'hardpan'. This varies in thickness from about 5 feet to 10 feet, and if it occurs in a thick enough strata, it has ample bearing capacity for apartments, office buildings, hospital buildings, etc. of seven or eight stories. This hardpan is composed of boulders of granite and limestone in a mixture of sand, glacial clay and limestone dust.

Above this hardpan dust is a layer of soft white clay containing considerable water and above this again is blue clay which is thirty to forty feet thick and fairly firm for pile foundations. Above this to the surface is clay. The top few feet of this clay is surface soil and a yellow clay running into a brown clay. Below this is a sharply defined band of yellow clay which has been the curse of many of the old spread foundations in Winnipeg, because of its rapid change of volume with water content.

Structure

Certain basic elements of a concert hall immediately give rise to broad general conceptions of form. First, and dominating everything else, is the auditorium itself. Here, as in the theatre, the great seating area gives rise to well-known type forms. The spanning of this great area is the major structural problem, and in recent buildings, scientific contributions have frequently shown themselves as engineering tours de force, using thin skins of shell or egg-like construction. There is, for instance, le Corbusier's scheme for the palace of the Soviets in which the shell-like form is clearly demonstrated - or again the total theatre project by Walter Gropius. Others have exploited parabolic and other dome forms. All these forms have one thing in common; they reduce weight to a minimum; they exploit lightness of structure.

The inherent shapes of auditoria, which neck down at the stage area, give rise to one great difficulty. Thin shell construction is ideally suited to spanning square or rectangular plans but the diminishing span of the typical auditorium plans is very difficult to contend with. Shells must be conic in section and these involve a very time-consuming analysis.

Then simple devices to span an irregular plan, or the delegation of the function to a simpler plan shape, remain a major challenge.

This view expressed by Prof. P. Weidlinger, in the lecture series, Structural Seminar, M. I. T., 1955

part IV
the solution

The Program

A monumental building has a fixed and more permanent form than other categories of buildings such as commercial or educational; as architecture, it is more solid - not necessarily in its structure but in the idiom it employs which must express its symbolic purpose. At the moment, there is no ready-made idiom of this kind we can call our own and it is this nebulous quality which architects must evolve for themselves in trying to create a monumental architecture.

There is a long-standing tradition that monumental buildings must be symmetrical, but, in the case of a concert hall, it is felt that a near-symmetry arises almost inevitably from the nature of the programme, which provides for one dominant element, the great auditorium; the other elements - foyers, promenades, lounges - both being smaller in scale and dependent on the large one. They group themselves naturally around it in a symmetrical fashion, because exits and crowd space are required equally on either side. The character of a concert auditorium, planned to focus attention on one central point, the conductor's rostrum, is most clearly expressed in a strongly axial design. Thus, whereas many symmetrical buildings are made so by forcing diverse elements into a formal pattern, this is a rare instance in which divergence from symmetry would have been the first evidence of artifice.

An axial design is relatively simple to achieve in a single auditorium and indeed is usually solved this way, but in the case of two or more

halls, the problem becomes more complex. Circulation must be simple, direct and straightforward to all places of assembly. Thus, to keep the circulation balanced to three separate halls which may or may not be used simultaneously, it was decided to maintain the axial character of the plan by disposing the halls at different levels in section.

Early in the programme, a number of relationships of one hall to the other were studied - for instance, common stage facilities or common foyer space. The latter was chosen for the simple reason that instrumental chamber music only involves four performers and did not justify relating rehearsal and near stage areas so closely.

Therefore, the lobby and foyer space flows beneath and between the various halls.

Another aspect of design arises at this point, that of spatial organization and progression of scales. It was felt that a series of spatial impacts should lead to the large volumes of the halls themselves. Therefore, the first space one enters is relatively low, but expansive, and were suited to the functions of cloakrooms, booking office, powder rooms and rest rooms. The cloakrooms become somewhat a tour de force since they are in reality a highly important aspect of design in this climate. They are designed to discreetly screen the wraps and garments, yet to be visually inviting.

From the lobby, one enters the main foyers and up great stairways to lounges and exhibition space where the vertical scale becomes somewhat

larger, bespeaking of large gatherings of people. The final spatial impact is conceived to be the halls themselves, large spanned spaces which constitute the climax.

The interiors of the halls themselves are planned for their specific uses. The concert hall is a single purpose room, devoted only to the best audio-visual relationship between performers and audience. The side galleries are assumed to be the most expensive seats in the house since they command the best view of all parts of the hall and, in turn, are in full view from all seats.

The orchestra platform itself is designed for 200 choristers and 85 musicians, is fully raked for optimum visual and aural view between performers and audience and is calculated to be flexible enough to accommodate different layouts of strings, brass and percussion. The console of the organ is arranged to the conductor's right and is movable by means of a cable arrangement for organ recitals.

The chamber music hall is designed for a more flexible use program. It is meant to be a more intimate space for use by chamber choirs, chamber quarters and experimental drama; thus the stage wings are flexible enough to allow flats and sets to be moved in.

The interior exhibition space is meant to exhibit the best examples of contemporary art in the City. More than this, the patrons themselves will be on display as they move through this space and are seen from the various levels surrounding it. This space will also serve as a discreet screen between the facing foyers of these two halls.

Structural Expression

The large concert hall will be on a system of independent footings.

The side walls are a double shell of concrete for sound exclusion and the whole space is spanned by a system of steel trusses. The truss system is not new or experimental but, in the last analysis, found to be best for accommodating the mechanical functions above a hung ceiling.

The foyers and lounges are of reinforced concrete beam and slab system simply because it obviates fireproofing a steel system. This system leads to somewhat shorter spans than steel but it is felt that a number of columns in the gathering places is ideally suited to small groups of people. Inevitably people gather about columns in conversation groups because they constitute spaces out of the main eddys of circulation.

Moreover, a large number of columns in these spaces would increase the spatial contrast to the large column-free volumes of the auditoria themselves.

The exterior skin about the lobbies and foyers is expressed in slabs of granite veneer perforated with glass inserts and with a sheet of glass floor to ceiling on each side of the exposed columns. Since concerts are an evening function, it was felt that this treatment would make the building sparkle like a great chandelier from without. Moreover, a perforated skin such as this should act as a foil to the heavy bulk of the auditoria, which could be finished in a rough granite facing in contrast to the smooth granite veneer of the ancillary areas.

Where the function changes, for example to offices, meeting rooms, etc., the scale breakup of the exterior becomes finer and more generously glazed.

Accoustics

The plan shape of the large concert hall was chosen in an effort to seat the maximum number of patrons in optimum hearing area in the hall. The double trapezed plan satisfies the requirement of reflecting planes at the orchestra end and tapers off in seating capacity to the rear of the hall.

One of the more important factors in the accoustic quality of a concert hall is the selection of a reverberation time to achieve the intended effects. However, the other requisite qualities, such as tone and balance, must be met equally as well. To achieve a good balance of the four orchestral sections, the orchestra platform is as compact as possible consistent with the musicians' requirements.

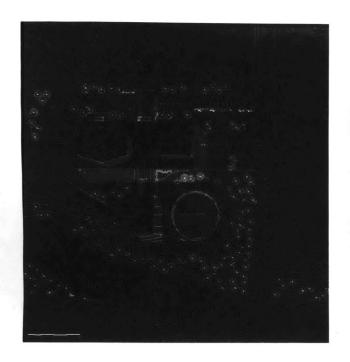
Since the hall will be used for choral work as well as orchestral concert, the reverberation time was chosen a little higher than the value shown on the chart. This would sacrifice definition somewhat but would contribute to a singing tone.

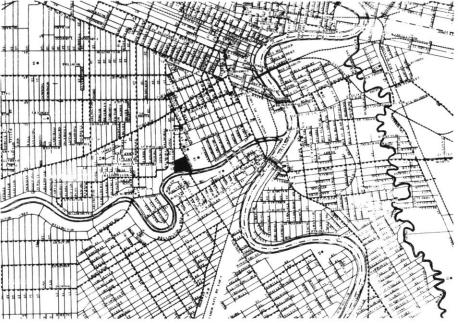
The value of 1.9 secs. was achieved by the disposition of materials as shown in the accompanying chart. The low absorption material is chiefly used in areas which might ordinarily give rise to echo problems.

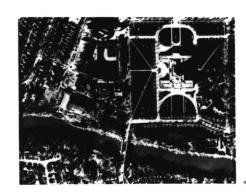
Frequency		125 c.p.s.		500 c.p.s.			2000 c.p.s.				
Optimum Rt		2.7 secs.		1.9 secs.			1.5 secs.				
					125 c.p.s. units		500 c.p.s. units		2000 c.p.s		
	LOCATION	MATERIALS	DIMENSIONS	AREA							
1.	Audience	·			3.0	8000	4.51	12000	6.0	16000	
	(1) Full Capacity-2685 (2) 2/3 Capacity-1685 800 seats				3.0 3.7	5050 298 0	4.0 2.8	7600 30 2 0	5.0 3.5	10000 2 800	
2.	Ceiling (1) Main Ceiling (2) Balcony & Galleries	Plaster		14000 4640	.04	560	•06	840	.06	840	
	(3) Canopy			1500	.04	240	.06	360	.06	360	
3•	Rear Walls (1) Main Floor (2) Balcony	4" Fiberglass	10 x 80 8 x 75	800 600	.40	560	•75	1050	.80	1120	
4.	Side Walls (1) Main (2) Side Galleries	Wood Panelling 1" Fibreglass	:	10000 1920	.25 .20	2 500 3 80	.15 .50	1500 960	.10 .80	1000 1500	
5.	(1) Balcony Front (2) Gallery Fronts	Fibreglass	2.5 x 100 2.5 x 120	2 50 3 00	.20	110	•50	275	.80	440	
6.	Front Wall	Wood	42 x 75	3150	.80	25 0	.06	200	.06	200	
,		Full House 2/3 Capacity			15,580 12,630		20,200 15,805		24,260 18,260		

Rt 500 - 1.6 secs. RT 2000 - 1.4 secs. Full House: Rt 125 - 2.1 secs.

Rt 500 - 2.0 secs. Rt 2000 - 1.8 secs. 2/3 Capacity: Rt 125 - 2.5 secs.



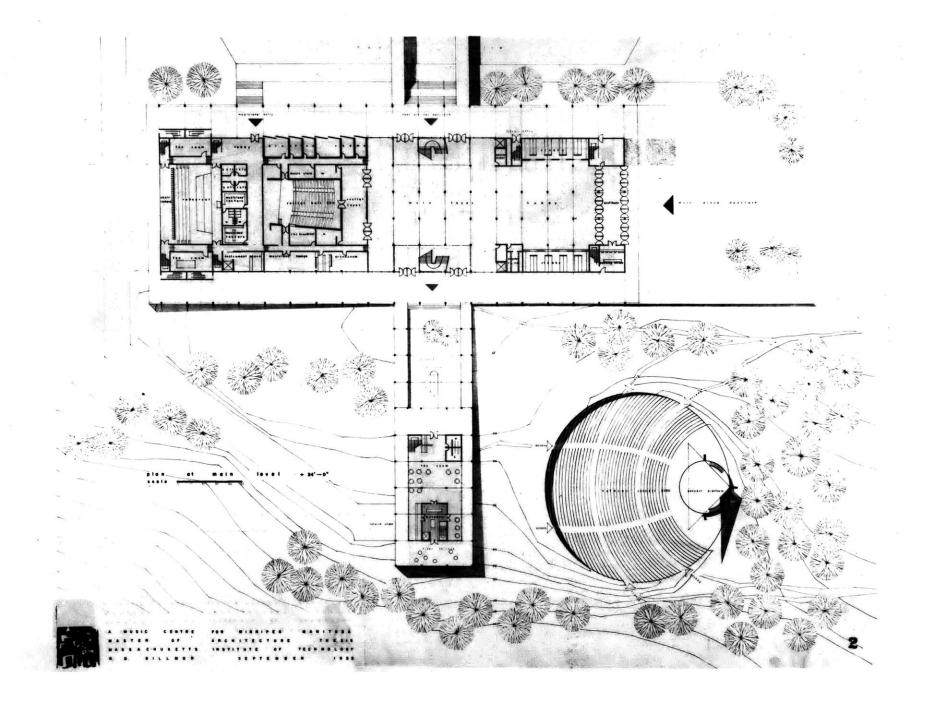


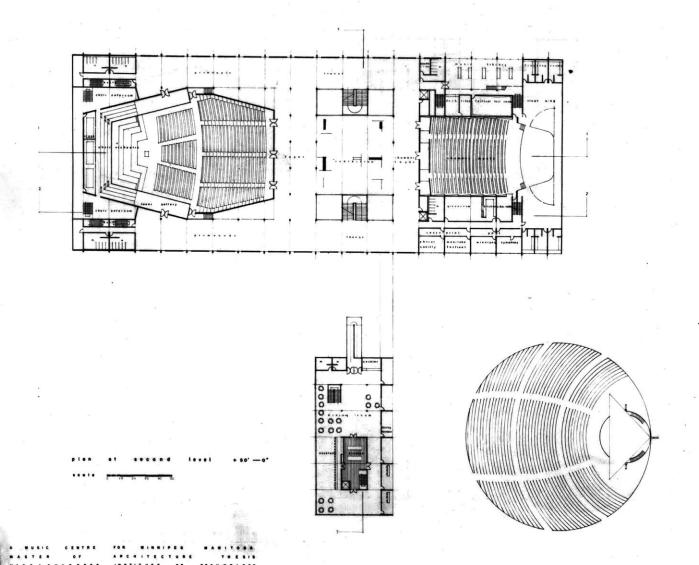


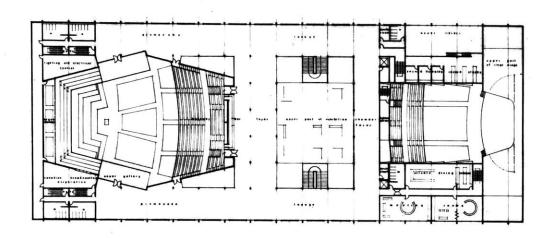


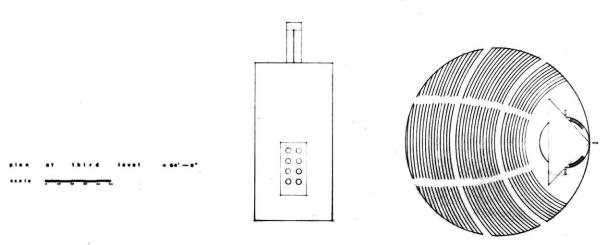


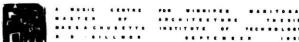


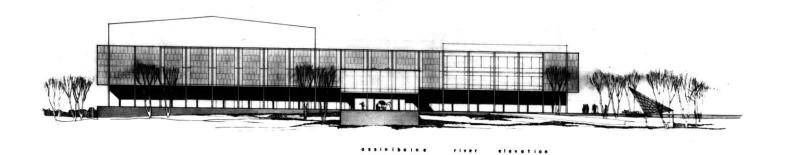






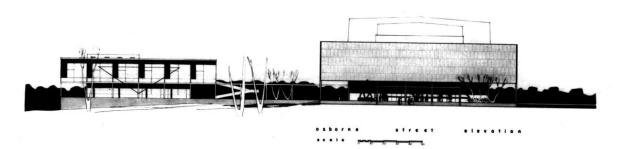




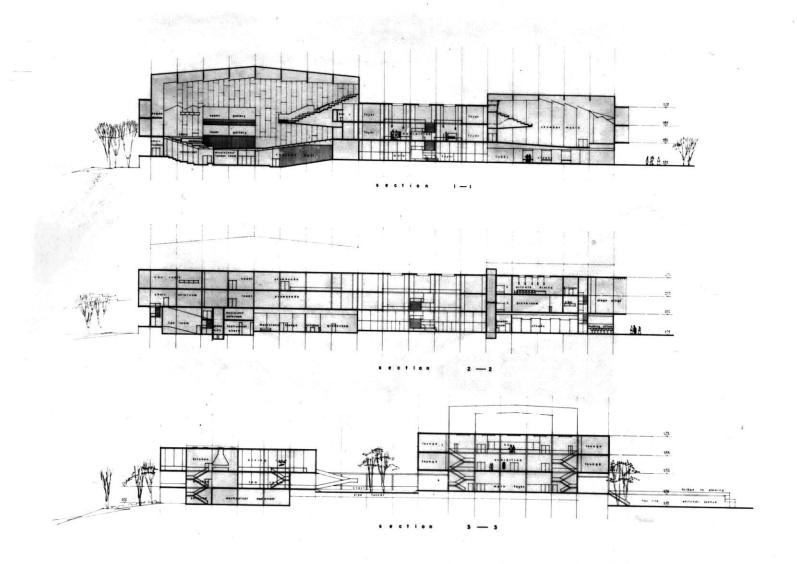


whitehall avenue elevation





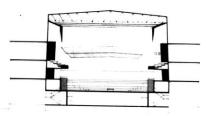




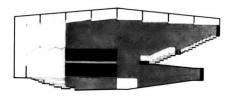


Pro	equency									
Ont	timum Rt	2.7 secs.					2000 c.p.s. 1.5 secs.			
									2000 c.p.	
	LOCATION	MATERIALS	DIMENSIONS	AREA						un
	Audience									
	(1) Full Capacity-2685 (2) 2/3 Capacity-1685					8000				160
	BOO seats				3.0	5050	2.8	7600	5.0	100
						2900		3020		26
2.	Ceiling (1) Main Ceiling	Plaster		14000						
	(2) Balcony & Gallerie			1600						8
	(3) Canopy			1500						
	Rear Walls									
	(1) Main Ploor	4" Fiberglass			.40					
	(2) Balcomy									
	Side Walls									
	(1) Main	Wood Panelling				2500				
	(2) Side Galleries	1" Fiberglass		1920					.80	
	(1) Balcogy Front		2.5 x 100							
	(2) Gallery Front	Fiberglass	2.5 x 120	300				275		
6.	Front Wall	Mond	42 x 75					200		2
		***************************************						200		-
	TOTALS	Pull House				sabine	20,200	sabins	24,260	sabin
		2/3 Capacity			12,630		15,805		18,260	
Full House: Rt 1 2/3 Capacity: Rt 1		5 - 2.1 secs. Rt 500 - 1.6 secs 5 - 2.5 secs. Rt 500 - 2.0 secs		Rt 2000 - 1.4 secs. Rt 2000 - 1.8 secs.						





cross section



long titudinal section

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a p p e n d i x

THE JUNIOR LEAGUE OF WINNIPEG, INC.

501 Waverley St., Winnipeg, Man., May 29th, 1955

Mr. R. Douglas Gillmor, 227 Westgate West, Cambridge 39, Mass.

Dear Mr. Gillmor.

Mrs. R.D. Guy, past president of the Junior League of Winnipeg has turned your letter over to me, as Chairman of the Special Project Committee, to answer your questions regarding the proposed Arts Centre for Winnipeg.

Primarily, of course, the League is interested in the formation of an Arts COUNCIL for Winnipeg, and our efforts have been along those lines. However, as you have gathered, there is also a trend towards a Centre, especially since the physical facilities available to arts groups in Winnipeg are woefully inadequate.

You asked for the names of the 22 groups we have been working with. I think a list of just the main ones would suffice - the Art Gallery, and its Women's Committee, the Winnipeg Symphony and its Women's Committee, the Royal Winnipeg Ballet, and its Women's Committee, the Little Theatre, the Manitoba Drama League, the Men's Musical Club, the Women's Musical Club, the Children's Theatre of Greater Winnipeg, the Manitoba Society of Artists, the Sketch Club, the Manitoba Museum, the "umanities Association, the Philharmonic Choir, and other musical groups, including Music Teachers' Association.

We had a meeting with these organizations in April, importing an Arts expert to speak and to lead a forum - she was Mrs. Helen Thompson, Executive Secretary of the American Symphony Orchestra League, and quite marvellous.

Feeling at the meeting was that action should begin at once, and the League therefor offered to hold a follow-up meeting after representatives had returned to their organizations, reported on the discussion and could come back empowered to vote for a steering committee who would then take over the organization of an Arts Council. This follow-up meeting will be held June 15th.

In the meantime, as you also know, things are popping with regard to the Auditorium here. City Council has before it a plan to renovate it and add several storeys to it, turning it into a City Hall at a cost of about $2\frac{1}{2}$ million instead of the seven million it might have cost to start from scratch on a new City Hall.

The amount "saved" might be used to build a new Art Centre. This Centre, as they visualize it, would have a large auditorium seating perhaps 3500 - no one has said yet whether it would have a level or raised floor, permanent or removable chairs. There would also be a small theatre to seat 500 - rehearsal and storage space for the Little Theatre, Ballet and Symphony groups, and possibly to be used by other bodies. In a separate building there should be an Art Gallery and Museum, and I've heard tell that a

canteen should be included.

There is talk that the Arts Centre might be located out by the new Stadium and Arena - a distinct and grisly possibility. Others would like to see it located on Osborne where the old University Buildings are. We are told, however, that this would add immeasurably to the cost of the buildings as they would have to be of Tyndall stone to conform with others in that district. However it seems to me that Green, Blankstein, Russell's building doesn't have any Tyndall stone.

Sorry I can't gave you any details on administration and finance - I just don't have them and think they probably haven't been worked out yet. However I have been told that Winnipeg Enterprises, who built the Stadium and Arena, are interested and might finance the new Centre in the same way. Mr. Culter Riley is head of that.

Your best bet on this whole thing might be to drop a line to Gordon Chown, the Alderman in charge of the committee that's looking after the Auditorium question.

Sorry I haven't been able to be very specific - things are pretty nebulous as yet. If, however, I can be of any assistance in getting you further information please don't hesitate to write me.

And I shall hope to hear in the Fall that you have designed a magnificent new Art Centre, and that Winnipeg is going to build it.

Sincerely,

Miss Eetty Sparling, Chairman, Special Project Committee

METROPOLITAN PLANNING COMMISSION OF GREATER WINNIPEG

301 MITCHELL-COPP BUILDING WINNIPEG CANADA

J. A. Ormiston J. G. Harvey John Blechner James F. Cox W. E. Davison J. B. Demetrioff D. I. MacDonald A. E. Rye L. H. Williamson Chairman Vice-Chairman G. M. Churcher K. A. Davidson Frank deGraff C. E. Joslyn Wm. G. Neil C. S. Warman

Eric W. Thrift Director

hiboia

301-334 Portage Avenue, Winnipeg 1, Manitoba, May 4, 1955.

Mr. R. Douglas Gillmor, 227 Westgate West, Cambridge 39, Mass.

Dear Mr. Gillmor:

This is in reply to your letter of April 25th regarding possible sites for an Arts Centre for Winnipeg which you hope to use as a subject of a thesis.

With respect to the sites shown on the map you sent with your letter, the property south of York Avenue immediately abutting the land occupied by the Land Titles Office and the Law Courts Building is Provincial Government property now occupied by the Juvenile Court and other offices and the Revenue Building. I doubt whether the Provincial Government would consider making this land available for a project which they are likely to regard as a benefit mainly for the City of Winnipeg.

You have also marked the block bounded by St. Mary and York Avenues, Vaughan and Kennedy Streets. The north end of this block from Vaughan to Kennedy for the depth of about 100 feet from St. Mary is now a parking lot. The rest of the block is occupied by old houses and apartment buildings with the exception of the A.B. Gardiner Funeral Chapel, which faces Kennedy Street about the middle of the block. In my opinion it would be extremely expensive to try to acquire this property for the establishment of an Arts Centre. It may, however, be possible to design a centre which would not disturb the funeral home.

The land between Assiniboine Avenue and the Assiniboine River south of the Parliament Buildings is also Provincial Government land and in my opinion would under no circumstances be available for a building. Under separate cover, we are sending copies of maps of the central area of the city and of the city as a whole.

.....2

you find it an interesting and useful project.

Yours truly,

Eric W. Thrift, Director.

EWT/ft

Men's Musical Club

OF WINNIPEG, LIMITED

6. Old Law Courts Building

May 2nd, 1955.

Mr. R. Douglas Gillmor, 227 Westgate W., Cambridge 39, Mass., U. S. A.

Dear Mr. Gillmor:

I feel that I already know you quite well, due to the many times that you and your work have been discussed in our home by Stewart and my daughter Phyllis. I have also been privileged to see some examples of your craftsmanship at University displays.

You will be interested to learn that during recent weeks several meetings have been held to see if there is a sincere desire to form an Arts Council, and whether the various groups would be willing to cooperate to make this effective. Mrs. Helen Thompson, Secretary of the American Symphony Orchestra League, was guest speaker on these occasions and created a most favorable impression amongst all those attending. A considerable discussion ensued relative to the need of building an Arts Centre. Indeed, the main emphasis seemed to be on this one point.

As a result of this series of meetings two things were apparent.

1. That a real effort will be made this autumn to form an Arts Council.

2. The Mayor of the City has been asked to appoint a committee to investigate the possibilities of building an Arts Centre. It is hoped the City itself will sponsor this project and secure financial support from the Provincial and Federal Governments. Once the building is erected, it should be able to support itself through studio rentals, etc. These two things I believe will clarify your own situation.

Now, with reference to details. The Men's Musical Club would envisage something like the following: A concert hall to accommodate approximately 3,000 people. A smaller hall that would seat about 800, and if possible, one other hall able to accommodate between three or four hundred, which could be used for rehearsals and intimate recitals of Chamber Music and so on. The Club would also require in such a building a business office and a library to house its Festival music and possibly collections of fine recordings. Possibly Stewart has covered quite fully the other ideas that we both had in mind in reference to clubrooms, dining facilities etc. I am most interested in your project and it would appear that your planning is most timely in view of the attitude of the cultural groups in Winnipeg at this time. Please be assured that I am at your disposal if you are in need of further information or enlightenment on any point. With all good wishes for the success of your undertaking, I am,

Sincerely,

RWC/KM

Secretary.

ASSESSMENT
DEPARTMENT



J. A. MacDONALD,
Assessment Commissioner

June 29, 1955.

Mr. R. Douglas Gillmor, 227 Westgate West, Cambridge 39, Mass.

Dear Sir:

In reply to your letter of June 26, 1955 requesting information regarding the Winnipeg site bounded by Whitehall, Osborne, Colony & Assiniboine River, I might say that the buildings on this site consist of two apartment blocks, one garage, a tourist camp, a curling rink, and seven dwellings. The total realty assessment is: Land \$58,710.00; Building \$158,650.00. For your information, for realty assessment purposes, land is assessed at full value, and buildings at $66\frac{28}{3}$ % of full value.

We are glad to have been of some service to you, and offer best wishes for a good thesis.

Yours truly,

Assessment Commissioner.

WAS/nep

MacAulay Urges Concerted Drive For Arts Centre

peg.
"Winnipeg has the stage in its progress and development," he told the gallery's annual meeting, "where an arts

centre is essential." He said the centre would not only give "tremendous impetus" to the gallery but "to music, the ballet, the theatre and the symphony." He said a "concerted effort on the part of the govern-ment, the city and the citizens" would be required to bring such a centre about.

UNDER ONE ROOF

Though Mr. MacAuley did not go into detail on the function of an arts centre, in past discussions it has been envisioned as a centre that would house much of the city's artistic and cultural

Mr. MacAuley forecast a year of "great activity" in the gallery and said many "excellent exhibi-

tions" were planned.

He also commended the Junior League of Winnipeg "for providing an opportunity for discussion of the subject - Should Winnipeg Have an Arts Council?" He said that 22 organizations had taken part in the discussion and that it was expected to result in further meetings. Early fall, he predicted, should see the formation of such a council.

Reporting on the past year, retiring president Stewart A. Searle said that major highlights in-cluded the acquisition of the Aikins property on Roslyn road by the art gallery and the ex-hibitions of important French and Spanish pictures.

A. R. Tucker, Gordon P. Osler, Prof. J. A. Russell, and P. S. Bower were named vice-pre-

John A. MacAulay, Winnipeg lawyer, was elected president of the Winnipeg Art Gallery J. N. T. Bulman, Mrs. P. A. Wednesday night and immediately issued a call for the creately issued a call for the creately issued a respective of an arts centre in Winnibal Joseph Harris, Mr. Hansack and the state of the control of the c haugh, Joseph Harris, Mr. Han-sell, P. J. Harrison, Dr. C. R. Hiscocks, J. S. Lightcap, R. S. Malone, H. W. B. Manning, Mr. MacAulay, J. H. McDonald, D. C. McGavin, H. J. Moody, Mr. Osler, John Parton, Mrs. R. A. Purves, W. McG. Rait, Prof. Russell, Mr. Searle, G. H. Sellers, David Slater, Mrs. H. Lloyd Thompson, Mr. Tucker, F. B. Walker and Eric N. Wright.



JOHN MacAULEY

Urges Art Centre For Winnipeg

A Little Theatre in Winnipeg should become the centre for prairie talent said John Hirsch, speaking Tuesday evening to the Business and Professional Women's Club following the supper meeting. Mr. Hirsch feels that young people need this cultural background to develop a democracy.
He is keenly interested in the
Little Theatre and urged the building of an art centre in Winnipeg with a permanent theatre.

Art Centre Proposals

By LILLIAN GIBBONS

A LD. Gordon Chown suggests turning the Civic Auditorium into a City Hall. Everybody rooting for an Art Centre for Winnipeg has called the auditorium a white elephant, a big beautiful building made almost useless by poor interior layout. The excellent sloping-floored, 800-seat concert hall can't be booked in advance because the main auditorium might be rented that evening, and you can't hear both simultaneously. To put in a permanent dividing

wall, and ruin both stages in depth, would cost \$60,000 "and it's not guaranteed," says Mayor George Sharpe,

Even the quiet enjoyment of pictures in the third-floor Art Gallery is banned when the main hall is in use — though I have viewed through a crack in a gallery door the thumps and socks of a wrestling match set up in a ring below!

So, maybe it's a smart idea: tear out the innards, make a City Hall of the white elephant. Change in use of the Auditorium ties in with the question, where would the Art Gallery go? Winnipeg needs better quarters for its Gallery. So there is lively discussion about an Art Centre.

Support for a downtown site for the Art Centre comes with the exhibition of architectural models shown at University Convocation this week. Claude de Forest designed a Cultural Centre for Montreal. The site he chose, "the very heart of the city" - from McGill university through the Sherbrooke St. area to Boulevard St. Läurent. He proposed grouping cultural and commercial buildings "to justify expropriation cost." He plan-ned a "pedsetrians' paradise by dipping Drummond St. and Stanley St. under the site." There was a dome-shaped chamber-music hall, flat tops, stilts, exterior painted walls, green space, as well as towering commercial buildings in his table model. At Convocation he was awarded the Royal Architectural Institute of Canada medal for his entire course and for "promise of professional distinction."

Another graduate Arthur Mudry, who won the University gold medal in architecture, planned with L. T. Nelson a Civic Development for Calgary. They selected a "central business district because it was in the heart of the city, a blighted area, and would encourage re-development of the surrounding area and increase property values."

The Calgary centre ran from First Street east to First Street west, from 7th to 9th Avenues. The Palliser Hotel looks out at it all, in the table model, The new group envisions a chapel, library, art centre, civic administration offices, shopping area, with space for controlled traffic.

A Big Four Parley We'd Like to See



-Chambers in the Halifax Chronic. Herald

Chown Unfolds New

WINNIPEG, THURSDAY, MAY 26, 1955

City Hall Plan



Here is Winnipeg's new city hall—if plans unveiled Wednesday by Ald. Gordon Chown gain approval by city council and ratepayers. This composite photograph shows an additional four storeys added to the present two-storey

auditorium structure and the re-creation of a city hall, even to the name above the door. It's the work of Green, Blankstein, Russell, architects. Cost of the project would be about \$2,000,000.

'Sleep On It' His Advice To Council

Twin projects, costing \$4,500,000 for a new city hall in the present civic auditorium and construction of a new auditorium-art centre, were unveiled Wednesday before city council.

The proposals were presented at an informal session by Ald. Gordon Chown, chairman of the special aldermanic committee set up to find a site for a new city hall.

Ald. Chown cut off discussion of the projects, asking the aldermen to "sleep on it" and discuss it thoroughly at some future meeting.

TWO BYLAWS

Duncan Lennox of the city's legal department told council that the proposals, if placed before the ratepayers, would have to go as two separate money bylaws.

Wednesday's council meeting did not even produce a straw vote on the proposals. Next move planned by Ald. Chown will be to have his committee thresh out all aspects of the plan.

The plan adds four storeys to

The plan adds four storeys to the present two-storey auditorium.

It would house all civic departments under one roof, with space for the school board. Council chambers, canteens, and parking space for 80 cars in the basement. Conversion would probably cost between \$1,750,000 and \$2,000,000.

NO LEGAL TROUBLES

The legal department said there should be no difficulty on conversion of the auditorium. The city had received the site from the Furlong estate on condition that an auditorium be erected and this agreement had been fulfilled.

While no plans have been drawn up for the new auditorium-art centre, the architectural firm of Green, Blankstein and Russell has submitted various proposals. Sitting in on these talks and present at Wednesday's meeting, was Culver Riley, head of Winnipeg Enterprises Ltd.

The structures would be of advanced design. If built in the stadium area, where the city owns property, total cost would be kept to an estimated \$2,500,000. One building would house at least two auditoriums — one of approximately 3,500 seats and the other, actually a small theatre, about 500 seats.