RAIG JOURNAL

Serial No 342, Vol. 31, No 2	EDITORIAL	32
	ARTICLES	
	Function of Ornament as Seen by Henri van de Velde, Clemens L. Rességuier	33
	The Master Plan and the Building, Eric R. Arthur	39
	The Function and Furnishing of the Union, M. R. Jackman	49
	Gardens and Plantings at Wymilwood, Lois Wilson	55
	ILLUSTRATIONS	
	Wymilwood, the Students' Union of Victoria College Fleury and Arthur, Architects	38
	NEWS FROM THE INSTITUTE	58
	Obituary	59
	Contributors to this Issue	60
	Book Reviews	60

COVER

Main Stair, Wymilwood Photographs by Panda

The Institute does not hold itself responsible for the opinions expressed by contributors

ROYAL ARCHITECTURAL INSTITUTE OF CANADA

EDITORIAL BOARD

EARLE C. MORGAN, CHAIRMAN

ERIC R. ARTHUR (F), EDITOR

F. Bruce Brown (F), Toronto; H. F. Brown, Toronto; C. S. Burgess (F), Edmonton; Howard D. Chapman, Toronto; Arthur H. Eadie, Toronto; A. G. Elton, Toronto; A. G. Facey, Toronto; Robert C. Fairfield, Toronto; Leslie R. Fairn (F), Wolfville; E. J. Gilbert, Saskatoon; Douglas E. Kertland (F), Toronto; Fred Lasserre, Vancouver; H. Claire Mott (F), Saint John; Jas. A. Murray, Toronto; H. E. Murton, Hamilton; Forsey Page (F), Toronto; John A. Russell (F), Winnipeg; Wm. J. Ryan, St. John's; R. A. Servos, Toronto; E. J. Turcotte (F), Montreal; G. Everett Wilson, Toronto

J. F. SULLIVAN, PUBLISHER

All correspondence should be addressed to the Editor

EDITORIAL AND ADVERTISING OFFICES, 57 QUEEN STREET WEST, TORONTO 1

EDITORIAL

A NEW TOPIC OF CONVERSATION to be heard wherever architects meet is architectural education. Imperceptibly, the word "education" has supplanted "training", although it was only a few years ago that the latter was used exclusively, and, in fact, remains today to describe the RAIC Committee on which the heads of schools discuss their curricula. Somewhat belatedly, we have come to think of the architect as an all round educated person who can take his place in society with the graduates of other schools and colleges. We can remember the day when architectural design was the be all and end all of architectural training, and our knowledge of history was confined to one book by Bannister Fletcher. We knew ancient buildings by dates and façades, and remained in blissful ignorance of the social conditions that produced them. Of the parallel movements in literature, art or philosophy, without which a study of Gothic, Renaissance or the Industrial Revolution is meaningless, no whisper was heard in the schools of architecture.

Nor were conditions in the other professions any better. Medicine, law, engineering and dentistry resisted any encroachment by humanistic "frills" from the time allotted to the one "saleable product"—whatever that might be. Lawyers have always considered an arts degree invaluable as a basis for law and the better life, but it was left to medicine and dentistry to make a course in the humanities mandatory.

As architecture is itself one of the fine arts, it seemed undesirable to divorce it from courses in literature, philosophy, sociology and the history of painting and sculpture. At least, in the present experimental stage, the student would seem to gain more by integration than by the rigid separation which seems to be so successful in medicine.

The architects whom we meet seem to consider this change in the curriculum of the greatest importance, and their only regret is that it came so late. A new generation is growing up that will take its place on art gallery committees, or school boards, in politics, planning and housing committees and in many spheres where the educated, rather than the professionally trained man, cannot help but command respect. A noticeable result to be seen already in the students who have had an introduction to the liberal arts, is a greater tolerance of others' views, and a greater curiosity about things in general. In planning such a comprehensive course of study, there comes, of course, a point where a delicate balance is reached between liberal studies and the stern realities of structure and design. In one school we know, that balance has been reached, and we have so far resisted the temptation to include music appreciation. For those of us who enjoy symphonies without knowing why, and find operas slightly ridiculous, the need for such a course is obvious, even for the staff. In the meantime, some students mistake inadequate funds for Philistinism when it is found impossible to wire the drafting rooms for F.M. stations in New York.

With what amounts to a cultural revolution in the schools, we wonder, and it is a purely personal wonder, whether we should continue to open the door to students who enter the profession through the examinations of the provincial associations. There may have been a time when we ran on roughly parallel courses, except that, in the one case, there was instruction, and, in the other none, but, today, we are separated by a gulf that only the most brilliant boy can bridge unaided. An argument for retaining the provincial examinations used to be that the universities were only for the well to do. We are quite sure that it is in the schools that one meets real hardship, if not, at times, poverty. The night dishwashers, the taxi drivers, the newspaper carriers and the sons supporting mothers are tragic evidence that such an argument is groundless. We present this point of view because, doubtless, the day will come when, like medicine, law and dentistry, the door will be closed. In our view, it cannot come too soon.

THE NATURE AND USE OF ORNAMENT has been one of the prime interests of Henri van de Velde. In every book van de Velde has ever published, one can find observations referring to this theme. In some chapters, such as "The Ornament as Symbol", "The New Ornament", "The Elimination of Imagination in the Creation of Ornaments" from the book "The Renaissance of Modern Applied Art", or the chapter "The Line" from the book "Essays", van de Velde writes almost exclusively on this subject of ornament. He had planned to write a book in which he wanted to demonstrate his ideas on the nature of ornament, but, till now, this work remains unfinished. From the title of this book, "L'Ornament; L'Existence et le Developement d'un Principe Structolineaire and Dynamographique", I have taken the term "structolineaire and dynamographique" to present van de Velde's ideas about the function of ornament.

Before I deal with the nature of the function of ornament, I would like to speak about the term ornament itself and how van de Velde defines it. For van de Velde, the essential substance of ornament is the line. The line plays a very important part within the theories of van de Velde, and he uses the word "line" in a much broader sense than is usual. He has phrased the sentence, "La ligne est une force", and this sentence has become one of his best known formulas. This means that he sees a line, not as the distance between two points, the edge of a shape, or the division between two shapes, which would mean something static, but as an expression of movement. The line expresses the movement from one point to another, the expansion of a shape towards its edges, or the clash of two expanding shapes.

In an aesthetic sense, the line affects the observing eye in such a way that the eye is forced to follow the movements of the various lines. Therefore, the line itself is not only the expression of a force, but is a force in itself capable of leading the eye into various directions. A combination of different lines, consequently, does not form a pattern but becomes the image of various forces battling or following each other. The perfect ornament will be achieved when all the lines, that is to say all the various forces, are kept in balance without losing their distinction of being in motion. If an ornament should be the image of forces kept in mutual suspense, no line of an ornament can be independent. In addition, lines as forces follow the law of action and reaction. Consequently, every line asks for

its counterpart. Thus, a play of forces is created for which van de Velde gives three rules: the completion, the repulsion, and the attraction.

Related to this idea of lines, which influence each other, is van de Velde's idea of complementary shapes. But, there is a fundamental difference. Each shape creates inevitably another shape. The first shape, so to speak the positive shape, has its complementary part, the negative shape which envelopes the first, the positive shape. With the creation of a shape it is unavoidable that its complementary shape will be conceived at the same time. Growth of the complementary or negative shape occurs automatically at the same time with the first, the positive shape and the form of the negative, the complementary shape, is predestined by the positive shape. The formation of a counterline is also predestined by the correspondent line, but it is up to the creator of the first line whether he draws the second line or not. Therefore, one could speak of positive and negative shapes in the relation of complementary shapes, whereas the lines are always positive.

The line not only forces the eye physically to follow certain directions, but is also representative of the energy of its creator and capable of putting the onlooker into a certain mood. In this respect, van de Velde's ideas are related to those of the expressionist movement. But a main difference lies in the fact that van de Velde wants the creation of a line to be an intellectual process whereas for the expressionist the process stems mainly from an emotional source. Whatever irrationality can be detected in van de Velde's creations comes from his reliance upon sensibility and not upon emotion.

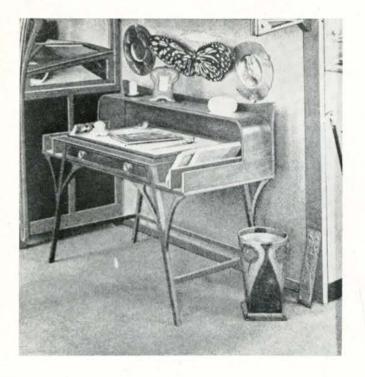
I have mentioned already that van de Velde uses the term "line" in a much wider sense than is usually customary. He speaks of the line of an object, the line of a room, or the line of a building. But even when he uses the term "line" in such a broad sense, he means the very same line that builds up an ornament, and therefore logically all these lines, in a room for instance, form an ornament, van de Velde postulates that every structure that is perfectly designed is subject to the same rules he establishes for the creation of ornament. These rules, therefore, will influence the shape of the various details of such a structure, because those details are carrying the lines which van de Velde has in mind. The most important consequence of this postulate is to conceive a structure as complex as it may be, as a unit where every detail has to be tuned to

become part of the overall design.

In the phrase "structolineaire et dynamographique", in the first term "structo" refers to the function of ornament, and "lineaire" to the mean by which this function can be carried out. The term "dynamographique" specifies this mean and therefore refers to van de Velde's ideas about the line, of which we have just spoken.

An ornament cannot exist by itself. It will always be applied to a part of something else, where it has to fulfil a certain function. van de Velde states that the function of ornament is twofold: It must stress the function of the part to which it is applied and, it must enliven the material of which those parts consist. In order to describe this double function of ornament, van de Velde has created a new word by using the noun "structure" as a verb. Therefore he says, "The function of ornament consists of structuring the form and not of decorating the form as one tends to believe in general."

I shall try to demonstrate this idea of structuring the form with a few examples. For this purpose, I confront a Chippendale card table designed around 1735 with a desk that van de Velde has designed in 1901. In particular, I shall compare the design of the legs of these two pieces of furniture. The function of these legs is to carry the weight of the top of the desk or of the table respectively, and by doing so, to keep these tops at a certain height. A simple construction, which could have the shape of straight poles would be sufficient to fulfil this function. Obviously, everything that goes beyond this simple functional form of poles, comes under the category of ornamentation, which is aimed to fulfil aesthetic purposes. Also from an aesthetical point of view, the legs of this piece of furniture show just as much the effort of carrying the weight of the top as they reflect the effort of elevating the top to a certain height. These two tasks, whether seen from a technical or aesthetical point of view, are the function of those legs. In both examples, the ornamentation is related to this function. The difference lies in the nature of this relation-





ship and the consequence thus to be derived.

In the ornament of the Chippendale table, the function of the leg to carry weight is symbolized by the rather fierceful face of the animal just at the point where the weight of the top first and foremost is felt. The formation of the small base in the form of a claw at the end of the leg indicates that this leg needs a firm stand to carry out this task. The design of unfolding leaves seen at the top of the leg relates partly to the function of elevating or lifting the top of the table.

The most obvious ornaments on these legs have preserved a considerable independence from the basic form to which they are attached. They symbolize the function of the legs, and they can be clearly distinguished as symbols, as additional shapes which embellish the basic form, which can be easily visualized underneath this ornamentation. It is easy to imagine taking off these ornaments, as they do not form an integral part of the shape of the legs.

The design of the legs from the desk by van de Velde also goes beyond the sheer functional form, but apart from its frugality compared with the other design, the ornamentation can not be distinguished as a separate part from the basic form of the leg. We can see in the design of the curves at the upper end of the legs, the indication of both support of weight and lifting the top of the desk. It can be said that they are curves of a decorative value, but at the same time these curves are an integral part of the entire shape of these legs.

In the ornament on the Chippendale table, the designer used symbols for the functions to adorn his creation. They can be assembled or taken apart because they come from a conception that sees an ornament as a static element of the whole thing. In van de Velde's desk it would be impossible to find a part that could be taken off without disrupting the whole form. Ornament and basic form have blended into a unit, a new shape.

The first aim of structuring form is achieved by fashioning the ornament with the idea of expressing the function of the detail to which it will be applied, and by blending such an ornament completely into the mere functional form; thereby creating a new form altogether. The second aim is to enliven the material with which such a detail is constructed.

At the left we see a set of table silver, and at the right we see the design of the Tropon wrapping paper. Both were designed by van de Velde. The lines on the handles of the silverware can not be interpreted as a stress of the functional form of the handle, but they certainly do not contradict the functional form of the handles. The purpose of these lines is to enliven the material. Their form indicates the flexibility and the resistance of metal, a metal that in the process of production has to go through a state of liquidity.

One can say the same about the package design for Tropon. It would be wrong to interpret this design as referring to the product for which it was used on the package. van de Velde, who was very familiar with the technical processes of the production of various materials, might have thought of the state through which paper must pass in the process before it is dried and pressed as a finished product. But one should not take these designs too literally or too symbolically. It becomes clear, that here in this second part of structuring a form by an ornament, the individual artist has more liberty than in the first part. It is up to the individual sensitivity of the artist, as to what he considers an adequate form for an ornament to enliven certain materials. But under any circumstances, the two aims, emphasizing the function of the detail and enlivement of the material, have to be brought into accord. It is also clear, that the first aim is decisive in the coordination of these two sources for the creation of ornaments.

At this point I would like to say a word about the naturalistic ornament and the geometric ornament. van de Velde rejects both, on the ground that neither blends into the form of the detail to which it is attached to the extent that it would create a new shape. Both types of ornament originate from a static conception of ornament which is contradictory to van de Velde's conception of lines as moving forces. In the case of naturalistic ornament, the objects which it represents, are always in the way and detract from the function of the ornament, even if such an object symbolizes this function.

In geometric ornament, this objection would not hold. But a geometric ornament will always look attached to the object and never appear as an organic part of it. van de Velde tends to the opinion voiced by the Swiss architect, Gottfried Semper, that geometric ornament might be an abstraction of certain techniques. An example would be an ornament derived from the pattern which is created by basket weaving. If this is correct, what has been said about naturalistic ornament would also pertain to geometric ornament in that its symbolic character denotes the function of the detail to which it is attached through the illusion of a certain technique, and this literary content would rather cloud the apprehension of the functional form of a detail instead of emphasizing it.

The various lines within an ornament seen as various moving forces constantly influencing each other, must create an impression of rhythm. van de Velde also uses this term and states, that it is this rhythm which gives the line its ornamental characteristic and that the accent of this rhythm is significant for the character of the ornament.

Ornament is a mean towards an end. This end is to structure the object to which it is applied. This structuring of the object through an ornament is achieved through emphasizing the functional form and enlivening the material. The ornament itself consists of lines which are forces. These forces give the impression of movements into various directions. These movements must be kept in balance, without losing the impression of movement. An ornament has to become the image of a play of forces made visible. But this play of forces is also the expression of the energy and mood of its creators. The various elements of an ornament and its function must be brought into harmony.

The most important device to make this play of forces visible, is the almost total rejection of angles and rectilinearity. What van de Velde uses are elongated, fluctuating lines. Such lines are the characteristic of the style which commonly is called "Jugendstil" in Germany and "Art Noveau" in France, van de Velde is the foremost exponent of theories of this style and period, besides his practical work as architect and designer.

This style became known first of all through works of applied art. The presence of these characteristics, however, in works of contemporary painters such as Toulouse-Lautrec, Munch, Hodler; sculptors such as Rodin, and architects such as Gaudi and Endell, would seem to indicate that this style should not be limited to works of applied art alone.

In the following concluding paragraphs, I shall try to interpret van de Velde's ideas of the function of ornament by starting to analyse works of the Jugendstil. The Jugendstil stands on the threshold between the latest period, that can be recognized as a style of its own, the Classicism and the Biedermeier, with all its different national variances, and a modern style. With it, a conscious effort was made to create a modern style. I shall try to point out the significance of van de Velde's theories and their importance in the development of a modern style.

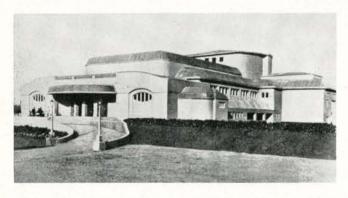
These works of Jungendstil have partly realized van de Velde's ideas, or are closely related to them, and were conceived at the time van de Velde published his theories and fought for a realization of a modern style. In showing these samples and a few others of modern architecture, I do not want to imply that the creators of these buildings have been influenced directly by van de Velde, although this might have been the case in many instances; but I do want to show that van de Velde had set forth principles and ideas concerning the function of ornaments which have become decisive factors in the development of modern design. It seemed to me especially important to prove this in the field of architecture.

The consequence of van de Velde's doctrine that ornament should not decorate but build is a blending of ornament and structure so close as to make one a part of the other. The ornament, in spite of this process, does not lose its characteristic expressing movements. The feeling of movement, therefore, transmits itself over the entire structure. On the other hand, one can conclude that van

de Velde understands the function of the various parts of a structure to be a dynamic one, because the ornament has to emphasize these functions and it does it with lines expressing or representing movement. The result is that a structure built in accordance with such a principle seems to have lost all its stability. This is the first and one might say, the most alarming impression. A typical example is the staircase of the Atelier Elvira in Munich by Endell, 1887, and a detail from the Casa Mila, Barcelona, by Gaudi, 1905-1910.

In architecture, an ornament, incorporated into the basic form to such an extent as to substitute the original functional form, changes from a decorative element into a tectonic element. But according to van de Velde's ideas the ornament loses in this process whatever independence it might have had. It forms together with the tectonic form a new unit in which the tectonic function is made the more obvious by being emphasized through an ornament.

A building by van de Velde such as the theatre at the Werkbund-Austellung, 1914, at Cologne, Germany, proves how powerfully his theories can be put into effect. The expression of movement is apparent, especially in details of decorative value, such as the outline of the roofs or the framing of the entrance windows, and yet this building stands firm on the ground, because the various functions are clear and are never disguised by ornamentation which had been applied for its own sake.



The idea of expressing movement in architecture shall be analyzed by comparison with the Baroque style. The difference between the expression of movement in the Baroque style and the Jugendstil can be dissected by examining the conception of matter in both styles.

The Baroque wants to give the impression of matter in movement, but the Jugendstil takes matter to express movement. The Baroque style shows masses moved around or lifted, masses which press down or even flow but never deny their body or weight. In Jugendstil, matter is only a medium to express energy; force itself at work. It is energy, a moving force, that should be expressed through the form and not material in movement.

Such an attempt can only be made when one presupposes a different conception of matter itself. Matter, in this case, is conceived as an aggregate of energy and not merely as weight. That means, in order to overcome the law of gravity in architecture, the old idea of weight and support has been given up and has become an idea of forces held in balance. It also means that, from an aesthetic point of view, the masses in their appearance in tectonic details are felt as balanced energies—which signifies something dynamic—and not as weight and support, which denote something static.

This approach must lead to the impression of defying the law of gravity in a structure; furthermore, it is an expression of the attempt to negate matter itself. The wish to give the impression of dematerialization in architecture can be traced throughout the history of architecture of western civilization. It can be observed in the late phases of many styles, and it is realized in an exemplary fashion in the Gothic style, where it serves to express a religious idea.

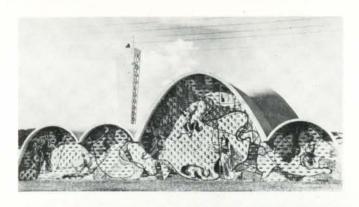
In the development of modern architecture, the same tendency toward dematerialization began to manifest itself in the middle of the last century with the construction of huge walls with glass and steel for exhibition purposes, and its latest realizations are buildings like the Lever House in New York City. Such landmarks in architecture as the Eiffel Tower or the modern suspending bridge, are also examples of this endeavour.

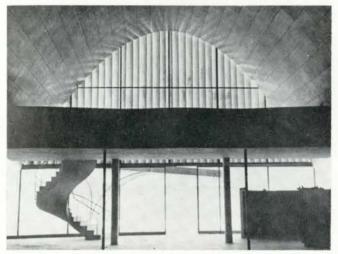
In his writing, van de Velde mentions this old desire for dematerialization in architecture, and points out that in a modern style this must be achieved through the proper use of lines.

In the late phases of certain styles, this attempt to dematerialize is pursued by loosening the compactness of masses in a structure. This process can be carried so far that the material appears almost as weightless, light as foam, as is the case in many constructions of the Rococo style. Yet the attempt to ignore the weight of matter itself, as light as it may appear, is never made. Only the Gothic style tries to overcome the gravity of matter as such.

In the Gothic style, matter is shown with the greatest economy, just enough to guarantee the existence of the building. Such an architecture symbolizes the thin ties of a spiritual world with the earth; matter should be neglected in favor of spirit, matter should be used only to point towards, or glorify, the spiritual world.

The difference between the Gothic conception of dematerialization and the modern attempt in the same direction shall be analyzed through the example of the Chapel of St Francis at Belo Horizonte, Brazil, by Oscar Niemeyer. This architecture defies the gravity of matter with its floating lines and with its thin glass walls, which span the space from the roof to the floor. For visual effect, the thin, stick-like columns seem incapable of carrying the heavy weight of the gallery, which they actually support. The view from the outside shows the same intention of transgressing the gravity of matter. The wall, that closes the back of the church, has lost all compactness through the mural that has been applied to it without leaving any space on the wall that would frame this mural. This wall appears weightless very much in the same fashion as though it had been built with stained glass. But the impression of dematerialization is aimed at only by transforming the feeling of weight into a feeling of tension and movement, which are physical phenomena. This building attracts the eye through the new and bold use of material, but draws one's interest very much towards this material instead of leading one beyond materialistic aspects as happens in the Gothic building. The wish for demateriali-





zation is expressed only through a change in the concept of matter, but remains on the materialistic plane.

I have chosen this example to show a danger that modern architecture will end by expressing physical and not metaphysical views, even in a building serving religious purposes.

In the modern style, this new approach to the nature of matter, which crystallized in van de Velde's sentence, "The line is a force", makes structures possible which would have been unthinkable under the old idea of weight and support. Such constructions would not have been understood and would have been branded as monstrosities or absurdities, judged from the old aesthetical viewpoint — that the design of structure illustrates the organization of weight and support. (see interior opposite)

Of the many consequences this new concept has for the realization of a modern style, reflecting our way of living, one should be singled out. One of the most striking and predominant factors in modern life, is the phenomenon of speed. Only in a concept, which sees a structure as moving forces kept in balance, can this feature of modern life find its reflection even in architecture.

New materials, which have technically enabled such construction, unquestionably helped to realize these new ideas; but they have not originated them. The idea must have proceeded the means by which they were carried out.

van de Velde's theories on the function of ornament are directly related to his ideas on the nature of beauty, art, and style. He repeats very often in his writing that his thoughts are not new, but that they had been forgotten. His whole career and the propagation of his theories started as opposition to what he calls "the ugliness of his time". He opposed violently the imitation and the mixture of form and styles in new creation — the common procedure at the end of the nineteenth century. In his efforts to formulate principles for a modern style, his conception of the function of ornament and the nature of the line as a force contributed the most potent factor in the development of a new style. These ideas have become an integral part of modern design.

V. C. Morris Store, San Francisco, California Frank Lloyd Wright, 1949



The foregoing is a paper given by Dr Clemens Rességuier at a meeting celebrating the ninetieth birthday of Henri van de Velde at Syracuse University.



WYMILWOOD

A Students' Union for Victoria College

Eric R. Arthur

History

Among the seats of higher learning in the British Dominions, Victoria University ranks as one of the more venerable, having received its charter from King William IV in 1836. The University was established originally in Cobourg, with an enrolment of about one hundred and twenty, and was moved to its present site in Toronto in 1892, at which time the students numbered two hundred and twenty-six.

Victoria University, today, is an autonomous degree granting institution within the University of Toronto, and comprises Victoria College, its Faculty of Arts, and Emmanuel College, its Faculty of Theology. The student enrolment is about one thousand, men and women.

Location

The buildings of the University of Toronto and its federated universities and colleges occupy property surrounding Queen's Park. The park is a natural one of grass and deciduous trees, and, while it is surrounded by a much travelled arterial road, it forms a pleasant foreground to the buildings of Victoria University. The grounds and buildings of Victoria extend northward to Bloor Street, and include some houses on Charles and St. Mary Streets to the east.

Existing Buildings

The arts and theological faculties of Victoria University are housed in a group of buildings that frankly disclose their age. The main, and oldest building, is Romanesque in the tradition of H. H. Richardson of Chicago, while Emmanuel College and the residences for men are what is usually called Collegiate Gothic. It is more difficult to put a label on Annesley Hall (to which Wymilwood is attached) but it is enough to say that it shows evidence of Dutch and Georgian influence.

Master Plan

A Master Plan for the future development of the University, was prepared by the architects in 1950. In the area south of Charles Street, this called for the addition of a chapel; the eventual replacement of the main building, and for a car parking area.

North of Charles Street, where the major building program will take place, the area consisted of Annesley Hall, (a residence for young women), a three-quarter size football field, an obsolete field house and some residential property.

The major changes called for in this area are:

- a) the re-orientation of the football field to a northsouth axis and its enlargement to regulation size
- b) the building of a gymnasium
- c) the building of a new field house and demolition of the old one
- d) the building of a Students' Union
- e) the building of a residence for women and the eventual demolition of Annesley Hall and the Bloor Street houses.

The Administration has already implemented the recommendations of the Master Plan with regard to car parking, the football field, and the building of the field house and Students' Union.

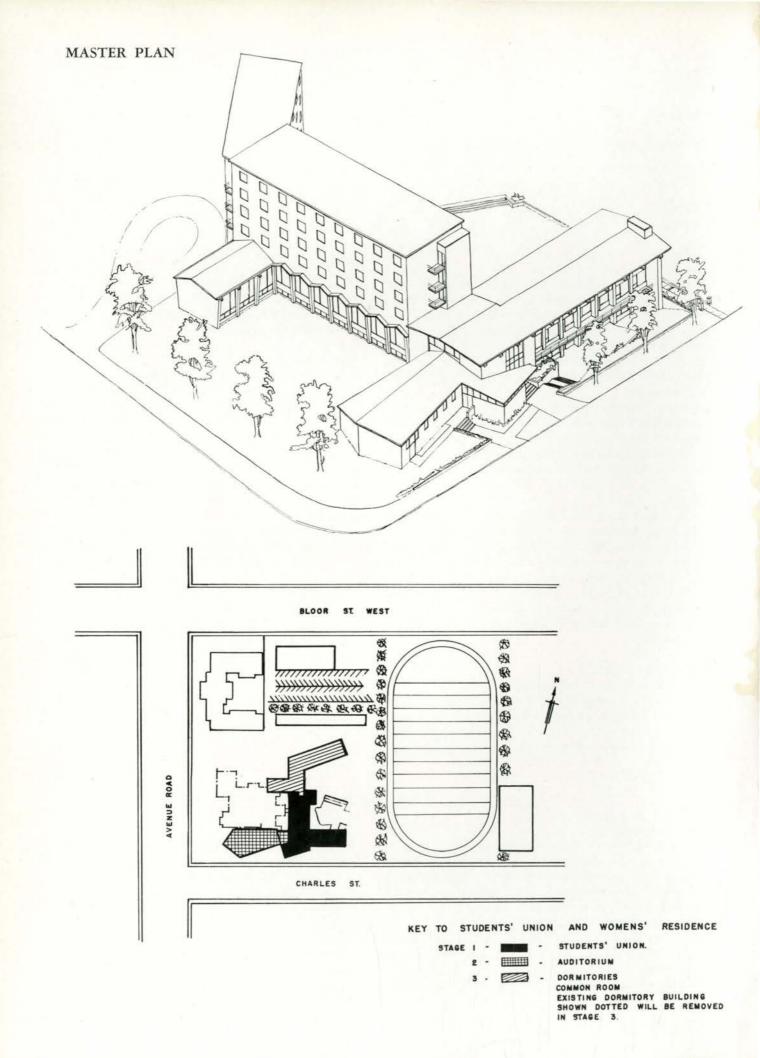
WYMILWOOD

Planning and Design

Except for the cafeteria and certain sitting rooms, Wymilwood is a co-educational Union for the use of Victoria students. The Union is joined to Annesley Hall through a kitchen common to both buildings, but access from one building to the other is controlled.

The Master Plan provides for the eventual replacement of Annesley Hall by a new residence large enough to house all the resident women students of Victoria. This will be connected similarly to the present arrangement to maintain a separation of the residence from the Union, and will continue to use a common kitchen to serve the dining room of the residence and the cafeteria in the Union.

An auditorium, to seat approximately three hundred, is planned to the west of the front entrance of the Union, and lavatories and cloak rooms are now sufficient to accommodate those who will use it. A unique problem, arising out of experience in the previous Women's Union, was to eliminate the tracking in of slush and wet to the entrance foyer during such events as dances in the Union, or large gatherings in the auditorium. Several conferences were



devoted to this, and the solution evolved seems to have proved effective. A floor grille outside the entrance doors takes care of loose snow, and a rubber mat inside leads directly to coat and overshoe rooms for women at entrance level and for men in the basement. This eliminates direct traffic from out of doors to the stair halls, either at basement or first floor levels.

An outstanding characteristic of Victoria University is its interest in promoting both music and contemporary Canadian art. The music room was, therefore, given great prominence in the plan of the Union, and to take care of the occasional overflow crowd, modernfold doors were used to extend this room out into the stair hall.

Wall space for the hanging of pictures was considered important, and has been well used to display the paintings acquired by the University.

From the beginning, every effort was made to keep the Union domestic in character, and to make it a design appropriate for young people. Red brick was used to harmonize with the brick of Annesley Hall during its lifetime.

A successful element in the design of the interior is the combination of lighting fixtures secured from several countries. The ceiling fixtures in the music room are Danish, its wall brackets and the ceiling light of the first floor common room are Swedish. The second floor stair hall lights are Italian, and the chandelier in the first floor east common room is from the United States. England supplied the chandelier in the second floor common room above, and also the ceiling fixtures in the faculty dining room. Corridor wall brackets in the cafeteria and second floor corridor were made in Canada to the architects' design.

The coffee shop is located off the sunken terrace on the south side of the building, and is accessible both from the building itself and from the street. It is used by both men and women daily from early morning to late evening; and in autumn and spring the terrace is greatly in demand.

In the angle of the building there is a small garden, secluded from the street, which has been designed to be seen from the cafeteria and faculty dining room, and this will be available for garden parties and similar functions.

Heating

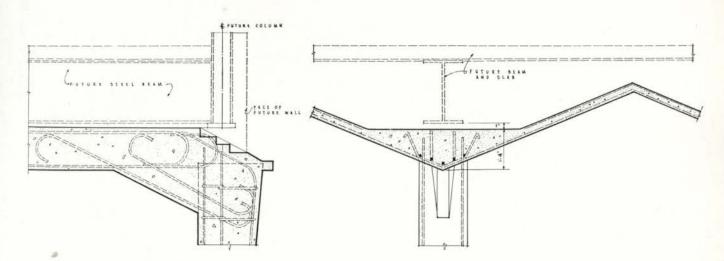
In general, the building is heated by hot water convectors except in the coffee shop and basement coat rooms where floor panel heating is used. In the cafeteria, there is, in addition, a forced hot air ventilation system which exhausts through the kitchen to eliminate food odours.

Construction

The Union was built during a critical shortage of steel. For this reason, the main building was designed in load-bearing masonry with interior columns, beams and slabs in reinforced concrete. Spandrels are 4 inch reinforced concrete slabs. The roof is constructed of shaped reinforced concrete arches carrying tongue-and-grooved douglas fir plank three inches thick topped with rigid insulation and built-up roofing.

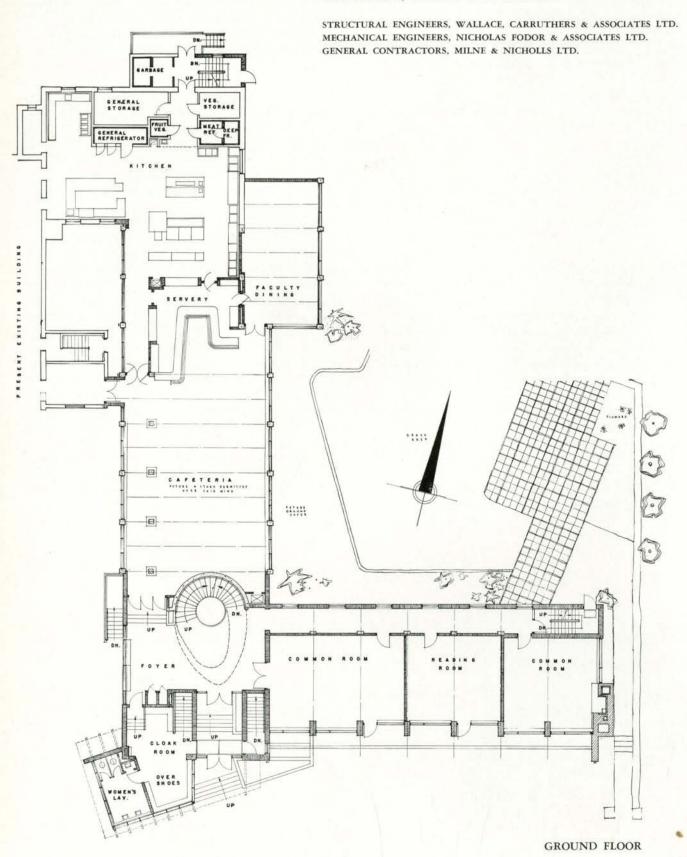
The shortage of steel also affected the cafeteria, which was designed to accommodate a future four storey dormitory addition. All columns in reinforced concrete are adequate to carry the future load, while the roof itself is of a strength just sufficient to carry its own weight and snow loads. The future structure will rest on steel girders bearing on concrete pads over the existing columns, and will impose no extra load on the present roof. By using the continuous V-shape roof, it was possible to achieve the maximum feeling of height in the cafeteria without incorporating the steel girders in the present building, and without raising the future second floor above the present second floor of Annesley Hall. Louvred lights were recessed into the sloping ceiling which was finished in acoustic plaster.

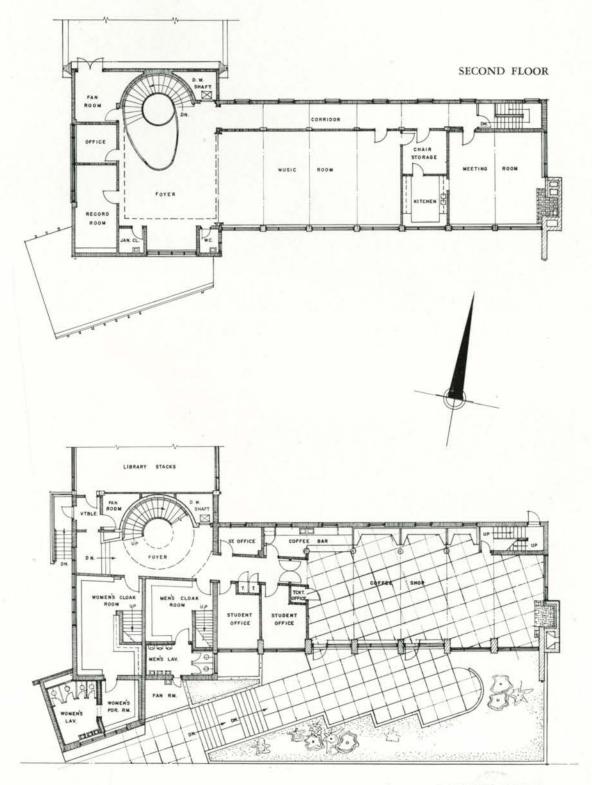
The main stair is executed in a reinforced concrete spiral supported on a semi-circular masonry wall. Treads, risers and strings are finished in terrazzo and the plaster soffit is coved into the wall.



DETAILS THROUGH ROOF OVER CAFETERIA

ARCHITECTS, FLEURY AND ARTHUR





BASEMENT FLOOR



The sunken garden from the main entrance. A dry stone wall and sloping bank planted in evergreen groundcovers accommodate the change in grade from street.

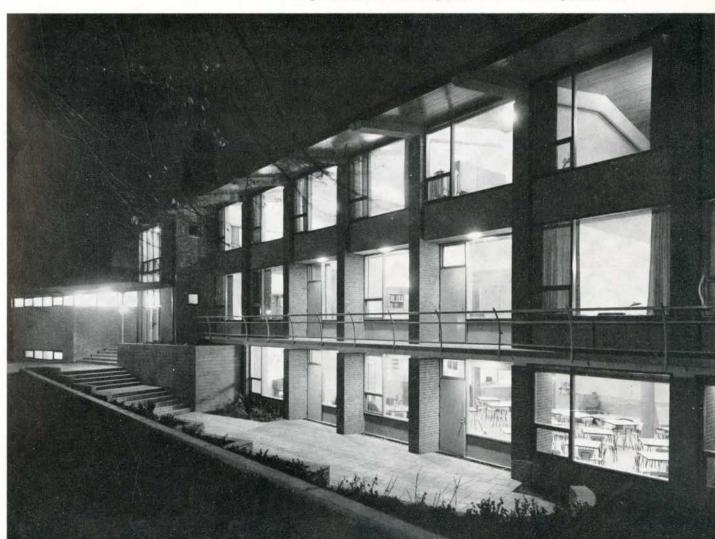


The main building from the east shows the typical structure, load bearing masonry walls, precast concrete spandrels, concrete beams and plank roof.



The cafeteria wing at night. Reinforced concrete columns are designed to carry an additional four dormitory floors. Hermetically sealed double windows are some of largest made in Canada.

The main building at night. A continuous grille-covered drain at the wall takes care of run-off in the lower court. Perimeter insulation was omitted here to keep the drain open in winter. The continuous balcony simplifies window cleaning and shades coffee shop windows.

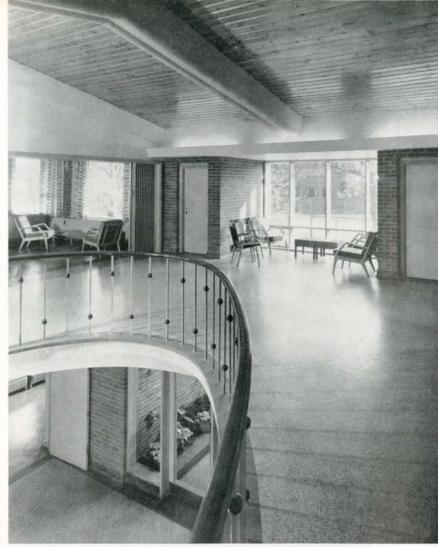


The second floor foyer opens to the music room to accommodate overflow audiences.

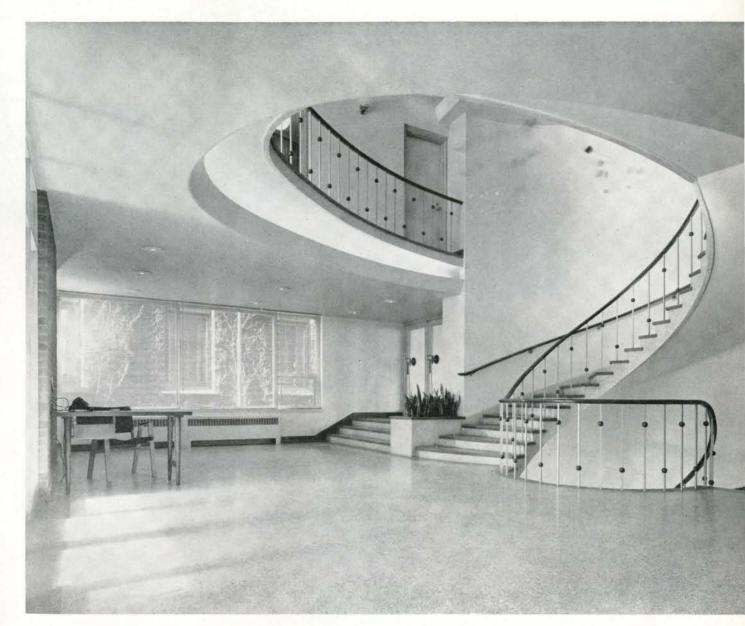


The main staircase is a reinforced concrete spiral cantilevered from a semicircular masonry wall. Precast terrazzo treads were used with terrazzo strings and risers.

The main entrance from the foyer. Cloakrooms are entered directly from the main vestibule.



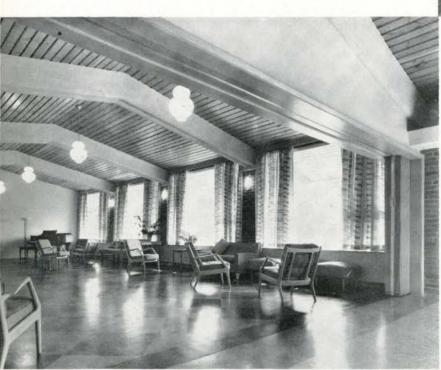




The main stair is illuminated by concealed fluorescent coves supplemented by pinpoint spots. West windows will eventually open to auditorium foyer. Doors to cafeteria show to left of stair.

The record room is a retreat for the serious student of music.





The music room on the second floor is used for recitals or meetings. Ceiling is 3" douglas fir plank spanning between concrete beams. Floor is cork tile.



The copper room is used for smaller meetings and social gatherings. The roof overhang keeps out noonday sun all year. THE NEW UNION, called Wymilwood, in outward appearance is dramatically and uniquely contemporary in design, and apparently was planned without hampering considerations of past college traditions. Yet, in fact, it is a replacement of a much beloved original "Wymilwood", the house of the late Mr and Mrs E. R. Wood, at 84 Queen's Park, who generously presented it to the College in 1926 to be used as a Women's Union (all University men students were members of Hart House). The furnishings of this Union were graciously donated by another friend of the College, the late Lady Flavelle. This house, built about 1900, incorporated many of the most elaborate features of interior decoration of that period.

The walls of two rooms were hung with velvet — one in emerald colour, the other ruby, a third room had yellow silk damask wall covering. The dining-room panelled in walnut to the domed gilt ceiling was surrounded by an ornate frieze of gilt fruits. A small ante-room had murals painted by Freya Hahn and a large sun-room with trelliscovered walls was another unusual feature. When the U. of T. purchased this building from Victoria in 1950, many Vic graduates felt that the intangible qualities of beauty, grace and refinement which this home had contributed to many generations of Vic girls would be lost forever.

The character, traditions and even some furniture of this earlier Union therefore inevitably influenced the planning of the Furnishing Committee as they endeavoured to create an interior for the new building worthy of, and as contemporary as, its distinguished exterior.

The new Union also was planned to become a greater co-ordinating factor in college life. The division of the sexes in their respective Unions meant that there was no place on the U. of T. campus where men and women could have a "coke" or meal leisurely together, and it was therefore decided to make part of the new Union available for men; and to open a co-ed coffee shop. The feminine grace and charm of the earlier Union had now to be supplemented by more durable and masculine qualities.

A final determining factor of the plans was, as always, a financial one. Estimates were approved and guaranteed by the College board, but funds from the Women's Residence reserve account and contributions from the Alumnae Association, graduates and interested friends were expected to cover the cost. Economy was, therefore, essential.

A committee representing faculty, undergrads, graduates and the Board undertook the furnishing task, and at once agreed to seek the co-operation and advice of the architects. The unfailing interest and suggestions from both Professor Arthur and Mr Fleury proved of invaluable aid, and no integration of the decorating scheme with the overall plans and especially the colours, could have been achieved without the endless hours which they patiently spent in working out details and designs with us.

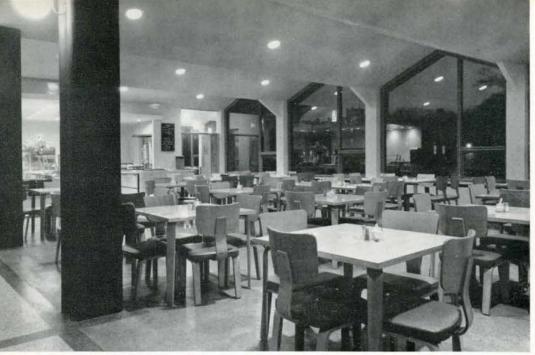
We also sought the services of a professional interior decorator, Freda James and her associate Mrs Zelma Rothwell. This firm had for many years featured the use of hand-woven Canadian textiles and designs, also Canadian and modern furniture. Miss James and Mrs Rothwell were extremely interested in all our many and varied problems, and were responsible for all the furnishings (drapes, upholstery and furniture) in the five common rooms, record room, foyer and office. Also a major contribution was their mammoth assembling job, when due to delays the painters only left the building as the furniture moved in, and within a short week-end all drapes were hung and furniture placed ready for the formal opening on a Monday.

We should like to acknowledge assistance from one further source — the National Design Index. On their advice, we went to view Trend House at Islington in June, 1951. Furnishings for this had been selected by the Design Centre from their award winners. We had received photographs of these, but since at that date none of the west coast metal furniture was being shown or retailed in the east, it was most helpful to see it "on location".

Photographs will show the reader what the Committee was able to accomplish in Wymilwood, but no black and white picture can possibly do it justice, or convey the feeling of light and gay colour which seem to be its chief characteristics.

The front exterior of this red brick building is banded in soft green and the large window areas on the main and lower floors are punctuated by four coral and yellow doors, giving access to the balcony or lower court. One enters the lobby through wide glass doors passing an electrolier with shades painted red, yellow and black. A large planting box in this lobby has proved most successful, despite fears that cold blasts from the frequently opened door would kill the bloom. Planting boxes are on each floor providing fresh green foliage throughout the season.

After the "colourful" exterior, the calm pale grey walls



The cafeteria is used by the women undergraduates. Main illumination is provided by louvred fixtures recessed in acoustic plaster ceiling.



The faculty dining room and lounge overlook the east garden and playing field.



The coffee shop is the social centre of the College. Precast concrete paving extends to the sunken garden for mild weather use.

of the foyer proper and soft green marble floor create a subdued setting for the architectural chef d'oeuvre of the building, the circular stair case. Here surely are grace and refinement comparable to the great period of Adam design. The only furniture is the necessary service desk designed by the architects (in walnut and ash). Match-stick handwoven blinds with white lacquer finish veil the large window and hide the view of an adjoining residence.

The "co-ed" common room opens from the foyer, the walls continuing the same light grey shade. A warm note is the red linoleum floor of the same tone as the brick columns. These are projections of the outside buttresses and help break up the large room into smaller conversational areas. Since flexibility in arrangement was desirable, upholstered sectional furniture was used in preference to chesterfields. This was covered in wool fabric hand-woven in green and grey stripe design or gunmetal textured cloth (all the hand-woven fabrics supplied by Miss James came from the Karen Bulow Studios, Montreal, and when mentioned further in this article will be referred to as K.B. fabric). Arm-chairs covered in green strawtex and parchment coloured scoop chairs (Eames design) together with blond oak occasional tables, a five foot coffee table and large square end tables, the tops covered with grey gilcolite and useful for card games, complete the furniture. Floor length drapes are English linen, the background chartreuse and the geometrical pattern in rust, grey and white, an award design chosen by the British Design Institute. This room proved so popular that a piano was soon added, chosen for tone in preference to modern design.

The reading room with its blue wall, cork floor and natural wood colours provides a tranquil atmosphere for study and relaxation. Interest lies in the two side walls—one features three maple panels about six feet square, tilted outward at the top to hide indirect lighting, the other, cupboards and open book-shelves and more indirect lighting. Two chesterfields are covered in K.B. brown and blue tweed texture, and upholstered desk chairs are covered in a plaid K.B. of the same shades with yellow added. Gold leather chairs from the former Wymilwood are put to good use as are blond oak desks and a large reading table covered in blue gilcolite. Floor and desk lamps of burnished or brushed brass add highlights to this room.

A common room reserved for women students completes the rooms on the main floor. Like all the rooms, it has two large windows with southern exposure, but also has a large window facing east, with view onto the playing field, so that through the noon hour when it is most in use, it is flooded with light and sunshine. A fireplace adds a welcome and home-like touch, and informality is encouraged with the series of red, blue and yellow two foot square, four inch thick foam rubber cushions which are placed on the floor around a cherry wood coffee table. Walls are pale yellow and off-white, the floor blue-green linoleum and the drapes English hand-blocked white linen. The pattern, a formal tulip design in red, yellow, green and blue adds a fresh young note as do the two white leather armchairs. Upholstered furniture is covered in green and white Scottish Dunedin tweed, and two desk chairs in red and yellow K.B. wool plaid (Victoria College colours). Odd tables and desk are light oak, and a highlight, literally as well as decoratively, is an American candelabra.

After mounting the graceful stair one finds the spacious bright upper foyer which may serve as a balcony for orchestra sitting-out area, or additional space for overflow meetings, since it is only separated from the adjoining music-room by modernfold doors.

This music-room is used for concerts, receptions, dances, large club meetings and class parties. Here, therefore, one might presume function would have determined the type of furnishing, since for nearly all these occasions the furniture has either to be moved away, or to the side, so that the main area is clear for dancing, or the brown webbed stacking arm-chairs, provided in an adjacent store-room, may be set up. Having stated the above, which are reflections gained in retrospect, the writer, who as chairman of the Furnishing Committee, takes responsibility for all its decisions, feels that in this room the Committee was more influenced in its thinking by the grandeur of the earlier building than by practical considerations. However, in Victoria circles it is agreed that this room is a modern counterpart; achieving through the use of delicate colours and good design an air of elegance and beauty. For this, the architect's vision created an ideal setting.

From the four large windows one has an extended view through the tree tops south across the College grounds to Queen's Park. These windows are shaded by the eight-foot overhang of the wood roof, giving a feeling of added breadth to the room as it is a continuation of the pine ceiling. The floor is a handsome mosaic of light and dark brown sixteen inch square cork tile. As a key-note, and determining the graceful character of the room, the architect chose Danish lighting fixtures of double curved white opaque glass. The modernfold doors (green outside to match the marble fover floor) are a dusty pink shade, which is repeated on the end wall opposite against which stands the grand piano. The long wall, facing the windows is off-white, and a baffle-board approximately eighteen inches from the top hides indirect pink coloured lights. Miss James and the Committee gave prolonged thought to the question of curtains since it has been agreed that this room should have an original design. Happily, a freeflowing indefinite pattern was chosen, after discarding alternatives such as college crests, Canadian symbols, etc. This was hand-printed in varying shades of brown on to K.B. sheer white cotton. Six foot sofa-benches with taupe lacquered bases (Dan Cooper design) covered with K.B. brown and white wool fabric, stand against the white wall, the length of which is broken by an interesting arrangement of cherry wood tea tables. Love seats covered in the same brown fabric make groupings by the windows with several two foot square ottomans covered in turquoise washable strawtex. This same blue predominates in the K.B. wool fabric covering seat and back cushions on the many Danish blond beech wood arm-chairs. Pink, blue and tan sofa cushions highlight the colour scheme.

The meeting-room, so called because it may be reserved, and is used almost exclusively as a room for small club, executive or committee meetings, is sometimes referred to as the most successful from the furnishing point of view. Certainly, it must be one of the more superior meeting rooms on the campus! The warmth of the colours, the

Third floor corridor shows typical construction: exposed concrete columns and beams, exposed haydite block, linoleum floor with terrazzo base and border.





Small common room on first floor, shows typical treatment of carrying exterior brickwork into the room.



The reading room has a furred ceiling to accommodate kitchenette piping above. In most rooms piping is concealed in masonry. The floor is cork tile.

copper-hooded fire-place, and the convenient "pass-through" for refreshments from the kitchenette, all help generate a friendly atmosphere. The walls of this room are yellow, the floor grey linoleum, curtains K.B. yellow and grey sheer, and the chesterfield covered in yellow and grey Dunedin tweed. Other chairs are covered in a handsome green Swedish linen with deep blue design. Copper and blue foam rubber cushions surround the fire-place, and further seating may be provided by the brown webbing stacking chairs.

One may descend to the basement and co-ed coffee shop via the circular stair or the fire-escape stair, the doors to which bear the eye-catching colours of tangerine and tomato. Another entrance is provided directly from the outside through the sunken court. The chromestone which covers this, continues throughout the floor of the coffee shop. The ceiling is blue, walls light and bright red pillars mark the counter and alcove areas. These are a very popular feature with built-in seats covered with three inch airfoam cushions in yellow Kalistron. Special low circular tables designed by the architect, enable groups of six to eight students to gather informally, privately and comfortably! The regular tables, seating four, also designed by the architect, and supplied by Metalsmiths, Toronto, have natural wood-finish formica tops. Chairs with black metal legs and \" natural plywood seat and back were designed by Peter Cotton and supplied by Perpetua Furniture, Vancouver. Natural coloured roll-up bamboo blinds are seldom used. At the far end of the room is a fire-place and lounge space. Henna leather covered chesterfields (inherited) and black safari chairs, metal floor lamps and coffee table complete the furnishings.

The building is equipped with a P.A. system; and a record room with a new Hi-Fi system in a specially designed cabinet is a favourite retreat for the students. A dark green wall, yellow sheer curtain, comfortable chesterfield in browns, and simple chairs are the only furnishings.

Running north from the Union and linking it with the Women's Residence is the women's cafeteria. The east wall is composed of five large windows, the glass of each extending from the apex of the pointed roof to within two feet of the floor. Apart from considerations of the cost and difficulty of curtaining these windows, the Committee felt the room would be more attractive if a clear view were provided onto a flood-lit landscaped garden. Another article in this *Journal* describes how this garden is now taking shape. In the meantime, the myriad lights in the blue ceiling reflect as stars in the black glass at night. Grey walls, yellow trim, brown columns, and green linoleum

floor are brightened by the coral leather air-foam seats on the natural colour laminated plywood chairs. Tables, 3 ft. square, made to stack, and using the same laminated plywood base with primavera realwood formica tops were supplied by J. Lorne Davidson & Company, Toronto.

The faculty dining-room at the north-east corner and jutting out from the cafeteria wing has a lounge, and dining facilities for twenty. The north wall is covered with vertical cedar panelling, the south wall illuminated by jewel coloured six inch square glass blocks interspersed with clear ones. The west wall is yellow with a twelve foot recess holding a specially designed buffet of contrasting woods and brushed aluminum handles. Tables of different sizes have quartered walnut realwood formica tops and chairs are grey and white fabralite. In the lounge section are plum coloured sofas, grey wool upholstered chairs, rose quartz marble-topped coffee tables, designed by the architect, and gay coloured cushions in the same jewel tones.

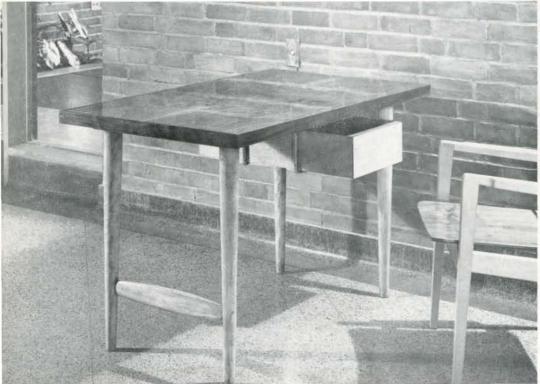
In the past, Wymilwood was noted for its fine collection of Canadian paintings and many now hang in the new Union. Lauren Harris, A. Y. Jackson, A. J. Casson, Arthur Lismer, Charles Comfort, Muhlstock, Peter Aspell, John Hall and D. McCarthy are represented. It was also hoped that through a mural competition held at the Ontario College of Art, a design would be chosen for the convex wall in the cafeteria. Unfortunately, none of the designs submitted were considered suitable by the Jury and the blank wall is a constant reminder of this omission. Other walls, still bare, will have pictures, we hope, when funds and paintings more in keeping with the contemporary character of the building can be acquired.

The undergraduate body, as their contribution to the building, is planning to give a piece of sculpture, and pieces by Elford Cox are under consideration.

In conclusion, the Committee again wishes to record their indebtedness to the architects, and through them to an anonymous donor whose generosity made possible its realization for their imaginative innovation of the mobile hanging over the main hall stair well. In contrast to the classic form of the stair, this is a playful symbol of our generation, composed of delicately balanced chrome rods and shining plastic, red, yellow and black shapes. It makes a fascinating decoration as it revolves, casting its shadows on the wall beyond. It may also remind us that in this new Union the bright keen faces of the many students passing back and forth will leave their mark and add new traditions to pages of our College history.







Some special furnishings were designed by the architects. Above, the radio phonograph from the record room. Left, the sideboard in the faculty dining room and the attendant's desk in the main foyer.

There is a clearly stated and happy alliance between inert building materials and living plants in the new Students' Union of Victoria College, Wymilwood. The eye passes easily and pleasingly from the steep bank of wintercreeper that surrounds the terrace at the front, past the junipers and privets at the entrance, into the building itself, where plantings in vestibule, stairwell and window corner carry the theme of green leaves on. Then outdoors again through the wide uncurtained windows of the cafeteria to the small and intimate garden hidden in the angle of the building where the two wings meet.

It is appropriate that living plants should play so prominent a part in the design of the Union, for the building itself has a youthful air about it and the students who constantly pour through it during term are animated and energetic, full of life and bubbling with vital activity. The plants growing in the gardens and boxes link the two—the static but contemporary form of the building on the one hand, the vivid, moving pattern of the boys and girls on the other.

There is no feeling in this building of being confined. The large areas of glass, and the inside structural members continuing on outdoors make the interior and exterior seem one.

The settings for the plant material at the front and inside the building have been so sympathetically created that the plants already look as though they belong there, even though they have only been in a year. The north garden is just moving from the planning to the planting stage, and can, therefore, be described with the rosiest words, for neither bug nor blight nor chill of night has withered its blueprint bloom.

Many fortunate and varied things have come together to make this successful use of growing plants so much in harmony with the contemporary architectural design of the building. The garden which the architects designed for the bank, outside the sun terrace of the coffee shop, creates an air of seclusion from city hurly burly and traffic even though in reality it is only a few feet away. The students appreciate and feel this, for crowds of them sit on the terrace in deck chairs and around the low retaining wall on the sunny days from early spring till late fall. The plantings in the building itself add a warm and living accent to the smooth impersonal planes of brick, plaster and terrazzo.

The site of the building is fortunate also, for though the

Union is in the midst of some of the most querulous Victorian architecture on the campus, its south aspect has a view through to Queen's Park, and, to the north and east, there is a wide playing field bounded on the far side with old buildings screened by ancient elms.

The light is clear. The few Norway maples and lindens along the street edge break the brilliance of the sun only enough to keep the wintercreeper on the terrace bank green-leaved all year. In the north garden, the permanent shadow cast by the building makes an ideal place for broad-leaved evergreen shrubs, English ivy on the wall, and evergreen periwinkle ground cover. The sun streams over the roof and past this dark green material in shadow to throw into sharp highlight the white birches, flowering shrubs and spring flowers that will surround the outside banks of the garden. To be able to make such frequent use of plant material which holds its green leaves through the months from December to May, when unlandscaped landscape is a dull mud colour, but when the Union is at its peak of use, is fortunate. Needle evergreens in this location would have neither the variety nor flexibility of the broad-leaved evergreens. Leafless deciduous trees and shrubs set before the brick walls would have had limited value for bold design.

The furnishing committee who planned the indoor plantings were also able to choose from a wider list of material than usual, because the light streaming well back into the rooms from the south is strong and clear, especially in the large plant box in the vestibule. The architect and those committee members who chose the material, however, would be the first to point out that the outstanding continued success of these plantings is entirely due to the intelligent and understanding care they receive from the warden, Miss Mary van Allen, and her staff.

The landscape architect of the north garden which is just now being planted, Mr Austin Floyd, will also have contributed immeasurably to the harmony of the scene by creating a small garden of contemporary design which, when it is established, will not only stand in beauty by itself, but will enhance and warm the whole north and east sections of the building. A crushed tile mulch under the ground level windows, brick paving on the terrace, and brick edging around the beds repeat and continue the texture and colour of the building. Cedar benches under the trees in the garden echo the oiled wood trim. Foliage and flower at various seasons repeat the rosy red of the

brick and the pink entry door to the Union. As Mr Floyd has carried the pattern and colour of the building out into the garden, so does he carry the garden over to, and up the walls, in the periwinkle border, euonymus and climbing ivy. In contrast to the disciplined form of the walls and terrace, the beds on the slightly rising north slope, which are planted with trees, flowering shrubs and spring flowers, have a free and mobile line which flows from the central lawn space to the periwinkle ground cover, to larger but still horizontal forms of plant material in symphoricarpos and juniper — then to taller shrubs and low trees, and, finally, to the full vertical at the outside edge of white birch, mountain ash, laburnum, flowering crabapple and magnolia.

There is a story about the magnolias. A glance at the plan of this garden will show that eight magnolia soulangeana are used in an informal line dividing the garden from the playing field. The original sketch called for some of the new and very beautiful varieties of flowering crabapples to be planted here. But a favourite sport of university students is the cooking up of various forms of high jinks. Any missiles handy to the hand are welcome, especially in the fall when the tidal urge for pranks seems at the full. It can be easily understood that the officers of the College were not particularly anxious to add eight trees full of juicy little apples to the autumn scene. So fruitless magnolias replace the crabs.

Since this garden will be looked down upon by two hundred students using the cafeteria three times a day from September to June, the gray bark, clear branch form and fat buds of the magnolias in the winter months will stand out strongly against the background of the playing field. When they cover themselves with huge saucers of porcelain-like flowers of pink and white in early May before the leaves appear, they should be perfectly beautiful.

The fact that the primary view of this garden is from the cafeteria and faculty dining room windows ten to twelve feet from the ground, has given Mr Floyd the opportunity to design a garden of contemporary form, but to be looked at from the same height as were the elaborate formal gardens of the palaces and manor houses in the 17th and 18th centuries. He has acknowledged this point and made use of it in his choice of material that is interesting to look down upon — carpets of textured ground cover, radiating plant forms of cotoneaster, and soft mounds of daphne contrasted with the formal boxing of the two mature trees to be set towards the centre of the garden where the terrace meets the lawn.

There were other factors besides the elevation of the view that had to be considered in the making of this garden. It had to look well and give the eye pleasure from November to March as well as in the dramatically coloured months of the fall and spring. Fifty years ago this would have been easy. A few clumps of spire evergreens to catch a thick frosting of snow on their branches, more sparkling white snow on ground and twig, and no more would be needed. But not now. In Toronto's banana belt winters

today when a thick film of oil furnace soot falls softly and invisibly all over everything, a different kind of material had to be chosen. The Japanese yew, taxus cuspidata, was an obvious choice, and the glabrous-leaved mahonia and the new small holly, ilex crenata convexa; then to hide the bare earth of banks and beds, the various ground covers mentioned earlier.

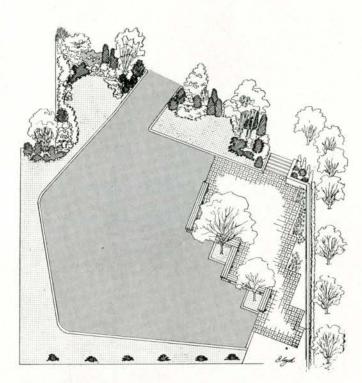
These ground covers, when they become established, will also perform a service that will mean low maintenance of the planted areas. They will keep down weeds, make the soil moist and cool for healthier growth of all the material, and eliminate the need for hand cultivation of the surface of the ground. There is no special gardening staff available to maintain any of the plantings at the Union, so it was essential to plant material that would need minimum care. There are no perennials needing to be coddled, no roses to be sprayed every week, no annuals to be planted every year then tied, de-seeded and finally pulled out.

Until the material reaches a more mature size in about three years, there will be some weeding, cultivation and staking to be done in the beds. After that, some discreet but infrequent pruning will be needed. There may have to be some replanting and dividing of the spring bulbs occasionally, and there will, of course, have to be the regular feeding, top dressing and watering that any good garden demands.

Cutting of the grass and trimming of the edges has been made easy by including in the design a grass ramp from the playing field down the slope into the lawn area of the garden. This ramp is wide enough for the motor mower which is regularly used to cut the field to come down into the garden to cut the grass there. An eight inch border of brick laid level with the grass will outline the beds and allow for one wheel of the mower to run right up to the edge of the bed. Except for the odd rebel blade, this should eliminate hand trimming of edges, which is both expensive and unpleasant.

The initial cost of gardens and indoor plantings like these at the Union is fairly high. Dry walls, brick and flagstone terracing, the use of mature trees for focal points, good sizes in nursery stock, ground cover plants in quantity and proper preparation of the soil adds up to an expenditure that makes any property committee hesitate. But far-seeing and wise property committees, as in the case at Victoria, realize that most of the original cost is for permanent architectural features that will need neither replacement nor maintenance for years; for plant material that will make the gardens in and around the building in pleasant scale from the day they are put in, instead of waiting a long time for them to grow to valuable size; and for a more appropriate choice of varieties in plants that will grow and thrive in this situation for years to come.

These gardens, as is true of the buildings and its furnishings as well, only come into true perspective and useful beauty when the crowds of boys and girls who use the Union are applied as a mobile and vital frieze against a background of brick and glass.



Plan of the north garden showing tile mulch against the building, grass lawn (gray on the plan) and tile paving in the terrace. For further description, see page 55.

For those interested in the specific kinds and sizes of material planted in the gardens and plant boxes of the Union we attach the following lists.

At the front (south) of the building.

In the bed following the wall to the left of the entrance Ligustrum Lodense 15-18"

Philadelphus ochroleucus 24"

In the bed at the top of the concrete well to the right of the entrance

Juniper Pfitzeriana glauca 15-18"

The bank facing the sun terrace outside the coffee shop

Ligustrum obtusifolium regelianum 18"

Ligustrum vulgare aureum 15"

Kerria picta 15"

Euonymus fortunei vegetus 18-24"

The border of the walk from Charles Street to the north garden

Philadelphus virginalis Bouquet Blanc 2-3'

As ground cover and vine along the dry wall at the east boundary

Helix baltica

In the interior plantings.

In the vestibule plant box

Schefflera actinophylla

Philodendron asperatum

Nephthytis Afzelii

Aglaonema simplex

Helix Sylvanian Beauty

Pothos variegata

Through the rooms, pots and bowls of

Monstera deliciosa

Philodendron cordata

Tradescantia fluminensis

In the stair wells of the main and basement floors Sansevieria thyrsiflora

In the north garden.

Ground cover: Vinca minor, Bowles var. planted on 12"

At the base of the north wall of the building, at spaced intervals

Euonymus carrieri 15-18"

Hedera helix baltica

Tree forms: Betula alba 6-10'

Sorbus Rowancroft (a pink-berried mountain ash) 3-4'

Laburnum vossi 3-4'

Malus Sargentii

Magnolia soulangeana 3-4'

(At the time of writing, it is hoped to use mature specimens of the Saghalien cherry as the focal point for the centre of the garden. This cherry has spring beauty, brilliant fall colour, and no fruit after midsummer.)

Evergreens

Thuja occidentalis 4-5'

Taxus cuspidata 24-30"

Juniper horizontalis glauca 18-24"

Ilex crenata convexa 18-24"

Daphne cneorum 12-15"

Mahonia aquifolium 15-18"

Flowering shrubs

Hibiscus Double Red 18-24"

Hydrangea paniculata grandiflora 4-5'

Sorbaria sorbifolia 3-4'

Ribes alpinum 18-24"

Daphne burkwoodi Somerset 18-24"

Euonymus alatus compactus 18-24"

Cotoneaster adpressa 10-12"

Symphoricarpos Hancock 2-3'

Prunus triloba flore pleno 3-4'

Forsythia intermedia spectabilis 4-5'

Viburnum carlesi 24-30'

NEWS FROM THE INSTITUTE

The last meeting of the Executive Committee of Council was held on January 16th in the PQAA Board Room, Montreal. Present were R. S. Morris (F) President; D. E. Kertland (F) Honorary Secretary; A. J. C. Paine (F) Honorary Treasurer; J. Roxburgh Smith (F), F. Bruce Brown (F); A. J. Hazelgrove (F); H. G. Hughes (F); Earle L. Sheppard; L. E. Shore (F); Harland Steele (F); C. J. G. Carroll, Secretary. In attendance also were the members of the PQAA Committee for the Annual Assembly: John Bland, R. C. Betts, Henri Mercier (F), F. J. Nobbs, Maurice Payette (F), and Bernard M. Deschenes.

At this meeting the Executive Committee advised that it would receive nominations from members of Council for the Allied Arts Medal until February 1st. It was decided to ask the Canadian Standards Association to prepare a standard for safe practice in those areas of hospitals where explosive gases are stored and used, as a continuation of the work of the Division of Building Research of NRC. The CSA has agreed to do this and the RAIC will have a representative on the Committee.

The Executive Committee and the RAIC Solicitor have completed a draft of revisions to the Act and By-Laws and this has been circulated to the entire Council and the Provincial Associations, for an interchange of views by correspondence before the Annual Meeting.

The Executive Committee has been investigating methods whereby architects in private practice would have the opportunity to make pension arrangements for themselves on the same basis as employees insofar as income tax is concerned. As a result, the Institute has joined with other professional organizations in negotiations with the Government of Canada on this subject. The proposals have not yet been accepted by the Government but it is felt that certain progress has been made. Copies of the brief on this subject have been sent to the Provincial Associations for their information.

Mr Earle L. Sheppard has been appointed Chairman of a Resolutions Committee and he will receive resolutions from the Provincial Associations and the members until March 29th for presentation at the Annual Meeting.

Preliminary arrangements have been made to hold the 1955 Annual Assembly in the Maritimes and the exact time and place will be decided soon.

The President reported that he and the Secretary have accepted invitations to attend the Annual Meetings of the PQAA and the Manitoba Association of Architects during the month of February.

Before adjourning, the Executive Committee set the date of the Annual Meeting to be February 27th, according to By-Law, and to be adjourned until May 11th at Montreal.

CORONATION MEDAL

We record with pleasure the award of a Coronation Medal to Mr Arthur Davison, B.Arch., (Toronto), MRAIC, Director of Engineering, Accommodation and Transport for the Department of Veterans' Affairs.

Mr Davison is serving his second term as President of the Ottawa Branch of the United Nations Association in Canada, and is a member of the National Executive of that organization.

CALENDAR OF EVENTS

47th Annual Assembly of the RAIC, Mount Royal Hotel, Montreal, Quebec, May 11th to 15th, 1954.

British Architects' Conference, Torquay, May 26th to 29th, 1954.

86th Convention of the American Institute of Architects, Statler Hotel, Boston, Mass., June 15th to 19th, 1954.

The Executive Committee of Council, in conjunction with the PQAA Committee, is proceeding with plans for the RAIC Annual Assembly, which will be held in the Mount Royal Hotel, Montreal, May 11th to 15th. The theme of the Assembly is The Architect and Industry, a study and appreciation of the relationship of the architect in the postwar industrial and commercial development of Canada. Features of the Assembly will include a Building Industry Conference, seminars, tours and a Manufacturers' Exhibition. It is the hope of the President and Council that this Assembly will bring the largest possible attendance and that it will be of the greatest interest and value to the profession.

An invitation has been received for members of the RAIC to attend the British Architects' Conference at Torquay, May 26th to 29th, which is under the auspices of the Devon and Cornwall Societies of Architects. The complete program will be available at the end of March and further information may be obtained from Mr C. D. Spragg, Secretary of the RIBA, 66 Portland Place, London, W.1.

CORRESPONDENCE

The President, Brazilian Institute of Architects, 4th Congress of Architects, Sao Paulo, Brazil January 15th, 1954

Congratulations and good wishes on the occasion of the fourth Brazilian Congress from the Council and members of the Royal Architectural Institute of Canada.

> R. Schofield Morris President

Mr R. Schofield Morris, President, Royal Architectural Institute of Canada

Dear Mr Morris:

The Chancellor, President and Faculty of this University are very grateful for your expression of good wishes on the occasion of the Centenary of this Institution.

The friendly message from your Institute is a source of great encouragement to us and provides an added incentive for the days to come. We were very pleased to welcome your representative and trust that his visit was pleasant.

In thanking you we should like to express our own good wishes for the success of your work both in the present and in the future.

Sincerely,

H. J. Somers, Vice-President St. Francis Xavier University

NOTE

List of new members and corrected addresses will appear in the new Membership List which will be sent to members in March.

ALBERTA

Of late years, great advances have been made in the colour treatment of interiors. The exteriors of buildings, however, depend for colour much more often on the materials used. If brick, stone or concrete, only a limited range of colour of low chromatic intensity is possible.

In Alberta the quality of daylight is normally intense, — very different from normal daylight in British Columbia, or in the Eastern Provinces. In Vancouver, for instance, atmosphere gives full force to colour. Brickwork looks richer than in Alberta, and the streets have a darker, stronger appearance. These lower tone values are a result of the humid atmosphere. Excessive sunlight in a dry region diminishes the chromatic intensity of colour, and tonal differences are also lessened.

Brick, one of the most satisfactory materials man has used, does not appear at its best in Alberta. It never takes on the rich beauty of more humid regions such as Holland and England. One could say, perhaps, that reddish brown bricks should give place to pale cream and buff bricks in the prairie light.

When passing through Saskatchewan a few years ago, I was talking to one of our best known landscape painters. He pointed out that the light reduced landscape, houses and towns we passed to pastel shades. The vivid colour of clothing worn by men and boys on the prairie is a result of the diminished chromatic brightness. I have never noticed such bright clothing in Eastern Canada, in Britain or Northern Europe. As one travels south into intense sunlight, clothing colour becomes brighter; and on the prairies we get away with it by a combination of bright sunshine and clear atmosphere.

Thus great beauty of colour in rich and subtle shades of brick and stone is denied us. Our best approach to a richer façade may be the development of shadow-casting projections arranged in patterns, as has been achieved in Spain with great distinction; the contrast of heavily textured areas and large plain areas; the occasional use of blocks of primary colour; large murals in coloured plaster.

In Alberta the destructive effect of light on colour has not been recognized except by a few artists. Much could be learned from the architecture of southern countries and adapted in a creative way.

Maxwell Bates

ONTARIO

During the past few years, this city appears to have awakened from a dormant period of many years. The trend of industry to move to smaller cities, to decentralize, created the need for a recent annexation of farming land equal to the area of the existing city. When this land became available not long ago, the way was clear for further growth, through, it was hoped, expansion in local industry and the addition of new. Truly it is too soon to suggest that annexation is the cure to this deterred growth; there are, however, signs at this early date that the therapy has been effective.

Several American industries have opened Canadian production centres in the district recently. Perhaps the greatest indication to date that we are becoming active again is the move of Canadian General Electric Davenport Works from Toronto to our municipality. Our local pundits foresee much growth around this nucleus. So much for the growth itself! The effect upon the outlook of the population is worth considering. Their change in attitude toward contemporary design is quite interesting; a feeling of at least tolerance seems to have grown over the past few years. While this has been a trend throughout our country, it is especially noteworthy here, where, we would suggest, the attitude of indifference has prevailed until recently.

While the demand for contemporary building à la House + Home is still non-existent to date, the request for moderate design incorporating honest architecture is quite prevalent. Such was not always; only a year or two ago we had to sell 'contemporary' as opposed to 'green shutters and gingerbread'. The acceptance of contemporary work in commercial and institutional building, of course, has never lagged. Possibly, this resulted from local building committees and business retailers who demanded the same type of school or hospital or commercial building as seen in the larger cities.

T. Allan Sage, Guelph

OBITUARY

The science of sound correction, as applied to theatres, schools, synagogues and churches, has lost one of its most able exponents; the architects, a thoroughly dependable consultant and Canada one of its fine citizens in the death of **Hyman Goldin**, on January 6th, in the Metropolitan General Hospital, Windsor.

This writer's indebtedness to him covers the very difficult problem he solved so successfully at Etobicoke Collegiate Institute, also St. Leonard's Anglican Church and for his work on Beth Tzedec Synagogue in which he was so deeply interested and on which he was engaged at the time of his death.

Mr Goldin was born in Poland, and came to Canada at

the age of twenty when he went to work for the Northern Electric Company in Montreal with whom he remained until 1950. When Gaumont Kalee and Odeon Theatres became active in Canada, he went with them in charge of sound and projection. During this period he collaborated with their architect, the late Mr Jay English. During the last two years, he had conducted his own consulting practice and had worked with many members of the architectural profession.

He will be remembered by his many friends, not only for his engineering ability, but for his kindly, friendly qualities. His quiet yet determined efforts to produce only the best possible results showed a strength of character and purpose that aroused the lasting respect of those privileged to work with him.

Forsey Page

CANADIAN GOVERNMENT OVERSEAS AWARDS

Word has been received at the Executive Offices of these awards in the Arts, Letters and Sciences, administered by the Royal Society of Canada. Fellowships of \$4000 and Scholarships of \$2000 are available, tenable in France and the Netherlands, for students with M.A. or equivalent proceeding to a higher degree. For application forms and full information apply to Awards Committee, The Royal Society of Canada, National Research Building, Ottawa 2, Ontario.

POSITION VACANT

The Community Planning Association of Canada invites applications for the principal staff position in its national office.

Applicants should have a general knowledge of community planning and municipal affairs, and must have an ability to prepare information and publications on planning subjects in non-technical language. Applicants need not possess professional qualifications as planners.

The salary will be commensurate with the qualifications and experience of the person appointed. Applications and inquiries, marked "Appointment – Confidential" should be addressed to The President, Community Planning Association of Canada, 169 Somerset Street West, Ottawa 4, Canada.

The Community Planning Association of Canada is a self-governing membership organization, supported by public and private funds. Its purpose is to encourage the development of town planning and regional planning in Canada. It has an established program of publications. Its membership extends into every province where it has organized Divisions engaged in the promotion of local planning affairs.

CONTRIBUTORS TO THIS ISSUE

M. R. Jackman writes "No specialized education or previous experience can be cited as qualifications for acting as chairman of the Victoria College Furnishing Committee, or indeed as a writer in this professional *Journal*. To a graduate of Victoria and an alumnae representative on her Board of Regents it was a job to be done — but what housewife after twenty years in her own home would hesitate to refuse an opportunity to help furnish such an exciting

new building?

An interest in Canadian painting, and especially the work of contemporary artists encouraged reading in allied fields, including architecture. A visit to the Festival of Britain and later to Harvard (Gropius' Graduate Union) and the new Breuer Co-operative Student Residence at Vassar College, showed how light, space, colour, simple furniture and fabrics could create a bright new world in which to live.

One hopes that the young people whose lectures are held in Victoria University's main building ("a depressing pile" to quote the Editorial in this *Journal*'s October issue) when enjoying leisure time in the fine new Union will gain a lift for their spirits. Certainly, for the writer, the privilege and opportunity of working with the architects on this project proved a most enlightening experience.

Clemens L. Rességuier was born in Austria. He received his education in that country, and at the University of Zurich where he received his Ph.D. For his thesis, he wrote on the writings of Henri van de Velde who collaborated personally on the gathering of material.

Dr Rességuier has exhibited at the National Watercolour Show in New York (1953), and is, at present, studying graphic design under Peter Piening, and painting under George Grosz. His hobbies are skiing and mountain climbing.

Lois Wilson (Mrs J. R. M.) is a member of the committee which, with Mr Austin Floyd, the landscape architect, has planned the garden for Wymilwood, the new Students' Union of Victoria College.

Mrs Wilson is a graduate of Victoria, is actively interested in gardening (understatement) and is a gardening consultant with *Canadian Homes and Gardens*.

FUTURE ISSUES

March Students' Issue – University of Manitoba

April Hospitals

May Toronto Subway

June Industrial

July Landscaping and the University City

of Mexico

BOOK REVIEWS

Early Christian Church architecture by J. G. Davies. Published by the Ryerson Press, Toronto. Price \$4.00.

The intention of this book is to bring before an English-speaking audience the great number of publications in the Early Christian field which have appeared of late years, many during the last war, and some not easily accessible, therefore, by reason of their limited circulation and review at that time. At the outset, it may be said that Mr Davies has dealt fairly and compactly with the archaeological material; if it cannot be described as a definitive synthesis it is because the time is not yet ripe for such a handbook.

The most valuable, as it is the longest, section deals with the basilica or congregational church, the constant common factor in structural types in Christian architectural history. Because the most impressive examples of such edifices are of the fourth or early fifth century and appear with inexplicable abruptness, research has had to do with origins. Mr Davies examines the older theories of a source in synagogue, mystery cult sanctuary, or private home, rejects each as well as any combination of them on the adequate ground of physical dissimilarity especially in regard to scale, is too aware of historic continuity to think the basilica was invented by Constantine's architects, and finally decides for an origin in the civil basilica as an imperial structure admirably suited for large gatherings. The two most recent explanations – the audience chamber of emperors and kings, and the buildings erected for congregational worship of the deified dead, – he finds lacking in evidence of structural similarity.

The other principal type of Christian structure, the central and domed plan, a shrine generally, is traced to an origin in pagan tombs in the Near East where the central plan in Christian use was always more common. In this section the question of origin is not as important as that of development to the crowning wonder of Early Christian art, Hagia Sophia. In this greatest of medieval architectural inventions the author admits the participation of regions which seem very backward today, Asia Minor and Armenia, but stresses both their importance in the early Christian community and the fact of the synthesis, not in the provinces but at the imperial capital. With too great caution he has avoided all discussion of the symbolic significance of the dome although it is obvious that domes are not merely practical solutions or their artistic effect as simple as that of a basilican structure. What they meant to Christians standing under them must be part of the history he has set out to tell.

The interior arrangements and furniture of the church, and the complementary structures which were numerous and important as long as the early church maintained its primitive communal character have each their own chapter. These are masterpieces of readable compression written not as inventories but as a picture of historical growth depending on liturgical practice. Finally, there is a survey of regional variations explained by the degrees of vitality of the different Christian communities, by the limitations of material, by local traditions of building antedating Christianity. This chapter might with advantage to the reader though at great cost to Mr Davies' powers of organization have been combined with the general introduction on the spread of Christianity which prefaces the book.

For the size of it, no book on the subject is as informative: the student of primitive Christianity, as well as the innovator today who is obliged to apply a modern and pagan idiom to Christian edifices, can study with profit the origins and development traced by the author.

G. S. Vickers

Modern town & Country Planning by James W. R. Adams. Published by the British Book Service (Canada) Ltd., Toronto. Price \$8.50.

This book is a revised version of "Recent Advances in Town Planning" written by Thomas Adams over twenty years ago. It is probably better, however, to regard it as a new work, as, although the structure of the book and much of the material remains the same, the emphasis is quite different.

Thomas Adams' wide knowledge of planning practice on both sides of the Atlantic enabled him to write a book that could inform each of the habits and performance of the other. It was this transatlantic flavour, this rare understanding of the motives and terminology of town planning in London and New York, Edinburgh and Toronto, that gave the earlier book its special character.

In this new version, his younger son, the county planning officer for Kent, England, has confined himself almost entirely to the British scene. As a result, he has produced an extremely useful book on the operation of town and country planning in Britain over a generation which, partly because it is written by an eminently practical planner and the son of a planner, should dispel many misinformed impressions of what planning really has meant in practice.

The subjects covered include: Law and Practice in Great Britain, 1909-1952; Principles and Practice of Zoning Regulation; Open Spaces and Other Amenities; Neighbourhood and Site Planning; Transportation; Markets and Public Services; Tendencies and Conclusions.

J. Tyrwhitt

REINFORCED CONCRETE by Oscar Faber. Published by the British Book Service (Canada) Ltd., Toronto. Price \$6.00. This work is a comprehensive yet compact presentation of those topics of the subject which are of interest and value to the student and designer of reinforced concrete. The treatment is practical and reflects throughout the author's lengthy experience in the design and construction of outstanding reinforced concrete structures of all kinds.

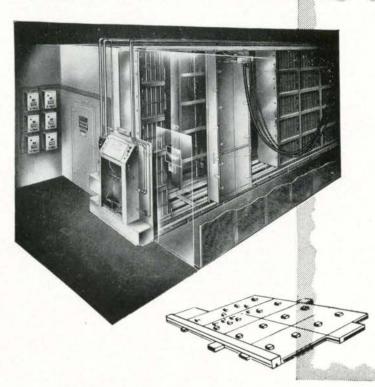
The subject matter is well organized and clearly developed. The topics dealt with fall into three groups. First, the author reviews briefly the history of the development of cement, concrete and reinforced concrete from ancient times to the present. He goes on to present the present day knowledge regarding the properties, the methods of manufacture, the factors affecting the strength of reinforced concrete, and the behaviour of concrete due to loading, moisture and temperature changes, etc.

In the second group of topics, the author develops the theoretical bases for the design of reinforced concrete and demonstrates procedures for the design of elementary structural parts such as slabs, beams, columns, and footings. Numerous useful charts and tables are included. These are designed to facilitate the selection of dimensions for such members. Being based on British specifications and practice, some are not directly applicable, without adjustment, to Canadian practice.

For the balance of the work the author goes on to deal with more specialized forms of reinforced concrete including piling, silos, bunkers, reservoirs, chimneys, shell concrete, pre-cast and pre-stressed concrete.

On the whole, while it might not be considered a complete text for study nor handbook for design, the book should be a valuable item in the library of both student and designer. For those who deal with reinforced concrete only occasionally and incidentally, it should be specially suitable on account of its wide yet concise coverage of the subject matter.

C. Hershfield



50 TONS

Clean Fresh

AIR PER MINUTE!

Precipilron at work for FORD OF CANADA AT OAKVILLE * Registered Trade Mark

SOME TYPICAL Precipitron

INSTALLATIONS

Sunnybrook Hospital

Sick Children's Hospital

The Steel Co. of Canada Ltd.

Consolidated Mining & Smelting Co. Ltd.

The Bell Telephone Company of Canada (Elgin Exchange Building)

Royal York Hotel

T. Eaton Co. Ltd.

Canadian Celanese Limited

York Knitting Mills Limited

General Foods Limited

Fifty tons of clean fresh air per minute electrostatically cleaned by the PRECIPITRON. That's the achievement of the 22 PRECIPITRON units installed in giant penthouses atop the new Ford of Canada plant at Oakville.

The ultimate in air cleaning efficiency, these electrostatic units remove dust, dirt, soot, pollen and other damaging dirt particles from the air supply for Ford's giant Paint Spray Booths.

The air supply passes through fine mesh fly screens where the larger airborne particles are stopped and immediately on through large air intake louvres at the end of each penthouse. From there it passes through a double row of preheat coils, through the air distribution baffle and then through the PRECIPITRON, where the microscopic dirt particles down to 1/10th of a micron are removed electrostatically. The clean air is then discharged downward into the

ductwork leading to the Paint Spray Booths.

PRECIPITRON is capable of cleaning air with an efficiency of 90% according to the U.S. Bureau of Standards blackness or discoloration

In addition to the 22 fans which pull air through the PRECIPITRON units at Ford, Sturtevant have installed 32 heavy duty Silentvane fans which handle the general ventilation of the factory. In all Sturtevant Fans in use at Ford-Oakville will handle a total of 3,456,000 CFM.







MECHANICALLY FILTERED AIR

*PRECIPITRON

The photographic reproductions above, showing the smudging effect of three equal air samples taken simultaneously, illustrate the effectiveness of PRECIPITRON Air Cleaning.

For application data and other information write

B. F. STURTEVANT CO. OF CANADA LIMITED

(a subsidiary of Canadian Westinghouse Co. Ltd.) HEAD OFFICE & PLANT - GALT, ONT. TORONTO - MONTREAL - HAMILTON - VANCOUVER

