

ERNEST CORMIER AND EUROPEAN CULTURE

The Influence of French Seventeenth- and Eighteenth-Century Architecture and Theory on Cormier's Designs for the Université de Montréal

In the March 1930 issue of *La revue moderne*, Henri Girard called Ernest Cormier (1885-1980) "le premier architecte qui a eu le courage de présenter au public montréalais un plan d'édifice moderne."¹ The reinforced concrete construction, the clear articulation of simple forms, the monumental scale and the total integration of ornament with structure in Ernest Cormier's 1927 project for the Université de Montréal indicate that he was one of the advocates of progressive trends in contemporary architecture. Isabelle Gournay has perceptively noted that Cormier's 1927 design for this teaching hospital and university complex represents a synthesis of the traditions of French Classical and North-American architecture. She has observed that the 1927 plan of the Université de Montréal (fig. 1), with its progression of *cour d'honneur*, *vestibule d'honneur*, pavilions and wings, reveals Cormier's debt to European seventeenth- and eighteenth-century architecture.² Through its site at the summit of Mount Royal, its symmetrical plan and hierarchical massing, the Université de Montréal alludes to the symbolism of the villa, château, monastery and hospital.

As Phyllis Lambert has noted, Ernest Cormier had a profound admiration for European culture. He had studied and worked as an architect in Europe from 1908 to 1918 and travelled there from Montréal almost every summer until the outbreak of World War II.³ As a student in Montréal, he had read the works of French eighteenth-century writers such as Beaumarchais, Joseph de Maistre and Philippe Néricault-Destouches. He owned an edition of Diderot and D'Alembert's *Encyclopédie*.⁴ Although Cormier rejected nineteenth-century historicism, his architecture has links with the European tradition because of his espousal of Julien Guadet's (1834-1908) doctrine of Structural Rationalism which formed the basis of the pedagogical program at the École des Beaux-Arts in Paris while he was a student there from 1909 to 1913. Cormier always remained faithful to the Beaux-Arts methods of design that he had learned first through the correspondence course of the École du Bâtiment in Paris which he took in Montréal from 1907 to 1908.⁵

The importance of architecture of the past to Ernest Cormier is evident in the organization and content of several syllabuses he prepared for a course on the history and theory of architecture which he gave from 1925 to 1954 at the École Polytechnique in Montréal. His course began with the Egyptians and ended with a discussion of contemporary architects he admired like Auguste

fig. 2 Ernest Cormier, delineator,
The Application of the Orders,
 1907-1908, pen, black ink and
 graphite, on beige tracing paper,
 28.7 × 22.2 cm, Montréal,
 Collection Centre Canadien
 d'Architecture / Canadian
 Centre for Architecture,
 AR01:ADC-19/3.



University of Pittsburgh of 1924 and to the contemporary Shelton Hotel in New York City.⁸ Cormier believed that an architect could develop a modern syntax for architecture while remaining faithful to tradition. He stated: "Avec le XX^e siècle, une période nouvelle s'est ouverte en Europe où les architectes, s'inspirant des principes qui sont à la base des styles passés sans en copier les formes, sont revenus à des conceptions logiques, en parfait accord avec le caractère des matériaux employés et les méthodes de leur mise-en-œuvre."⁹

Isabelle Gournay has suggested that Cormier's practice of first working out his ideas in preliminary sketches showing the components of the plan was derived from three sources: his reading of Guadet's *Éléments et théorie de l'architecture*, first published in 1902-1904; his correspondence with Jean-Paul Guichard, the director of the École du Bâtiment; and his training at the École des Beaux-Arts in the atelier of Jean-Louis Pascal (1837-1920), the author of the preface to the third 1909 edition of Guadet's book.¹⁰ Cormier instructed his students at the École Polytechnique: "Toute la structure s'élève de la base

suivant une règle qui est écrite sur le sol dans le plan... . Le plan est à la base de toute l'architecture... . Le plan est le générateur.”¹¹ The chapters in Cormier's course syllabus on French Romanesque and Classical architecture reveal the influence of Guadet's theory of Structural Rationalism. Like Guadet, Cormier admired French Romanesque, seventeenth- and eighteenth-century buildings because the spatial divisions on the interior and the structure were clearly expressed on the exterior. Cormier said in his syllabus: “L'architecture romane a le grand mérite de la sincérité; les façades sont l'expression franche des plans et il y a toujours concordance absolue entre la structure et la forme.”¹² Of French Classical architecture, he said: “L'architecture favorisée par les rois prend un caractère grave, noble, majestueux; on a le goût de la clarté, de la régularité, et de la symétrie.”¹³ In his course he often showed photographs of the church of Saint-Sernin in Toulouse and the church of the Invalides by Jules Hardouin Mansart.¹⁴

A drawing (fig. 2) Cormier executed in Montréal sometime between 1907 and 1908 for the correspondence course of the École du Bâtiment in Paris demonstrates that at this early date he already had a knowledge of French eighteenth-century architecture and theory, particularly of the writings of Jacques-François Blondel (1705-1774) whose pedagogical methods formed the basis of architectural education at the École des Beaux-Arts.¹⁵ Julien Guadet and Jean-Louis Pascal had published in 1904-05 an edition of Blondel's *Architecture française*, first printed in Paris between 1752 and 1756. In fact, Guadet had reproduced in *Éléments et théorie de l'architecture* several illustrations from Blondel's book and had incorporated many of Blondel's ideas as well.¹⁶ At the bottom of this drawing, Cormier copied the court façade of Pierre Rousseau's (1751-1810) Hôtel de Salm, built in the 1780's, from Volume I of Guadet's book; in the middle, the court façade of Jacques Gondouin's (1737-1818) École de Chirurgie of 1771-1777, from Jean-Nicolas-Louis Durand's (1730-1834) *Recueil et parallèle des édifices de tout genre, anciens et modernes*, first published in 1801; and at the top, the main façade of Jean Sylvain Cartaud's (1675-1758) Château for Antoine Crozat at Montmorency, of 1706-1709, from the plates of Volume 3 of Jacques-François Blondel's *Cours d'architecture*, published separately in 1773.¹⁷ The two inventories of what remained in Cormier's library between 1980 and 1981 indicate that Cormier owned the first 1902-1904 edition of Julien Guadet's *Éléments et théorie de l'architecture*, André Félibien's (1619-1695) *Des principes de l'architecture*, printed in 1699, the 1773 edition of Blondel's *Planches pour le troisième volume du Cours d'architecture*, an edition of Blondel's *Cours d'architecture* published by Armand Guérinet in Paris sometime before 1913, as well as the original edition, printed between 1771 and 1776.¹⁸ Since Cormier owned Guérinet's 1905 edition of the supplement to Jean-François de Neufforge's 1757 *Recueil élémentaire*

d'architecture, now in the Canadian Centre for Architecture's (CCA) library, it is quite possible that he had also acquired at least Guérinet's edition of Blondel's *Cours* before he went to Paris in 1908.¹⁹

Two basic steps in the design process suggested by Jacques-François Blondel in his *Cours d'architecture* were adopted by Cormier in his own work. The first was the study, after the program was established, of both historical and contemporary precedents through a firsthand examination of actual buildings as well as research in albums of engravings and books. Blondel stated: "À cette expérience, il en faut joindre une autre non moins essentielle... c'est celle qui nous apprend à juger par l'examen des édifices anciens et modernes, de la route que les grands maîtres ont suivie dans l'ordonnance de leurs édifices."²⁰ The second step was the use of sketches to investigate alternate plans and elevations before the execution of detailed drawings. Blondel had established the distinction between the *esquisse* and the *rendu*, two types of architectural drawings which were required in the competitions held at the École des Beaux-Arts in the eighteenth and nineteenth centuries. Blondel explained: "Après avoir conçu l'idée entière de son édifice, il doit passer à l'esquisse des plans, des élévations, et des coupes, et y placer même les principaux ornements... Il doit déterminer les enfilades essentielles dans l'intention que les dehors et les dedans aient une parfaite correspondance entre eux."²¹

Cormier applied the methods proposed by Blondel and Guadet to the project he carried out while at the British School in Rome from September 1914 to January 1917. Under the direction of Thomas Ashby, an archaeologist and one of the first twentieth-century scholars to systematically study Renaissance architectural drawings after the antique, Cormier worked on a project to reconstruct and restore the Villa Madama. This villa, built on the slope of Monte Mario overlooking the city of Rome, was designed by Raphael between 1516 and 1518, but only partially constructed between 1518 and 1525.²²

Cormier carried out painstaking historical research in Rome in order to understand Raphael's original design. In a July 1, 1916 memorandum written to the faculty of the British School in Rome, Cormier outlined in English the work he would follow during the last semester of his fellowship: "A scheme for the restoration and completion of [the] Villa Madama from the drawings of Sangallo and Raphael in the Uffizi at Florence. Thanks to Mr. Bergès now proprietor of [the] Villa Madama I have been given all facilities, use of scaffolding for the measurement of the existing construction and the execution on the site of a copy of the decoration of the vaults of the loggia."²³ At the villa, Cormier made a sketch of the terrain on which it was located as well as measured drawings of its ground plan and of decorative details.²⁴ Cormier had also studied Roman buildings which had influenced Raphael. In the same memorandum, he listed drawings he had executed during the previous year:

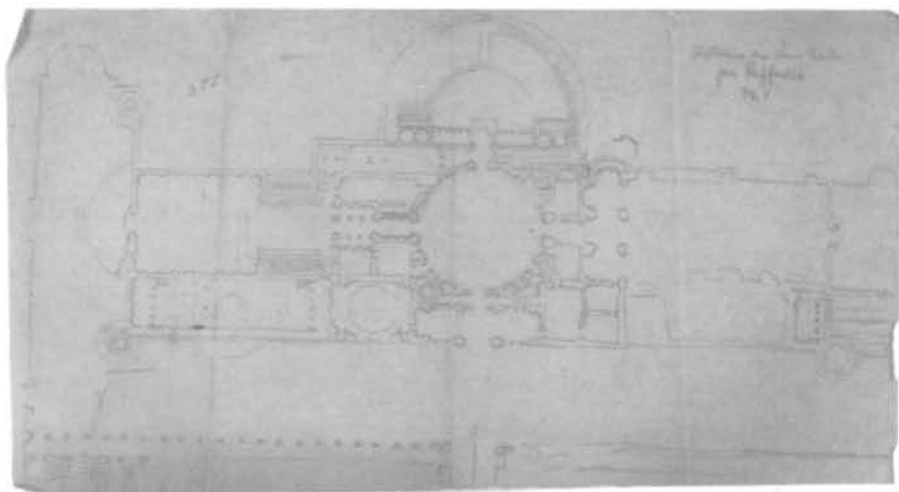


fig. 3 Ernest Cormier, delineator, Antonio da Sangallo the Younger and Raphael, designers, **Ground Plan of the Villa Madama**, 1916, graphite on tracing paper, 20 × 36.9 cm, Montréal, Collection Centre Canadien d'Architecture / Canadian Centre for Architecture, AR01:ADC-19/1.

"From the antique, study of the order of the Temple of Castor and Pollux; entablature capital and base and full size details; survey and sketch restoration of the so-called Temple of Minerva Medica."²⁵ A measured drawing of a capital and base from the Temple of Castor and Pollux is found in the Cormier Archive along with notes that he took from several articles written by Rodolfo Lanciani between 1874 and 1883 on the reconstruction of the nymphaeum of the Villa of the Roman Emperor P. Licinius Gallienus, known during the Renaissance as the Temple of Minerva Medica.²⁶ Several lists of books Cormier read at this time indicate that he did extensive research into the history of the Renaissance villa and palace. Amongst the works listed are Paul Marie Letarouilly's *Édifices de Rome moderne*, published in Paris between 1840 and 1865; Heinrich von Geymüller's *Die Architektur der Renaissance in Toscana*, printed in Berlin between 1885 and 1908; and a series edited by Albrecht Haupt entitled *Palast Architektur in Oberitalien und in Toskana*, printed in Berlin between 1886 and 1911. Cormier's copies of this latter series are in the CCA's library.²⁷ At the same time, Cormier made lists of Renaissance villas and palaces which he must have visited. Included are the Villa d'Este at Tivoli, the Villa Aldobrandini at Frascati, the Palazzo del Te in Mantua and the Palazzo Pandolfini by Raphael in Florence.²⁸ The CCA owns several drawings he copied from those by Antonio da Sangallo, the Younger, (1484-1546) for the Villa Madama that are in the Uffizi. One copy is a drawing of the plan of the villa itself (fig. 3), after Uffizi A 314, and another is a plan of the gardens of the villa, after Uffizi A 916 verso.²⁹ Most

of these drawings were copied from photographs in books. One small piece of plastic used to trace a drawing by Giovanni da Udine in the Uffizi (A 7129) for the grotesque decoration of the loggia of the Villa Madama has survived in the Cormier Archive along with Cormier's copy. Cormier traced the drawing by Giovanni da Udine from a book on Raphael by Theobald Hoffmann.³⁰

Cormier applied the methods proposed by Blondel and Guadet in the design process for the Université de Montréal. In an article Cormier wrote for the January 1947 issue of *Architecture, Bâtiment, Construction*, he explained: "L'établissement du projet, commencé en 1924, a été précédé d'une étude des entreprises similaires en existence à cette époque, non seulement pour établir une documentation précieuse, mais aussi pour se rendre compte des tendances et essayer de prévoir les améliorations que l'avenir pourrait apporter."³¹

Phyllis Lambert and Isabelle Gournay have already suggested that a clue to the buildings that Cormier investigated in his research for the Université de Montréal can also be found in a watercolour of a stained glass window, *Vitrail pour un architecte* (fig. 4).³² This point of view can be supported by several letters recently discovered by Robert Little. First of all, these letters reveal that this proposed stained glass window was to be a gift to Cormier and was actually designed in 1927 by Charles Mauméjean, a member of the Parisian firm of Mauméjean Frères and a former colleague of his in the atelier of Jean-Louis Pascal at the École des Beaux-Arts in Paris. The fact that Cormier signed the watercolour in the lower right-hand corner "Cormier delineator" indicates that he did not assume credit for the initial design. The first reference to *Vitrail pour un architecte* occurs in a letter of August 5, 1927 in which Cormier accepts the offer of the gift from Charles Mauméjean. Cormier intended to place the stained glass window in the waiting room of his office on Mansfield Street. At the time, the firm of Mauméjean Frères was producing stained glass windows for Cormier's churches of St. John the Baptist and Notre-Dame-du-Sacré-Cœur in Rhode Island.³³ In a letter of October 20, 1927 that accompanied a still unfound, initial schematic design, Charles Mauméjean explained the iconography of the proposed stained glass window to Cormier: "Nous avons voulu traiter le sujet [l'architecture] dans un caractère nettement moderne, en illustrant le sujet d'ornements géométriques auxquels s'apparentent des visions architectoniques de monuments connus de ce pays de France dans lequel nous avons eu la joie de vous connaître à l'époque de nos études à l'Atelier Pascal." Mauméjean stated in this letter that the figure of architecture was holding the tower of Auguste Perret's concrete church of Notre-Dame-de-Raincy which had been completed in 1923.³⁴ Charles Mauméjean was initially inspired by two stained glass windows shown at the *Exposition des Arts Décoratifs et Industriels Modernes* in Paris in 1925: *L'Évolution de l'architecture* designed by Paul Tournon and executed by the firm of Borderel and Robert for the *Pavillon des*

architectes diplômés, and *Les monuments de la France*, designed by J. Le Chevallier and T. Hanssen and made by L. Barillet for the *Pavillon du tourisme*.³⁵

Cormier evidently retained Mauméjean's general conception in his watercolour but made a few changes. The articulation of the background of the figure of architecture is similar to that of the figure of Luxury in a stained glass window by Mauméjean Frères that was illustrated in the June 1926 issue of *Art et*

Décoration.³⁶ However, the figure of architecture herself is closer to a figure of Paris depicted in a painting by Robert Delaunay (1885-1941) which adorned the *Appartements de réception d'une ambassade française* at the 1925 *Exposition des Arts Décoratifs et Industriels Modernes* which Cormier had visited.³⁷ In the letter of October 20, 1927, Charles Mauméjean asked Cormier to indicate which of his own and other buildings he might like to add to those already included in the initial conception. Cormier changed most of the monuments since only the churches of Notre-Dame and Saint-Etienne-du-Mont and the Eiffel Tower in Paris survived in the final design represented in his watercolour.³⁸

Phyllis Lambert has suggested that the buildings included in this window represent a homage to Julien Guadet as well as to Auguste Perret — Guadet had been Perret's teacher at the *École des Beaux-Arts*.³⁹ The fact that Cormier added to Mauméjean's original design two Romanesque churches in the upper left-hand section (fig. 5) that were copied directly from illustrations in Volume 3 of Guadet's book, *Éléments et théorie de l'architecture*, supports her point of view. These are the church of Notre-Dame at Ibos in the Hauts-Pyrénées at the very top and the church of Notre-Dame-d'Orcival, in Auvergne, at the very bottom of this section.⁴⁰ Cormier may have met Perret



fig. 4 Ernest Cormier, delineator, Charles Mauméjean, designer, *Proposed Stained Glass Window for Cormier's Office on Mansfield Street, 1927*, pen, black ink and watercolour on paper, 99.5 × 55.4 cm, Montréal, Collection Centre Canadien d'Architecture / Canadian Centre for Architecture, AR01:1503/N.



fig. 5 Ernest Cormier, delineator, Charles Mauméjean, designer, Detail of a Proposed Stained Glass Window for Cormier's Office on Mansfield Street, 1927, pen, black ink, and watercolour on paper, 99.5 × 55.4 cm, Montréal, Collection Centre Canadien d'Architecture / Canadian Centre for Architecture, AR01:1503/N.

when he worked in Paris from 1917 to 1918 for the firm of Considère, Pelnard, and Caquot which, like that of Perret, specialized in reinforced concrete construction. Cormier also acquired the first monograph on Perret soon after its publication by Paul Jamot in 1927.⁴¹ By 1927, the year this stained glass window was designed, Perret's influence over the magazine *L'Architecture Vivante*, founded by Jean Badovici in 1923, was superseded by that of Le Corbusier (1887-1965) and his followers. Perret had written the definition of the title in the preface to the first issue in 1923. After 1927, according to Peter Collins, Le Corbusier used *L'Architecture Vivante*, in addition to *L'Esprit Nouveau*, as a vehicle to replace Perret as the leader of the progressive movement in French architecture and to impose his own philosophy. Cormier subscribed to *L'Architecture Vivante*.⁴² Although he had also read Le Corbusier's 1923 manifesto *Vers une architecture* and had even adopted some of his ideas,⁴³ Cormier never went as far as Le Corbusier in the rejection of the past or in the adoption of the machine aesthetic. He always remained faithful to Guadet's theory of Structural Rationalism. Thus, the stained glass window *Vitrail pour un architecte* (fig. 4) can be considered as Cormier and Charles

Mauméjean's affirmation that in 1927 they were throwing in their lot with Perret rather than with Le Corbusier.

Many of the buildings represented in this stained glass window, such as the Shelton Hotel, the tower of the Cathedral of Learning of the University of Pittsburg and a utopian model of a business district drawn by Hugh Ferriss (1889-1962) which appear in the lower right corner adjacent to the Eiffel Tower (fig. 4), influenced Cormier's 1927 master plan for the Université de Montréal.⁴⁴ In addition, two portions of the window are of particular interest in analyzing the influences on the designs Cormier executed for the Université de Montréal before 1924. The first clue is presented in the lower right portion of the window (fig. 4). Directly to the right of the Eiffel Tower, Cormier represented the dome of the Mole Antonelliana in Turin, a masonry building designed as a synagogue by Alessandro Antonelli (1798-1888) in 1863, but used subsequently as a civic museum. In 1927, the Mole Antonelliana was the highest building in Europe south of the Alps.⁴⁵ Cormier had made several trips to Turin. According to official stamps in his passport, one occurred between March 24 and April 18, 1916 on his way back to the British School in Rome from Montréal.⁴⁶ In the projection of his expenses for this trip, written in Montréal in March 1916, Cormier listed the cities of Turin, Genoa, Florence and Pisa which he was going to visit before returning to Rome.⁴⁷

The second clue to the sources for Cormier's early designs for the Université de Montréal occurs in the upper central portion of the stained glass window (fig. 5). At the apex of the window, Cormier added the church of the Invalides that was built by Jules Hardouin Mansart (1646-1708), just below, the École Militaire by Ange-Jacques Gabriel (1698-1782), and slightly to the right, the Collège des Quatre Nations by Louis Le Vau (1612-1670) and François d'Orbay (1637-1697) which are all in Paris. Cormier knew these buildings well since they were located in the 6th and 7th arrondissements in proximity to the École des Beaux-Arts on the rue Bonaparte, the apartments Cormier and his wife inhabited from 1908 to 1918 at 57 rue de Lille and 219 rue de l'Université, and the atelier of Jean-Louis Pascal on the rue Mazarine.⁴⁸

The initial research Cormier carried out in order to find precedents for the design of the Université de Montréal is revealed in eleven small sheets with sketches on tracing paper, some in pen and ink and some in graphite, that have been identified by Isabelle Gournay. By starting with historical precedents, Cormier was following the precepts of Julien Guadet and Jacques-François Blondel. These sketches are very different in style and character from the preparatory and presentation drawings for the 1926 and 1927 master plans. Thus, I agree with Isabelle Gournay that they should be associated with the studies which Cormier had carried out between 1923 and 1924 before he was actually awarded the commission on April 11, 1924.⁴⁹ Cormier stated in 1947

that since the most difficult part of the program was the design of the Faculty of Medicine, "...l'étude a donc commencé par le groupe Faculté de Médecine-Hôpital."⁵⁰ This group had been part of the program since 1920 when a need for new buildings for the Université de Montréal had been acknowledged. The very general character of the program as indicated by the inscriptions on two of these sheets and the European influences found in these sketches indicate that they must have been executed by Cormier sometime before the trip to the United States from April 25 to May 8, 1924 which was organized by the Division of Medical Education of the Rockefeller Foundation. It was after this trip that Cormier and the university officials considered primarily North-American prototypes for the design of the Université de Montréal.⁵¹ In the summer of 1923 Cormier returned to France and Italy where he saw again the monuments he had known as a student.⁵²

These sketches correspond to the description and purpose of the *esquisse* by Blondel. Cormier stated in 1947: "Comme on doit procéder pour toute édifice utilitaire, l'étude du plan et des dispositions générales fut à la base du projet. Ainsi les façades sont la conséquence rigoureuse du plan et l'expression franche et loyale des nécessités du programme."⁵³ Two of the earliest sheets of drawings Cormier executed show several sketches of villa- or château-like buildings with domed spaces in the centre and forecourts surrounded by extended side wings. Cormier wrote at the top of the recto of the first of these two sheets: "Biblio[thèque] Musée Amphit[héâtre]" and on the top of the recto of the second: "hopital [sic] Médecine Sciences Arts Sciences Appliqués Droit."⁵⁴ These are references to the specialized spaces required and to the different faculties of the Université de Montréal. On the verso of the first sheet with the inscription on the recto "Biblio[thèque] Musée Amphit[héâtre]", Cormier sketched in the upper left-hand corner the ground plan of a palace or château with rectangular corner pavilions and two interior rectangular courtyards (fig. 6).⁵⁵ The future site of the Université de Montréal on the summit of Mount Royal obviously reminded Cormier of the sites of those villas, like the Villa Madama, that he had studied in Italy. Jacques Gondouin had used a similar château and palace plan as the prototype for a project for a Riding School for which he received the troisième prix at the École des Beaux-Arts in 1759.⁵⁶ The other sketches on this sheet show elements of what looks like a monastery with a church connected to wings or courtyards. In France, from the Middle Ages to the end of the eighteenth century, the sick were cared for by the religious orders, and the architecture of hospitals took on the form of monasteries and convents. These sketches reveal that Cormier was thinking of the Hôtel Royal des Invalides in Paris (fig. 7), a hospital for aged and ill soldiers. The main wings housing the soldiers were designed and built by Libéral Bruant (c. 1635-1697) for Louis XIV between 1671 and 1674; the two churches in the centre of the

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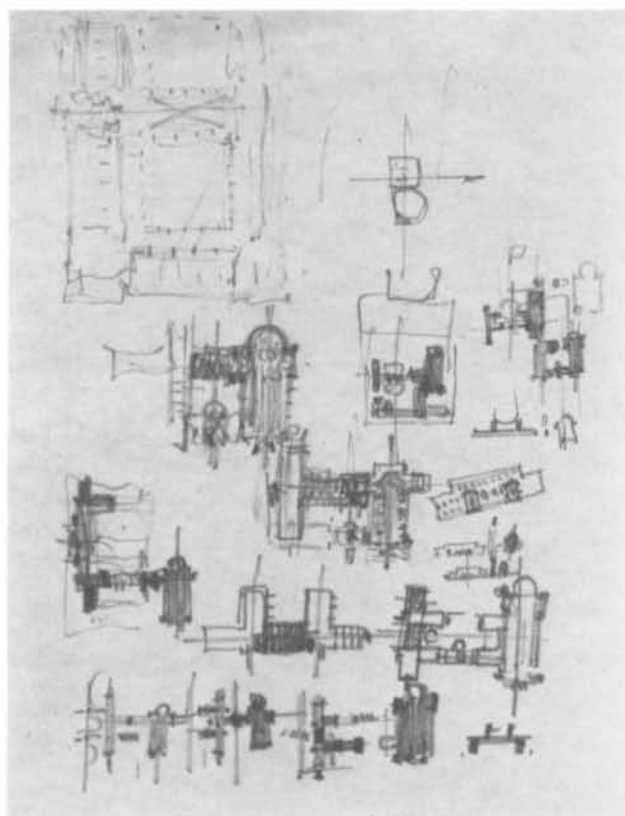
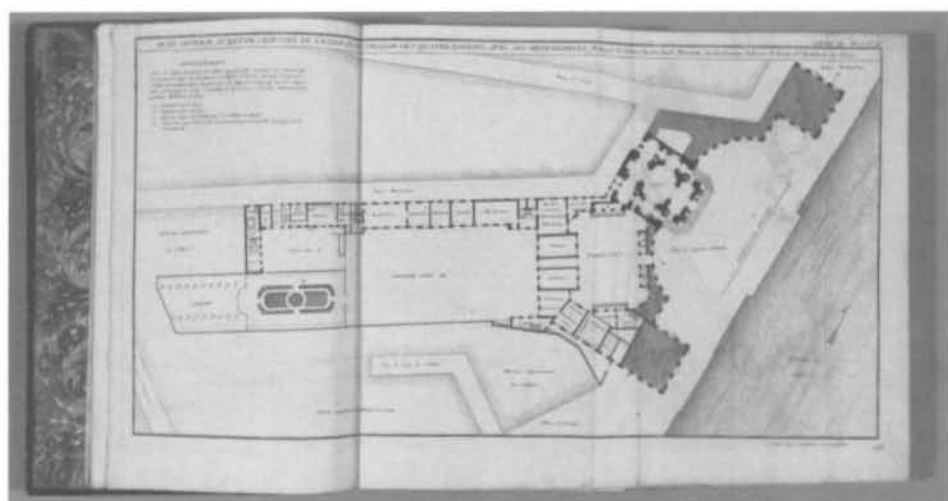


fig. 6 Ernest Cormier, *Preparatory Sketches for the Université de Montréal*, 1923-1924, graphite on tracing paper, 21.5 × 28.5 cm, Montréal, Collection Centre Canadien d'Architecture / Canadian Centre for Architecture, AR01:670/A-22, 01 Arc 039N verso.

fig. 7 Libéral Bruant and Jules Hardouin Mansart, architects, C.A. Jombert, engraver, *Bird's-Eye View of the Hôtel Royal des Invalides*, Paris, 1671-1691, engraving, 43.6 × 81.4 cm, from Jacques-François Blondel, *Architecture française*, vol. 1 (Paris, 1752), Book II, no. I, pl.I, Montréal, Collection Centre Canadien d'Architecture / Canadian Centre for Architecture, ID:WM443 Cage.



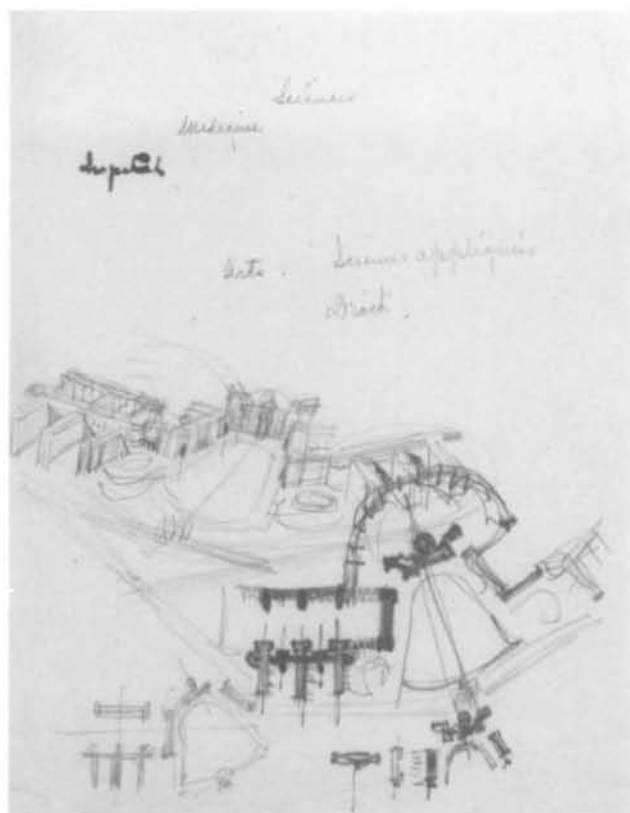


fig. 8 Ernest Cormier, Preparatory Sketches for the Université de Montréal, 1923-1924, graphite on tracing paper, with an inscription partly in ink, 28.5 × 21.5 cm, Montréal, Collection Centre Canadien d'Architecture / Canadian Centre for Architecture, AR01:670/A-22, 01 Arc 037N recto.

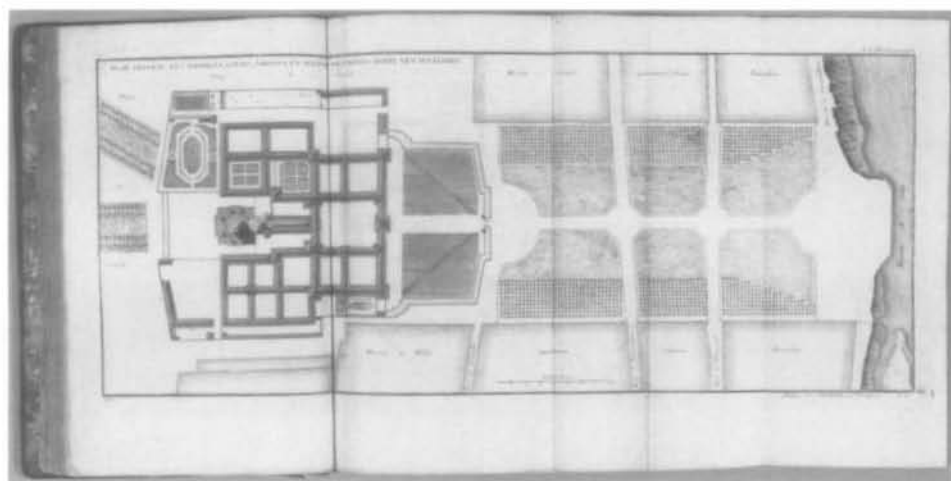


fig. 9 Louis Le Vau and François d'Orbay, architects, C.A. Jombert, engraver, Ground Plan of the Collège des Quatre Nations, Paris, 1662-1688, engraving, 43.7 × 77 cm, from Jacques-François Blondel, *Architecture française*, vol. 2 (Paris, 1752), Book III, no. 1, pl.1, Montréal, Collection Centre Canadien d'Architecture / Canadian Centre for Architecture, ID:WM443 Cage.

complex, one for the soldiers and one planned to be a mausoleum for the King, were designed and built by Jules Hardouin Mansart between 1676 and 1691. Both Julien Guadet and Jacques-François Blondel praised and illustrated the Hôtel Royal des Invalides.⁵⁷ The other building that Cormier also investigated at this time was the École Militaire, a school for young nobles. It had been designed and built from 1751 to 1775 by Ange-Jacques Gabriel under the patronage of Pâris de Montmartel (1690-1766) and the Marquise de Pompadour (1721-1764). The original project, which Cormier could have known through an engraving by Le Rouge published in 1754, was based on the Hôtel Royal des Invalides. It contained an infirmary, spaces for riding and exercise, as well as a church and classrooms for the teaching of law, rhetoric, history and politics. The École Militaire as built was greatly reduced in size. The final version was illustrated and discussed by Guadet in *Éléments et théorie de l'architecture*.⁵⁸ As we have seen, Cormier depicted in *Vitrail pour un architecte* the façade of the main wing which was erected facing the Champ de Mars.

The second sheet Cormier executed at this early stage with the inscription on the recto "hôpital [sic] Médecine Science Arts Sciences Appliqués Droit" is equally interesting (fig. 8). It contains two sketches: a bird's-eye view of one building in the centre and a ground plan of another at the bottom.⁵⁹ The lower ground plan can be considered an adaption of the Collège des Quatre Nations (fig. 9), designed by Louis Le Vau and constructed between 1662 and 1688, with the assistance of François d'Orbay, on the left bank of the Seine facing the Louvre. The Collège des Quatre Nations must have interested Cormier since it was founded, in accordance with the 1661 Will of Cardinal Mazarin, as a school for sixty young nobles from four of the provinces of France. The chapel of the school in the centre of the complex was designed to serve also as the mausoleum of Cardinal Mazarin.⁶⁰ The two courtyards depicted in the engraving by C.A. Jombert beyond the chapel at the left, along the rue Mazarine (fig. 9), contained lodgings for the students and professors, stables, kitchens, a refectory, a laundry and classrooms. The library and a room for studying drawing were located on the first floor of the two pavilions at the end of the semicircular wings which surround the forecourt to the right along the left bank of the Seine.⁶¹ Jacques-François Blondel had the highest praise for the Collège des Quatre Nations in Volume 3 of his *Cours*. He said: "Le Collège Mazarin à Paris... est un des mieux situés, & dont la disposition soit la mieux entendue quoiqu'il occupe moins d'espace que plusieurs autres élevés dans cette capitale."⁶²

Cormier understood that Le Vau had amalgamated several different building types into the plan of the Collège des Quatre Nations. The traditions of ecclesiastical and monastic architecture were combined with that of the villa. The main block (the chapel), crowned by a dome, with semicircular wings surrounding a forecourt, was influenced in part by Andrea Palladio's project for

the Villa Trissino at Meledo, illustrated in his *Four Books on Architecture*, and by Le Vau's own Château of Vaux-le-Vicomte.⁶³ Cormier himself alluded to this connection between the villa and scholastic institution in his drawing (fig. 8). Just above the plan derived from the Collège des Quatre Nations, he depicted a bird's-eye view of a building based on the Hunting Lodge of Vittorio Amedeo II, Duke of Savoy, at Stupinighi. This very large and extensive villa, containing apartments, a chapel, a central *salone*, a library, several picture galleries, stables and fencing rooms, was built between 1729 and 1770 just west of Turin. It was designed by the Piedmontese architect, Filippo Juvarra (1678-1736). Cormier could have seen the Hunting Lodge at Stupinighi on his trip to Turin in March, 1916. He may have also known a reproduction of one of Juvarra's preparatory drawings for the Hunting Lodge which is similar in character to his own (fig. 10).⁶⁴ In a subsequent phase in the design process, Cormier further developed, in two other sheets, the analogy between the university complex and château. In these villa-like buildings which are adaptations of those in the drawing discussed above (fig. 8), Cormier opened and closed the wings around forecourts which are laid out according to the principles of axial symmetry found in the gardens at Versailles.⁶⁵ The château and gardens of Versailles occupied a prominent place in Cormier's course on architecture at the École Polytechnique.⁶⁶

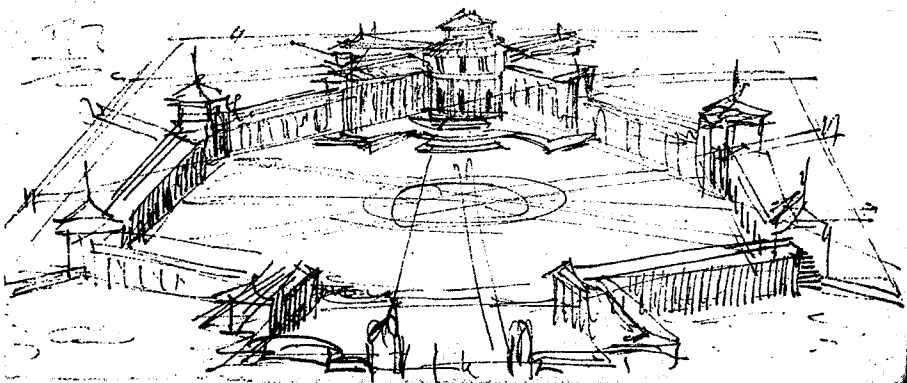


fig. 10 Filippo Juvarra, Bird's-Eye View of the Hunting Lodge of Vittorio Amedeo II at Stupinighi, 1729, pen and brown ink on paper, 9.4 × 22.9 cm, Turin, Museo Civico.

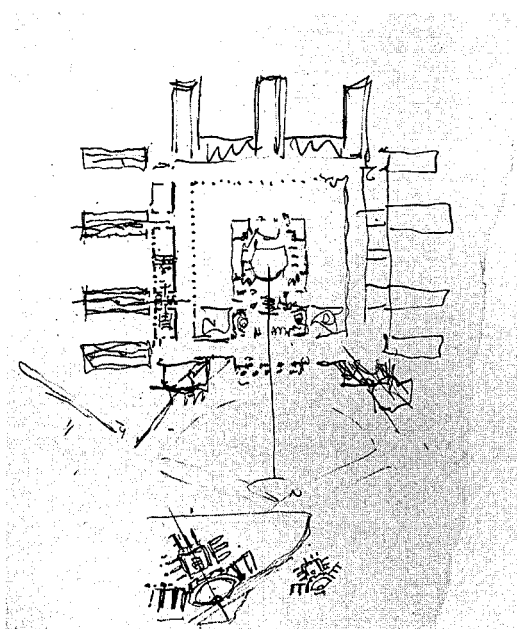


fig. 11 Ernest Cormier, Preparatory Sketches for the Université de Montréal, 1923-1924, pen and black ink on tracing paper, 28 × 21 cm, Montréal, Collection Centre Canadien d'Architecture / Canadian Centre for Architecture, AR01:670/A-22, 01 Arc 32N recto.

The last of the eleven sheets (fig. 11) reveals how Cormier attempted to combine the traditions of the villa, château, hospital and monastic building types into one building complex. On this sheet, in two sketches at the bottom, Cormier stretched out the building plan based on the Collège des Quatre Nations and added at the back several wings projecting from a rectangular, inner courtyard.⁶⁷ This scheme recalls an unexecuted project by Jules Hardouin Mansart to place semicircular wings derived from the forecourt of the Collège des Quatre Nations in front of the Hôtel Royal des Invalides. Cormier could have known of Hardouin Mansart's design through a drawing by Robert de Cotte (1656-1735), and through Pierre Bellocq's *l'Église Royale des Invalides*, published in

Paris in 1702.⁶⁸ In a variant of this project at the top of the sheet (fig. 11), Cormier placed a semicircular auditorium along one wing of a rectangular, inner courtyard on axis with the entrance to the building. Here he was inspired by the semicircular amphitheatre of an eighteenth-century building he had known since he took the correspondence course from the École du Bâtiment in 1907 and 1908 in Montréal; that is, Jacques Gondouin's École de Chirurgie, built between 1771 and 1777, adjacent to the Monastery of the Cordeliers. Cormier must have walked past this building many times since it is located just off boulevard Saint-Germain in the 6th arrondissement, not far from the École des Beaux-Arts. The plan of the École de Chirurgie was based on that of the typical French urban palace and château with a *cour d'honneur* and entrance wing on the street. The functions of its rooms were relevant for Cormier's research into historical precedents for the Université de Montréal. The École de Chirurgie contained, in addition to the aforementioned amphitheatre for anatomy courses, several other lecture halls, a chemistry laboratory, a small hospital ward, rooms for patients who were prisoners, a room to display collections of medical instruments and offices for the professors.⁶⁹ A design by Charles-Victor Famin for a medical school and teaching hospital which won the Grand Prix at the École des Beaux-Arts in 1835, also influenced Cormier's aforementioned plan for the Université de

Montréal (fig. 11). Famin, like Cormier, arranged rectangular wings around a rectangular courtyard and placed a semicircular auditorium in the wing at the entrance which was also derived from Gondouin's École de Chirurgie.⁷⁰

We can conclude that these sketches, carried out by Ernest Cormier between 1923 and 1924, had an influence on his later projects for the Université de Montréal. The villa-like buildings based on the Collège des Quatre Nations and the Hunting Lodge at Stupinighi (fig. 8) were an influence, as Isabelle Gournay has already shown, on the *Maison des Étudiants* (*Ensemble de l'Habitation*) and on the small hospital of the 1926 project.⁷¹ I also believe that Cormier's sketch (fig. 11), which was based on Gondouin's École de Chirurgie and on Famin's design for a medical school, influenced the *Ensemble des Études*, the main building in the centre of the 1926 project.⁷² In addition, not only the *Ensemble des Études* (fig. 1), but also the *Maison des Étudiants* and the *Maison des Gardes* of the 1927 project were influenced by Cormier's sketches which were derived from the Collège des Quatre Nations and the Hunting Lodge at Stupinighi (fig. 8).⁷³

The influence of Auguste Perret as well as that of Romanesque and eighteenth-century architecture is also apparent in the articulation of the exterior façades of the Université de Montréal (fig. 12). Ernest Cormier and Auguste Perret shared a common admiration for French seventeenth- and eighteenth-century architecture gained through their espousal of the Structural Rationalism of Julien Guadet. Perret articulated the exterior walls of his buildings in layers to make clear the underlying structure of the concrete columns and lintels.⁷⁴ He had used marble panelling in the form of French seventeenth- and eighteenth-century pilasters, architraves, mouldings and window frames to express the underlying concrete structure of the building in an early work which Cormier knew, the Théâtre des Champs-Élysées, completed in 1913.⁷⁵ Cormier also layered the concrete wall surfaces of the Université de Montréal and covered them with another material (brick) to emphasize the underlying structure of the building. The structural piers (fig. 12) were articulated to resemble the wall buttresses of the Romanesque churches like that of Bourg Saint-Andéol in Provence, which Cormier had photographed, and the applied flat, pilasters, architraves and straight window frames of the eighteenth-century villas such as the Hunting Lodge at Stupinighi which he so admired.⁷⁶ Cormier said of the façades of the Université de Montréal in 1947: "On a pris soin de donner aux tableaux des fenêtres toute la profondeur possible afin de rendre l'aspect des murs plus riche. D'une manière générale, les piliers de la structure sont nettement accusés en contraste avec les grandes horizontales des planchers et des toits."⁷⁷

An awareness of the strength of Cormier's attachment to the past is essential to understanding why he chose not to work in the style known after



fig. 12 Gabor Szilasi, photographer, Ernest Cormier, architect, *The West Wing and the Crowning of the Chapel of the Université de Montréal, 1930-1944*, chromographic colour print taken in 1989, 25.4 × 32.9 cm, Montréal, Collection Centre Canadien d'Architecture / Canadian Centre for Architecture, PHTR 1989:0021.

1932 as *The International Style*.⁷⁸ Cormier was the engineer as well as the architect of his buildings. He used the latest techniques of reinforced concrete construction. However, in contrast to Le Corbusier, and because of his *Beaux-Arts* training, Cormier felt obliged to clothe these concrete structures in traditional materials and to endow his buildings with allusions to the great monuments of the past. Cormier was an artist in addition to being an architect and engineer. His aesthetic sensibilities prevented him from accepting the machine aesthetic. In notes taken in February 1948 from an article on the works of the Swedish architects Sven Gottfried Markelius (1889-1972), Sture Frölen (1907-) and Ralph Erskine (1914-) that Cormier used for the preparation of his course syllabus at the *École Polytechnique*, he wrote in English: "Why they ask, make windows larger than necessary just to show that we can create a wall entirely of glass? Why flat roofs when they always start to leak in the spring? Why avoid traditional materials when they provide pleasant texture and colour at the same time? Why eschew fantasy and decoration for which in our hearts, we long? It is high time to call attention to the fact that men are after all not machine-made."⁷⁹ Cormier had met Sven Gottfried Markelius in 1947 when both were members of the International Committee to design the United Nations Building in New York.⁸⁰

While Cormier was designing the Université de Montréal, he was also overseeing the construction of the church of St. John the Baptist in Pawtucket, Rhode Island (fig. 13) as well as that of the 1928 Hydroplane Hangar at the airport at Pointe-Aux-Trembles (fig. 14). In an interview Cormier granted in 1947 to the magazine *Architecture, Bâtiment, Construction*, he stated that the church of St. John the Baptist was one of the public buildings that gave him the most satisfaction and the one where he was able to see his initial concept carried out to the last detail.⁸¹ This church, which was designed by Cormier in 1923, had been constructed between 1924 and 1928 at the then astronomical cost of \$450,000. The church of St. John the Baptist was built of reinforced concrete but was faced on the exterior with brick and limestone and decorated on the interior with paintings, sculptures, brass fittings and marble panelling.⁸² This church alludes to the European tradition more evidently than the Université de Montréal. The nave, with its coffered wood ceiling suspended from a hidden concrete vault, was inspired by the nave of Filippo Brunelleschi's (1377-1446) church of Santo Spirito in Florence (1454-1602).⁸³ The overall design of the façade of the church of St. John the Baptist (fig. 13), richly decorated with a limestone cornice above a triangular pediment and an applied arcade with limestone arches, columns and corinthian capitals, recalls the twelfth-century façade of the Abbey church of San Miniato al Monte, also in Florence.⁸⁴

In contrast to the Université de Montréal (fig. 12) and the church of St. John the Baptist (fig. 13), the Hydroplane Hangar (fig. 14) has no facing over its concrete frame and walls and no references to traditional building types.⁸⁵ One may ask, how could Cormier design three such different buildings between 1923 and 1928? I believe that the answer is due in part to Cormier's appreciation of French seventeenth- and eighteenth-century architecture, theory and aesthetics. Cormier held in great esteem three traditional concepts that were codified by Jacques-François Blondel, those of "convenance" (harmony), "bienséance" (propriety or fitness) and "commodité" (utility).⁸⁶ A building had to have a stylistic unity and appearance in accord with its plan, function and the desires and status of the patron. Furthermore, it had to express, through its form, a message about its role in contemporary society as well as its relationship to the past. Cormier did not wish to abandon the iconography or the hierarchy of traditional building types, except in a case like the Hydroplane Hangar (fig. 14) for which there were no historical precedents.

Now that The International Style has been succeeded by Post-Modernism, Cormier's buildings have great relevance since they can provide architects with a way of re-establishing contact with the traditions of the past while remaining faithful to modern methods of construction.

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fig. 13 Ernest Cormier, architect, Façade and Bell Tower of the Church of St. John the Baptist, Pawtucket, Rhode Island, 1923-1928, (Photo: Montréal, CCA, from St. John the Baptist, Church Directory, Pawtucket, Rhode Island, 1987)



fig. 14 Ernest Cormier, architect, Hydroplane Hangar, Airport, Pointe-aux-Trembles, 1928, 19.1 × 24.2 m, Montréal, Collection Centre Canadien d'Architecture / Canadian Centre for Architecture, AR01:P-1804. (Photo: anonymous photographer, 1930)

Notes

- 1 I would like to thank Isabelle Gournay and Phyllis Lambert for inviting me to present this talk and my husband, Robert Little, for his encouragement and suggestions. I am also indebted to Nicholas Olsberg, Chief Curator, Gilles Lessard, Assistant Registrar, and to Andrea Arthurs of the CCA's Research Department, to Robert Desaulniers, Robert Fortier, Claudette Daniel and Eric Vanasse of the CCA's Archives Department, to Rosemary Haddad, Pierre Boisvert, Renata Guttman and Suzie Quintal of the CCA's Library, as well as to Father William Gallagher and Mr. Robert Fortin of the church of St. John the Baptist in Pawtucket, Rhode Island for their assistance. Girard's text is cited by Isabelle GOURNAY, "The Work of Cormier at the Université de Montréal," *Ernest Cormier and the Université de Montréal*, ed. Isabelle Gournay (Montréal: Canadian Centre for Architecture, 1990), 76.
- 2 GOURNAY, *ibid.*, 69, 82 n. 28. The exploded axonometric drawing of level 4 executed by Alain Richer in 1989, p. 58 fig. 28, of *Ernest Cormier and the Université de Montréal*, was based on a photostat of a drawing by Cormier of 1927, 150 pl. 41, (AR01:00-EC-018). The documents in the Cormier Archive at the CCA will be referred to hereafter with numbers beginning with AR01.
- 3 Phyllis LAMBERT, "Architecture Where Cultures Meet," *Ernest Cormier and the Université de Montréal*, ed. I. Gournay, 18, 19, 23; see also Isabelle GOURNAY, "Ernest Cormier: Training and Early Works," *Ernest Cormier and the Université de Montréal*, ed. I. Gournay, 32-34. Cormier left for Paris on August 1, 1908 to enroll at the Atelier de préparation for the École des Beaux-Arts.
- 4 Several hand-written inventories were made of the remainder of Ernest Cormier's library after his death in 1980. Michel Lalonde made one inventory (hereafter referred to as A) of the books in the living room of Cormier's apartment at 1624 Pine Avenue; sometime later, possibly in 1981, another inventory (hereafter referred to as B) was made of the books remaining in Cormier's office on 1624 Pine Avenue. Not all of his books have come into the possession of the CCA. Inventory A includes several volumes published by the Bibliothèque Nationale in Paris between 1890 and 1900 which are now in the CCA's library: Philippe NÉRICAUULT-DESTOUCHES, *Le Philosophe marié* and *La Fausse Agnès*, 1893 (ID:90-B2656); Joseph DE MAISTRE, *Les soirées de Saint Pétersbourg*, 1900 (ID:90-2649); Pierre-Augustin CARON DE BEAUMARCHAIS, *Le Mariage de Figaro*, 1899 (ID:90-2644). In addition, vols. 45, 46 and 47 (plates) of DIDEROT and D'ALEMBERT's *Encyclopédie méthodique* (Paris: chez Panckocke, Liège, chez Plomteaux, 1782-1832) are in the CCA Library (PO 10846, PO 10598).
- 5 See GOURNAY, "Training and Early Works," 32-34. A copy of the first edition of Julien GUADET's *Éléments et théorie de l'architecture: cours professés à l'École nationale et spéciale des beaux-arts par J. Guadet*, 4 vols. (Paris: Librairie de la construction moderne, 1902-1904) now in the CCA's library (ID:86-B12603) was listed in Inventory B. Cormier was admitted to the École des Beaux-Arts in July 1909.
- 6 GOURNAY, "Training and Early Works," 34, 40 n.15. The type-written syllabus from which I have taken these quotations is in a notebook with Cormier's handwritten notes which are dated between 1947 and 1950. Gournay dated this syllabus, entitled *Cours d'architecture à l'usage des ingénieurs*, sometime after 1925. See AR01:ARV-2/A-2, typescript, folio 4.
- 7 Willie CHEVALIER, "Entretien avec Ernest Cormier," *Vie des Arts* 20, no. 81 (Winter 1975-1976): 18.
- 8 Notebook of contact sheets made from negatives of photographs taken by Cormier in Europe in the 1920's and later on from books that were used for his course. AR01: Nit 122b, 122c.
- 9 CORMIER, *Cours*, AR01:ARV-1/A-2, typescript, folio 12.
- 10 GOURNAY, "Training and Early Works," 32-33, 39 n.7, 40 nn.14, 15. See GUADET, *Éléments et théorie*, 3rd ed. (Paris: Librairie de la construction moderne, 1909), 1:50-54: "Des Croquis," 100-103: la disposition, les proportions, la construction, le programme.

- 11 CORMIER, *Cours*, AR01:ARV-2/A-2, typescript, folio 87.
- 12 CORMIER, *Cours*, AR01:ARV-2/A-2, typescript, folio 48. For the development of the doctrine of Structural Rationalism in the nineteenth and twentieth centuries see Peter COLLINS, "Rationalism," *Changing Ideals in Modern Architecture, 1750-1950* (Montréal: 1957), 148-217.
- 13 CORMIER, *Cours*, AR01:ARV-2/A-2, typescript, folio 66.
- 14 CORMIER, *Cours*, AR01:ARV-2/A-2, typescript, folios 49 and 66, lists of slides shown for Romanesque architecture and for the period of Louis XIV. For the actual photographs Cormier showed in his course, see AR01: Nit 23d, for the church of Saint-Sernin, and 93c for the Invalides.
- 15 AR01:ADC-19, carton 704, chemise 3. For the influence of Blondel on the methods of instruction used at the École des Beaux-Arts in the nineteenth century see, Richard CHAFEE, "The Teaching of Architecture at the École des Beaux-Arts," *The Architecture of the École des Beaux-Arts*, ed. Arthur Drexler (London and New York: Museum of Modern Art, 1977), 61-63; Peter COLLINS, "The Eighteenth Century Origins of Architectural Schooling," *Selected Writings, The Fifth Column* 4, nos. 3-4 (Summer 1984): 35-39; and Richard CLEARY, "Romancing the Tome; or an Academician's Pursuit of a Popular Audience in 18th-Century France," *Journal of the Society of Architectural Historians*, 48, no. 2 (1989): 139-149.
- 16 GOURNAY, "Training and Early Works," 40 n.14. A copy of Guadet's and Pascal's 1904-1905 edition of Blondel's *Architecture française*, published in Paris by the Librairie Centrale des Beaux-Arts, is found in the Library of Congress in Washington D.C. (NA 1041.B6). See for instance Guadet's bird's-eye view of the Invalides, *Éléments et théorie*, 3rd ed., vol. 1, 121 fig. 33, which is copied from Jacques-François BLONDEL's *Architecture française*, vol. 1 (Paris: C.A. Jombert, 1752), Book II, no. I. pl.1.
- 17 GUADET, *Éléments et théorie*, 3rd ed., vol. 1, 158 fig. 58; Jean-Nicolas-Louis DURAND, *Recueil et parallèle des édifices de tout genre, anciens et modernes* (Paris: chez l'Auteur, 1801), pl.18; Jacques-François BLONDEL, *Planches pour le troisième volume du Cours d'architecture qui contient les leçons données en 1750 et les années suivantes* (Paris: chez la Veuve Dessaint, 1773), vol. 3, pl. XV. For the dating of the first and third buildings, see Wend Graf KALNEIN and Michael LEVY, *Art and Architecture of the Eighteenth Century in France* (Harmondsworth: Penguin Books, 1972), 342, 228, and for the second, see Allan BRAHAM, *The Architecture of the French Enlightenment* (Berkeley: University of California Press, 1990), 138-143.
- 18 See CCA Library, Inventory B, for all of these books which were published in Paris. Only Cormier's copy of the first edition of Guadet's treatise has come into the collection of the CCA's library. The Library of Congress's Union Catalogue lists two editions of Blondel's *Cours d'architecture* which were published by Guérinet in Paris, one undated (NB 0557 366) and one published in 1913 (NB 0557 368). No date was given for the edition by Guérinet of Blondel's *Cours d'architecture* in Inventory B of Cormier's library.
- 19 Inventory B: Jean-François NEUFFORGE, *Recueil élémentaire d'architecture*, 4 vols. (Paris: A. Guérinet, 1905) now in the CCA's library (ID:90-B4849).
- 20 Jacques-François BLONDEL, *Cours d'architecture ou traité de la décoration, distribution, et construction des bâtiments*, vol. 3 (Paris: chez la Veuve Dessaint, 1772), xxi. On pages xxiii to xxiv, Blondel recommends that the architect first study illustrations of buildings in books and then visit the actual buildings.
- 21 BLONDEL, *Cours d'architecture*, vol. 4 (Paris: chez la Veuve Dessaint, 1773), 111. On page 112, Blondel describes how to execute finished drawings of the exterior. For the difference between the *esquisse* and the *rendu* at the École des Beaux-Arts in Paris, and the importance of the study of the *parti*, or organization of interior space, (*distribution and disposition*), see David VAN ZANTEN, "Architectural Composition at the École des Beaux-Arts from Charles Percier to Charles Garnier," in *The Architecture of the École des Beaux-Arts*, 111-325, and particularly pages 112 to 118, for the influence of Blondel, and pages 130, 236 to 234, for the contributions of Guadet and Pascal.

22 GOURNAY, "Training and Early Works," 33, 40 n.20. Cormier won the Henry Jarvis Studentship, a scholarship for two years study, in January 1914. Thomas Ashby was the director of the British School in Rome during Cormier's stay there and the author of several books on Roman architecture, including *Sixteenth-Century Drawings of Roman Buildings Attributed to Andreas Coner*, Papers of the British School in Rome, vol. 2 (London, 1904), vol. 7 (London, 1913). Cormier interrupted his studies for several months at the beginning of 1916 to return to Montréal because of the death of his father on August 18, 1915. He was back in Rome by April 18, 1916 (AR01: ADC-3A/3xH/1/2 and AR01: ADC-3B/2/2). See his passport (AR01:ARV-4/D-1) issued in Ottawa on February 11, 1916. For the Villa Madama, see Christoph FROMMEL, Stefano RAY, Manfredo TAFURI, *Raffaello Architetto* (Milan: Electa, 1984), 311-343.

23 AR01: ADC-3A/3xH/1/2, chemise 3, folio 2 of the memorandum.

24 AR01: ADC-19, carton 704, chemise 1. There is one measured drawing of the whole ground plan, two measured details of parts of the ground plan, and a measured profile of a capital and entablature from one of the staircases. Cormier made many other finished drawings of the Villa Madama. See GOURNAY, ed., *Ernest Cormier and the Université de Montréal*, 20 fig. 1, (AR01:254xx/N,2) for a drawing in gouache of one of the vaults of the loggia.

25 AR01:ADC-3A/3xH/1/2, chemise 3, folio 2 of the memorandum.

26 The study of the order of the Temple of Castor and Pollux is found in a notebook in AR01: ADC-3A/3xH/1/2, chemise 4; the notes on Lanciani's articles are found in AR01: ADC-19, carton 704, chemise 1.

27 AR01: ADC-19, carton 704, chemise 1, sheets of notes. For the book by Haupt, see Inventory B, and CCA library (ID:86:-B20183).

28 AR01: ADC-19, carton 704, chemise 1, sheets of notes.

29 AR01: ADC-19, carton 704, chemise 1. See FROMMEL, RAY and TAFURI, *Raffaello Architetto*, Uffizi A314, no. 2.16.11., 337, ill. 320; and Uffizi A916, ill. only, 318.

30 Cormier's drawing is in AR01: ADC-19, carton 704, chemise 1, and the piece of plastic is in chemise 2. The source is indicated by an inscription in Cormier's hand on the drawing. See Theobald HOFMANN, *Raffael in Seiner Bedeutung als Architect*, 4 vols. (Zittau: R. Menzel, 1900-1911). Cormier's copy did not come into the CCA's library.

31 Ernest CORMIER, "Les plans de l'Université de Montréal," *Architecture, Bâtiment, Construction*, 12, no.18 (January 1947): 30.

32 GOURNAY, "The Work of Cormier," 70, 82 n. 31; Phyllis Lambert, with the assistance of Barry Bergdoll, preparatory text dated 19/02/90 for a didactic panel for the exhibition *Ernest Cormier and the Université de Montréal*. The watercolour was exhibited at the Montreal Museum of Fine Arts from November 20 to February 28, 1927 at the annual exhibition of the Royal Canadian Academy of Arts of which Cormier was a member. See Evelyn de R. McMANN, *Royal Canadian Academy of Arts, Académie Royale des Arts du Canada, Exhibitions and Members, 1880-1979* (Toronto, 1981), 82; and *Registre des expositions* (April 1925-November 1934), Archives, Musée des Beaux-Arts de Montréal, vol. 8, no. 235, 182. I would like to thank Nicole Cloutier for the above information.

33 AR01: 905 A/76, 3005, 1: "J'accepte avec plaisir l'offre que vous me faites d'un petit vitrail pour mon bureau. Je vous donne plus bas un croquis montrant la dimension de la fenêtre où j'ai l'intention de le mettre. Le thème à adopter pourrait être 'L'ARCHITECTURE,' traité à la façon moderne."

34 AR01: 905-A/76, 3005, 1-2: "Entre les mains du personnage symbolisant l'Architecture, nous avons placé la tour que les Frères Perret ont construite à Raincy." For the tower of the church of Notre-Dame-de-Raincy, see Bernard CHAMPIGNEULLE, *Perret* (Paris: Arts et Métiers

Graphiques, 1959), pl. 21. The tower of the church of Sainte-Thérèse-de-Montagny, completed in 1926, appears in the upper left portion of the window. See CHAMPIGNEULLE, *Perret*, pl. 23.

35 Guillaume JANEAU, "Le Fer à l'Exposition des Arts Décoratifs et Industries Modernes," *Études d'art décoratif contemporain* 2 (Paris, 1925): pl. 5, and Gaston VARENNE, "Quelques aspects nouveaux de l'art du vitrail," *Art et Décoration* 50 (June 1926): 173 ill. I would like to thank Robert Little for pointing out these sources to me as well for those in notes 36 and 37.

36 VARENNE, "L'art du vitrail," 178 ill., Cormier subscribed to this periodical, see CCA Library, Inventory B.

37 Yvonne BRUNHAMER, Suzanne TISE, *Les artistes décorateurs, 1900-1942* (Paris: Flammarion, 1990), 111 ill.

38 AR01: 905-A/76, 3005, 1: "C'est ainsi que nous pourrions remplacer certaines parties de la composition qui ne traduisent pas des monuments aussi connus que Montmartre (sommet de la composition); Notre-Dame et Saint Étienne-du-Mont (droite du sommet de la composition) Versailles, Tour Eiffel, et Chambord (base de la composition)." The churches of Notre-Dame and of Saint-Étienne-du-Mont appear in the upper right corner.

39 See note 32. For Perret's training, see Peter COLLINS, "The Doctrine of Auguste Perret," *Architectural Review* 114 (August 1953): 91-92.

40 GUADET, *Éléments et théorie*, 3rd ed., vol. 3, 486 fig. 1223, and 263 fig. 1037. For the latter church, see also Bernard CRAPLET, *Auvergne Romane*, 3rd ed. (Paris: Éditions du Zodiaque, 1962), 70 fig. 19. In between the two churches derived from Guadet's book are the Cathedral of Saint-Front at Périgueux and the kitchen at Fontevault Abbey. See Kenneth CONANT, *Carolingian and Romanesque Architecture*, 1st paperback ed. (Harmondsworth: Penguin, 1974), 290 fig. 225, and 289 fig. 224.

41 GOURNAY, "Training and Early Works," 33-34, 40 nn. 22, 23. See Inventory B: Paul JAMOT, A.-G. *Perret et l'architecture du béton armé*, (Paris: Van Oest, 1927). Cormier also owned an album of illustrations of the works of Perret published by the Librairie de France in 1928: A.-G. *Perret: 24 Phototypes*, preface by Marcel Mayer. Neither of these books has come into the library of the CCA.

42 Peter COLLINS, "The Classicism of Auguste Perret," *Selected Writings, The Fifth Column*, 4, nos. 3-4 (Summer 1984): 74-77. Cormier may have stopped his subscription to *L'Architecture Vivante* in 1927. See Inventory B, which lists only those issues dating from 1923 to 1926.

43 LAMBERT, "Architecture Where Cultures Meet," 25, 29 n.24; GOURNAY, "Training and Early Works," 38, 41 n.46. Cormier's own copy of *Vers une architecture*, 6th ed., published in Paris by G. Cres most likely in 1925, is in the CCA's library (ID:90-B1098).

44 See note 32 and GOURNAY, "Training and Early Works," 70, 72 fig. 47, and 70 fig. 39, and 82 nn. 29, 31.

45 This connection was noted by Barry Bergdoll. See note 32 and Carroll MEEKS, *Italian Architecture, 1750-1914* (New Haven: Yale University Press, 1966), 193 fig. 104, 198.

46 AR01:ARV-4/0-1. On March 24, 1916, Cormier arrived in Modane, a town in the province of Savoy on the border of France and Italy. He had gone back to Montréal in order to settle his father's estate at the beginning of 1916. He must have arrived in Rome sometime before April 18 when his wife received a bill from Au Printemps in Paris. See AR01: ADC-3B/2/2, chemise 8.

47 AR01:ADC-3B/2/2, chemise 2. The legal document in which he acknowledges borrowing the money from his father's estate for this trip and for the rest of his studies is dated March 3, 1916.

48 AR01: ADC-3A/1/2, chemises 1-3; Cormier still kept an apartment in Paris while he was in Rome at the British Academy. Just to the left of the École Militaire is François Blondel's Porte

Saint-Denis (1671) and to the right of the Collège des Quatre Nations is the façade of the church of Saint-Sulpice, designed by Jean-Nicolas Servandoni in 1736. See L. HAUTECŒUR, *Histoire de l'architecture Classique en France*, vol. 2 (Paris: A. Picard, 1948), 511-513, 513 fig. 406, and vol. 3 (Paris, 1950), 361-366, 366 fig. 310.

49 AR01: 670/A-22A; GOURNAY, "The Work of Cormier," 63, 65, 81 n.10, and 136-137 pls. 26.1-26.6, also in GOURNAY, ed., *Ernest Cormier and the Université de Montréal*, for illustrations of six of the eleven sketches.

50 CORMIER, "Les plans de l'Université de Montréal," 30.

51 Marcel FOURNIER, "Tradition and Modernism: The Construction of the Université de Montréal," in *Ernest Cormier and the Université de Montréal*, ed. I. Gournay, 44-46, 48, and GOURNAY, "The Work of Ernest Cormier," 67-70.

52 GOURNAY, "Training and Early Works," 37, 41 n.42. There are contact prints and negatives of photographs Cormier took in Europe in the 1920's in the Cormier Archive at the CCA.

53 CORMIER, "Les plans de l'Université de Montréal," 29.

54 AR01: 670/A-22A; the recto of the first drawing (01 Arc 39N, recto) is unpublished; the second drawing (01 Arc 37N, recto) was published in GOURNAY, ed., *Ernest Cormier and the Université de Montréal*, 137 pl. 26.6.

55 AR01: 670/A-22A; the verso of this drawing (01 Arc 39N, verso) is also unpublished.

56 BRAHAM, *French Enlightenment*, 138 fig. 174.

57 Patrik REUTERSWÄRD, *The Two Churches of the Hôtel des Invalides* (Stockholm: Nationmuseum, 1965), 9-29, 8 fig. 1: plan engraved by Jean Marot, 1693. See BLONDEL, *Architecture française*, vol. 1 (Paris, 1752), Book II, 191-205, no. I, pl. 1, and *Cours d'architecture*, vol. 3 (Paris, 1772), 313; and also GUADET, *Éléments et théorie*, 3rd ed., vol. 1, 121 fig. 33.

58 Christopher TADGELL, *Ange-Jacques Gabriel* (London, 1978), 46-48, 181-185, pl. 158: engraving by Le Rouge, 1752, pl. 159: anonymous engraving of *Grand Project* of 1751, pl. 164: *View of Main Façade*; GUADET, *Éléments et théorie*, 3rd ed., vol. 1, 155 fig. 54: façade, vol. 4, 112-113 figs. 1559-1562: plans, sections, and elevation of façade.

59 AR01: 670/A-22A, 01 Arc 37N, recto, published in *Ernest Cormier and the Université de Montréal*, 137 pl. 26.6.

60 Albert LAPRADE, *François d'Orbay, Architecte de Louis XIV* (Paris: Éditions Vincent, Fréal, 1960), 71-72, 117-119, and pl. 1: drawing of the ground plan of 1662 by Louis Le Vau, Paris, Archives Nationales, N III Seine 710. Hilary Ballon, who is preparing a monograph on Le Vau, has made new discoveries about the chronology of this building and its sources.

61 BLONDEL, *Architecture Française*, vol. 2, Book III, 1-8, no. I, pl.1. See also pls. 2-6.

62 BLONDEL, *Cours d'architecture*, vol. 3 (Paris, 1772), 335.

63 Anthony BLUNT, *Art and Architecture in France: 1500-1700*, 4th paperback ed. (Harmondsworth: Penguin Books, 1980), 326. Blunt related the design to Francesco Borromini and Carlo Rainaldi's church of S. Agnese in Piazza Navona (1653-1666) in Rome. The centralized plan and dome is related to Louis Le Vau's Château of Vaux-le-Vicomte, built in 1657 for Nicolas Fouquet. See *ibid.*, 229-234, and 230 figs. 188, 189. See also Andrea PALLADIO, *I Quattro libri dell'Architettura* (Venice: Domenico de' Franceschi, 1570), 60 ill.

64 The Hunting Lodge at Stupinighi is located ten kilometres west of Turin. Between 1900 and 1919, it was the summer residence of Queen Marguerita of Italy. See Franco CARESIO, *Stupinighi, la real palazzina di caccia* (Turin: Editurist, 1987), 7-24, 133 plan ill.; 8-9, exterior; and 28, bird's-eye view by Filippo Juvarra, Museo Civico, Turin. Rudolf WITTKOWER, *Art and*

Architecture in Italy, 1600-1701, 2nd rev. ed. (Harmondsworth: Penguin Books, 1965), 227 fig. 34, 226-227, 338 n.38, suggested that Juvarra himself had been influenced by Boffrand's Château La Malgrange near Nancy and by Le Vau's Château of Vaux-le-Vicomte.

65 AR01:670/A-22A, 01 Arc 034N and 01 Arc 031N; published in GOURNAY, ed., *Ernest Cormier and the Université de Montréal*, 136 pls. 26.2 and 26.3. See also BLONDEL, *Planches pour le troisième volume du Cours d'architecture*, vol. 3, pl. XXVII: plan of the gardens of Versailles.

66 CORMIER, *Cours*, typescript, AR01:ARV-2/A-2, folio 66, and list of slides, folio 68, and contact sheets, AR01:Nit 4, for photographs of the Grand Trianon and gardens at Versailles that he used in his course.

67 AR01:670/A-22A, 01 Arc 32N; published in GOURNAY, ed., *Ernest Cormier and the Université de Montréal*, 137 pl. 26.4. See also another sketch which is a variant of this plan, 01 Arc 36N, 137 pl. 26.5.

68 See REUTERSWÄRD, *Hôtel des Invalides*, 28 fig. 4, for the drawing by Robert de Cotte, Paris, Bibliothèque Nationale, Cabinet des Estampes, Hc14, vol. 1, folio 3; and 28-29 for the reference to the publication by Bellocq.

69 BRAHAM, *French Enlightenment*, 138-143, 139 figs. 176-177, 144 fig. 182; BLONDEL, *Architecture française*, vol. 2, Book III, 88-90, no. XV, pls.1-4.

70 VAN ZANTEN, "Architectural Composition," 191-193, 192 ill.

71 GOURNAY, "The Work of Cormier," 65. See 138 pl. 27: photostat of plan for the 1926 project (AR01:847xx), 139 pl. 29: view of the façade of the *Maison des Étudiants* (AR01:R/A/2), also in *Ernest Cormier and the Université de Montréal*.

72 GOURNAY, ed., in *Ernest Cormier and the Université de Montréal*, 138 pl. 27.

73 Photostat of plan of 1927 project (AR01:00-EC-018) in GOURNAY, ed., *Ernest Cormier and the Université de Montréal*, 150 pl. 41.

74 COLLINS, "The Classicism of Auguste Perret," 74-76.

75 COLLINS, "The Doctrine of Auguste Perret," 92-93, 93 ill. , and JAMOT, A-G. *Perret*, pl. VII. Under the influence of Guadet's doctrine of Structural Rationalism, Perret discovered that the true structural form for concrete was the frame.

76 See the photograph of the church of Bourg Saint-Andéol taken by Cormier between 1923 and 1925 (AR01:ADC-6,4/36), and Marcel AUBERT, *Cathédrales, abbayes, collégiales, et prieurés romanes de France* (Paris: Arthaud, 1965), 630-631, ill. 533. For a detail of the exterior façade of the Hunting Lodge at Stupinighi, see CARESIO, *Stupinighi*, 5 ill.

77 CORMIER, "Les plans de l'Université de Montréal," 29.

78 The term *The International Style* was not used until the 1932 exhibition of the same name organized at the Museum of Modern Art in New York by Philip Johnson and Henry Russell Hitchcock in which Le Corbusier, Walter Gropius, J.J. Oud and Mies Van der Rohe were acknowledged as the leaders of a new style in architecture. See Henry Russell HITCHCOCK, *Architecture: Nineteenth and Twentieth Centuries*, 3rd paperback ed. (Harmondsworth: Penguin Books, 1971), 513.

79 CORMIER, *Cours*, AR01:ARV-2/A-2, handwritten notes, folio 39, dated February 3, 1948. See also folios 70-77, retyped article by Albert Laprade, "Esthétique," dated c.1950, on the faults of *The International Style*. Cormier called Le Corbusier an extremist in an interview. See Arthur PRÉVOST, "La personnalité de la semaine," *Le Canada*, 2nd ed., vol. 50, no. 106 (9 August 1952) n. pag. For the Swedish architects, see Stefano RAY, *Sven Markelius, 1889-1972* (Rome: Officina

edizioni, 1989), *L'Architettura moderna nei paesi scandinavi* (Bologna: Cappelli, 1965), and *Ralph Erskine* (Bari: Dedalo Libri, 1978). I would like to thank Christina Enfors of the Arkitektur Museet in Stockholm for the birthdate of Sture Frölen.

80 Victoria NEWHOUSE, *Wallace K. Harrison, Architect* (New York, 1989), 115, 119: photograph of Cormier with the other members of the International Committee. Ironically Cormier was the interpreter for Le Corbusier.

81 Anonymus, "Ernest Cormier, architecte et ingénieur, l'homme, sa personnalité, son oeuvre," *Architecture, Bâtiment, et Construction* 2, no. 10 (January 1957): 15.

82 Cormier began designing the church in December 1923 and the church was consecrated in 1926. See AR01:2306/3.4-2306/3.5-2306/3.6 for the drawings; and AR01:251/A-10 for the correspondence. On June 26, 1925 Cormier left for France and Italy where he ordered works of art for the interior and exterior of the church. Alphonse Graton, the priest of the church, wanted the church to be modelled after the church of Ste-Marguerite Marie in Montréal, built between 1923 and 1925.

83 See Alberto BUSIGNANI and Raffaello BENCINI, *Le chiese di Firenze, quartiere di Santo Spirito* (Florence: Sansoni, 1974), 32-35, view of interior opp. p.48. Brunelleschi was awarded the commission in 1428, but construction was not begun until 1464, long after his death.

84 BUSIGNANI and BENCINI, *Santo Spirito*, 218-220, illustration of façade opp. 224. The basilica was founded in 1013. Photographs Cormier took in Florence between 1923 and 1925 are found in AR01:Nit B-2041/01.

85 LAMBERT, "Architecture Where Cultures Meet," 26 fig. 9, 25; GOURNAY, "Training and Early Works," 33. This building was destroyed in 1987. In this building Cormier introduced the thin shell technique of concrete vault construction to North America. Cormier had worked in 1917 for Considère, Pelnard, and Caquot who had used the technique in France.

86 Robin MIDDLETON, "Jacques-François Blondel and the Cours d'architecture," *Journal of the Society of Architectural Historians* 18, no. 4 (1959):140-148; and Christopher TADGELL, *Ange-Jacques Gabriel* (London: A. Zwemmer Ltd., 1978), 19-21.

Résumé

ERNEST CORMIER ET LA CULTURE EUROPÉENNE

L'influence de l'architecture et de la théorie françaises des XVII^e et XVIII^e siècles sur les dessins de Cormier pour l'Université de Montréal

Le projet de Cormier pour l'Université de Montréal, prévu à l'origine pour inclure un hôpital dans le complexe universitaire, constitue une synthèse des traditions de l'architecture classique française et nord-américaine. Le projet de 1927 pour l'Université de Montréal avec sa cour d'honneur, son vestibule d'honneur, ses ailes et pavillons, est le témoignage de l'influence sur Cormier de l'architecture européenne des XVII^e et XVIII^e siècles. Par son emplacement au sommet du mont Royal, par son plan symétrique et sa volumétrie hiérarchisée, l'Université de Montréal fait allusion au symbolisme de la villa, du château, du monastère et de l'hôpital.

Ernest Cormier admirait profondément la culture européenne. De 1908 à 1918, il avait vécu en Europe où il avait étudié et pratiqué l'architecture et où il séjourna chaque été jusqu'à l'éclatement de la Deuxième Guerre mondiale. Même si Cormier rejetait l'historicisme du XIX^e siècle, son architecture n'est pas étrangère à la tradition européenne, puisqu'il avait fait sienne la doctrine du rationalisme constructif de Julien Guadet (1834-1908), doctrine qui était à la base du programme pédagogique de l'École des Beaux-Arts de Paris, où il avait étudié de 1909 à 1913.

Un dessin exécuté par Cormier à Montréal, vers 1907 ou 1908 pour le cours par correspondance de l'École du Bâtiment de Paris, montre qu'il connaissait déjà l'architecture française du XVIII^e siècle et sa théorie, en particulier les écrits de Jacques-François Blondel (1705-1774), dont les méthodes pédagogiques sont à la base des cours d'architecture à l'École des Beaux-Arts.

Cormier a assimilé deux étapes fondamentales de la conception proposées par Jacques-François Blondel dans son *Cours d'architecture* (1771-1776). Lorsque le programme architectural est établi, il s'agit dans un premier temps d'étudier les précédents, aussi bien historiques que contemporains en visitant soi-même les édifices et en faisant des recherches dans les livres et albums de gravures. Dans un deuxième temps, on fait des croquis pour étudier différents plans et élévations avant de passer à l'exécution des dessins détaillés. Cormier appliqua les méthodes de Blondel lorsqu'il planifiait l'Université de Montréal.

L'aquarelle *Vitrail pour un architecte* réalisée par Ernest Cormier et Charles Mauméjean en 1927 pour la salle d'attente de l'agence de Cormier, rue Mansfield, donne des indices sur les édifices que Cormier avait étudiés lorsqu'il faisait des recherches pour l'Université de Montréal. Au point correspondant

au sommet de la fenêtre, Cormier a peint l'église des Invalides construite par Jules Hardouin-Mansart (1646-1708), juste en-dessous, il y a l'École militaire d'Ange-Jacques Gabriel (1698-1782), et légèrement à droite, le collège des Quatre Nations de Louis Le Vau (1612-1670) et François d'Orbay (1637-1697); tous ces monuments sont à Paris.

Onze petits feuillets montrant des croquis sur papier-calque, certains à la plume, d'autres au plomb, représentent des bâtiments français des XVII^e et XVIII^e siècles que Cormier a aussi étudiés pour son projet de l'Université de Montréal. La nature très générale du programme, comme en témoignent les inscriptions sur deux des feuillets, et les influences européennes présentes dans les croquis suggèrent que Cormier les a probablement dessinés avant son séjour aux États-Unis, du 25 avril au 8 mai 1924, organisé par la *Division of Medical Education* de la fondation Rockefeller. C'est à la suite de ce voyage que Cormier et les dirigeants de l'Université s'intéressèrent principalement aux prototypes nord-américains pour la conception de l'Université de Montréal. Au cours de l'été 1923, Cormier, qui était retourné en France et en Italie, avait revu les monuments qu'il avait découverts lorsqu'il était étudiant.

Quand on connaît l'attachement de Cormier pour le passé, on comprend pourquoi il refusa de construire dans ce que l'on appella à partir de 1932 le *Style international*. Cormier dirigeait ses projets au double titre d'architecte et d'ingénieur. Il utilisait les techniques les plus récentes de construction en béton armé. Mais à cause de sa formation à l'école des Beaux-Arts et contrairement à Le Corbusier, il se sentait obligé de revêtir la structure de béton avec des matériaux traditionnels et d'évoquer dans ses édifices une parenté avec les monuments du passé.

Les notions classiques de *convenance*, de *bienséance* et de *commodité* établies par Jacques-François Blondel avaient beaucoup d'importance pour Cormier. Pour lui, l'édifice devait posséder une uniformité stylistique en accord avec le plan et la fonction et devait exprimer à travers sa forme un message quant à son rôle dans la société contemporaine et quant à ses rapports avec le passé.

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