WORDS INTO BUILDINGS: THE

Figure 3. The Nobbs-Darling plan of 1912 for the University of Alberta campus, including the modifications made in 1915 and the buildings constructed by 1920. (Percy E. Nobbs, "Construction at the University of Alberta, Edmonton," Construction 14, no. 1 [January 1921]: fig. 1)
Although the first Canadian university was founded in 1818, the first to be provided with a master plan intended to guide its physical development as a campus from the time of its inception was the University of Alberta. In this paper we will review the history of this plan, examining the story of both the plan itself and what actually happened on the ground. We will set this story into four major sections, plus a conclusion: the historical background; the campus as a whole; individual buildings; and words into buildings. The methodology below sets the intellectual context for the the paper.

METHODOLOGY

The roots of contemporary academic theory with respect to the interpretation of cultural events, as understood in the wide sense that prevails in anthropology, can be traced to 19th-century Germany, and more specifically to Karl Marx and to theological exegesis. Within the broad, many-channelled river of ideas that has evolved from these springs, the most directly relevant to this paper is the tradition of linguistic analysis that sprang from the work of Saussure. As those familiar with that tradition know, it has in recent years become as multifarious and as prone to factional quarrels as had the churches of Christianity following the Reformation. Of all the many devices now at the disposal of those who wish to controvert at the level of theory, however, we are interested in only three: the distinction made by Saussure himself between language and speech; the postulated parallels between information conveyed verbally and non-verbally; and the binary oppositions of Lévi-Strauss.

Language/discourse and speech
Perhaps the most fundamental of the various theoretical innovations made by Saussure with respect to linguistics was that between langue and parole. The former term refers to language as a social product; it can be conceptualized as the linguistic environment into which children are born. It is the source of the rules they, unconsciously, make their own as they develop their individual capacities for speech. Parole is usually translated into English as "speech," and refers to what speakers do. It refers to performance as distinct from capacity.

In recent decades it has been recognized that language, when thought of in terms of the vocabulary and the style of speaking, varies with both the social context in which it takes place and the intention of the speaker. The term discourse is commonly used today to refer to distinct classes of linguistic activity: the discourses of politics, for example, or the law, or, in the case of this paper, of higher education, and architecture.

Parallels between verbal and non-verbal communication
The case can be made that there are parallels between the messages that people convey to one another in ordinary language and those that can be "read" in the material products of human activity. Moreover, it is possible to develop a method of identifying those parallels in specific cases. There are two key elements in the method: the first applies the distinction between language and speech to the discourses of both higher education and architecture. In the latter, current architectural practice in any particular society (as conditioned by prevailing fashion and the technology of constructional functions) as the "language," while the practice of any individual builder or architect is the equivalent of "speech." The second element takes metaphors as the principal linguistic element for converting meaning in verbal language into its non-verbal counterpart.

In this paper we use two sets of metaphors. Both sets lend themselves readily to expressing the organization of space and/or the architectural form of a building. The first set of metaphors consists of the general concepts of height, centrality, and durability. In ordinary language, figures of speech containing these three terms are used consistently as a way of conveying a positive attitude with respect to some point (e.g., "at the peak of her career," "one of the central values of our way of life," "marriage is forever"). In this paper we are adding paired sets of metaphors commonly associated with classical and romantic aesthetics: straight lines, right-angle corners, simple roof lines, and symmetry of form about some central axis (in the case of classicism); and curvilinear, peaked, and asymmetrical forms as their romantic counterparts. In ordinary language, the two aesthetic styles are also marked by their association with the subordination of practice to some normative set of rules (classicism), and the expression of individuality without regard to rule or precedent (romanticism). Though these concepts had their origin in aesthetics, they have come to be associated in a general way with the notions that, on one hand, the good of the individual must be subordinated to that of some larger society, and on the other hand that priority should be granted to the individual vis-à-vis their social context.

Binary oppositions
Associated with the work of Claude Lévi-Strauss is the idea that binary oppositions are key concepts that can be used to decipher the organization of the social constructs found in an enormous range of different societies. It is not necessary in this paper to review the debates that have enshrouded the structuralism of Lévi-Strauss and the post-structural schools that have succeeded it because the approach presented is empirical, and the only epistemological claim we make for our observations is that they form a coherent web.

by O.S.E. Bilash and O.F.G. Sitwell
1 HISTORICAL BACKGROUND

The University of Alberta began its life as an idea in the mind of Alexander Cameron Rutherford, the first premier of Alberta.10 On his initiative, the idea became an Act of the Provincial Legislature in 1906 and acquired a name. It then became a group of individuals appointed to the governing positions sanctioned by the Act. Next, it became the staff and registered students at a temporary site. It then became, in addition to the above, a plan in the mind of the individual whose primary responsibility it was to see that it was properly housed, Henry Marshall Tory. Next, and in addition to the first four points, it existed as a plan on paper as proposed by its chief architect. Subsequently, and still in addition to the first four items, it existed as that plan modified by the input of the president and the Building Committee. Then, and in addition to the first three points, it existed as a physical plant in various stages of construction. And finally, when it was housed in permanent buildings on its own campus, it could be spoken of as a university. At this point it becomes legitimate to examine the relation of that instance of “speech” with the discourse from which it is drawn.

Of all the individuals associated with the foundation of the University of Alberta, two played prominent roles in giving the University of Alberta its academic character and its physical form: Henry Marshall Tory, the university’s president from 1906 to 1928, and Percy Erskine Nobbs, the architect he chose.

Henry Marshall Tory

Henry Marshall Tory (1864-1947), the man who was to become the founding president of the University of Alberta, grew up in Guysborough County, N.S., and subsequently joined the staff of McGill University, where he became a professor of mathematics and physics. Tory was recruited in 1906 by Premier Rutherford for the position that he was to hold for 20 years while passing through Edmonton after a visit to Vancouver, where he had just finished providing the provincial government of British Columbia with a report on the procedure it should follow in founding a university.11

Tory had from the beginning a vision of what the university as an institution was to be. It is possible that the university’s motto, “Quaecumque vera” (whatever things are true), comes as close as a single phrase can to describe the vision. It is even possible that the motto’s potential ambivalence — between pursuing truth, and admiring it as an ideal that forever eludes the grasp — was one that lay unrecognized in his mind. Be that as it may, we note that, although the first academic programme established by the university led to a bachelor’s degree in Arts, it was always Tory’s intention that a full range of professional programs be available. He had his way. The faculties of Law and of Medicine were organized in 1912-13,12 and other faculties were added not long after. With respect to its role in the province, Tory asserted on one occasion that “it is certainly the function and duty of the University to provide leadership in economic and sociological problems as in other domains of thought.”13

On another occasion he summarized one of the most important services provided by the University to the people of Alberta:

This University is a state body controlling the standard of all professional examinations in the province which means that the technical men of the University, together with certain other men of outstanding position in their professions, selected by the Senate, actually fix the standard of education to which all the professions must conform.... Our influence on Public Health matters is direct and important.... 14

Once installed as president, Tory sought to keep the plans and policies of the university in line with recent trends among well-established universities in North America by sending surveys to them in search of fresh information. In 1920 he sought information about the proposed Faculty of Education,15 and about the taxing formula used in other provinces and states to tax universities.16 In 1922 his survey dealt with the relationship between public universities and hospitals.17

In addition to the role of the university as a public institution, Tory’s correspondence with the chief architect, Percy E. Nobbs,18 shows that he also had a clear vision of the physical appearance of the future university. It is true that there was a Building Committee that met periodically, but it based its discussion and decisions on the information provided by Tory. The minutes and correspondence suggest that he fully exercised the influence of his unique attributes to move the Committee’s
decisions in the direction he favoured. Tory was the only member of the Committee with a doctorate, the only member with prior experience in the establishment of a university, the only member with any teaching experience, the only member who had access to all university correspondence, and the only permanent member of the Committee over the whole 20 years of his presidency.

In short, Tory's influence on the appearance of the campus and its buildings was as great as on the institutional aspect of the university. Not only did he sway the opinions of the Building Committee in his favour, he was even able to veto some of Nobbs's ideas, as we shall see.

Percy Erskine Nobbs
Percy E. Nobbs (1875-1964) was the most important professional architect to contribute to the planning of the University of Alberta in the years when Tory was president. Nobbs had received his architectural training in Scotland where he had articled with Robert Lorimer, a romantic traditionalist. From Lorimer he learned the Arts-and-Crafts philosophy of William Morris. As summarized by Susan Wagg, the Arts and Crafts movement, "A development of the Gothic revival, ... represented, in essence, a human protest against the devastating effects of nineteenth-century industrialism. It involved the attempt to purify architecture and design." Nobbs received several architectural awards and travelled widely throughout Europe. In 1901 he joined the London County Council, where he was influenced by the two prevalent architectural philosophies of the day: the grandiloquent Beaux-Arts-inspired planning and architecture aimed at making of London an imperial capital rivaling the Paris of Napoleon III; and the socialist-inspired philosophy directed at improving life for the city's poor. All his life Nobbs was interested in planning and large-scale design. He came to Canada in 1903, taking a post at McGill University. There he lectured on architecture and designed some of the university's buildings. There, too, he met Henry Marshall Tory.

The discourse of higher education
In order to examine the way in which — and the degree to which — the spatial layout of the University of Alberta campus and the architectural form of its buildings embraced the notion of what a university conceived of as an institution was supposed to be, the meaning attached to the word "university" in the institutional as well as the architectural discourse must be identified.

A general consensus of societal opinion about all aspects of a society's knowledge can be found in repositories of information such as dictionaries and encyclopedias. The foremost English-language encyclopedia of its time, the Encyclopaedia Britannica, published major editions in 1910-11 and 1929. The span of years in the university's history in which we are interested extends from 1906 to 1928, the year that saw the retirement of President Tory and the beginning of a decade when no construction took place. The articles devoted to universities in the 1910-11 and 1929 editions of the Britannica will therefore be used to provide the reference language to which this particular expression is to be related.

In the earlier edition there is no single article devoted to the general concept of a university. There is, instead, one major article and several minor ones devoted, at least for the most part, to particular universities. Although the great bulk of the text in the major article is devoted to the histories of individual universities, some general statements about their role in society are presented. From these, together with the points made in the articles on Cambridge and Harvard, it is possible to form a notion of what was meant by the term "university" in the English-speaking world in the first decade of this century.

We used the article devoted to Cambridge University because McGill, where both Tory and Nobbs were members of the staff and where Premier Rutherford obtained his degrees, was affiliated with Cambridge. Similarly, we drew on the article on Harvard because that university is generally acknowledged to be the foremost university in the United States and, as such, may be presumed to have had an influence on Canadian images.

According to these sources, a university was a compound body containing two major elements. First, forming the core of the institution, there was a college, which is to say a place where young people who have graduated from high school live together for the purpose of being inculcated with an education that is both intellectual

12 Board of Governors of the University of Alberta [hereafter cited as Board], Annual Report for 1913. University of Alberta Archives [hereafter UAA].
13 Letter, Tory to Mercer, 12 October 1918, UAA, accession no. [hereafter UAA# 68-9-190].
14 Letter, Tory to Macinnis, 29 August 1921, UAA# 68-9-337.
15 UAA# 68-9-120.
16 UAA# 68-9-35.
17 UAA# 68-9-50.
18 UAA# 68-9-29.
19 UAA# 68-9-29.
21 Ibid., 2.
22 Ibid., 3.
24 Britannica, 1910-11, 27:748-78.
and moral. The second element was formed by the programs in professional training, represented first and foremost by medicine and law. There is considerable emphasis on the fact that, though the undergraduate program of the college was concerned with "a regular and liberal course of education"37 and that "moral and religious influences are brought to bear on the formation of character,"38 in the best institutions there had been "a marked diminution in the clerical character of the college teaching bodies"39 and "the denominational influence has ceased to have the importance it once possessed."40

In summary, a university was seen as a body "devoted to learning and education."31 In the United Kingdom, it was staffed by a "permanent profession" that strove "to meet the constantly increasing requirements of scientific education" in the United States,

There is a disciplinary stage in university education which is the requisite introduction to the higher and finer work of the university. The success of the higher work depends upon the intellectual and moral qualities of the professors. No amount of material prosperity is of value unless the dominant authorities are able to discover, secure and retain as teachers men of rare gifts, resolute will, superior training and an indomitable love of learning.... In methods of instruction professors should have as large an amount of freedom as may be consistent with due regard for the co-operation of their colleagues and the plans of the foundation. The steady improvement of the libraries and laboratories is essential if the institution is to be kept in the front line. The newest books and best apparatus are indispensable, for instruments and books quickly deteriorate and must be superseded.... Publication is one of the duties of a professor. He owes it not only to his reputation but also to his science, to his colleagues, to the public, to put together and set forth, for the information and criticism of the world the results of his inquiries, discoveries, reflections and investigations.33

In 1929, the Britannica still saw that the essence of a university lay in its being "a body devoted to learning and education."34 While there were no points of blatant conflict with the views expressed in the earlier edition, some new elements had appeared. Any single university exercised "a helpful local influence," while collectively they were "living symbols of their liberty and proofs of their intellectual progress or maturity ... directed by the national ideal." Note, too, was taken that, historically, the university was a traditional, "conservative" institution that dealt with "mental activity ... of an unprofitable kind." Finally, since the First World War, "international university co-operation ... [played] an extremely important role in university life."35

As established in the educational discourse of the time, the character of a university was built of elements that can be grouped under seven headings: devotion to learning and education; provision of professional training; concern for the moral dimension of education, and the disassociation of the university from sectarian education; interest in the role and quality of the professors; helpful local influence; commitment to the national ideal; and responsibility for international university co-operation.

The discourse of architecture

By the discourse or language of architecture we mean the prevailing repertoire of aesthetic concepts and stylistic devices (underlain by the technology of construction) adopted by the architects of some culture. Because the "vocabulary" entailed by that definition is extensive, we have chosen to concentrate on what might be called the "dialect" used when it is the buildings appropriate for a university that are being discussed. As it happens, there is a dearth of literature on the design and planning of entire campuses before 1929.36 It is true that there are some items, some British, some American, that might have been known to Nobbs when he prepared the master plan of 1912, and which might thus have helped shape his ideas.37 It is unlikely, however, that he was influenced by American precedents, unless negatively (as shown below). Nor is there any visible sign — unless in choice of the material with which to clad his buildings — that he was influenced by the "redbrick" universities that had recently been founded in the United Kingdom.

Given the absence of specialist literature, we turn again to the Encyclopaedia Britannica for insight into university architecture in the first decade of this century. On the whole, the edition of 1910-11 contains little useful information. It is true that
there are references to the architecture of universities in the article devoted to universities as institutions, but they are made in passing. The 1929 edition of the Britannica, on the other hand, does contain a section devoted to university architecture, though it is short and contains less information than we would like. As it happens, in the year this, the first American version of the Britannica, appeared, Klauder and Wise published a book devoted exclusively to the topic.38

While it would be invalid to use items published subsequent to an event as influences on that event, it is legitimate to use them as witnesses to the attitudes that prevailed during the period prior to their compilation. Thus, information drawn from these two later sources and the information provided by the 1910-11 Britannica on architecture as a general topic, plus its minor items with respect to universities, can serve as a basic guide to the relevant language.

So we begin:

[Architecture is] the art of building in such a way as to accord with principles determined, not merely by the ends the edifice is intended to serve, but by high considerations of beauty and harmony.... The end of architecture as an art ... is so to arrange the plan, masses and enrichments of a structure as to impart to it, interest, beauty, grandeur, unity, power.... Of such principles or qualities the following appear to be the most important: size, harmony, proportion, symmetry, ornament and colour.39 (emphasis added)

There then followed in the Britannica a review of the architectural styles that had prevailed in the past and met the principles just listed. This historical survey closed with the then-modern architecture of England and the United States. In England there had been a reaction against the use of slavish imitations of both Gothic and classical precedents. In their place, architects had begun to draw on an English tradition in which classical precedents were taken as a general inspiration in terms of size, proportion, and symmetry, so as

To reduce architecture to good sound building and good workmanship which seemed to promise ... a better basis to work upon than the mere imitation of classic or medieval detail.... This was ... the Queen Anne revival.... But following hard upon it ... arose the idea of a modern architecture founded on a free and unfettered treatment of the materials of our earlier Renaissance architecture, as illustrated in the buildings of the Stuart period. This new ideal was styled "free classic."40

Later, when dealing with American universities, there was a passing reference to

The development of laboratories and libraries. Everywhere special buildings, well equipped with the latest and best apparatus, are springing up.... Libraries ... store-houses for books and manuscripts ... in American universities ... have taken on another characteristic. Subdivided into special departments, or supplemented by fresh additions, they are the workingrooms of "seminaries," where capable teachers, surrounded by scholars properly qualified, are engaged in teaching, studying and writing.41

As already noted, the Britannica (1929) does deal specifically with university architecture. For our purposes, the two key observations were that "the heart of the University is the campus ... or college yard"; and that university buildings are "designed to be permanent harmonious entities ... which permit expansion and embody all possible known improvements."42 To these observations we can add points taken from Klauder and Wise. Their starting point was that it is highly desirable for the authorities responsible for the construction of a university to adopt a general development plan.43 With respect to such a plan, they suggest, "the key-note ... is order."44 That order, however, may either be a "symmetrical and formal scheme" or "informal."45 The former was preferred if the site was level. "If the style is formal, the ... buildings will lie nearly always at right angles with each other, and will take one or more of the well-known forms of U H L E F T Z [sic]."46 As for architectural styles, these fell into two main divisions: "The Formal The Classic or Renaissance, Georgian, Colonial, regular, symmetrical, rectilinear. The Informal The Gothic, or picturesque and irregular, unsymmetrical."47 In addition, they noted that the buildings needed by a university could be divided into "three primary divisions: teaching, housing, recreational."48

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38 See note 36 for the Klauder and Wise citation.
39 Britannica, 1910-11, 2:369-70.
40 Ibid., 2:435.
41 Ibid., 27:777.
42 Britannica, 1929, 22:880.
43 Klauder and Wise, chapter 3.
44 Klauder and Wise, 25.
46 Ibid., 34.
47 Ibid., 44.
48 Ibid., 27.
2 THE CAMPUS AS A WHOLE

In 1907, Premier Rutherford arranged for the acquisition of a site for the proposed University of Alberta. It consisted of River Lot 5, as laid out in the 1882 land survey carried out in the area of Fort Edmonton. This block of land had an area of approximately 104 ha (figure 1).

The first man to sketch a plan of the campus as a whole was President Tory. So far as we have been able to learn, no copy of this sketch, which must have been made in 1909, has survived. However, the correspondence between Tory and Nobbs provides some information as to the starting positions of the two men. Tory wrote:

The first scheme that I showed to you [in August 1909] as a basis on which we had our first consultation was a "courtyard with rounded ends." The very reason that I brought it to you was that I was dissatisfied with it because it did not overcome the difficulty of definite and continuous extension of buildings... When I gave you that plan I gave it with the criticism that I wanted something done that would make a continuous expansion possible ...

The relevant highlights from Nobbs's lengthy reply are the following:

The symmetrical disposition of buildings round courts or quadrangles on so enormous a scale lacks in my view any aesthetic value commensurate with the cost and inconvenience involved. The grouping should be more intimate and expressive of purpose, and the general idea of such a quadrangle is hardly interesting enough to be worth repetition. Twins are not a group architecturally.... I recommend that the university buildings be so grouped as to provide a central yard large enough for any reasonable laboratory extension in the rear of buildings facing on the various courts... that external questions of prospect may suggest.

In 1910, having digested Nobb's advice, Tory presented a plan for the development of the campus to the Minister of Education, who happened also to be the Premier. It seems probable that this plan was the basis of the one that was reproduced in the University Calendar of 1912-13 (figure 2). On Rutherford's authority construction of two buildings was started, but a political crisis overwhelmed the government; because the crisis involved the resignation of the Premier its effects spread to the university. Work was halted and, for the first time, a Board of Governors was installed. What followed was encapsulated by Tory in a letter to Nobbs some years after the turmoil had died down:

The new Board decided the plan [of 1910] and as there were both McGill and Toronto men upon it, I was asked to call in [architect to the University of Toronto Frank] Darling and yourself for further study.... You and Darling came out here, looked over the ground and agreed that the original work was on sound lines and simply matured your original plan further... The residence scheme was well under way on your original plan when Darling came. The Arts building followed on exactly the same ground and foundations as had been originally planned.

The 1912 Nobbs-Darling plan for the campus was adopted (figure 3; see page 4). It must be borne in mind when examining this plan that the architects had to design the campus within the overall constraint imposed by the dimensions of River Lot 5. Initially, 87th (then 5th) Avenue, which runs east-west, effectively functioned as the planning baseline for the campus (figure 2). The part of River Lot 5 lying south of 87th Avenue was set aside as the location for a hospital and for use as the university's farm.

The baseline so identified has a length of approximately 625 m. North of it, along what are now 114th and 116th (then 8th and 10th) streets, extend respectively the eastern and western boundaries of the campus. On the east side, a distance of 580 m takes the boundary from 87th Avenue to the top of the steep bank that slopes down some 50 m to the North Saskatchewan River. In other words, extending north from the 87th Avenue baseline there is an area of level plain on which there is room to lay out a campus that is, to all intents and purposes, square.

Not all this space was needed for the demands of the foreseeable future. Nobbs restricted the area on which the buildings that he would design were to be constructed by taking the line of what is now 89th (then 7th) Avenue as the working base for his plans. He may have been prompted to this decision by the fact that, even before 1908, a plot of land on the eastern side of the property, between 87th and 89th...
avenues, had been made available to the Methodist Church of Canada; their theological college (Alberta College South) was the first building to be constructed within the boundaries of the university’s property (figure 2). This fact Nobbs had to accept, though he banished St. Stephen’s, as the college is now known, from the perspective drawing of the campus that accompanied the plan of 1912 (figure 4) — though did show the location of the college by sketching in the site it occupied as a shadow on the ground.

Figures 3 and 4 when taken together — and they were almost certainly the only two showing the whole campus as Nobbs proposed — show that he conceived the campus as having an eastern and a western half. The axis that divided them was formed by a “great quadrangle” 91 m (300 feet) wide by 365 m (1,200 feet) long, oriented north-south. This central axis was to be crowned at its northern end by Convocation Hall, which was to be “a dominant mass, linking the scheme together as a whole.”

The line of the great quadrangle was then extended an additional 200 m south along an avenue to the main gates of the university (figure 4).

The location of those gates suggests that Nobbs conceived of the campus as facing south, which would imply that the north side represented the back of the campus. However, the situation was not that simple. In his first analysis of the site, Nobbs wrote:

The external prospect of the site appears ... to be worth very serious consideration. The river front is the position for the big facade of the future. The east side faces a street which might well be widened and which will become important as the driveway on the bluff is developed. The south front on the main avenue suggests a group with significant importance .... (emphasis in the original)

The only firm conclusion that can be drawn from this analysis is that the lone border that could not be considered as the front of the campus was that lying on the west. Figure 1, which shows the relationship of the university’s site to the cities of Strathcona and Edmonton, makes it plain why this was the case. It was from them that all visitors to the campus came. Approach from the west was not to be expected, not only because no one lived there, but more significantly because the meandering course of the North Saskatchewan River cuts off such access less than a kilometre from the western boundary of the campus. Thus, there might be some uncertainty as to which was the front of the campus, but there was no doubt as to which was its back.

The presence of the two residences already built (figure 2) must have affected Nobbs and Darling in their planning, but they were able to treat them as a source of inspiration. Their response was to treat the west campus as “the residential side of the University.” The east side of the campus was to contain “the teaching buildings.” More important to the architects was their determination to avoid the mistakes of the

57 Letter, Nobbs to Tory, 20 August 1909, UAA# 68-9-29.
58 Nobbs, “Construction at the University of Alberta,” 7.
59 Ibid.
past. As Nobbs subsequently wrote:

It will be remembered that some of the more recent buildings had by that time [1912] made their appearance on the Toronto University campus, and a drastic remodelling of the whole group there was under consideration, while McGill University had experienced the calamitous fires of April, 1907, and had realized, in the process of reconstruction, how very rapidly university buildings can be outgrown or become obsolete. The Toronto buildings, while homogeneous in scale, varied a great deal in type, and suffered as a group from a diversity of colour and material. At McGill, on the other hand, a homogeneous material of exquisite dignity went far to unify a heterogeneous mixture of types, placed with a certain haphazard picturesqueness, but little regard for general effect or ultimate development. Both of these great universities were suffering, and would suffer yet more, from lack of a comprehensive plan embodying an earlier realization of their future development.

So the President of the new University set us to work on a scheme for ... a University that was to appear presentable and explicit after a few years of growth and which could be added to without replanning throughout up to such time as its accommodation should rival in extent anything now existing in the Old World.

The common defect of general planning from which many of the older American universities suffer is due to adhesion to the idea of a campus around which the buildings grow, eyeing each other's rapidly evolved succession of modes and styles in odious comparison from a damaging proximity. Then, when the circle is complete, the centre has to be filled with a growth which adds to the menagerie quality of the group, and at the same time converts the whole institution into a builder's yard during the operation.60

Assuming the architects intended visitors to enter the university through its main gates, we see that, for such people, Convocation Hall was to provide the primary focus. But Nobbs was thinking at two scales, for he also wanted the university to have a building that would provide a landmark visible from many miles away. In the centre of the eastern or "teaching" quadrangle he proposed that there should be a tower more than 30 m high (figure 4).

Thus began what was the most prolonged controversy between Nobbs and the Building Committee of which record has survived. According to Nobbs, the tower was "a most essential feature of the [Arts] building scheme as a whole." The plan for the Arts building was accepted, though only after the modifications discussed below had been made to it.61 The tower was rejected. The next year Nobbs tried again, suggesting a detached tower with clock similar in design to the one that had earned him the prestigious Royal Institute of British Architects' Tite Prize in 1900.62 He used the death of Lord Strathcona (January 1914)63 as the occasion for the following suggestion:

It has occurred to me that Strathcona could not be better celebrated around Edmonton than by the erection of the detached tower which your University needs

(a) To give it the time.
(b) To contain a peal of bells.
(c) To hold the architectural scheme together.
(d) To serve as a landmark for 40 miles round.
(e) For experiments in the torsion of wire, pendulums and laws of gravity.

Such a Strathcona monument would not be too costly and would be extremely telling.... My present feeling is that it should rise with a perfectly plain brick stalk from the middle of the laboratory yard so that it will show above the main group of teaching buildings to all persons approaching them.64

Tory remained unconvinced.

Six years later, Nobbs still had on his plans

A site reserved for a lofty clock tower. Rising from the centre of the great yard, the clock and chimes will be where most seen and best heard, while from a distance the tower will serve at once as a monumental landmark and a focus for the surrounding scheme of buildings.65
It was not to be. If only for reasons of economy, the authorities responsible for the university chose to keep the tower’s profile low.

Alone among the university’s buildings, the cluster of houses built in the northwest part of the campus (figures 2, 3) was not sited on the orthogonal pattern used throughout the rest of the campus plan. Their orientation was not to the cardinal points of the campus, and the overall pattern in which they were laid out contained at least some curvilinear elements. It is also significant that they conformed to the architectural norm of the time, which is to say they were romantic in style rather than classical (figure 5).

There is thus a clear distinction, made visible in the landscape, between the physical form provided for the place of work and the one which framed domestic life. It is also clear that there was a distinction between the pattern imposed on the places of residence of those still young enough to be subjected to the processes that inculcated the laws and order of society, and the pattern provided for the places of residence of those who had achieved the independence associated with adulthood.

There can be little doubt that the decision to locate houses for the staff in the northwestern corner of the campus was made by Tory, for it was contained in the plan that he submitted to Nobbs in the summer of 1909. Nobbs described the proposal as “an excellent one.”

The fact that the first four houses were shown as being already built on a plan dated 26 February 1912 (figure 2) strongly suggests that Tory was also responsible for having them sited on a curving road. There is no document putting the point beyond doubt, but there is no other plausible candidate. What led Tory to adopt a curvilinear alignment for the houses is a matter of conjecture. Through his acquaintance with Nobbs, it is possible that he knew of the work of Ebenezer Howard and the Garden City movement. Whatever the case, this small cluster of houses may well stand on the first curved street in Edmonton whose course was not an adaptation to the sinuous path of the North Saskatchewan River or its tributary creeks.

The houses may have been well-located with respect to access to their inhabitants’ places of work, but from the point of view of those who had to do the shopping or have any other contact with the outside world they were in as remote a location as the campus had to offer. But, then, it is unlikely that Tory himself would have done the shopping.

Before moving to a consideration of individual buildings, there is one further aspect of the campus as a whole that needs consideration: the presence of buildings constructed by the representatives of religious denominations. Following the precedent established by the University of Toronto, religious instruction with an explicitly Christian content was provided by denominational colleges. These were incorporated separately with their own governing bodies, but they were able to affiliate with the

66 Letter, Nobbs to Tory, 20 August 1909, UAA# 68-9-29.
university, which meant that, under specified circumstances, students could obtain academic credit at the university for courses taken at the colleges.69 In Alberta, as we have already seen, the Methodist Church of Canada took advantage of this arrangement in 1908 to found Alberta College South, subsequently known as St. Stephen’s College.70 Their lead was followed in 1921 by the Roman Catholic diocese of Edmonton, though the resulting building, known as St. Joseph’s College, was not built until 1927.71

3 INDIVIDUAL BUILDINGS

As an introduction to a survey of the individual buildings that were erected to house the university, the topics of building materials and architectural style will first be considered in general terms.

Building materials

Stone or brick were the durable materials of choice when the university’s first buildings were being planned. For their first building, which was originally intended to house the Faculty of Arts, the Senate resolved to ask “the Government to provide the necessary funds with which to construct the building ... of Granite and Calgary Sandstone.”72 This was the building on which construction was halted by the crisis that led to a change of provincial government in 1910. When the new government subsequently authorized the construction to proceed, a relatively modest structure was built, intended primarily as a residence; the material was brick.

When Nobbs and Darling visited Edmonton in August 1912 to restart large-scale planning, one of the matters they dealt with was the choice of building materials. They recommended that the materials employed should be brick and stone, the proportion of stone to brick being increased in the more important buildings, but the character of brick buildings with stone dressings and trimmings to be maintained throughout the scheme ....73

In a later exchange, Nobbs was to write

We are now sending you revised elevations for the proposed Arts Building and a report. Please get your people to accept the brick and stone design. In the first place I do not build stone fronts with brick backs when a building can be seen all round and with brick introduced in the front it is an easy matter to simplify the treatment in the rear for the sake of economy without making the building look ridiculous.74

Although no reasons for using brick in preference to stone appear in the records, it is reasonable to suppose that economy was the chief consideration. Suitable stone was not available closer than Calgary; brick was available locally. The greater cost of building in stone might have seemed acceptable in 1910, given the general optimism that prevailed during the years of the great land boom on the Canadian prairies.75 But A.L. Sifton, who succeeded Rutherford as premier in 1910, gave Tory a chilly reception when asked for a level of support similar to that provided by Rutherford.76 Under these circumstances, the Board may well have thought that restraint was necessary. On the other hand, it is also possible that Nobbs wanted to use brick because it was part and parcel of the architectural style he was recommending.

Architectural style

Very definite views were expressed at the meeting of the Board of Governors attended by Nobbs and Darling with respect to the type of buildings required. They resolved

That the buildings generally should consist of three storeys and a basement. That the buildings generally be carried out in an elastic free classic style in accordance with modified English traditions, work of this character being eminently suitable to the kind of windows and roofs most practicable in the locality, as also to the materials and labour available.77

Following this extract from the memorandum that summarized the meeting is a note that reads:

70 Senate, Minutes, 6 July 1908, UAA# 12-182.
71 UAA# 68-9-431.
72 Senate, Minutes, 7 September 1909, UAA# 12-182.
73 Board, memorandum of meeting, 22 August 1912, UAA# 68-9-29.
74 Letter, Nobbs to Tory, 11 April 1913, UAA# 68-9-29.
76 Corbett, Henry Marshall Tory, 115-16.
77 Board, memorandum of meeting, 22 August 1912, UAA# 68-9-29.
The present vogue for Collegiate Gothic was characterised [sic] as an exotic affectation which would soon pass out of fashion. This view was reinforced by the statement that both Mr. Darling and Mr. Nobbs were trained in the Gothic school, and fully appreciated the economic and other great practical disadvantages in the way of embarking in that style on a scheme which might take at least half a century to complete. The civilization and methods of XIV Century England were totally inapplicable to XX Century Canada, while the free classic style was the natural building tradition of the English Speaking World.78

Nobbs and Darling had one other recommendation to make about the general methods of construction to be used for the university's buildings. As Nobbs later put it, Factory lighting and unit planning are not only applicable, but indispensable, to efficiency combined with economy, in laboratory design ... with the result that all the buildings were to have top-light and saw-tooth roofs wherever possible.79

**Buildings of the west campus**

During the first three years the university was offering classes (1908-1911), its staff and students carried on their respective activities in temporary accommodation. Then Athabasca Hall (figure 6) was opened.80 It was followed soon after by its near-twin, Assiniboia Hall.81 These two buildings were designed by the Provincial Department of Public Works.82 It is not clear whether it was by accident or intention that the style used for the first two residences harmonized readily with the style Nobbs wished to use.

The third residence, Pembina Hall, was designed by C.S. Burgess, described by Nobbs as the "resident architect at the University."83 (He was also responsible for the dining block added to the rear of Athabasca Hall.84) Though these buildings were intended to provide a place for students to live, two references in the records show that they performed an educational function and were not just dormitories; and that an educational function had been intended:

The Dining Hall has made it possible to conduct not only the residential part of the University in a suitable manner but has made it possible to conduct our social functions in a manner worthy of the University. The gymnasium section of the building was ... in constant use ... during the entire winter. The University is to be congratulated on having this excellent accommodation for physical culture at this early stage of its career. Perhaps no part of the University equipment has been more keenly appreciated by the student body.85

From the very beginning the scheme of residence and dining hall was designed to be part of the Educational work of the University. If you had been an observer of the changes that has

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78 Ibid.
79 Nobbs, "Construction at the University of Alberta,"
3.
80 Edmonton Journal, 2 September 1911.
81 Board, Annual Report for 1913.
82 Province of Alberta Archives, accession nos. 83.86 and 83.227.
83 Nobbs, "Construction at the University of Alberta,"
5.
84 Ibid., 3.
85 Board, Annual Report for 1914.
taken place in the attitude of the students in the last five years since the dining hall was built, you would understand exactly what I mean. There is no part of our work that has given me so much gratification, as the social improvement among the students, due to the fact that the dining hall was there as a great social centre, as well as a place to supply food. In order to secure this Educational result, it is absolutely necessary that the dining hall and residence system be run on a higher plane than an ordinary boarding house ... [because] our hall is infinitely more than a mere dining hall. If it were a question of making money, then we should have started off as in many of the American places with a Cafeteria instead of a well organized and well equipped dining room, and that was the judgment expressed at the beginning by certain members as to what should be done.  

**Buildings of the east campus**

Nobbs was responsible, either alone or in association with Burgess, for all the "teaching" buildings constructed during Tory’s presidency.  

There were five in total. The power plant and the two laboratories did not interest Nobbs. They were of “economic ... construction,” and one was “run up immediately on the close of hostilities.” (emphasis added)  

The Arts and Medical buildings were a different matter. They were large, and so-located as to be the first buildings belonging to the university proper that visitors coming from the east or south would see. In these buildings Nobbs intended to express by his architectural “speech” his commitment to the view that the language of architecture was concerned with “size, harmony, proportion, symmetry, ornament and colour.”  

There is evidence for this assertion: in the case of the Arts Building, there is a distinction between function and appearance. We have already seen that when Nobbs and Darling presented their recommendations to the Board of Governors in 1912, they included the advice that, wherever possible, buildings that would house laboratories should be equipped with top-lights (i.e., skylights) and saw-tooth roofs. Both the laboratories and the Arts Building were given such roofs. In both cases, too, the utilitarian nature of their roofs was hidden from view to the east by parapets facing that direction. In the case of the Arts Building, however, the balustrade that tops that facade was also extended along the north and south facades (Figure 7). In the case of the power plant and the two laboratories, on the other hand, it is only the on the very narrow east and west facades that views of the roof were veiled by brick parapets. In other words, relatively few people ever notice that the Arts Building has a utilitarian roof, whereas only a gesture is made to hide the utilitarian roofs on the other buildings that carry them (Figure 8).  

The importance that Nobbs attached to the Arts Building is also evident in the form of a presentation drawing that shows signs of three evolutions to the design. In each of the evolutions the building was reduced in size and grandeur (Figure 9). This drawing carries dated notations that make it almost certain that the intent to shorten the front facade by “50 feet” at either end and lower it by one storey is the modification referred to by Nobbs in his letter to the Building Committee of 11 April 1913.  

Because it is the east elevation that is shown in the drawing, Nobbs was able to include his beloved tower, even though it was to be detached from the Arts Build-
ing and stand some distance to the west. Even the least grand of the elevations shown in the drawing was scaled down further in the Arts Building as it was actually constructed (figure 7).

Further evidence pointing in the same direction is that Nobbs wanted to decorate the Arts Building with carved ornament on a fairly lavish scale:

I send you a sketch showing the sculptural group I propose. The intention is to represent ancient and modern learning, the ancient learning being symbolized by the old man with the lamp and the scroll while modern learning has a book on her lap and a globe at her feet. This last item is to remind us that a knowledge of things as they are begun with the discovery that the world was round. 91

Finally, a comparison of figure 7 with figure 6 shows that stone was used more abundantly as a decorative trim on the Arts Building than it was on the residences.

Most of what has been said about the Arts Building can be applied to the Medical Building (figure 10). However, the latter differs in two ways that call for special comment. First, the presence of two large lecture theatres is revealed in the facade of the Medical Building by two bays that project from the south (main) facade on either side of the central entrance. In other words, this building reveals some of its internal functions in a way that is not true of the Arts Building, where the articulation of the main facade is governed very largely by the compositional constraints of classical architecture. Second, the main facade of the Medical Building is a crowned by a turret or spire. This feature is not related to any academic function of the building, nor is it utilitarian. Given that it is neither, it may be appropriate to interpret this feature as a sign of the status assigned to the role of the activities housed in the building in the minds of those responsible for its construction.

Although almost never noticed, the Arts Building does in fact have a spire, albeit a stubby one, but it is located over the rear extension of the building and is not visible from the front (figure 8). That rear extension houses Convocation Hall. This is not the great hall that was to form the visual focus for visitors approaching the campus along the line of its projected central axis, and which was also to form the dominant mass in the north face that the university presented to the world across the river valley. The rear extension was to be something more modest: Nobbs showed it as an assembly hall. 92 University historian Walter Johns, however, refers to it as “Convocation Hall,” 93 and it does seem that this has been recognized as its principal function since the time it was built. It is reasonable to conjecture, in the absence of records on the point, that Nobbs conceded that his monumental Convocation Hall was not going to be built in the foreseeable future, and responded by adding the spire to make the building over which it rides seem taller.

Onlookers seem to have shared Nobbs’s opinion as to relative importance

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91 Letter, Nobbs to Tory, 29 September 1914, UAA# 68-9-29.
92 Nobbs, “Construction at the University of Alberta,” figs. 6, 7.
93 Johns, History of the University, 51.
This hospital was planned, built, and operated by John Sandford, History UAA, University of Alberta Hospital, 1914-1964,” 6-7. UAA, “The history of the University in November, 1922,” 69-97-887.

The university as institution and as physical plant corresponded to the university as an institution; second, we will compare the architectural “speech” represented by the university with the corresponding discourse of the time; third, we will deepen the understanding of the university achieved to that point by analyzing the metaphors that are expressed in the physical form of its buildings and the spatial organization of the campus.

The university as institution and as physical plant

So far as the university as an institution is concerned, the focus of attention is formed by the seven characteristics that were identified in the section The discourse of higher education (pp. 7-8). Of these seven, three were clearly translated into physical form. A case can also be made that three of the remaining four were embodied in the university’s physical form, though indistinctly.

First, the university had a strong collegiate base. By 1928 there were ten buildings on the campus. Four of these, the three residences of the west campus plus the Arts Building of the east, were wholly or primarily devoted to serving that function. Important as the liberal-arts curriculum of the university was, however, it did not justify the construction of a separate library. Though there are numerous references in the Tory papers to the library being a place of central importance to the university, it was housed throughout Tory’s presidency in buildings that performed other functions as well.

It is clear that Tory’s university took seriously the obligation to provide for professional as well as liberal education: the campus had four buildings largely, if not wholly, devoted to the needs of the former. It is also possible that the single building that did not, at first analysis, provide an educational function at all — the power plant — may also have contributed to some of the professional programs. In the long run, Nobbs clearly intended the power plant to serve instructional purposes. In that same
long run, power for the campus was to come instead from a small building constructed for the purpose, to be located on what was functionally the back side of the campus (figure 3).

The separation of the university from denominational influence was as clear on the ground as it was in the minds of those who wrote for the Encyclopedia Britannica.

While we think that few would quibble with the points we have just made, the institutional functions having to do with the quality of the professors, with the desirability of the university being a helpful local influence, and with its dedication to the national ideal are less clearly visible. However, we do note that the location of the houses provided for the professors combines proximity to the campus with isolation from the rest of the urban polity within whose boundaries they were located. The relative priorities to be attached to profession and to social life, in one mind at least, is clear enough.

The utility of the university specifically (though not exclusively) to the national ideal was noted by historian W.H. Alexander. We cannot do better than quote his words: One [lesson] ... established by the experiences of 1914-1918 is the importance of the command of resources.... Victory will hereafter be to the nation that has learned how to exploit most successfully its natural endowment ... and how to keep, technically, one jump ahead of the other fellow.... A conspicuous feature of the “new order” ... is an intensified devotion to the material elements of existence, and it is only natural that ... the university of Alberta ... should be found devoting more attention than ever to research along scientific lines, especially in such aspects of science as have practical applications.  

He subsequently wrote:

Perhaps the most noteworthy item indicative of the new order was the foundation in 1920 of the scientific and research council of Alberta, whereby the whole scientific ability and equipment of the university was placed at the disposal of the province for the purpose of providing assistance in ... the exploitation of the resources of the Alberta economic area.  

It is in Alexander’s own linking of these developments with changes in the material universe that we are most interested. In his own words, “The scientific developments hinted at [above] ... received material consecration by the commencing of operations in the spring of 1920 on the second of what we may call the great university buildings [i.e., the Medical Building]. It was about this same time that the fundamental sciences, physics and chemistry, received substantial increase in their equipment.”

The language of architecture as expressed in the university

Klauder and Wise might have taken the plan prepared by Nobbs and Darling as paradigmatic for a campus located on a level site (figure 3). It is formal in its layout, with all the buildings, except for the houses of the professors, laid out in an orthogonal pattern. The style of the buildings is correspondingly formal. Klauder and Wise called for buildings to provide teaching, housing, and recreational purposes. By the time of Tory’s retirement, buildings of all three types had been built, though the Varsity Rink is not one Nobbs would have approved. We also note in this context that Klauder and Wise associated heating plants with the teaching function by classing them with engineering buildings.

Moving on to the Britannica of 1929, figure 3 shows that the University of Alberta had, as its centrepiece, what Nobbs and Darling called “the great quadrangle.” As noted above, Tory’s very first concern, and the one which drove him to seek professional advice, was to provide for the progressive expansion of the campus. Finally, the Britannica of 1910-11 noted a number of features of contemporary universities. Among these were the lavish provision of laboratories and libraries. On this score the University of Alberta seems to have done well under only one of the headings: laboratories.

On the other hand, there seems little reason to doubt that Nobbs’s “elastic free classic” style of architecture is that referred to by the Britannica as “free classic.” By its use, Nobbs and the other architects who worked on the campus before 1923 were able to provide the university with buildings that were “homogeneous in style” and virtually uniform in “colour and material.” Whether that would have been

105 Ibid., 26.
107 Klauder and Wise; see notes 36 and 43-48.
108 Ibid., xi.
Metaphors expressed in the University's physical form

As we noted in our methodological discussion (page 5), we shall apply Lévi-Strauss's binary oppositions, though doing so without applying his particular procedure. Instead, we will simply establish a set of pairs. The set is anchored by taking as the foundational pair, which appear at the top of the table, a pair whose location on the ground is indisputable. Once they are in place, the remaining pairs fall into place.

<table>
<thead>
<tr>
<th>west campus</th>
<th>east campus</th>
</tr>
</thead>
<tbody>
<tr>
<td>back</td>
<td>front</td>
</tr>
<tr>
<td>simple</td>
<td>ornate</td>
</tr>
<tr>
<td>college</td>
<td>university/professional school</td>
</tr>
<tr>
<td>less stone</td>
<td>more stone</td>
</tr>
<tr>
<td>low</td>
<td>high</td>
</tr>
</tbody>
</table>

Of these pairs, it is that of low : high that interests us the most. Despite the policy adopted by the Board of Governors that "the buildings generally should consist of three storeys," and despite the fact that the major buildings of both the west and east campuses rose to that height, yet the quality of height was conferred on the main buildings of the east campus. The use of spires enabled those who made the decisions to identify as important the buildings that housed what they believed to be the most important activities of the university.
We can express what we believe to have been the critical subconscious cast of mind, as it existed in the foundations of the thinking of Tory, Nobbs, and the rest, most correctly as follows: Though they believed that a university is a place where all who attend are equal in their dedication to the purposes for which a university exists, yet the world is a hierarchy in which some people are more important than others, and some activities are privileged in a like way.

In support of this contention, we can also point to the differences in status and perceived capacity to behave in a responsible way that are implied in the pairing:

<table>
<thead>
<tr>
<th>Place of residence for students</th>
<th>Place of residence of professors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rectilinear layout =</td>
<td>Curvilinear layout =</td>
</tr>
<tr>
<td>disciplined condition</td>
<td>disciplined condition</td>
</tr>
<tr>
<td>Classical architecture =</td>
<td>Romantic architecture =</td>
</tr>
<tr>
<td>disciplined condition</td>
<td>freedom</td>
</tr>
<tr>
<td>Under tutelage</td>
<td>Full citizens</td>
</tr>
</tbody>
</table>

CONCLUSION
We have tried to show what was meant by university as that term was understood in everyday language in the first quarter of this century, and then to analyze the campus of the University of Alberta as it was fashioned in that same period. An aerial photograph of the University taken in 1926 (figure 11) allows us to summarize our conclusion. Though the University of Alberta was neither a Cambridge nor a Harvard, nor even a McGill nor a University of Toronto, it was a university as that word was understood at that time.

So far, so good. But it is possible to push the analysis further. The key to doing so lies in that ambivalence with respect to “truth” which might have been present in Tory’s mind (“Quaecumque vera”). Should we, identifying for a moment with the members of the university community, pursue truth (being inspired by the belief that it can be attained)? Or should we devote ourselves to cognitive activities valued by the society that forms the context of our lives, being comforted by the conviction that truth is to be admired as an ideal we place briefly before a small proportion of the rising generation, before they move on to become part of the elite of the society of voters who choose those who will be our political masters and the holders of our purse strings? If we ask those questions, there is no doubt as to the answer given by Tory’s university. Nor is it surprising that a culture that contains such an educational institution as its pinnacle should have proven itself to be self-perpetuating.

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