Strategic Management Upside Down: Tracking Strategies at McGill University from 1829 to 1980

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Abstract

A number of the fundamental premises of strategic management are put into question in a study that tracks the realized strategies of a prominent university over a century and an half. Amidst continual change in detail, there was remarkable stability in the aggregate, and nothing resembling quantum or revolutionary change in strategy ever occurred. This may be explained in some of the terms most popular in business today: "empowerment", "venturing", and especially "knowledge work". Thus, while the typical university may seem very different from the typical corporation, its behaviour may in fact contain sobering messages for the strategic management of businesses.

Résumé

Le présent article suit, sur une période de plus d'un siècle et demi, l'évolution des stratégies d'une université bien connue et remet en question un certain nombre de prémisses élémentaires de la gestion stratégique. Au cœur d'incessants changements qui affectent les détails, on note dans l'ensemble une remarquable stabilité et l'absence de tout changement global ou révolutionnaire dans la stratégie. Cette situation peut s'expliquer par les termes les plus en vogue, de nos jours, dans le milieu d'affaires, à savoir : « autonomisation », « développement commercial », et tout particulièrement « travail intellectuel ». Donc, bien que l'université type puisse paraître bien distincte de la compagnie type, son comportement peut en fait contenir d'importants messages pour la gestion stratégique des entreprises.

Frederick W. Taylor (1911) popularized the term "one best way" almost a century ago. It remains alive and well in the thinking of strategic management, which has stepped from one best way to another over the course of its short history: from the strategic planning of the 1960s and 1970s (e.g., Ansoff, 1965; Steiner, 1979), to the strategic positioning of the 1980s (notably Porter, 1980, 1985), to the core competencies of the 1990s (notably Prahalad & Hamel, 1990). That all of this has worked as prescribed remains an open question; that any of it has worked in the university setting is the subject of this paper.

There has certainly been a steady stream of calls over the years for universities to engage in strategic management and strategic planning (e.g., Holdaway & Meekison, 1990; Hosmer, 1978; Ladd, 1970; Lutz, 1982). Yet seldom have the fundamental differences in strategy been addressed between universities and corporate organizations, for which almost all of these prescriptions have been developed.

Consider mission and product-market strategy, the essence of positioning. The mission of the university is research and teaching: to create and to disseminate knowledge. Yet these, especially research, are largely under the control of individual professors (Hardy, Langley, Mintzberg, & Rose, 1983, 1984). A university of one thousand professors might be described as pursing one thousand different research strategies, and many different teaching strategies. Other key strategic issues—for example, the hiring of professors and the rules for tenure—are often determined collectively: not by the careful conception described in the strategic management literature so much as in the give and take of complex interactive processes. How, then, do prescriptions

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about central planning, core (namely common) competencies, and overall competitive analyses apply to universities?

This is not to conclude that universities do not have strategies. In fact, Hardy et al. concluded that universities are inundated with strategies, in the sense of consistent patterns of action: within programs and departments, about pockets of research and approaches to tenure, concerning the construction of buildings and the methods of teaching, and so on. We just do not understand the trajectory of such strategies: how they originate, evolve, change, and interrelate in the university setting. This study of a prominent Canadian university across most of its history seeks to address these issues.

In his will of 1811, James McGill, a successful fur trader, bequeathed £10,000 to establish a college in his name on his country estate. After a difficult start, during which the family contested the will, the college began with a medical school in 1829. A century and a half later, McGill University had emerged as an internationally known institution with a beautiful campus at the foot of Montreal's Mount Royal mountain (now a five-minute walk from the centre of downtown Montreal), offering an almost full slate of academic degrees to some 20,000 students.

This study tracks the strategies of this institution from 1829 to 1980, in the process addressing some rather unexplored aspects of the strategy-making process. With these dates, we focus on the history—the long trends—and avoid being influenced by what we know best, the recent years that we have lived. After a brief introduction to the research method and sources of data, the university's strategies are described in each of several key areas across the 152-year period, before final conclusions are drawn about strategy making in universities and beyond.

Method and Sources

This study uses a method of tracking strategy that has been applied to an automobile company and a government fighting a foreign war (Mintzberg, 1978), a supermarket chain (Mintzberg & Waters, 1982), and a film company (Mintzberg & McHugh, 1985), among others. The research is based on the definition of strategy as *realized* (pattern in action), as compared with *intended* (plan for action), in order to contrast *deliberate* strategies that have been *formulated* (intended strategies that were realized), with *emergent* strategies that *formed* (patterns of action realized in the absence of, or despite, intentions, see Mintzberg & Waters, 1985).

The issue of deliberateness is particularly interesting in the university setting, because of the individual and collective control over so many specific actions. For a strategy to be "deliberate", not only must the actions have been determined by conscious intentions (namely decisions), but so too must have been the pattern among them. In other words, a series of independent actions that converge on some theme (say the hiring of radical feminists across a number of departments) can be labeled a deliberate strategy only if there was some sort of conscious intention at the outset to establish that pattern. But what may have been deliberate for particular individuals or subgroups may in fact have been emergent for everyone else, including the central management. Can the "organization" then be said to have pursued a deliberate strategy? (What if the hiring of those radical feminists was promoted by some coalition of a few professors spread across departments. Did the system then exhibit common intention?)

Based on these notions of deliberate and emergent strategy, research on the strategy-making process has generally proceeded in four steps: (a) *collection* of basic data, in particular, traces of actions taken by the organization, studied in terms of main areas of strategic activity, as well as supporting evidence about the organization, its performance, and its context; (b) *inference* of strategies as patterns (consistencies) in particular stream of these actions, and then inference of periods in the history of the organization, through consideration of significant times of change in these strategies; (c) *analysis* of each period, based on the intensive study of internal documents as well as interviews with available key players; and (d) *synthesis* of conceptual conclusions for the study, based on brainstorming around a series of theoretical questions dealing with patterns of strategic change, relationships between deliberate and emergent strategies, and the interplay of environment, leadership, and organization in strategy formation (an unpublished document outlining this in detail is available from the first author).

This study proceeded somewhat differently for reasons that will become clear. We first traced action streams and inferred strategies in various areas, as in the other studies. But these did not so evidently fall into distinct periods, meaning that naturally occurring times of comprehensive change were less evident here, an important conclusion in its own right. Certainly there were important events in the history of McGill, such as the appointment of a key Principal (McGill's label for President or Rector), or the shift to a major new source of funding. But these did not seem to manifest themselves in shifts across a wide range of strategies.

Accordingly, we focus this presentation on particular strategies themselves rather than on periods in the history of the organization, followed by broader conclusions that draw conceptual lessons about the entire period of the study.

The great advantage of studying a well-known insti-

tution over a century and a half is that there is so much interest in its past. We were particularly fortunate to have had access to a two-volume history authored by a distinguished professor of divinity who subsequently assumed senior positions in the university's administration (Frost, 1980, 1984). There were also, of course, annual reports dating back to 1868. Other sources included academic calendars, internal telephone books (to identify the introduction of new units), minutes of the Board of Governors and of the Senate, organization charts, and student and administration newspapers, as well as interviews.

The disadvantage of extending a study over such a long period of time, of course, is that most of the key players are simply unavailable for interview. Moreover, universities themselves, as we shall see, leave barely any central trace of some of their most important activities, notably, styles of pedagogy and approaches to research. These tend, as noted, to be carried out on an individual basis, so that the study of a university with dozens of departments and thousands of professors becomes not so much the study of one organization as of a collection of "loosely coupled" entities (Weick, 1976). Hence, with all that we could study, the critical aspect of overall mission was something we could not, at least not with our methodology. But, as should become evident, we had our hands full with what was available, not only the available data but also the lessons that could be drawn from them.

In seeking to extend the study over such a long period of time, we were forced to focus on those areas that left tangible traces of the actions taken. Listed in the order discussed below, these include: (a) academic offerings, including degrees and certificates, majors and diplomas, research centres and institutes; (b) enrollment, by Faculty and geographical area, also academic staff levels; (c) finances, including funding by source and the resulting surpluses and deficits; (d) buildings, including new construction, acquisition, and renovation; and (d) structure, including principalship, senate and board of governors membership, and the development of support services and administration.

Academic Offerings

Figure 1 shows various aspects of program activity at the university, organized by Faculty. The label Faculty in Canada, aside from reference to the corps of professors, labels major units, or "schools" as they are called in American universities, usually comprising several departments. (We shall capitalize the F when using this meaning here.) Medicine was the first Faculty, in 1829, followed by Arts and Science soon after and then Law, and Management was the last, created in 1968. The Faculty of Arts and Science was split into two in 1971, 128 years after its creation.

Two aspects of this chart are quite remarkable. First, with a single exception (Veterinary Science, which lasted only 12 years, from 1891 to 1903), the university never closed a single Faculty. In other words, nothing that the university started in a serious way over 150 years ever was ever stopped. At this level of aggregation, the institution remained the sum total of all that it ever did.[1]

Second, the introduction of new Faculties is remarkably spread out. Except for three in the years 1920-1922 (one, Dentistry, spun off Medicine and a second, Music, always rather small), Faculty introductions span rather evenly the entire century and a half. To give an idea of this spacing, we tabulated the years between each successive new faculty: 14 (Medicine to Arts and Science), 10 (to Law), 25 (to Applied Science, later renamed Engineering), 13 (to Veterinary Science), 16 (to Agriculture), 13 (to Music), 0 (to Dentistry), 2 (to Graduate Faculty), 26 (to Divinity, later renamed Religious Studies), 17 (to Education), and 3 (to Management).

Figure 1 also records the introduction of major new degree programs, and tells much the same story. (There is about a four-year lag here, as the announcement of the first graduates in the annual report was taken as the most reliable indicator of the introduction of a new program; Graduate Faculty is not shown as many of these degrees were listed in other Faculties.) Almost all of the 15 decades indicate some activity (the exception being the 1850s, 1860s, and 1880s), yet the maximum was only three new degrees, and that only occurred twice (in the 1900s and 1940s). Six of the decades show two new degrees and four show one. The absence of clustering is rather striking. In fact, when we tabulated graduate degree additions (e.g., an LL.M. following an LL.B.), there was even more of a spread.

Only when we considered new certificates, diplomas, and majors by Faculty did some clustering begin to appear, shown as aggregates of the data in Figure 1. Some Faculties (for example, Dentistry and Religious Studies) were only thinly developed, with just a few basic degrees. Others developed extensively, with all kinds of special programs, sometimes across substantial periods of time (notably Medicine and Arts and Science), or else in particular periods (such as Education in the last 30 years of the history). Overall, this activity tends to cluster from the end of the last century into the 1920s, especially in Medicine, Engineering, and (in two clusters) Arts and Science. A second clustering can be seen in the 1940s through 1960s, again in Medicine and Arts and Science, and (here, newly) in Education. But note that all of this pertains to only four Faculties out of the 11 (leaving aside

Figure 1
Academic Activities

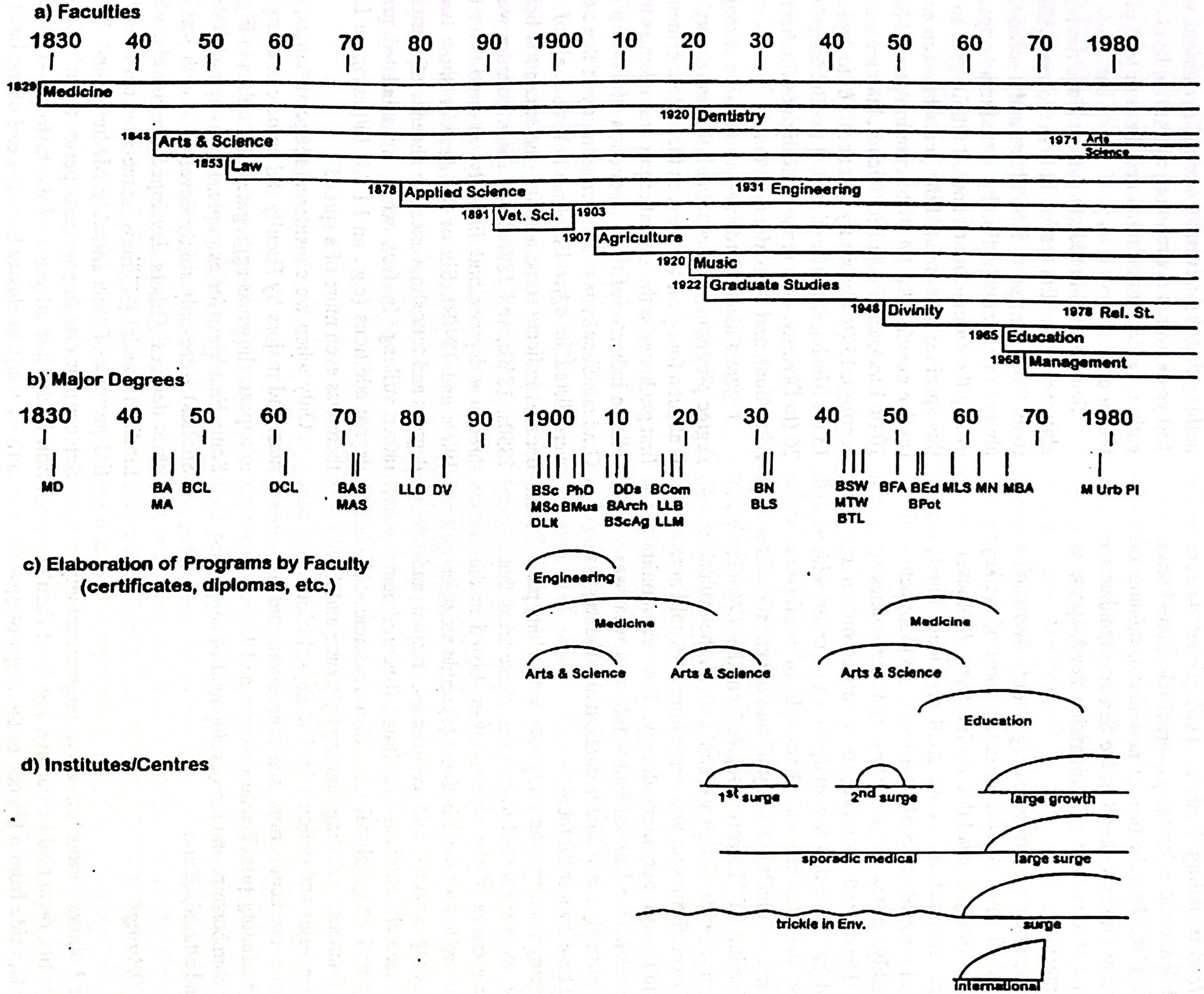
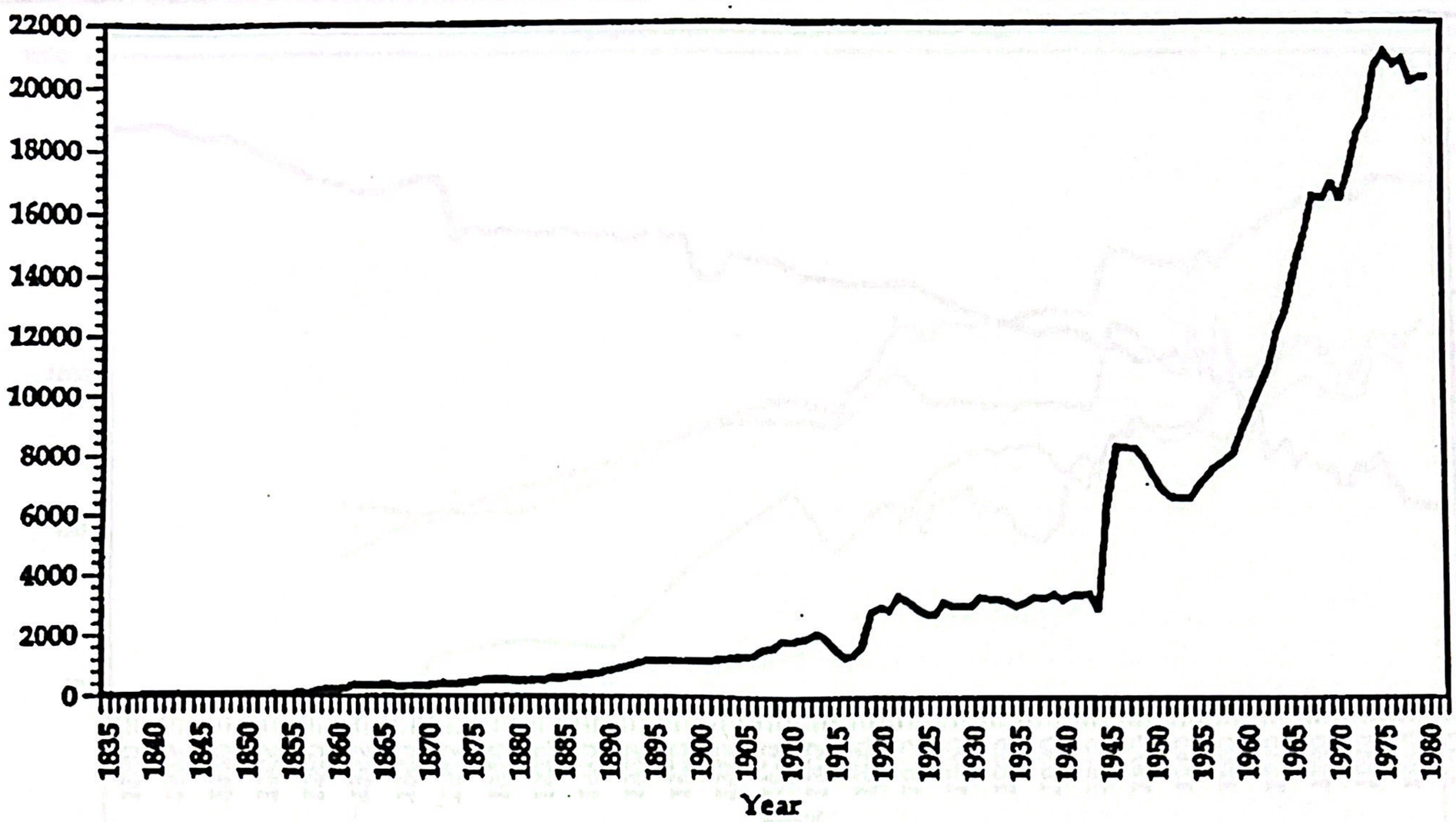


Figure 2a
Enrollment Figures, Total



Veterinary Science and counting Arts and Science as one).

Finally, we tabulated our one clear trace of research activity, the opening of new centres and institutes, where research, largely an individual activity, manifested itself institutionally—in certain cases, at least. (Centres tend to be created where there is the need for collaborative research and/or for the purchase of expensive equipment.) This, again, is shown symbolically as aggregates of our data.

Perhaps because of its institutional nature, here we see somewhat more clustering, especially in more recent times, with three periods of growth in particular, a first in the 1920s and early 1930s, a second after World War Two, and the one large surge beginning in the early 1960s and running to the end of the study period. Only three focal themes could be discerned, one in Medicine (that began sporadically in the late 1920s and developed into a major surge from the mid-1960s), a second related to environmental issues (that began as a trickle toward the end of the First World War and also surged beginning in the early 1960s), and a third in the international realm that occurred only during the 1960s.

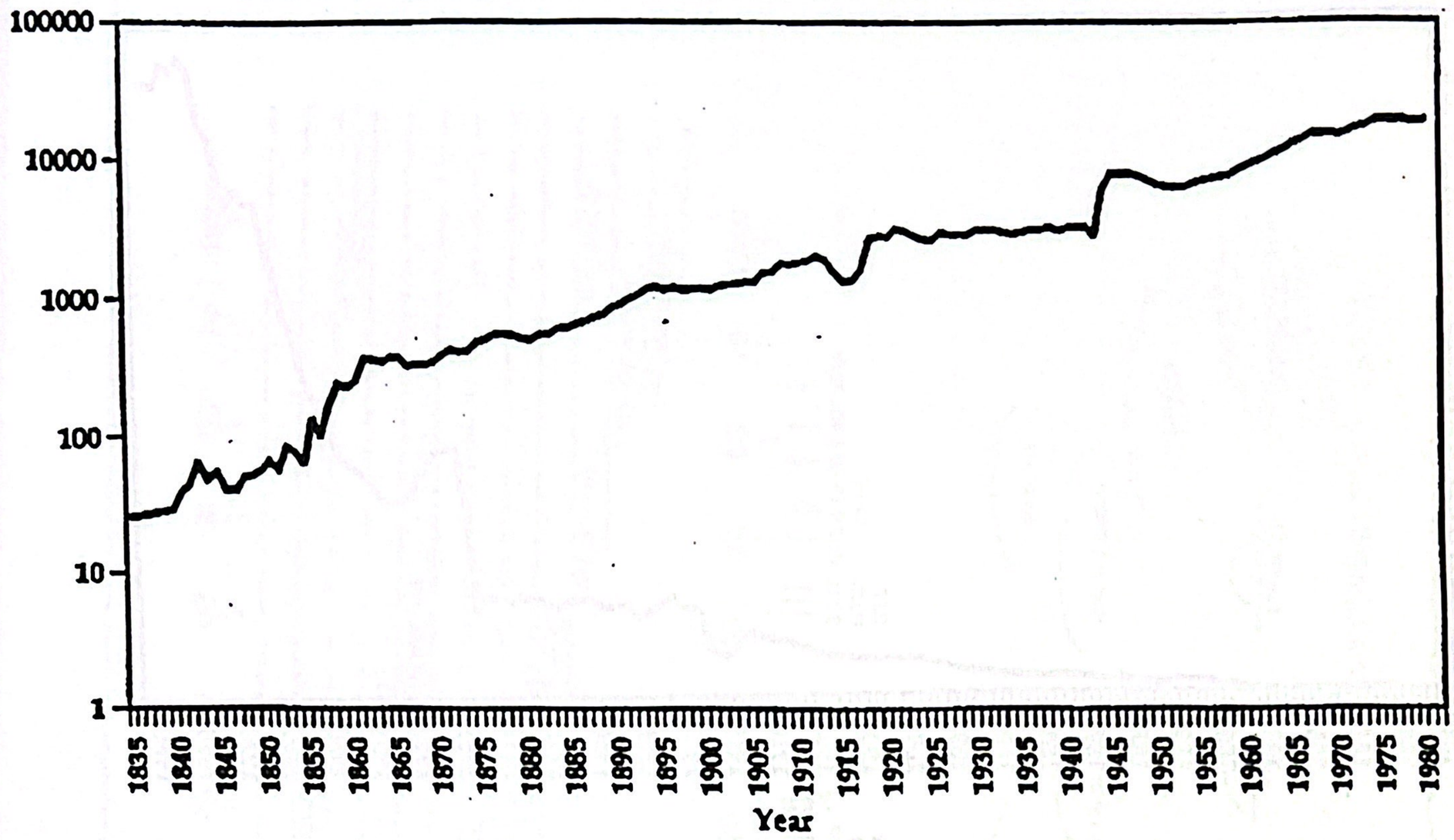
An effort to identify concentrated periods of attention by Faculty did not produce anything beyond the fact that some of the professional Faculties figured more prominently in the early years (Medicine and Law) and the later ones (Education, and Medicine again), while Arts and Science came into and out of attention throughout the history.

Enrollment

Figure 2a plots the total student enrollment of the university across its history. The curve does not look particularly remarkable: fairly strong long term growth with a dip for World War One and somewhat slower growth during the Depression followed by a major surge after World War Two, and then fairly rapid growth to near the end.

But when the same figures are plotted in Figure 2b on a semi-log scale, which highlights comparative rates of growth, a remarkable thing happens: the university seems to have settled on a trend line in the late 1860s (just as Canada became a nation), with about 300 students, and stayed on it for over a century, to the end of the study period, with 20,211 students. There were all kinds of short-term variations, to be sure, as well as the major blips of the two World Wars (when enrollment dipped and later surged, especially after the Second War, when the university initiated special programs to accommodate the returning veterans), and the more noticeable

Figure 2b
Enrollment Figures, Total (Semi-Log)



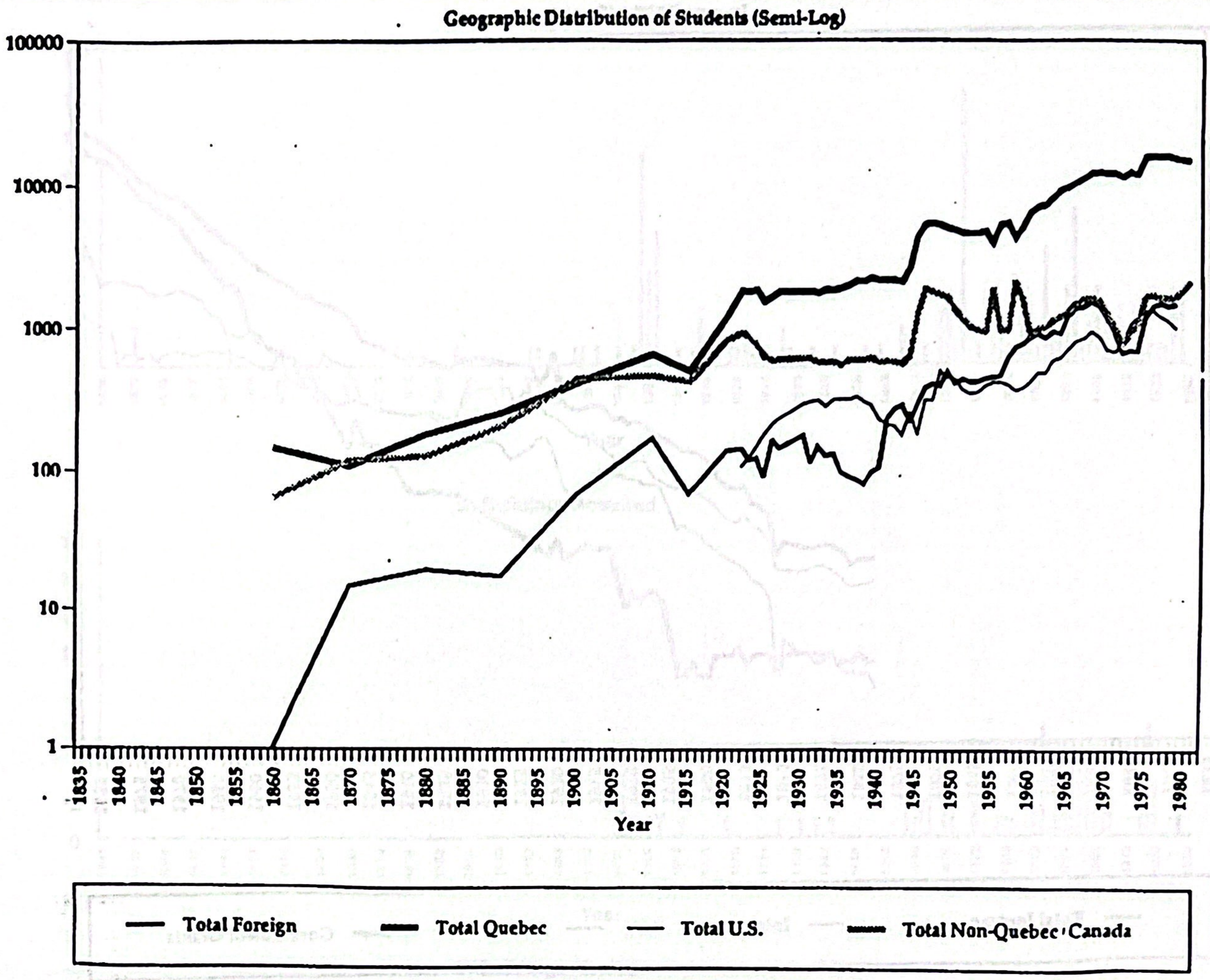
slowed growth of the Depression (itself remarkably steady). But in all cases, the university fell straight back on to its long-term trend line, where it almost precisely remained at the end of the study period in 1980. It is almost as if some larger force was driving this rather fragmented system to attain more or less steady growth for over a century.

Indeed, the university's biggest surge in enrollment ever, from 9,500 students in 1961 to 16,500 in 1969, when considered statistically on the semi-log graph, could almost be considered a correction, to get back on the trend line it came off during the Depression 30 years earlier. Might this be explained by the "baby boom" that itself reflected the Depression followed by the War? With the nature of the university's decision-making process, however, we can hardly talk about a deliberate strategy over such a long period. But we can certainly talk about a realized one, whatever the reasons, of 3.78% compounded growth.

When we considered the same figures by Faculty, we seemed to get not more explanation but less, because the overall highly ordered trend line appears to comprise others of mostly greater variability. Arts and Science, as the largest Faculty, followed a similar trend line but with greater short-term variability around the mean; Medicine appears to have stopped major growth at the turn of the century; Engineering exhibited greater variability until enrollment stabilized after the post World War II surge; Graduate Faculty grew faster but with greater variability, as did Management, while Law showed slower growth but with higher short-term cyclically. With the whole university generally growing faster and steadier than its individual Faculties, the conclusion can be drawn that it grew more by adding activities than by expanding existing ones. In other words, McGill grew especially by the *diversification* of its offerings.

Certain faculties controlled their enrollment very carefully, notably Law and Medicine. In fact, the Quebec Bar controlled numbers in the Law Faculty, for example, with a deliberate target for a time of no more than 500 students. In the case of Medicine, the number of beds in the Montreal teaching hospitals was a key factor. Other Faculties, notably Arts and Science, did not limit numbers so much as accept any student who met certain criteria. In the case of Engineering, enrollment was partially controlled, especially in times of growth (e.g., before the First War and in the early 1950s), due to equipment restrictions. But when interest waned, enrollment was opened up. Indeed, the university went to great efforts to sustain Engineering when demand dropped, implying a kind of smoothing behaviour with regard to the total number of students.

Figure 3
Geographic Distribution of Students



Considering the figures overall, Medicine rose first (that is how McGill began its existence) followed by Arts and Science and then Engineering, so that just after the turn of the century, the university was a balanced mixture of these three. Then Arts and Science surged ahead, but by the mid-1920s, McGill was a general university with an almost full range of offerings, much as it is today, although Graduate Faculty enrollment grew rapidly after World War Two as research became more prominent.

Considering the geographic breakdown in Figure 3, for most of the study period McGill had a significant population of foreign students. Additionally, before the turn of the century it enrolled as many students from outside Quebec as from within it. Since 1915, however, in waves, it became an increasingly Quebec (and especially Montreal) institution, although foreign enrollments (U.S. and abroad) did grow rapidly after World War Two.

Quebec enrollment followed the pattern of total enrollment, more or less, and in fact constituted most of it. The rest of Canada exhibited somewhat wider swings and much slower growth in this century, while growth in American as well as offshore enrollment maintained roughly the same rate as Quebec, but with wider swings. It is interesting that all the lines, save that for Quebec, meet just before the end of the study period.

Finances

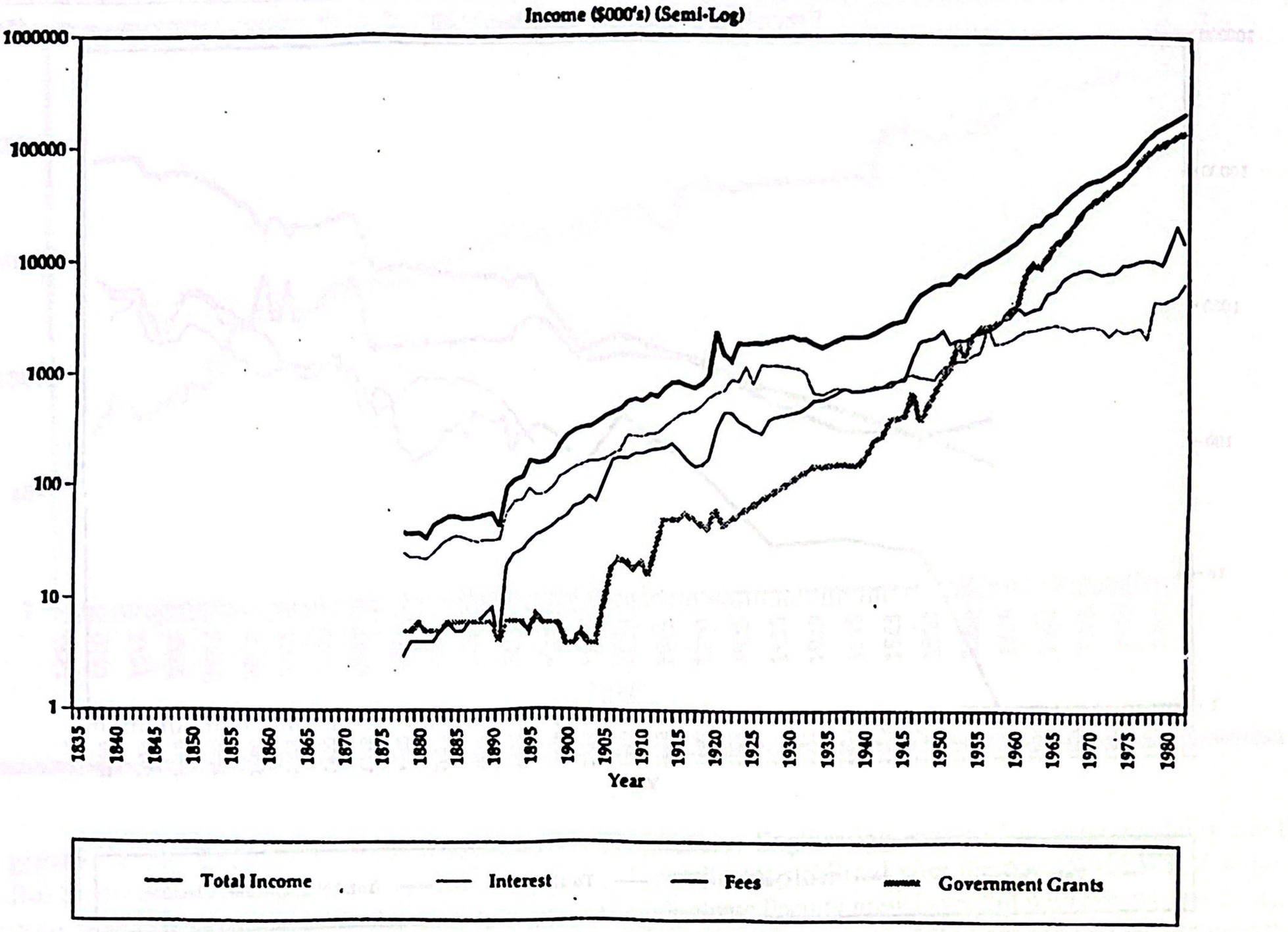
Figure 4 shows the income of McGill University from the 1870s (when reliable data became available) to the end of the study period, broken down by its three main sources. Again, as the plot is on a semi-log scale, the steady long-term rise in total income can be seen, which accelerated after the Second World War.

In some ways, the curve is smoother than the one for enrollment, with the exception of two sharp blips: down then up late in the last century, and up then down and up again in the 1920s.

The breakdown of this income between student fees,

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Figure 4
Income



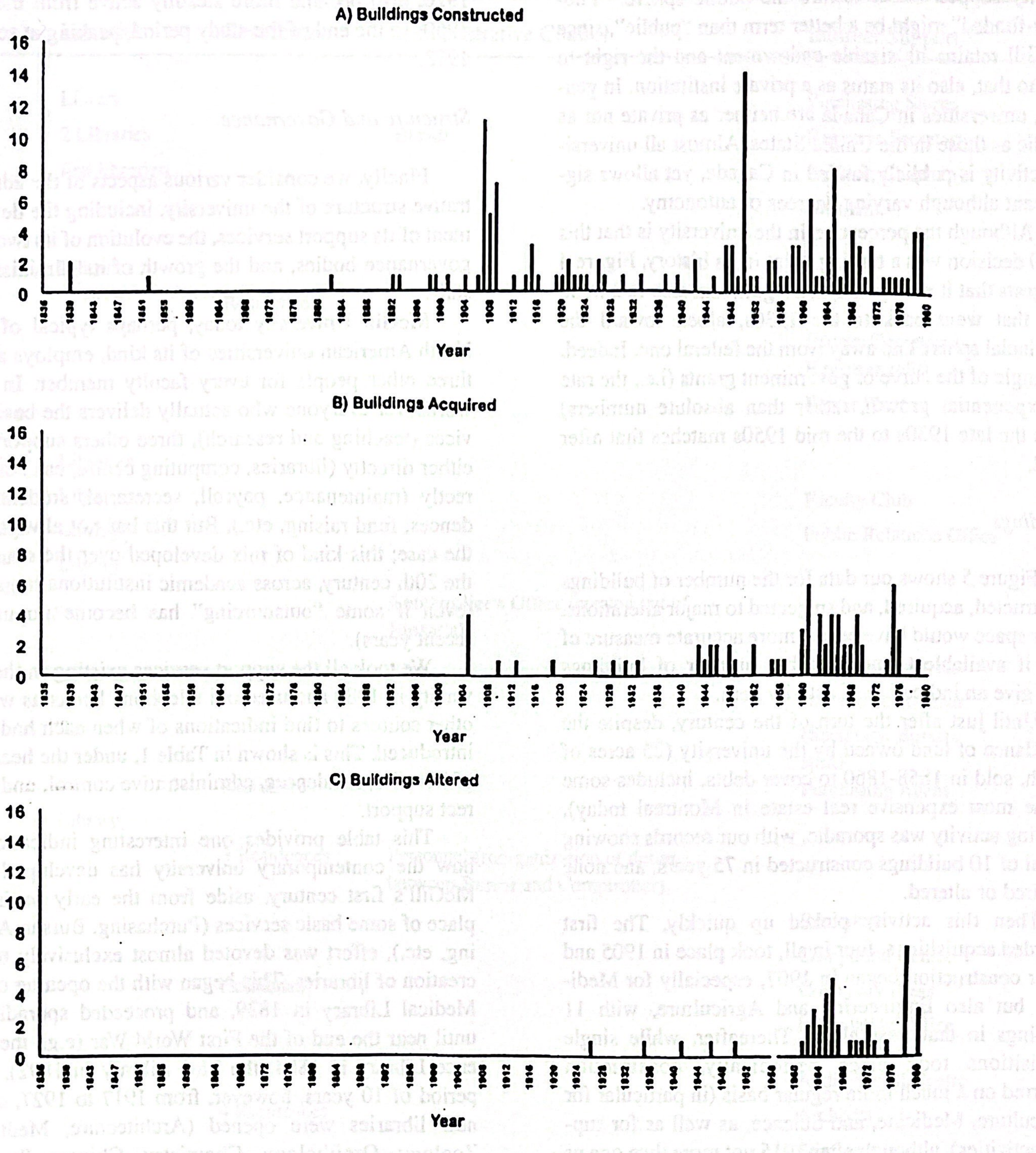
interest (reflecting donations and endowments), and government grants tells an interesting story of the university's history. Rough periods of emphasis can be delineated, but identified as much by the crisscrossing trends as by dramatic shifts.

Commensurate with its founding on James McGill's £10,000 grant, not to mention the considerable real estate that accompanied this, McGill was a university supported largely by donations for virtually its first full century; into the new century, interest made up the lion's share of the income. But this belies the history that preceded the data of Figure 4, because in its early decades the university stumbled from one financial crisis to another, through continual bouts of poverty and debt. It was not until 1837 that the family challenges to the initial grant were exhausted. A first building was then constructed, which ran a factor of three over budget, leaving insufficient funds to pay the professors. By 1852, after a series of real estate manipulations, the university had to close its doors for one year, firing all its staff.

What might be called the age of the benefactors began in the early 1860s, shortly after William Dawson, McGill's great Principal (and one of its great scholars as well) began his 40-year tenure. Three men in particular supported the university: William Molson of the beer family, then, in the 1880s, Sir Donald Smith, who earned his fortune building the Canadian Pacific Railway, and Sir William McDonald of tobacco interests. Major grants from the U.S. Carnegie and Rockefeller Foundations in the 1920s (including a million dollars from the latter for the Medical Faculty in 1920) brought the age of the benefactors to a close, although important benefactors did appear later.

Government income was low and relatively steady in most of these years, showing two major increases in the first two decades of the 20th century but still remain-

Figure 5
Buildings



ing far below the other two sources of income. Fee income rose very sharply near the end of the first century and then began a very steady if occasionally interrupted rise, suggesting that, of all the parameters of this study, this was among the most stable and, taking inflation into account, the slowest to increase. By the mid-1930s, for about 10 years, fee and interest income were virtually identical, after which the former exceeded the latter in almost all the remaining years.

Government grants increased steadily and, from the 1940s, at a more rapid rate, bypassing interest income in the 1950s and, after running almost identical with fee income for most of the 1950s, pulling rapidly ahead of it as well. So, by 1960, the year in which McGill took a

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wrenching decision to accept major and statutory provincial government funding ($5.3 million, compared with grants in the $1.5–$2 million range previously), the university slipped closer toward the public sphere. "Publicly-funded" might be a better term than "public", since McGill retains its sizable endowment and the right to add to that, also its status as a private institution. In general, universities in Canada are neither as private nor as public as those in the United States. Almost all university activity is publicly funded in Canada, yet allows significant although varying degrees of autonomy.

Although the perception in the university is that this 1960 decision was a turning point in its history, Figure 4 suggests that it was, perhaps, a significant step in a trend line that went back to the 1930s, albeit toward the provincial sphere and away from the federal one. Indeed, the angle of the curve of government grants (i.e., the rate of exponential growth, rather than absolute numbers) from the late 1930s to the mid 1950s matches that after 1962.

Buildings

Figure 5 shows our data for the number of buildings constructed, acquired, and subjected to major alterations. Floor space would have been a more accurate measure of this, if available throughout, but number of buildings does give an indication of activity here.

Until just after the turn of the century, despite the abundance of land owned by the university (25 acres of which, sold in 1858-1860 to cover debts, includes some of the most expensive real estate in Montreal today), building activity was sporadic, with our records showing a total of 10 buildings constructed in 75 years, and none acquired or altered.

Then this activity picked up quickly. The first recorded acquisitions, four in all, took place in 1905 and major construction began in 1907, especially for Medicine, but also Engineering and Agriculture, with 11 buildings in that year alone. Thereafter, while single acquisitions took place periodically, construction occurred on a much more regular basis (in particular for Agriculture, Medicine, and Science, as well as for support activities), although after 1915 not more than one or two buildings were added in a single year. This continued right through the Depression (even with mounting deficits), to the end of World War Two, after which, due to the degradation of existing facilities during the war as well as the influx of veteran students, there began the most extensive building activity in the university's history. Fourteen buildings were constructed in 1950 alone, six in 1961, and eight in 1965. (The university grew in size from 1.2 million square feet in 1959 to 5 million in 1971.) This growth slowed somewhat in the 1970s.

Acquisitions, which picked up in the 1940s, also continued to the end of the study period, peaking at six in both 1961 and 1975. Major alteration, which began in 1926, also became more steadily active from the early 1960s to the end of the study period, peaking at seven in 1978.

Structure and Governance

Finally, we consider various aspects of the administrative structure of the university, including the development of its support services, the evolution of its two main governance bodies, and the growth of its administrative staff.

McGill University today, perhaps typical of large North American universities of its kind, employs almost three other people for every faculty member. In other words, for everyone who actually delivers the basic services (teaching and research), three others support that, either directly (libraries, computing centre, etc.) or indirectly (maintenance, payroll, secretarial, student residences, fund raising, etc.). But this has not always been the case; this kind of mix developed over the course of the 20th century, across academic institutions in general (even if some "outsourcing" has become popular in recent years).

We took all the support services existing in the university in 1980 and used old telephone books as well as other sources to find indications of when each had been introduced. This is shown in Table 1, under the headings of libraries, residences, administrative control, and indirect support.

This table provides one interesting indication of how the contemporary university has developed. For McGill's first century, aside from the early setting in place of some basic services (Purchasing, Bursar, Auditing, etc.), effort was devoted almost exclusively to the creation of libraries. This began with the opening of the Medical Library in 1829, and proceeded sporadically until near the end of the First World War (e.g., the Science Library in 1884, the Law Library in 1892). In a period of 10 years, however, from 1917 to 1927, seven new libraries were opened (Architecture, Medicine, Zoology, Ornithology, Chemistry, Chinese Studies, Library and Information Studies). After that, only one new library appeared (Commerce in 1943), although two were later moved into expanded new facilities (the general library in 1970 and the Commerce Library, renamed Management, in 1976).

Residences did not develop like libraries. The first was opened in 1896 and a second in 1939. Three opened in 1947 alone and (after one in 1962) another four were added in 1965.

Judging from Table 1, the contemporary university

Table 1
Chronology of Major Support Services

Year	Libraries	Residences	Administrative Control	Indirect Support
1829	Library			Purchasing Stores
1843	2 Libraries		Bursar	Registrar Secretary
1849	first librarian			Auditor, Chaplain
1883				Museum
1884,1892, 1893	Libraries			
1896		Residence		
1903				(Bursar/Secretary/ Registrar split)
1909				Power Plant
1917,1919, 1922, 1923	Libraries			
1924	Library			Faculty Club
1926	Library			Public Relations Office
1927	Library			
1929			Comptroller's Office (created out of Bursar's)	
1933				Placements Bureau
1934				Investment Advisor
1936				(Secretary, Bursar/ split)
1939		Residence		Purchasing Agent
1943	Library			
1947		3 Residences	Personnel (reorganization of duties between Bursar and Comptroller)	
1951				Bookstore
1960				Computing Centre
1962		Residence		University Press
1963				Information Office Grants Office
1964				Audio Visual Centre
1965		4 Residences		Archivist
1966				Printing, French Centre
1969				Teaching Resource Centre
1970	Expansion of General Library		Office of University Planning	Publicity Office, Real Estate Office
1974			Management Systems; Budget Planning	Development Office
1976	Expansion of Management Library			Industrial Research Office

with its extensive support services is a phenomenon that, ironically, dates from the 1930s, even perhaps the 1920s. The McGill Faculty Club opened in 1924 and its Public Relations Office in 1929. Three major services were added in the 1930s (Placements Bureau in 1933, Investment Advisor in 1934, and Purchasing Agent in 1939). But it was in the 1960s that the real growth of services began, with the Computing Centre in 1960, followed by the University Press, Grants Office, Audio-visual Centre, Printing Office, and so on. That growth appears to have been more or less completed by 1970, with only a Director of Development and an Office for Industrial Research added after that (in 1974 and 1976).

Finally, as much as indirect support developed in the university, administrative control did not, which suggests that universities do not function like most other organizations. This activity barely developed at all, let alone in parallel with the burgeoning growth of students, faculty, budgets, and facilities.

Our data show a Bursar's Office established in 1843, a Comptroller's Office created out of the Bursar's Office in 1929, and the duties between these two clarified in 1947, when a Personnel Office (later relabeled Human Resources) was added. The first office of University Planning was opened in 1970, and offices of Management Systems and Budget Planning were added in 1974. Even well into the 1990s, the only university-wide units that can be thought of as administrative control included, among dozens and dozens of direct and indirect support services, Accounting, the Comptroller's Office, Internal Audit, and the Vice Principalship for Planning and Resources.[2] All of these remained tiny, except for Accounting, whose space in the 1997 telephone book was nonetheless not much larger than that for the McGill Research Centre for Intelligent Machines. Music, one of the smallest Faculties, and the fund-raising office each occupied significantly more space.

As for the direct line management, the university hierarchy has always been very flat, at least in the academic areas (although somewhat more conventional in the support areas), having experienced virtually no significant elaboration over the years. The Faculty of Management, for example, had no intermediate level of supervision between the 63 members of academic staff listed in the 1997 telephone directory and its dean. Its area heads served in support rather than supervisory capacities, and, in fact, these posts were generally filled on temporary, rotating bases.

Larger Faculties are split into more formal departments, each with a head, but even here similar or in fact larger "spans of control" are common (e.g., in the Department of Pediatrics in the Faculty of Medicine in 1997, over 100 faculty members were listed under a single head; the administrative Accounting Department, in contrast, listed 53 people, of whom seven or eight appear to have had managerial titles). There are, of course, what might be called lateral managerial positions, with authority over programs but not over people, as in the post of Associate Dean, Masters Programs, in the Faculty of Management. The elaboration of these positions, as well as those of administrative assistants to aid the deans, appears to have taken place in most Faculties in the 1962-1966 period.

Between the deans of the various faculties and the Principal of the whole university, the 1997 telephone directory listed six Vice Principals: one for the Macdonald Campus (which is mainly Agriculture), two (Academic and Research) for most of the rest of the academic activities, and the others for Administration and Finance, Development and Alumni Relations, and Planning and Resources.

We collected evidence on the changing nature of the university reporting structure, as well as its various organigrams over the years, but those did not produce much of significance. For the most part, aside from the support services, activity here seems to have consisted of the periodic juggling of reporting relationships between the deans and the vice principals (the deans themselves, of course, pegged to the Faculties, which, as noted, remained remarkably steady once established).

Another aspect of structure is the official governance of the university, particularly the interplay over the years of the largely external Board of Governors and the largely internal Senate. Much can be (and has been) written about these two; in addition, we undertook a study of the size of both as well as a qualitative assessment of their power relationships over time.

Both grew over the years, the Board steadily, especially between 1907 and the early 1920s and after 1960 (to more than 40 at the end of the study period). The Senate, which grew steadily from under 20 members in 1860 to almost 70 by the end of World War One, diminished after the war and again before World War Two, to a low of about 25 members, before peaking again in the early 1970s at over 80 members.

Qualitatively, in its early years McGill was formally governed by a public body called the "Royal Institute for the Advancement of Learning", which exerted great influence over it. But by the 1860s power had effectively passed to its own Board of Governors. The Senate came into formal existence (by that name, at least, and with the beginning of its current powers) in 1935, as the "highest academic authority in the University". It participated in the appointment of deans, and could initiate constitutional amendments so long as these were ratified by the Board of Governors. Gradually, as the Board of Governors changed from an all male, Anglican body early in the last century to include other ethnic and reli-

gious groups, women, and eventually, students, the Senate, comprising an increasingly broad mix of people from inside the university, became relatively more influential.

Still, beyond these two governing bodies, other forms of influence gained in importance, especially that of the Quebec Government, also of the faculty association (not a union as such), the McGill Association of University Teachers (MAUT), as well as faculty members themselves, especially in the 1960s. "Until then, the only significant committees within Faculties consisted of deans and department heads, whose appointments could last for decades, [and] Senate as dominated by the deans" (Edward Stansbury, former Vice Principal for Planning, personal communication).

And so over the course of a century, although perhaps accelerated near the end, a rather closed, focussed power group had given way to rather dispersed governance, which is consistent with the conclusions we shall now draw about the strategies and the strategic making process.

Where are the Strategies?

Where is strategy in all this? Or, perhaps more to the point, where is strategy as pattern, whether or not intended, and where are intentions?

Glancing across Figure 1, which contains our findings on the central activities of the university, namely its academic offerings, as well some indication of its research activity, we see remarkably little patterning (i.e., strategy), emergent or deliberate. Faculties came (and rarely went) and degree programs were added from time to time, while less significant certificate and diploma programs did come in clusters, as did research institutes and centres. McGill University grew by diversification to become a more or less fully elaborated university over a century and a half. This may be a strategy of sorts, but hardly different from dozens of other universities.

Yet break any of this down and strategies can be found everywhere. The Faculty of Medicine, for example, enrolled considerable numbers of Americans after the Rockefeller Foundation grant in the 1920s, and in the 1960s the new business school became the first in Canada to adopt the theory-oriented approach pioneered at the Carnegie Institute of Technology.

If strategy is pattern, then there certainly was a crystal clear strategy of growth in total enrollment—3.78% annually for over a century. Since it is difficult to imagine a principal of McGill University announcing such a strategy in 1870, we can only conclude that this is about as emergent as a strategy can get.

Emergent, but not likely by chance. This order must have been driven by something. We suggest two explanations.

First is corresponding growth in the university's prime source of students, namely the population of the Island of Montreal. In fact, the area's population grew in exponential fashion, at least from 1861 to 1981, indeed rather more steadily than that of McGill, if somewhat slower, although, like McGill, that growth did slow during the Depression as well as in the final decade. This suggests that the university enrolled a steadily increasing proportion of the Montreal population, which reflected the growing demand for higher education.

Attempts were made to stimulate enrollment from particular groups and particular areas, especially in the later years, and the university also tried to limit some of its places to particular numbers and even, in some cases, to people of particular strata and ethnic backgrounds. But the university also reacted to the interests, demands, and pressures of the communities that surrounded it.

A second explanation for the steady growth in overall enrollment, as well as more cyclical growth in Faculty enrollment, might be found in Cyert and March's (1963) notion of "sequential attention to goals": that decisions on the growth were subjected to bargaining among the players. For example, one Faculty may have been allowed to grow for a time and then another. Or perhaps champions for growth and for consolidation simply came and went in the various Faculties so that, even within any given Faculty, these two goals may have been attended to sequentially.

With regard to income, the interesting patterning is in the relative leveling out of fee income and the dramatic growth in government income. Unlike the private universities of the United States, McGill went the route of a quasi-public institution, yet managed to maintain a rather large degree of autonomy.

But did McGill choose to go that route? As we noted earlier, while its people agonized over accepting the provincial government grant of 1960, which put it somewhat more firmly under the control of Quebec City, the data of Figure 4 suggest a trend line that was established back in the 1930s.

The central administration of the university did not have much control over programs. But it did have considerable influence over physical and social structures. Buildings, for example, whether to be constructed, acquired, or altered, require formal decisions. So here we do see some clear patterns: a major surge (read strategy) of construction in the early years of the 20th century, again after World War Two, and significantly in the 1960s, the latter likewise for building acquired and altered.

Changes to the social structure, in particular the addition of support services, likewise required formal decisions of a central management. But here we see less

patterning, and what there was of it appears to follow outside forces or trends. Library development was widely spread out, while the residences came largely in the heavy growth years of 1947 and 1965. Administrative control units were added only occasionally, while indirect support units came more frequently, particularly in the 1930s and especially the 1960s. But this probably happened in most universities in North America. If "industry recipes" do, indeed, exist to guide action taking (Spender, 1989), then the industry of higher education has certainly had its share.

Structural reorganizations occurred frequently. But it is not clear that they made much difference to the overall functioning of the university. Throughout, the administrative structure remained thin, a characteristic of professional bureaucracy (Mintzberg, 1979).

Where are the Strategic Periods?

In other studies of tracking strategies, it proved rather easy to identify distinct periods in the history of the organization. Often these revolved around crises, for example a sudden drop in the sales of an automobile company (Mintzberg, 1978), followed later by a key "turnaround" through the redesign of many models. Or they appeared as a change in one strategy that drove others, such as a shift to self-service in a supermarket chain in the 1930s (Mintzberg & Waters, 1982). Both examples came from rather integrated, centralized organizations, of the "machine" or "entrepreneurial" form (Mintzberg, 1979). But even in the more "adhocracy," or project form of organization, no less dependent on skilled experts than a university (but involving them in much more teamwork), distinct periods were clearly evident, such as in the case of a film company that experienced cycles of divergence and convergence in the characteristics of the films it made (Mintzberg & McHugh, 1985). All of this is consistent with the punctuated equilibrium theory of Miller and Friesen (1980, 1984) and Tuchman and Romanelli (1985), that long periods of incremental adaptation are interrupted by short bursts of revolutionary realignment. But we saw none of this in the university.

Of course, one can always find periods in the study of any organization: here, for example, up to about 1855, when the university was trying to get on its feet, and after 1880, when its development proceeded more quickly, and after 1960 when it accepted that Quebec grant. But were such periods sharp and significant here?

We think not. We have already made our point about the government grant. In fact, while this seems to have been followed by increased activities in support services, construction, and the creation of institutes, changes in what really mattered, that is, the programs offered, really begin almost 20 years earlier and ended about 10 years later.

Periods can, of course, be defined around key events, or the appointment of new leaders. Such events did occur at McGill—the two World Wars, the Depression, that government grant—but as we have argued, these did not seem to change the course of key strategic parameters, at least not in the long run, and this is a story about the long run.

The appointment of new leaders is how periods are often identified when the histories of institutions are written. But does this reflect the true importance of the leadership, or just the personification of organizational activity, including the attribution of whatever happened to whoever happened to be leading? Might this simply reflect the need to identify periods somehow?

A brief promotional piece issued in 1997, entitled *McGill Facts*, contained a one-page "History of McGill University" that went from principal to principal. At one point it read: "Taking up office in 1939, Principal Cyril James guided McGill through World War II and the post-war reconstruction period" (as presumably would have any other leader!). More telling, perhaps, is the following:

> In 1944, seizing the opportunity afforded by the second Quebec Conference, he arranged for the fall convocation to be held at the Citadel in Quebec City so that honorary degrees could be conferred upon U.S. President Franklin Delano Roosevelt and British Prime Minister Winston Churchill.

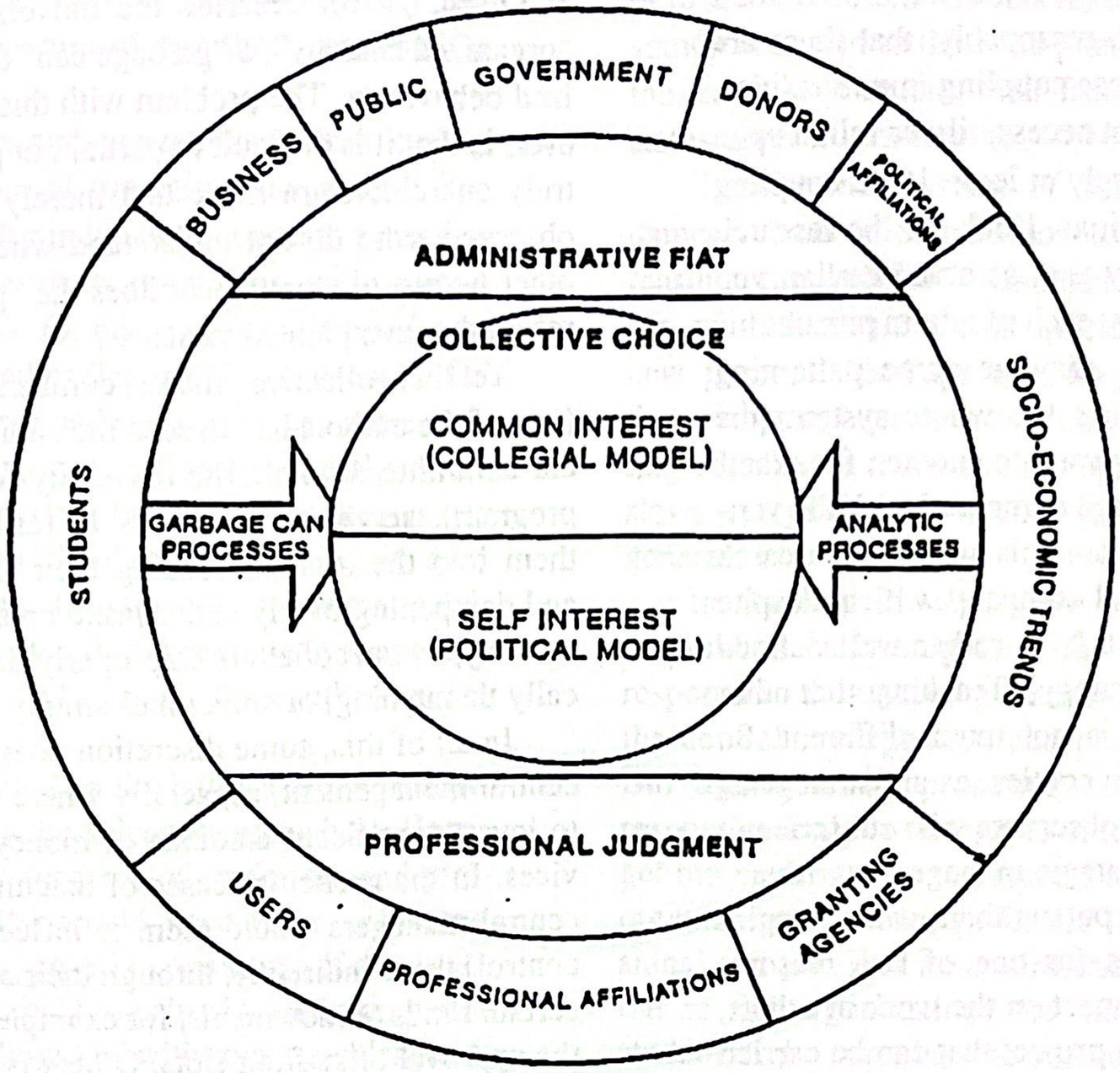
Significant for the image and status of the university, no doubt, but hardly the stuff of strategic revolution.

The two-volume Stanley Frost (1980, 1984) history of the university delineates most of its chapters by periods. It is instructive to look at these. Some cover brief periods, such as "A Time of Intermission: 1848-1852" and "A Time of Reconstruction: 1852-1855." A number are identified with particular leaders (four on the years of John William Dawson alone, Principal from 1855-1892), two cover the war period, and several focus on particular disciplines.

Yet, while there is no doubt that events occurred and leaders led (or failed to lead), the story told by the facts alone seems to convey another message. It is not that McGill University did not change. Quite the contrary, McGill University changed continuously over the century and a half. That is key to understanding all this. It never stopped changing. But it never changed in quantum leaps.

This may not be a fashionable conclusion in these times of so-called "hypercompetition", "turbulence", "turnaround", "renewal", and so on. But then again, institutions that last centuries are not very fashionable these days either, even if they do remain rock solid.

Figure 6
Three Levels of Decision Making in the University



(from Hardy et al., 1983)

Our perspective in this study is, of course, long term. Zoom in more closely, and events do seem key, for example the impact of the two world wars on enrollment, most evident in Figure 2a. Enormous scrambling had to take place to adapt. But the sobering conclusions of the long term perspective, too often and too easily overlooked, deserve serious attention too, across the entire field of organization theory no less than across this one organization.

Who are the Strategists?

Most of the literature of strategic management as well as the popular press have a convenient answer to the question of who is responsible for strategy: the chief. "In four years [Chief Executive] Gerstner has added more than $40 billion to IBM's share value," claimed *Fortune* magazine on April 14, 1997 (Morris, 1997, p. 70). But the facts are not so easily ignored in this study. Something has been going on in this institution beyond the formal leadership, namely a rather complex social system, at least by the standards of most of the literature of strategic management.

Hardy et al. (1983, 1984) have presented a model that outlines the elements of this. Shown in Figure 6, these include the professors at the operating base, the managers at the hierarchical apex, and a complex system of collective choice in between, involving both. All of this is surrounded by an environment of many influencers with all sorts of varied interests.

Our conclusions above, about strategies and periods, can perhaps best be understood by considering the university as a structure of "professional bureaucracy" (Mintzberg, 1979.) Here highly trained experts carry out work that is complex but rather stable, established through professional training. This enables the operating work to be "pigeonholed", that is, divided up, with each portion attributed mostly to individual professionals who can work free of the need for much adaptive mutual adjustment with their colleagues. Thus, a surgeon and an anesthetist can coordinate in an operating room with virtually no oral communication.

Perhaps no organization fits this model better than the university. This is "loose coupling" with a

vengeance: just consider the independence of departments, of programs, of teaching and of research (even from each other), of courses, and of the professional themselves as individuals (who often work at home). Lutz (1982) has pointed out, reasonably, that there are pockets of tight as well as loose coupling in universities, and that loose coupling cannot necessarily be relied upon prescriptively. But, descriptively at least, loose coupling does abound in these institutions. Look for the research strategy of McGill University and, as noted earlier, you must look at all the professors, each of whom pursues his or her own research. There may be some patterning across units, even some across the whole system (the level of quality from one university to another, for example). But this is usually minimal compared with the variations. One need only compare this with the research conducted in a pharmaceutical company, which, despite some variation, can be driven by a rather well defined agenda (meaning intended strategy). Teaching, that other aspect of the core mission, is not much different. So strategies are abundant in universities, as are strategists; they just cannot be found by observers who subscribe to the conventional tenets of strategic management.

Professionals are able to pursue their own strategies in professional bureaucracies for one of two reasons. Either their work has little impact on the work of others, as, for example, in a research project that can be carried out individually. Or, if it does, the project has been approved in a collective process, after it has been championed by an individual professional and then debated and found acceptable. The strategic management process in the university thus begins to look like the venturing process described by Burgelman (1983) and others, in which the individual initiatives of champions give rise to a collection of rather independent products or services (as in a company such as 3M).

There remain, however, other areas where the system must act in a more "collective" fashion—staffing decisions, for example, or the provision of library and computing support services. Here coupling has to be tighter. Some of these decisions are subjected to the complex machinations at the collective level, where professors and managers decide and debate (all too often in that order). Here, as shown in Figure 6, the common interest of collegiality meets the self-interests of politics. All universities presumably combine the two, although in the most effective, as McGill appears to have been (and remains), the unifying force of collegiality—including deep-seated beliefs in the institution itself—at least holds its own.

The battles at this collective level can range from the rather analytical through the intensely political to the hopelessly anarchical. Langley (1990, 1991) has described analysis in the professional bureaucracy as a kind of "shootout" between opposing forces, in order to persuade more neutral parties, who care less but vote more, while Cohen, March, and Olsen (1972; also March & Olsen, 1976), describe the university as a kind of "organized anarchy", a "garbage can" of almost randomized behaviours. The problem with this latter view, however, is that it is difficult to partial out processes that are truly anarchic from those that merely look anarchic to observers who do not understand what is going on. In other words, to what extent does the "garbage can" represent the unexplained variance?

Yet this collective process, cumbersome as it may be (one of the authors had to seek the approval of 11 different committees within the university for a new masters program), serves the purposes of testing ideas, fitting them into the system, ensuing their adequate support, and dampening overly enthusiastic ones (as well, unfortunately, as ones that are improperly understood, politically threatening, or sometimes simply too novel).

In all of this, some discretion does remain with the central management, especially where there is the need to invest significant amounts of money or support services. In the particular cases of teaching and research, central managers would seem to influence (rather than control) these indirectly, through their ability to allocate certain funds (endowments, for example), and to control the approval of staffing slots. Otherwise, it would seem more effective for them to try to manage the processes by which strategies emerge rather than the actual content of these strategies, for example, by influencing the structure of the collective process, by making appointments to key committees, and by encouraging (or discouraging) the champions of individual initiatives. Thus, when asked what were the major issues facing him in his job at the time, one Vice Principal Academic at McGill, considered highly effective, said "in my opinion, staff relations and staffing policy," then "working conditions" and "salary policy." No mention of mission: imagine such a statement from a corresponding executive of a corporation.

Dramatic change—turnaround, renewal, restructuring, and all the rest—would thus hardly seem to be the appropriate focus of the effective leader of a university. But the other side of the coin is that those leaders who can influence process in a significant way—by making strong appointments, establishing key procedures, and encouraging cultures of quality—can have a great long term impact on the institution, probably far longer than most corporate managers. McGill, for example, had its Dawson, whose influence may still be felt more than a century after he departed, although it did take him more than a third of a century to make that impact. It might be hypothesized that behind every great university sits one great leader, indeed one whose tenure can be measured

in decades (which, given today's turnover rates, may also mean one who served long ago). Our findings suggest, in any event, that it takes a great deal of energy and a long period of time to move a system such as a university. But once moved, the momentum of that thrust can last for many years.

Put all this together and universities seem to end up with a bifurcated system of strategic management. One (let us call it System I, for individual) concerns a mission that is diffused throughout its operations, with a great many people responsible for micro actions that make up macro directions. The other (let us call it System C, for collective) is more aggregated and sometimes more centralized and more integrated, influential mostly in its indirect impact. Each system has its own strategies, its own strategists, its own style of strategy making, its own periods, and its own logic. One is spread out to many differentiated pockets, the other is concentrated yet opaque, a level of aggregation laid over all those other aggregates.

Our study has focused on the latter, simply because we have chosen to study the university as a whole. Comprehensive study of the former—of professors and programs and departments—would have taken resources many times what we expended in our study. If a university is a set of activities held together by common parking lots, as it has been described with some semblance of truth, then we would have had to study dozens of organizations. But there is benefit too in studying the university as a single entity, not least as a way to open up perspectives in the field of strategic management.

What about the Environment?

One actor has been absent in these conclusions so far, in our opinion the most influential of all: the environment. All the discussion, debate, conflict, and analysis appear to reflect, accelerate, or decelerate changes that are imposed on the university from the outside. If any message comes through our data, it is about how much internal behaviour is determined by external conditions. Universities are organizations that respond continuously to these conditions precisely because there are so many internal actors capable of independent response.

To understand this, System I has to be seen as a myriad of activities (programs, projects, etc.) that mirror certain needs in society: a medical program to train physicians, a research study to understand economic cycles, and so on. Ultimately, almost every activity reflects some sort of external need, brought to life by one or more internal members of faculty. In effect, a champion in his or her university promotes a new activity, which, when accepted, becomes either a temporary project (as in much research) or an ongoing activity (as in much of the teaching). Often, related activities have already been taking place at other universities, which responded earlier to the same need. Of course, each activity had to start somewhere, and so there are pioneers among universities too, or at least among their faculty members, to whom status accordingly accrues.

The internal system of collective choice acts to dampen these initiatives, to ensure that a proposal is feasible, fundable, and reasonable. Sometimes a consensus of enthusiasm forms quickly around an exciting new proposal, perhaps encouraged by a management that wishes to have its institution seen to be on the "cutting edge". But more commonly, the collective process slows everything down until sufficient support can be generated.

In System C, where the whole institution must respond in an integrated fashion, as in McGill's response to the returning veterans after World War One, the central management can play a more active role. But again, to be proactive here usually means to respond quickly to the needs of the environment, not to get the environment to respond to the initiatives of the organization. Indeed, go inside those enrollment decisions, and you find an environment at least as influential as the organization: the university "accepts" the student, to be sure, but the student also selects the university.

Either way, then, strategy in the university setting is generally responsive to the environment, whether led, lagged, or, perhaps most common, mirrored. In this regard, our study of McGill University is closest to an earlier one of U.S. strategy in Vietnam, and farthest from that of Volkswagenwerk (see Mintzberg, 1978). Universities are certainly not governments, but with regard to their reactiveness, they do resemble them. This can be contrasted with businesses, which can be both more proactive and yet better insulated from the environment. Mass production in particular often requires the sealing off of the technical core, to use Thompson's (1967) memorable phrase.

In a world so obsessed with the proactive management of change, this may seem rather old fashioned. (Indeed, universities have historically been rather weak at marketing, which is intended to promote the organization in its environment. And now that they have discovered marketing, in some cases with a vengeance, it seems rather antithetical to their very essence.) But perhaps it is the new-fashioned behaviours that need to be questioned, since the citizens of a democratic society should expect their organizations to serve them, and not vice versa. In a society of increasingly aggressive organizations, on every front, universities continue to offer another perspective.

Who is this Environment?

Much of organization theory treats the environment as some great amorphous mass that is somehow "dynamic" or "complex", let alone "turbulent" or "hyperturbulant." But the history of this university suggests that most of this environment is rather lumpy.

First among these lumps has to be one force opaque to this study: all sorts of peer affiliations, in the form of professional networks, activities in other universities, research granting agencies, accreditation bodies, and so on. What appears within the university to be individual autonomy usually amounts to professional control: professors respond to their not-so-invisible colleges of peers around the world. And so, the ostensibly independent organizations in which they work are, in fact, rather conformist institutions. McGill is a university remarkably like many others—better in some spheres, worse in others, reflective of its own particular context and culture to be sure, but hardly dramatically different from, say, the University of Toronto or Oxford or the Université d'Aix-Marseilles. That is why professors can so easily come and go, carrying in their research and slipping into existing courses (by catalogue number at least).

Hence Spender's (1989) term "industry recipe", coined for business, might in fact apply best to universities. This suggests too that many of the premises of strategic management might apply worst to universities: the search for market position, for example, or first mover advantage, inimitability, and so on. Universities certainly compete with one another. But more certainly, they copy each other, and cooperate happily in so doing. While business people may try to maximize profits in some sense, or at least claim to, academics try to maximize ego: a new idea is successful not because it is patented and protected, but if it is diffused and imitated.

We might conclude that the most popular strategy in the university is the provision of some widely accepted service in its own particular geographic niche. Mintzberg, Ahlstrand, and Lampel (1998, p. 109) call this strategy "local producer", and suggest that it may be the most common one of all, found in the corner grocery store and the national post office, for example. Of course, business seems to be moving in the direction of increasing cooperation too, even with competitors. But that only leads us back to the claim that the seemingly unusual form of strategic management in the university may be becoming more usual in conventional organizations.

A second key set of lumps of the university's environment are the funders, whether the state, in the case of the public university, or the donors, in the case of the private ones (or both, in the case of McGill). But while they may seem highly influential, particularly in their ability to demand side payments, our story suggests that these people are not really key forces in their own right so much as manifestations of broader outside forces, as well as inside ones. Donors usually seem to give money in response to needs defined by people in the university, which in turn reflect needs in society. Indeed, the Government of Quebec sought to control new university programs by setting up a reviewing body comprising representatives of the various universities themselves. And McGill's greatest capitulation, to accept that increase in Quebec Government funding, came about in part because of its own instrumental role in encouraging government funding of Canadian universities in the first place.

The users of the system, notably the students, are another key group. Yet how are these to be characterized? As "customers", in the popular parlance of today? There is certainly an important element of this, for better as well as for worse. Yet these "customers" must apply and then be accepted, only to be tested and found adequate for release (unless they are found inadequate and so discharged in humiliation). Perhaps, then, the students are better described as suppliers, or even as the raw material on which the system works. Or perhaps the categories are the problem. The students are people, individuals in a particular setting called the university.

Behind all these actors, and actions, is perhaps the most important part of the environment: social forces. For it is to these that the system ultimately responds. And here we believe the findings of this study are most interesting.

The behaviour of McGill University was driven by the social forces in the environment: demographic trends, economic shifts, and changing tastes and preferences, as well as wars, technological breakthroughs, and other dramatic events. One could say that a university is in the business of responding to such forces, of creating and disseminating conceptual knowledge about what is happening in society. As a result, change is business as usual for the university; that is perhaps why we saw no significant strategic change. At the micro level, everything in the university is always changing.

Consider so dramatic and pervasive a technology as the computer. Its presence appears in course offerings, in a computing centre that offers a key support service, and in all sorts of applications in pedagogy, budgeting, the processing of research data, and so on. But can it be argued that the university is a different place today as a result of the computer, or even that it pursues radically different strategies (even if it does have a School of Computer Science as a new pigeonhole for the new technology). Contrast this with the impact of the computer on the operations of banks and airlines. Or consider a rather dramatic social event, the student revolts of

1968, which impacted McGill much as it did many other campuses: students were appointed to all sorts of committees, some attitudes were opened up and others were closed down, but not much else changed.

Sometimes McGill University responded quickly to some event (as in the post-war enrollments), other times it moved slowly (perhaps because of temporary fund limitations). But most remarkable is the way it seemed to balance all the pressures, to keep the whole system in a kind of extraordinary equilibrium. Events whose impact could not be balanced in the short run, such as the post war arrival of the veterans, were eventually balanced in the long run. The university seems, then, to be the ultimate homeostatic system, eventually dampening the effects of all influences. In effect, lumpy as the environment may intrinsically be, after the university gets through with it, it looks awfully even.

Consider how some important change in the environment is handled in the university. First, someone has to champion some manifestation of it within the system, and that seems often to be the solitary professor. Then, unless this is an issue of great crisis or else one outside of the central mission, it must be negotiated through the system of collective choice, which usually has a dampening effect on it. In effect, the organization takes its cues from the environment and then marches at its own pace (if not to its own tune), and not necessarily directed by its own conductor. The strong chief executive *facilitates* the change process; the ineffective one drowns in it.

For almost every force experienced in this system, a counterforce can be expected somewhere: conservative economists in opposition to radical sociologists, promoters of growth challenged by conservers of the status quo, humanists opposed to technologists, friends of the donors facing enemies of the rich, and so on. And because power in this system is so diffuse, and about as transparent as an organization can get (and still be called an organization), almost every single one of these internal views can find supporters in the environment, so that internal political battles easily spill into the community. No wonder McGill University so rarely got rid of anything (as in the battle over closing the Faculty of Dentistry, vigorously defended by its alumni). Activities did disappear, but more by dying natural deaths than by having been killed.

Why Such Strategic Stability?

What explains the remarkable strategic stability of this organization, the long-term trend lines, the entrenchment of established activities, the steady additions of new ones, the dampening effects of sudden external changes? Is this just a great big bowl of jelly that absorbs everything that comes its way, embracing discontinuities alongside trends to continue at its own steady pace?

Had we tracked components of the university, particular courses, for example, or research projects, we would likely have found many changes and even dramatic shifts. Yet our study of aggregations of these revealed nothing dramatic. Apparently the changes did not cluster at any one time, either because they happened not to or else because they were not allowed to.

Perhaps there is some truth in both explanations. The general university, in its range of offerings, mirrors many facets of society. These days we may be inundated with claims about change in society, renewal, turbulence, and so on, but the fact is that some things are always changing in society while many others remain rather stable. We merely notice what happens to be changing at the time (now, for example, computers and how we communicate, while automobiles and jet aircraft continue to use technologies established, respectively, almost a century and a half century earlier). So perhaps universities change as societies mostly do change (in order to mirror them): a few things here, a few things there.

That certainly seems to have been the pattern for McGill. One by one, the Faculties established themselves, first Medicine, then Arts and Science, much later Management, and so on. Each grew its own programs, achieved steady state, and later perhaps experienced a resurgence by elaborating some new program (often at the graduate degree level). Some of these developments took place within programs and Faculties, while others occurred through the addition (or "diversification") of programs and Faculties. Indeed, most of the academic infrastructure of McGill, like most other universities presumably, was in place long ago. (At least 63% of the students graduating in 1980 received degrees that were in place before 1900.)

Moreover, the forces of collective choice may moderate the pressures for change by allowing only a certain amount of change through at a time. After all, each committee meeting has a limited agenda, and, as noted above, for every force (including that for change) there tends to arise a counterforce. As a result, when there is much change, the counterforces for stability likely increase. A great deal of change at once may be perceived by many people as chaotic and destabilizing; hardly any change, in contrast, may provoke too much political friction over limited resources. Some kind of balance allows for progress without disruption.

Not that anyone consciously manages such a process, at least not if this study is any indication. Each specific change may be managed, indeed very carefully managed by its own champion. But the overall pattern of change seems to be guided by larger forces, some kind of invisible political hand, if you like. The system thus

exhibits the characteristics of homeostasis: the maintenance of a dynamic balance among its various components and with its environment, by correcting any excessive swings in any direction (Katz & Kahn, 1966).

So fragmentation and loose coupling prevail here, with change that is necessarily piecemeal, not quantum and revolutionary. It is difficult to change the collective mind of such an organization because it has hardly any collective mind. Each individual mind looks out to a different set of affiliations, many of these resistant to dramatic change. Indeed, a prime driver of dramatic change that is so evident in other studies of strategic management, market failure, figures hardly at all in this study. Veterinary Science may have come and gone, but it had hardly any noticeable impact on the system.

To conclude, while strategic revolution may be unlikely in universities, steady incremental change seems to be endemic; microevolutions that add up to macroevolutions. In a sense, universities change like transformers. They sit rock solid, in one place for decades, never seeming to move at all. But that belies the steady humming inside, a state of constant vibration. Put differently, while nothing much ever seems to change overall, in detail things are changing all the time. There may still be a Faculty of Medicine at McGill, as there was almost two centuries ago. But probably not a single course in this Faculty today is the same as it was five years earlier. Of course, all sorts of specific activities (overall program designs, particular research projects, etc.) do remain stable for a time, but some things are always changing and all things are sometimes changing.

Conclusion

It is customary, almost ritualistic, to conclude a paper like this with a call for more research, to broaden the sample, and so on. While we agree with such sentiments in principle, and even in particular here, we prefer to end this article on a different note.

Universities are generic institutions. They are so alike, seemingly so common in their behaviours and activities, that we wonder if the history of McGill University is not, in some sense, the history of all universities or, if you like, with increasing accuracy, the history of all western universities, all (general) North American universities, all (general) Canadian universities. Sometimes a sample of one can reveal a great deal about a phenomenon, as in a psychologist's study of the development of his own child or the physicist who split a single atom.

Can any of these conclusions inform strategic management in business? Universities seem so different from corporations, as has been noted in a few places. Yet delve into the knowledge work of corporations—the research laboratories, the design studios, and so on—and you find similarities, with corresponding implications for strategies there. Indeed, delve into the many rather loosely coupled corporations, such as the 3Ms and the Hewlett-Packards, and you find that a number of the conclusions here have application there: porous boundaries that let environmental forces in every which way, accompanied by considered venturing, devolved strategists and fragmented strategies, an enormous amount of micro changes with relatively little quantum change, and so on.

To the extent that this describes their strategic behaviour, so much that has been written about strategic management, with its focus on the planners, the chief executive as "architect" of strategy, and the management of change as driven from the "top", becomes questionable. Certainly all the hype about turnaround and revolution needs to be reconsidered in such contexts. Perhaps these companies change best from the inside out, at their own pace, rather than from the top down, frenetically.

Universities are commonly among the oldest organizations of our societies. One study "identified only sixty-six organizations or institutions that have been in continuous existence in Europe since the Reformation of the sixteenth century": 62 of them were universities! (Neilson & Gaffield, 1986, p. xiii). Yet universities can also be seen as among the most contemporary organizations of our societies, certainly if one compares the currently popular writings about empowerment, knowledge workers, and venturing with the nature of leadership, collective decision making, and championing in today's universities. Moreover, universities exhibit a sensible kind of stability in a world of often senseless change. And so they may well be beacons for a more reasonable future for our organizations. Perhaps the proper response to all the hype about change and turnaround and turbulence is not more dramatic intervention but more respect for institution.

Notes

1 A major battle erupted subsequently over a proposal to close down the small Faculty of Dentistry. This proposal was finally rejected. It might be added that even Veterinary Science came back in 1940 in the form of a diploma in Veterinary Public Health.

2 There are, of course, accounting and budgeting offices in most of the larger units.

References

Ansoff, H.I. (1965). *Corporate strategy*. New York: McGraw-Hill.

Burgelman, R.A. (1983). A process model of internal corporate venturing in the diversified major firm. *Administrative Science Quarterly, 28*, 223-244.

Cohen, M.D., March, J.G., & Olsen, J.P. (1972). A garbage can model of organizational choice. *Administrative Science Quarterly, 17* (1), 1-25.

Cyert, R.M. & March, J.G. (1963). *A behavioral theory of the firm*. Englewood Cliffs, NJ: Prentice-Hall, 1963.

Frost, S.B. (1980). *McGill University: For the advancement of learning, Volume 1: 1801-1895*. Montreal: McGill-Queen's University Press.

Frost, S.B. (1984). *McGill University: For the advancement of learning, Volume II: 1895-1971*. Kingston and Montreal: McGill–Queen's University Press.

Hardy, C., Langley, A., Mintzberg, H., & Rose, J. (1983). Strategy formation in the university setting. *Review of Higher Education, 6*, 407-433.

Hardy, C., Langley, A., Mintzberg, H., & Rose, J. (1984). Strategy formation in the university setting. In J. Bess (Ed.), *College and university organization*. New York: New York University Press.

Holdaway, E.A. & Meekison, J.P. (1990). Strategic planning at a Canadian university. *Long Range Planning, 23* (4), 104-113.

Hosmer, L.T. (1978). *Academic strategy*. Ann Arbor, MI: University of Michigan Press.

Katz, K. & Kahn, R.L. (1966). *The social psychology of organizations*. New York: Wiley.

Ladd, D.R. (1970). *Change in educational policy*. New York: McGraw Hill.

Langley, A. (1990). Patterns in the use of formal analyses in strategic decisions. *Organizational Studies, 11* (7), 17-45.

Langley, A. (1991). Formal analyses and strategic decision making. *Omega*, 19 (213), 79-99.

Lutz, F.W. (1982). Tightening up loose coupling in organizations of higher education. *Administrative Science Quarterly, 27*, 653-669.

March, J.G. & Olsen, J.P. (1976). *Ambiguity and choice*. Bergen, Norway: Universitetsforlaget.

Miller, D. & Friesen, P.H. (1980). Momentum and revolution in organizational adaptation. *Academy of Management Journal, 23*, 591-614.

Miller, D. & Friesen, P.H. (1984). *Organizations: A quantum view*. Englewood Cliffs, NJ: Prentice-Hall.

Mintzberg, H. (1978). Patterns in strategy formation. *Management Science, 24* (9), 934-948.

Mintzberg, H. (1979). *The structuring of organizations*. Englewood Cliffs, NJ: Prentice-Hall.

Mintzberg, H., Ahlstrand, B., & Lampel, J. (1998). *Strategy safari*. New York: Free Press.

Mintzberg, H. & McHugh, A. (1985). Strategy formation in an adhocracy. *Administrative Science Quarterly, 30*, 160-197.

Mintzberg, H. & Waters, J.A. (1982). Tracking strategy in an entrepreneurial firm. *Academy of Management Journal, 25*, 465-499.

Mintzberg, H. & Waters, J.A. (1985). Of strategies, deliberate and emergent. *Strategic Management Journal, 6*, 57-272.

Morris, B. (1997, April 14). Big blue. *Fortune*, pp. 68-81.

Neilsen, W.A.W. & Gaffield, C. (Eds.) (1986). *Universities in crisis: A medieval institution in the twenty-first century*. Montreal: Institute for Research on Public Policy.

Porter, M.E. (1980). *Competitive strategy: Techniques for analyzing industries and competitors*. New York: Free Press.

Porter, M.E. (1985). *Competitive advantage: Creating and sustaining superior performance*. New York: Free Press.

Prahalad, C.K. & Hamel, G. (1990). The core competence of the corporation. *Harvard Business Review, 68* (3), 79-91.

Spender, J.C. (1989). *Industry recipes*. Oxford: Basil Blackwell.

Steiner, G.A. (1979). *Strategic planning: What every manager must know*. New York: Free Press.

Thompson, J.D. (1967). *Organizations in action*. New York: McGraw-Hill.

Taylor, F.W. (1947/1911). *Scientific management*. New York: Harper & Row.

Tushman, M. & Romanelli, E. (1985). Organizational evolution: A metamorphosis model of convergence and reorientation. In L. Cummings & B. Staw (Eds.), *Research in organizational behavior*. Greenwich, CT: JAI Press.

Weick, K.E. (1976). Educational organizations as loosely coupled systems. *Administrative Science Quarterly, 21* (1), 1-19.