# The Michigan Saga



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#### Institutional Saga

Universities are based on long-standing traditions and continuity, evolving over many generations (in some cases, even centuries) with very particular sets of values, traditions, and practices. Burton R. Clark, a noted sociologist and scholar of higher education, has introduced the concept of organizational or institutional "saga" to refer to those long-standing characteristics that determine the distinctiveness of a college or university. Clark's view is that "An organizational legend (or saga), located between ideology and religion, partakes of an appealing logic on one hand and sentiments similar to the spiritual on the other. Universities develop over time such an intentionality about institutional life, a saga, which then results in unifying the institution and shaping its purpose." As Clark notes, "An institutional saga may be found in many forms, through mottoes, traditions, and ethos. It might consist of longstanding practices or unique roles played by an institution, or even in the images held in the minds (and hearts) of students, faculty, and alumni. Sagas can provide a sense of romance and even mystery that turn a cold organization into a beloved social institution, capturing the allegiance of its members and even defining the identity of its communities."2

While all colleges and universities have social roles assigned to them, some have purposively reshaped these into compelling missions that over time achieve sufficient success and acclaim that they become an embracing saga. The appearance of a distinct institution saga involves many elements—visionary leadership, strong faculty and student cultures, unique programs, ideologies, and of course, the time to accumulate the events, achievements, legends, and mythology that characterize long-standing institutions.

For example, the saga of my own alma mater, Yale University, was shaped over the centuries by old-boy traditions such as secret societies (e.g., Skull and Bones), literature (from dime novel heroes such as Frank Merriwell and Dink Stover to Buckley's *God and Man at Yale*), and national leadership (William H. Taft, George H. Bush, Bill Clinton, George W. Bush, and, of course, Gerald R. Ford, although the latter was first and foremost a Michigan man)<sup>3</sup>. Harvard's saga is perhaps best captured by the response of a former Harvard president, who when asked what it takes to build a great institution like Harvard, responded simply: "300 years!" Notre Dame draws its saga from the legends of the gridiron, i.e., Knute Rockne, the Four Horsemen, and the subway alumni. Big Ten universities also have their symbols: fraternity and sorority life, campus protests, and gigantic football stadiums.

While institutional sagas are easy to identify for older universities such as North Carolina, Virginia, and Michigan among the publics, and Harvard, Yale, and Princeton among the privates, they can sometimes be problematic to institutions rising rapidly to prominence. During the controversy over inappropriate use of government research funds at Stanford during the 1990s, the late Roger Heyns, former Michigan dean, chancellor at UC-Berkeley, and then president of the Hewlett Foundation adjacent to the Stanford campus, once observed to me that Stanford faced a particular challenge in becoming too good too fast. Prior to WWII, its reputation as "the farm" was well-deserved. Stanford was peaceful, pastoral, and conservative. The extraordinary reputation it achieved first in the sciences and then across all the disciplines in the latter half of the 20<sup>th</sup> Century came on so abruptly that the institution sometimes found it difficult to live with its new-found prestige and visibility, as its inquisition by a federal inquiry into misuse of research funds in the 1990s demonstrated.

Again to quote Burton Clark, "The institutional saga is a historically based, somewhat embellished understanding of a unique organization development. Colleges are prone to a remembrance of things past and a symbolism of uniqueness. The more special the history or the more forceful the claim to a place in history, the more intensively cultivated are the ways of sharing memory and symbolizing the institution." A visit to the campuses of one of our distinguished private universities conveys just such an impression of history and tradition. The ancient ivy-covered buildings; the statues, plaques, and monuments attesting to important people and events of the past, all convey a sense that these institutions have evolved slowly over the centuries in careful and methodical ways to achieve their present forms and define their institutional saga.

In contrast, a visit to the campus of one of our great state universities conveys more of a sense of dynamism and impermanence. Most of the buildings look new, even hastily constructed in order to accommodate rapid growth. The icons of the public university tend to be their football stadiums or the smokestacks of their central power plants rather than their ivy covered buildings or monuments. In talking with campus leaders at public universities, one gets little sense that the history of these institutions is valued or recognized. Perhaps this is due to their egalitarian nature, or conversely, to the political (and politicized) process that structures their governance and all too frequently informs their choice of leadership. The consequence is that the public university evolves through geological layers, each generation paving over or obliterating the artifacts and achievements of earlier students and faculty with a new layer of structures, programs, and practices.

Hence, the first task of a new president of an institution such as the University of Michigan is that understanding its institutional saga.

### The Michigan Saga

To illustrate, let me adopt the perspective of a university archeologist by sifting through the layers of the University of Michigan's history to uncover its institutional saga. Actually, this exercise is necessary both to explain my particular experience as a university president and to set the stage for a more in-depth analysis of the various elements of university leadership.

#### Images of Michigan

So what might be suggested as the institutional saga of the University of Michigan? What are the first images of Michigan that come to mind? Academic activities such as students listening attentively to brilliant faculty in the classroom or studying in the library? Scientists toiling away late in the evenings in the laboratory striving to understand the universe or scholars poring over ancient manuscripts, rediscovering our human heritage? Probably not.

The University of Michigan is many things to many people, but its images are rarely stimulated by its core missions of teaching and scholarship. To some, the university's image is its football team, the Michigan Wolverines, decked out in those ferocious winged helmets<sup>6</sup> as it stampedes into Michigan Stadium before a crowd of 110,000, rising to sing the Michigan fight song, *Hail to the Victors*. Others think first of a Michigan of the arts, where the world's leading orchestras and artists come to perform in Hill Auditorium, one of the great concert halls of the world.

For some, Michigan represents the youthful conscience of a nation—the birthplace of the Teach-In protests against an unpopular war in Vietnam, site of the first Earth Day, and home of the century-old *Michigan Daily*, with student engagement in so many of the critical issues of the day. There is also the caring Michigan, as experienced by millions of patients who have been treated by the University of Michigan Medical Center, one of the nation's great centers of medical research, teaching, and clinical care.

Then there is the Michigan of the cutting-edge research that so improves the quality of our lives. For example, it was at Michigan 50 years ago that the clinical trials were conducted for the Salk polio vaccine. It was at Michigan that the gene responsible for cystic fibrosis was identified and cloned in the 1990s. And although others may have

"invented" the Internet, it was Michigan (together with another "big blue" partner, IBM) that built and managed the Internet backbone for the nation during the 1980s and early 1990s.

Michigan can also be seen as a university of the world, long renowned as a truly international center of learning. Walk down the streets of any capital city in the world and you will encounter its graduates, often in positions of leadership. Indeed, Michigan is even a university of the universe, with the establishment of the first lunar chapter of the UM Alumni Association by the all-Michigan crew of Apollo 15!

These activities may serve as images of the university for many. I would argue, however, that they convey less the nature of Michigan's institutional saga than they are a consequence of its more fundamental traditions and character. To truly understand Michigan's saga, one must go back in time almost two centuries to the university's founding in frontier America.











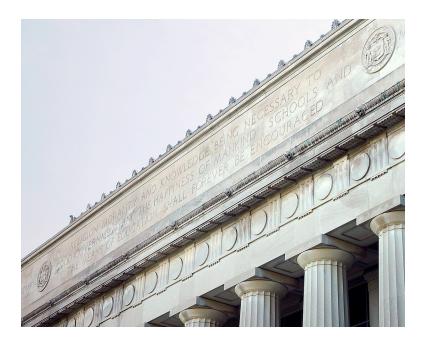




Images of the University of Michigan (from top, clockwise: Hill Auditorium, MLK Day March, Harlan Hatcher and Jonas Salk, University Hospital, Apollo 15 on the Moon, Michigan Wolverines; center: Angell Hall

It can be argued that it was in the Midwest, in towns such as Ann Arbor and Madison, that the early paradigm for the true public university in America first evolved, a paradigm capable of responding to the needs of a rapidly changing nation in the 19<sup>th</sup> Century and that still dominates higher education today. In many ways, the University of Michigan has been throughout its history the flagship of public higher education in America. Although the University of Michigan was not the first of the state universities, it was the first to be free of sectarian control, created as a true public institution, and governed by the people of its state.

The University of Michigan (or more accurately, the *Catholepistimead or University of Michigania*) was established in 1817 in the village of Detroit, two decades before Michigan entered the Union, by an act of the Northwest Territorial government and financed through the sale of Indian lands granted by the United States Congress. The founding principle for the university can be found in the familiar words of the Northwest Ordinance,<sup>8</sup> chiseled on the frieze of the most prominent building on today's campus, Angell Hall:



"Religion, morality, and knowledge being necessary to good government and the happiness of mankind, schools and the means of education shall forever be encouraged."

This clearly echoes the Jeffersonian ideal of education for all, to the extent of an individual's capacity, as the key to creating the educated citizenry necessary for a democracy to flourish.

Actually, the first incarnation of the University of Michigan (aka "Catholepistemiad") was not a university but rather a centralized system of schools, borrowing a model from the imperial University of France founded by Napoleon a decade earlier. It was only after the State of Michigan entered the Union in 1837 that a new plan was adopted to shift the university beyond secondary education, establishing it as a "state" university after the Prussian system, with programs in literature, science and arts; medicine; and law—the first three academic departments of the new university.

Both because the university had already been in existence for two decades before the State of Michigan entered the Union in 1837, and because of the frontier society's deep distrust of politics and politicians, the new state's early constitution (1851) granted the university an unusual degree of autonomy as a "coordinate branch of state government," with full powers over all university matters granted to its governing board of regents. This constitutional autonomy, together with the fact that the university was actually established by the territorial government and supported through a land grant from the U.S. Congress, has shaped an important feature of the university's character. In financial terms, the University of Michigan was actually a United States land grant university supported entirely by federal grants and student fees rather than state resources until after the Civil War. Hence throughout its history the university has regarded itself as much as a *national* university as a state university, albeit with some discretion when dealing with the Michigan State Legislature. This broader heritage has also been reflected in the university's student enrollment, which has always been characterized by an unusually high percentage of out-of-state and international students<sup>10</sup>. Furthermore, Michigan's constitutional autonomy, periodically reaffirmed through court tests and constitutional convention, has enabled the university to have much more control over its own destiny than most other public universities.

Implicit in the new constitution was also a provision that the university's regents be determined by statewide popular election, again reflecting public dissatisfaction with both the selection and performance of the early regents. (The deposed regents retaliated by firing all of the professors at the university.) The first assignment of the newly elected board was to select a president for the university (after inviting back the fired professors). After an extensive search, they elected Henry Philip Tappan, a broadly educated professor of philosophy from New York, as the first president of the reconfigured university.

Tappan arrived in Ann Arbor in 1852, determined to build a university very different from those characterizing the colonial colleges of 19<sup>th</sup> century America. He was strongly influenced by European leaders such as von Humboldt, who stressed the importance of combining specialized research with humanistic teaching to define the intellectual structure of the university. Tappan articulated a vision of the university as a capstone of civilization, a repository for the accumulated knowledge of mankind, and a home for scholars dedicated to the expansion of human understanding. In his words, "a university is the highest possible form of an institution of learning. It embraces every branch of knowledge and all possible means of making new investigations and thus advancing knowledge."<sup>11</sup>

In Tappan's view, the United States had no true universities, at least in the European sense. With the University of Michigan's founding heritage from both the French and Prussian systems, he believed he could build such an institution in the frontier state of Michigan. And build it, he did, attracting distinguished scholars to the faculty such as Andrew D. White and Charles Kendall Adams<sup>12</sup>, and placing an emphasis on graduate study and research, and investing in major research facilities.

Of course, in many other ways, the university was still a frontier institution, as the early images of the campus suggest. Yet even at this early stage, the University of Michigan already exhibited many of the characteristics we seen in today's universities.



University of Michigan in Tappan's time (painting by Jasper Cropsey, 1855)

One might even make the claim that the University of Michigan was not only the first truly public university in America and one of its first land-grant universities, but also possibly even its first true university, at least in the sense that we would understand it today. To be sure, the early colonial colleges such as Harvard and Yale were established much earlier by the states (or colonies), as were several institutions in the south such as the Universities of North Carolina, South Carolina, and Georgia. But all were governed by clergymen, with the mission of preparing young men for leadership in church or state. The University of Michigan, pre-dating Thomas Jefferson's University of Virginia by two years, was firmly established as a *public university* with no religious affiliation. Michigan's status as a land-grant university, provided through Congressional action, predates the Land-Grant Acts establishing the great state universities (e.g., the Morrill Act of 1862) by almost half-a-century. And Henry Tappan's vision of Michigan as a true university, stressing scholarship and scientific research along with instruction, pre-dates other early American universities such as Cornell University (founded by Andrew D. White, one of Tappan's faculty members at Michigan) and Johns Hopkins University by two decades.

From its founding, Michigan has always been identified with the most progressive forces in American higher education. The early colonial colleges served the aristocracy of colonial society, stressing moral development over a liberal education, much as the English public schools, based on a classical curriculum in subjects such as Greek, Latin, and rhetoric. In contrast, Michigan blended the classical curriculum with the European model that stressed faculty involvement in research and dedication to the preparation of future scholars. Michigan hired as its first professors not classicists but a zoologist and a geologist. Unlike other institutions of the time, Michigan added instruction in the sciences to the humanistic curriculum, creating a hybrid that drew on the best of both a "liberal" and a "utilitarian" education. And years before Harvard embarked on this dangerous course, Michigan actually allowed upper-division students to choose some of their own courses.

Michigan was the first university in the West to pursue professional education, establishing its medical school in 1850, engineering courses in 1854, and a law school in 1859. The university was among the first to introduce instruction in fields as diverse as zoology and botany, modern languages, modern history, American literature, pharmacy, dentistry, speech, journalism, teacher education, forestry, bacteriology, naval architecture, aeronautical engineering, computer engineering, and nuclear engineering.

Throughout its early years, Michigan was the site of many other firsts in higher education. It provided leadership in scientific research by building one of the first

university observatories in the world in 1854, followed in 1856 with the nation's first chemistry laboratory building. In 1869 it opened the first university-owned hospital, which today has evolved into one of the nation's largest university medical centers. It continued as a source of major paradigm shifts in higher education into the 20<sup>th</sup> century. It created the first aeronautical engineering program in 1913, and then followed soon after WWII with the first nuclear engineering (1952) and computer engineering (1955) programs. The formation of the Survey Research Center and associated Institute of Social Research in the 1950s stimulated the quantitative approach that underpins today's social sciences. Michigan was a pioneer in atomic energy, with the first nuclear reactor on a university campus, and then later developed time-sharing computing in the 1960s. In the 1980s it played a leadership role in building and managing the Internet, the electronic superhighway that is now revolutionizing our society. Its influence as an intellectual center today is evidenced by the fact that it has long been one of the nation's leaders in its capacity to attract research grants and contracts from the public and private sector, attracting over \$800 million a year in such sponsored research support today.

Throughout its history, the University of Michigan has also been one of the nation's largest universities, vying with the largest private universities such as Harvard and Columbia during the 19<sup>th</sup> and early 20<sup>th</sup> centuries, and then holding this position of national leadership until the emergence of the statewide public university systems (e.g., the University of California and the University of Texas) in the post-WWII years. It continues to benefit from one of the largest alumni bodies in higher education, with over 450,000 living alumni. Michigan graduates are well represented in leadership roles in both the public and private sector and in learned professions such as law, medicine, and engineering. Michigan sends more of its graduates onto professional study in fields such as law, medicine, engineering, and business than any other university in the nation. The university's influence on the nation has been profound through the achievements of its graduates.

The activism of Michigan students has often stimulated change in our society, from the teach-ins against the Vietnam War in the 1960s to Earth Day in the 1970s to the Michigan Mandate in the 1980s. In a similar fashion, Michigan played a leadership role in public service, from John Kennedy's announcement of the Peace Corps on the steps of the Michigan Union in 1960 to the AmeriCorps in 1994. Its classrooms have often been battlegrounds over what colleges will teach, from challenges to the Great Books canon to more recent confrontations over political correctness. Over a century ago *Harper's Weekly* noted that "the most striking feature of the University of Michigan is the broad and

liberal spirit in which it does its work."<sup>13</sup> This spirit of democracy and tolerance for diverse views among its students and faculty continues today.

Nothing could be more natural to the University of Michigan than challenging the status quo. Change has always been an important part of the university's tradition. Michigan has long defined the model of the large, comprehensive, public research university, with a serious commitment to scholarship and progress. It has been distinguished by unusual breadth, a rich diversity of academic disciplines, professional schools, social and cultural activities, and intellectual pluralism. The late Clark Kerr, the president of the University of California, once referred to the University of Michigan as "the mother of state universities," noting it was the first to prove that a high-quality education could be delivered at a publicly funded institution of higher learning.<sup>14</sup>

Interestingly enough, the university's success in achieving such quality had little to do with the generosity of state support. From its founding in 1817 until the legislature made its first appropriation to the institution in 1867, the university was supported entirely from its Federal Land Grant endowment and the fees derived from students. During its early years, state government actually mismanaged and then misappropriated the funds from the Congressional land grants intended to support the university. Throughout its history, the state of Michigan has rarely been among the national leaders in its support of public higher education. Rather, many (including the author) believe that the real key to the university's quality and impact has been the very unusual autonomy granted the institution by the state constitution. The university has always been able to set its own goals for the quality of its programs rather than allowing these to be determined by the vicissitudes of state policy, support, or public opinion. Put another way, although the university is legally "owned" by the people of the state, it has never felt obligated to adhere to the priorities or whims of a particular generation of Michigan citizens. Rather, it viewed itself as an enduring social institution with a duty of stewardship to generations past and a moral obligation to take whatever actions were necessary to build and protect its capacity to serve future generations. Even though these actions might conflict from time to time with public opinion or the prevailing political winds of state government, the university's constitutional autonomy clearly gave it the ability to set its own course. When it came to objectives such as program quality or access to educational opportunity, the university has always viewed this as an institutional decision rather than succumbing to public or political pressures.

This unrelenting commitment to academic excellence, broad student access, and public service continues today. In virtually all national and international surveys, the university's programs rank among the very best, with most of its schools, colleges, and

departments ranking in quality among the top ten nationally and with several regarded as the leading programs in the nation. Other state universities have had far more generous state support than the university of Michigan. Others have had a more favorable geographical location than "good, gray Michigan." But it was Michigan's unusual commitment to provide a college education of the highest possible quality to an increasingly diverse society–regardless of state support, policy, or politics–that might be viewed as one of the university's most important characteristics. The rapid expansion and growth of the nation during the 19<sup>th</sup> and 20<sup>th</sup> century demanded colleges and universities capable of serving all of its population rather than simply the elite as the key to a democratic society. Here Michigan led the way in both its commitment to wide access and equality and in the leadership it provided for higher education in American.

Particularly notable here was the role of Michigan President James Angell in articulating the importance of Michigan's commitment to provide "an uncommon education for the common man"15 while challenging the aristocratic notion of leaders of the colonial colleges such as Charles Eliot of Harvard. Angell argued that Americans should be given opportunities to develop talent and character to the fullest. He portrayed the state university as the bulwark against the aristocracy of wealth. Angell went further to claim that "the overwhelming majority of students at Michigan were the children of parents who are poor, or of very moderate means: that a very large portion have earned by hard toil and by heroic self-denial the amount needed to maintain themselves in the most frugal manner during their university course, and that so far from being an aristocratic institution, there is no more truly democratic institution in the world." To make a university education available to all economic classes, for many years tuition and fees at the university remained minimal. As President Angell put it, "The whole policy of the administration of the university has been to make life here simple and inexpensive so that a large portion of our students can support themselves." This commitment continues today, when even in an era of severe fiscal constraints, the university still meets the full financial need of every Michigan student enrolling in its programs.

As historian Frederick Rudolph suggests, it was through the leadership of the University of Michigan after the Civil War, joined by the University of Minnesota and the University of Wisconsin, that the state universities in the Midwest and West would evolve into the inevitable and necessary expression of a democratic society. <sup>16</sup> Frontier democracy and frontier materialism combined to create a new type of institution, capable of serving all of the people of a rapidly changing America through education, research, and public service. As Rudolph notes, these institutions attempted to "marry"

the practical and the theoretical, attempting to attract farm boys to their classrooms and scholars to their faculties."<sup>17</sup>

The university has long placed high value on the diversity of its student body, both because of its commitment to serve all of society, and because of its perception that such diversity enhanced the quality of its educational programs. From its earliest years, Michigan sought to attract students from a broad range of ethnic and geographic backgrounds. By 1860, the regents referred "with partiality" to the "list of foreign students drawn thither from every section of our country." Forty-six percent of the university's students then came from other states and foreign countries. Michigan awarded the first doctorate to a Japanese citizen who later was instrumental in founding the University of Tokyo. President Angell's two-year service as emissary to China established further the university's great influence in Asia.

The first African American students arrived on campus in 1868. Michigan was one of the first large universities in America to admit women in 1870. At the time, the rest of the nation looked on with a critical eye, certain that the experiment of coeducation would fail. Although the first women students were true pioneers, the objects of intense scrutiny and some resentment, by 1898 the enrollment of women had increased to the point where they received 53 percent of Michigan's undergraduate degrees, roughly the same percentage they represent today.

One of Michigan's most important contributions to the nation may be its commitment to providing an education of exceptional quality to students from all backgrounds. In many ways, it was at the University of Michigan that Thomas Jefferson's enlightened dreams for the public university were most faithfully realized. Whether characterized by gender, race, socioeconomic background, ethnicity, or nationality—not to mention academic interests or political persuasion—the university has always taken great pride in the diversity of its students, faculty, and programs. Its constitutional autonomy enabled it to defend this commitment in the face of considerable political resistance to challenging the status quo, eventually taking the battle for diversity and equality of opportunity all the way to the United States Supreme Court in the landmark cases of 2003. In more contemporary terms, it seems clear that an important facet of the institutional saga of the University of Michigan would be its achievement of excellence through diversity.

A Heritage of Leadership

Of course, while university presidents are most successful when they understand and respect the institutional saga of their university, they are also capable of shaping it to some extent. But perhaps more significantly, the long history and unusually strong traditions characterizing universities such as the University of Michigan inform, define, and shape their leadership. It has sometimes been suggested that the regents of the university have been fortunate to have always selected the right leader for the times. Yet history suggests the achievements of Michigan's presidents has been due less to good fortune or wisdom in their selection than to the ability of this remarkable institution to mold its leadership. For this tradition all should be grateful, since change inevitably happens in both rapid and unexpected ways in higher education, as evidenced by the diverse roles that the university's presidents have played over time.



Henry Philip Tappan (1852-1863)

Henry Philip Tappan, Michigan's first president<sup>18</sup>, captured the excitement of the early regents with his vision of building a true university, which would not only conduct instruction and advanced scholarship, but also respond to popular needs. The university would demonstrate to a skeptical public the true value of scholarship. In Tappan's words: "We shall have no more acute distinctions drawn between scholastic and practical education; for, it will be seen that all true education is practical, and that practice without education is little worth; and that there will be dignity, grace, and a restless charm about scholarship and the scholar." Although his expectation that university professors should engage in research as well as teaching disturbed some, it also allowed him to attract leading scholars and take the first steps toward building a true university in the European sense.

Yet Tappan also had an elitist streak, as evidenced in a speech he gave in 1850 proclaiming, "We have cheapened education so as to place it within the reach of

everyone."<sup>20</sup> He aimed to develop an institution that would cultivate the originality and genius of the talented few seeking knowledge beyond the traditional curriculum, with a graduate school in which diligent and responsible students could pursue their studies and research under the eye of learned scholars in an environment of enormous resources in books, laboratories, and museums.

His vision, personality, and European pretensions eventually began to rub the frontier culture of Michigan the wrong way, with one newspaper describing him as "the most completely foreignized specimen of an abnormal Yankee we have ever seen". The editor of a Detroit newspaper led strong opposition to his goal of building a "university", believing instead that a "high school" was the only goal deserving of state support. Although Tappan's first board of regents strongly support his vision, they were replaced in 1856 by a new board that began almost immediately after its election to undermine Tappan's leadership by using a committee structure to weaken his executive powers. The board's opposition to Tappan was joined by several faculty members strongly resistant to change, along with the powerful editor of a Detroit newspaper. Eventually, the convergence of these hostile forces emboldened the regents to fire Tappan in 1863, ironically during a secret session soon after their defeat in the next statewide election. The lame-duck board named as his successor Erastus Haven, a former faculty member who had long sought the position.

Despite this ignominious end to his tenure by a maverick board of regents, Tappan today is viewed as one of the most important early American university leaders, not only shaping the University of Michigan but influencing all of higher education and defining the early nature of the American research university. Years later, President James Angell was to have the last word on the sordid incident: "Tappan was the largest figure of a man that ever appeared on the Michigan campus. And he was stung to death by gnats!"



Erastus Otis Haven (1863-69)

A professor of Latin and literature from 1852 to 1856, Erastus Haven had been among those seeking Tappan's dismissal and viewed himself as a possible successor. Although the newly elected regents were lukewarm to Haven, they quickly concluded that it would be too disruptive to bring back Tappan, particularly after he had lashed out publicly at those who had undermined him at Michigan following his departure from Ann Arbor. Although Haven had no personal agenda, he was able to win over elements from both campus and community and succeeded in consolidating some of the reforms Tappan instituted. He secured a modest annual appropriation from the legislature. He defended Michigan's unusually large out-of-state enrollments (then two-thirds) by reminding the legislature that the university had been funded through the sale of lands granted by the United States Congress rather than state tax dollars and hence had national obligations (an argument subsequent presidents would frequently repeat).

However Haven broke no new ground in moving further toward Tappan's vision of a university. He sided with the regents to deny admission to women. The unusual nature of his appointment in the wake of Tappan's firing would continue to deprive Haven of strong faculty and regental support. He soon became frustrated with faculty criticism and left in 1869 for the presidency of Northwestern University.



Henry Simmons Frieze (1869-1871)

The regents asked Henry Frieze, professor of Latin and Literature, to serve as president pro tempore until Haven's successor could be selected. Frieze would later serve again in the interim role on two other occasions when Angell went on overseas assignments. Despite his brief tenure, Frieze accomplished much, quietly moving to admit women; obtaining the funds to build University Hall, the dominant academic building of the 19th century campus; and establishing the University Musical Society, the center of cultural life in the university and Ann Arbor to this day. But perhaps most significantly, Frieze created the American secondary school systems-the high schools as we know them today. Prior to the Civil War, most public education occurred at the primary level, and colleges and universities were obliged to create associated academies to prepare students for college work. Frieze instead began the practice of certifying select Michigan public schools as capable of offering respectable college preparation, thereby freeing the university from preparatory commitments and stimulating the schools of the state to extend their responsibilities into secondary education. This was the device that unleashed the high-school movement in the Midwest and later the nation, not only enabling the state universities to cultivate scholarly aspirations, but reshaping public education into clearly differentiated elementary and high schools.<sup>22</sup>

His successor, James Angell, put it well: "No man except President Tappan has done so much to give to the university its present form and character. No one was ever more devoted to the interests of this institution or cherished a more abiding hope for its permanent prosperity and usefulness."<sup>23</sup>



James Burrill Angell (1871-1909)

Michigan's longest serving president (38 years), James Angell, had served as president of the University of Vermont and on the faculty of Brown University before coming to Ann Arbor. He presided over Michigan's growth into the largest university in the nation. He was persuasive both with the regents and the state legislature. He managed to convince the state to fund the university through a "mill tax," a fixed percentage of the state property tax, thereby avoiding the politics of having to beg the legislature each year for an operating appropriation (as is the practice today).

Although Angell himself was not an educational visionary, there were others on the faculty such as John Dewey who strongly influenced the direction of American education. Many of today's characteristics of the university first appeared during Angell's long tenure, such as the academic organization of schools and colleges, the four-year B.A./B.S. curriculum of 120 semester hours, the Michigan Daily, the Michigan Marching Band, and the Michigan football team. When Angell arrived the university had 33 faculty and 1,100 students, and the university administration consisted of only three people: a president, treasurer, and secretary. By the time Angell retired in 1909, the university had grown to over 400 faculty and 5,400 students.

As noted earlier, Angell was an articulate and forceful advocate for the role of the public university in a democracy. He continued Frieze's efforts to shape coherent systems of public elementary and secondary education, and replaced the classical curriculum with a more pragmatic course of study with wider utility and public accountability. With other public university leaders of the era such as van Hise at Wisconsin, he established the state universities of the Midwest in a central role in the life of their states.

Yet Angell also embraced much of Tappan's original vision for a true university in Ann Arbor. He favored eliminating the freshman and sophomore years and focusing

the university on upper division and graduate education. Interestingly enough, Angell joined Andrew White of Cornell in attempting to slow the professionalism of college football. When Michigan students invited Cornell to play its football team in 1873, White replied to Angell: "I will not permit thirty men to travel 400 miles merely to agitate a bag of wind!" Thirty years later in 1906, Angell called the formative meeting of the Western Conference in Chicago (later to become the Big Ten Conference) to reform the sport, only to suffer an embarrassing end-run when Michigan's famous coach, Fielding Yost, persuaded the regents to withdraw Michigan from the new athletic conference in 1908 because it would restrict the outside income of coaches. (It would take a decade—and a new board of regents—to end this "flirtation with foolishness", restore faculty control of intercollegiate athletics, and rejoin the Western Conference.)<sup>25</sup>

Perhaps most indicative of Angell's vision, however, was the advice that he gave a visiting committee of trustees from the newly formed Johns Hopkins University. He convinced them that the time was right for the development of a great graduate university on the German model. Very much in the Michigan spirit, he argued that whatever they did ought to be something new and different. A rapidly changing nation required new colleges and universities that could change with it!

Angell was the last of the "headmaster" college presidents at Michigan, with an intimate relationship with students and faculty. The large, complex university of the 20<sup>th</sup> century would require a far different type of leadership.



Harry Burns Hutchins (1909-1920)

Harry Hutchins, Dean of the Law School, was named interim president in 1909 at the age of 63 to succeed Angell. After several candidates, including Woodrow Wilson, declined to accept the Michigan presidency, the regents decided to make Hutchins president for a three-year term, which was later extended to five and then ten years.

Hutchins largely continued the Angell agenda, with the first significant additions to the campus from private gifts: a large concert hall (Hill Auditorium) and a women's resident hall (Martha Cook). Hutchins made the first concerted effort to pull together Michigan's growing alumni body with major projects such as the Michigan Union (the nation's first student union). However he also faced the difficult challenge of leading the university through World War I, which rapidly exhausted his remaining energy and led to his retirement in 1920.



Marion Leroy Burton (1920-1925)

Marion Burton was attracted to Michigan from the presidency of the University of Minnesota (and, before that, Smith College). Tall, with a commanding presence and a persuasive voice, he captivated students and legislators alike. His talent for organization and vision of an expanding university precisely fit the needs and spirit of the post-WWI years. He understood that following the Great War, the demand for a college education would be enormous. It would be a time for the university "to spend boldly rather than conserve expediently," as Hutchins had done. Instead, Burton recognized that "A state university must accept happily the conclusion that it is destined to be large. If the state grows and prospers, it will naturally reflect these conditions."<sup>27</sup> And, propelled by the prosperous economy of the Roaring 20s, construction on the campus boomed and enrollments increased. Burton was also an academic innovator, restructuring the Board of regents to give the deans more authority, creating faculty executive committees as a form of shared governance at the school and department level, instituting faculty sabbaticals, and attracting visiting faculty in the arts such as Robert Frost. Unfortunately, Burton suffered a serious heart attack in 1924, and he died at the age of 49 after only five years as president.



Clarence Cook Little (1925-1929)

In the aftermath of Burton's tragic death, the regents searched for a young man in vigorous health and turned to the 36-year-old president of the University of Maine, Clarence Cook (Pete) Little, as Michigan's next president. A cancer researcher with all of his degrees from Harvard, Little favored the Michigan focus on research, but he clung to the New England collegiate ideal of a selective student body with an emphasis on character development rather than preparation for a career. In effect, he pushed the Harvard educational model, complete with the Harvard "houses" instead of students living independently in boarding houses and fraternities, along with a common curriculum for the first two years through a "university college," much to the dismay and determined resistance of the Michigan faculty. These educational objectives, coupled with his controversial stand on social issues such as prohibition and birth control, soon created strained relations both on the campus and across the state. Although Fielding Yost, now athletic director, managed to build Michigan Stadium during Little's tenure, other accomplishments were modest, and after only four years he submitted his resignation in 1929 to become director of the Jackson Memorial Laboratory in Bar Harbor, Maine. The regents were faced once again with finding a new president, for the third time in the decade.



Alexander Grant Ruthven (1929-1951)

Alexander Ruthven received his PhD in zoology from Michigan in 1906 and served as a faculty member and later director of the University Museum. He became the dean of administration under C. C. Little, the university's second-ranking administrator, and was selected as president by the regents after a perfunctory search just weeks before the stock market crash of 1929. Ruthven led the university for two decades through the traumas of the Great Depression and World War II. He was already very experienced in both university administration and state relations, and he understood well that "It is absurd to think that a lay board can handle the details of the modern university, or that the president is a headmaster, capable of directing all financial, academic, and public relations activities." Instead he created a corporate administration, in which the regents served as "guardians of the public trust and who functioned as custodians of the property and income of the university," while the president was viewed as the chairman of the faculties, just as the deans were chairmen of their faculties and administrative heads of their schools.<sup>28</sup>

Ruthven managed to protect the university from serious cuts in state appropriations during the Depression, although the mill tax was eventually replaced by the process of annual appropriations from general state revenues in 1935. He understood well the dangers of wartime priorities, and he was skillful in protecting the core education and research missions of the university, even as it served the nation in exemplary fashion during World War II. In 1951, when Ruthven finally retired, the university had grown to over 21,000 students, including 7,700 veterans enrolled under the G.I. Bill.



Harlan Henthorne Hatcher (1951-1967)

The regents selected as Ruthven's successor Harlan Hatcher, former vice president for faculty and curriculum, dean, English professor, and student (all three degrees) at Ohio State, noted for his teaching, writing, and administrative talents. Hatcher moved rapidly to restructure the university's administration to take advantage of the postwar economic boom. Hatcher's 17-year tenure saw dramatic expansion in enrollment and the physical campus, including the acquisition and development of the North Campus in Ann Arbor and establishment of regional campuses in Flint and Dearborn to accommodate the doubling of student enrollments from 21,000 to 41,000. Michigan continued its reputation as one of the world's leading research universities with major activities in nuclear energy (the Michigan Memorial Phoenix Project), the space program (including the nation's leading programs for astronaut training), biomedical research (the clinical trials of the Salk vaccine), the physical sciences (Donald Glaser's invention of the bubble chamber), and the development of the quantitative social sciences (the Institute for Social Research and the Survey Research Center). Student hijinks (the first panty raids in 1952) were balanced by serious social issues such as the Red Scare years when two faculty members were dismissed for refusing to testify before the House Subcommittee on Un-American Activities. The university benefited from generous state support during this era, enabling important educational innovations such as the Residential College, the Pilot Program, and the Interflex program (a novel combined B.S./M.D. program).

Although Hatcher's skillful gentleman-scholar approach provided effective leadership during the 1950s, it was challenged by the emerging student activism of the 1960s, with the formation of the Students for Democratic Society (and the Port Huron Manifesto) by Michigan students Tom Hayden and Alan Haber in the 1960 and the

growing student protests over issues such as civil rights and the Vietnam War. It was clear that times were changing, and a new style of leadership would be necessary as student activism against "the establishment" escalated during the 1960s. Hatcher retired in 1967 at the age of 70.



Robben Wright Fleming (1968-1979)

The regents turned to Robben Fleming, chancellor of the University of Wisconsin, to lead the university during a time of protest and disruption. Fleming's background as a professor of labor relations specializing in arbitration and mediation served him well during the tumultuous years when Ann Arbor was a center of student activism. His patience, negotiating skills, and genuine sympathy for the concerns of students and faculty helped Michigan weather the decade without the destructive confrontations that struck some other universities. Despite pressure from conservative groups, Fleming was careful both to respect the freedom to protest and to avoid inflexible stands on non-essential matters, believing that most protesters would soon wear themselves out if not provoked.

Fleming's background as a labor negotiator also served him in good stead with the increasing unionization of the university, as numerous employee groups unionized and strikes became a familiar routine in campus life. In 1971, even student groups such as the University Hospital interns and residents and then the graduate teaching assistants successfully unionized.

Fleming believed that the most important role of the president in a successful university was to keep things running smoothly, and this could best be done by recruiting a team of outstanding administrators. He once noted "If you start out as

president with a provost and a chief financial officer who are superb people, you are about three-quarters of the way down the path of success, because these are your critical areas."<sup>29</sup> And talent he had in abundance: Allan Smith, Frank Rhodes, and Harold Shapiro as provosts, and Wilbur Pierpont and James Brinkerhoff as CFO.

The cutback in federal research funding, associated with the burden of the Vietnam War and a state economy weakened by the OPEC oil embargo and the energy crisis, limited both campus expansion and new initiatives, although Fleming did manage to launch the planning for the most ambitious project in university history, the Replacement Hospital Project. Student activism continued over issues such as minority enrollments (the Black Action Movement, which demanded in 1970 that the university commit itself to the achievement of 10% enrollment of African American students), the debate over recombinant DNA research in 1974, the university's continued involvement in classified research (which eventually led to the severing of its relationship with the Willow Run Laboratories in 1972), and the growth of the environmental movement, culminating in Earth Day in 1970 (when the students hacked a Ford to death on the Diag). Fleming handled each of these with skill and effectiveness. Yet it became clear that the continuing erosion of state support was not likely to recover, and a new financial strategy involving significant private fundraising and tuition revenue would be necessary. Hence, after a decade of leadership, Fleming stepped down in 1977 and was succeeded by Allan Smith, the former provost, as interim president for a year.



Harold Tafler Shapiro (1980-1987)

After an extensive nationwide search, the regents turned inside to select the university's provost, Harold Shapiro, as the next president. A Canadian by birth and

educated at McGill and Princeton, Shapiro had served as chair of the Department of Economics and led the economic forecasting project that analyzed the Michigan economy. He understood well that the state's economy would likely drop in prosperity to the national average and below in the years ahead. As it happened, during the 1970s and 1980s, state support would fall from 60% of the university's general and education budget to 30% (and decline still further to 15% during the 1990s). Together with his provost, Billy Frye, he started the university down the long road toward becoming a privately supported public university since he had little faith that generous state support would ever return. Despite the weak state economy, the university moved ahead on important projects such as the completion of the Replacement Hospital Project, the successful move of the College of Engineering to a new North Campus complex, a major \$180 million private fundraising campaign, and a rebuilding of the physical sciences.

Yet Shapiro's most important impact as president lay not in his financial acumen but rather in the high standards he set for the quality of the university's academic programs. Both as provost and president he raised the bar of expectations for faculty hiring, promotion, and tenure. He understood well that the reputation of a research university is determined by the quality of its research, graduate and professional programs, and these, in turn, are determined by faculty achievement and reputation. Only by being recognized as a leader among its peers would the university acquire the financial strength and independence to afford and seek excellence in undergraduate education.



James Johnson Duderstadt (1988-1996)

Following Shapiro's departure to Princeton, the regents conducted a long (a very, very long) nationwide search, eventually turning back inside once again to tap the university's provost (me)–only the fourth insider in Michigan's history. Building upon

Shapiro's efforts, my administration completed the objectives of stabilizing the university's support base in the face of the continued erosion of state support by launching the first \$1 billion fundraising campaign for a public university (eventually raising \$1.4 billion), rebuilding the university's multiple campuses, leading Michigan to its status as the nation's leading research university (in research volume), and building its financial strength to the highest level in its history (as measured by achieving the highest Wall Street credit rating of Aaa, the first for a public university). Foreseeing a 21st century world in which knowledge, globalization, and pluralism would be critical elements, my administration initiated the Michigan Mandate and Michigan Agenda for Women to diversify the campus community, created a new International Institute, and moved to reshape academic programs to prepare students for the global economic and information revolution (including Michigan's role in building and managing the early phases of the Internet). During the 1990s a process of institutional transformation was launched to explore possible futures for a 21st century university, establishing programs throughout the world, launching an Internet-based university, stimulating interdisciplinary programs, and promoting a renewed focus on the quality of undergraduate education.



Lee C. Bollinger (1997-2001)

Although Lee Bollinger had long been a faculty member and then dean of the Law School at Michigan, he was offered the Michigan presidency while provost at Dartmouth College. A First Amendment scholar, Bollinger had strong interests in campus architecture (appointing the noted architect, Robert Venturi, as campus planner) and the arts (promoting the university's earlier relationship with Robert Frost and Arthur Miller and funding performances by the Royal Shakespeare Company). He launched a vigorous defense of the university's affirmative action admissions policies

that would eventually lead to the Supreme Court decision of 2003. Bollinger also committed almost a half-billion dollars of university resources to building massive facilities for a Life Sciences Institute (designed by Venturi), although he was unable to recruit the key faculty necessary to staff the effort or raise the necessary funding for its operation. Several of his projects met strong resistance, such as the Venturi-designed "halo" installed at Michigan Stadium and his plan to move his office to Angell Hall, displacing the undergraduate counseling office. After a brief four-year tenure, Bollinger left to become president of Columbia University.



Mary Sue Coleman (2002-)

Mary Sue Coleman became Michigan's first woman president in 2002, after serving as president of the University of Iowa. A biochemist by training, Coleman immediately took responsibility for re-energizing the Life Sciences initiative, settled the long-standing investigation of the basketball program, and led Michigan during the final months of the affirmative action case before the Supreme Court. She faced new challenges as the state's economy crashed in the midst of a national recession, leading to appropriation cuts which reduced state support even further (dropping to less than 8% of the university's total budget) and requiring further restructuring of the university's finances. But perhaps most significantly in her early tenure, she restored a sense of confidence that her administration would be driven by a strong interest in institutional welfare and respect for the efforts of faculty and students.

## Michigan's Character as a Trailblazer

So what might be suggested for the Michigan saga in view of its history, its traditions and roles, and its leadership over the years? Among the possible candidates from Michigan's history are characteristics such as the following:

- 1. The *Catholipistimead of Michigania* (the capstone of a system of public education)
- 2. The flagship of public universities or "mother of state universities"
- 3. A commitment to providing "an uncommon education for the common man"
- 4. The "broad and liberal spirit" of its students and faculty
- 5. The university's control of its own destiny, due to its constitutional autonomy providing political independence as a state university, and an unusually well-balanced portfolio of assets providing independence from the usual constraints as a public university
- 6. An institution diverse in character, yet unified in values
- 7. A relish for innovation and excitement
- 8. A center of critical inquiry and learning
- 9. A tradition of student and faculty activism
- 10. A heritage of leadership
- 11. "The leaders and best" (to borrow a phrase from Michigan's fight song, *The Victors*.

Yet there was one more element of the Michigan saga that seems particularly appropriate during these times of challenge and change in higher education. Shortly after my appointment as provost of the university, Harold Shapiro arranged several visits to the campuses of peer institutions to help me learn more about their practices and perceptions. During a visit to Harvard, I had the opportunity to spend some time with its president, Derek Bok.<sup>30</sup> As it happened, Bok knew a good deal about Michigan since, in a sense, Michigan and Harvard provided a key communication channel between public and private higher education.

Bok acknowledged that Harvard's vast wealth allowed it to focus investments in particular academic areas far beyond anything that Michigan—or indeed almost any other university in the nation—could achieve. But then he added that Michigan had one asset that Harvard would never be able to match: its unique combination of quality, breadth, and capacity. He suggested that this combination enabled Michigan to take risks far beyond anything that could be matched by a private university. Because of its relatively modest size, Harvard tended to take a rather conservative approach to academic programs and appointments, since a mistake could seriously damage an academic unit. Michigan's vast size and breath allowed it to experiment and innovate on a scale far beyond that considered by most institutions, as evidenced by its long history of

leadership in higher education. It could easily recover from any failures it encountered on its journeys along high-risk paths.

Bok suggested that this ability to take risks, to experiment and innovate, to explore various new directions in teaching, research, and service, might be Michigan's unique role in American higher education. He persuaded me that during a time of great change in society, Michigan's most important saga might be that of a pathfinder, a trailblazer, building on its tradition of leadership, and relying on its unusual combination of quality, capacity, and breadth to re-invent the university, again and again, for new times, new needs, and new worlds.

This perception of Michigan as a trailblazer appears again and again in its history, as the university explored possible paths into new territory and blazed a trail for others to follow. Actually, Michigan has been both a trailblazer, exploring possible new paths, and a pioneer, building the roads that other could follow. Whether in academic innovation (e.g., the quantitative social sciences), social responsiveness (e.g., its early admission of women, minorities, and international students), or its willingness to challenge the status quo (e.g., the Teach-Ins, Earth Day, and the Michigan Mandate), Michigan's history demonstrates this trailblazing character time and time again. Recently, when Michigan won the 2003 Supreme Court case concerning the use of race in college admissions, the general reaction of other colleges and universities was "Well, that's what we expect of Michigan. They carry the water for us on these issues." When Michigan, together with IBM and MCI built NSFnet during the 1980s and expanded it into the Internet, again that was the type of leadership the nation expected from the university. 31

Continuing with the frontier analogy, while Michigan has a long history of success as a trailblazer and pioneer, it has usually stumbled as a "settler", that is, by attempting to follow the paths blazed by others. All too often this leads to complacency and even stagnation at an institution like Michigan. The university almost never makes progress by simply trying to catch up with others.

My travels in Europe and Asia always encounter great interest in what is happening in Ann Arbor, in part because universities around the world see the University of Michigan as a possible model for their own future. Certainly they respectindeed, envy–distinguished private universities such as Harvard and Stanford. But as public institutions themselves, they realize they will never be able to amass the wealth of these elite private institutions. Instead they see Michigan as the model of an innovative university, straddling the characteristics of leading public *and* private universities.

Time and time again I get asked questions about "the Michigan Model"—or, to some, "the Michigan Mystique." Of course people mean many different things by this phrase: our unusually strong and successful commitment to diversity; our hybrid funding model combining the best of both public and private universities; our strong autonomy from government interference; or perhaps our unusual combination of quality, breadth, and capacity that gives us the capacity to be innovative, to take risks. And, of course, these multiple perspectives all illustrate particular facets of what it means to be a "leader and best", as the words from Michigan's famous football fight song, *The Victors*, suggest.

The institutional saga of the University of Michigan involves a combination of quality, size, breadth, innovation, and pioneering spirit. The university has never aspired to be Harvard or the University of California, although it greatly admires these institutions. Rather Michigan possesses a unique combination of characteristics, particularly well suited to exploring and charting the course for higher education as it evolves to serve a changing world.

University presidents can play important roles in creating and defining institutional sagas. Clearly early Michigan presidents such as Henry Tappan, James Angell, and Marion Burton were important in this regard. Other Michigan presidents have been successful in defining, shaping, and strengthening the trailblazing character of the university. And most Michigan presidents were sufficiently aware of the institution's history and accomplishments that they were able to utilize its saga to address the challenges and opportunities of their era, although history also suggests that the tenure of those who chose to ignore the Michigan saga was brief and inconsequential.

This is an important point. Although university presidents can influence the saga of their university, they also must recognize that these characteristics provide the framework for their role, capable both of enhancing and constraining their actions. Successful presidents are attentive to an institution's saga, respecting its power and influence over the long term, and carefully aligning their own tenure of leadership with its elements. Presidents who are either ignorant or dismissive of the institutional saga of their university have little impact and rarely last more than a few short years.

Leading a university involves much more than raising money, building the campus, recruiting faculty, and designing academic programs. Universities are social institutions based on ideas, values, and traditions. While they function in the present, they draw strength from the past as they prepare to invent the future. Only by

embracing, building upon, and perhaps helping to shape the institutional saga of a university can a president span successfully the full range of presidential roles.

<sup>1</sup> Burton R. Clark, *The Distinctive College: Antioch, Reed and Swarthmore* (Chicago: Aldine, 1970) p. 235.

<sup>&</sup>lt;sup>2</sup> Clark, p. 235.

<sup>&</sup>lt;sup>3</sup> And, of course, a bevy of candidates including Pat Robertson, Gary Hart, Jerry Brown, Paul Tsongas, Dick Cheney, Joe Lieberman, Howard Dean, and John Kerry; see also Warren Goldstein, "The Yale Candidates", *Yale Alumni Magazine*, May/June 2004 (New Haven: Association of Yale Alumni, 2004) pp. 46-53.

<sup>&</sup>lt;sup>4</sup> Roger Heyns, private communication, 1992.

<sup>&</sup>lt;sup>5</sup> Clark, p. 235.

<sup>&</sup>lt;sup>6</sup> Ironically, the winged helmet so familiar to Michigan football fans was actually brought to Ann Arbor by football coach Fritz Crisler from Princeton, which also continues to use them today. They actually originated as a marketing gimmick by the Spalding sporting goods company and were used by several other universities in the 1940s, including Michigan State! (For more information, see: http://www.umich.edu/~bhl/athdept/football/helmet/mhelmet.htm)

<sup>7</sup> For good sources on the University's history, see: Howard H. Peckham, *The Making of the University of Michigan*, 1817—1992, edited and updated by Margaret L. Steneck and Nicholas H. Steneck (Ann Arbor: University of Michigan Bentley Historical Library, 1997); Wilfred B. Shaw, editor, *The University of Michigan: An Encyclopedic Survey* (Ann Arbor: University of Michigan Press, 1941-1980); Frederick Rudolph, *The American College and University: A History* (University of Georgia Press, Athens, GA, 1962); the collections of the Bentley Historical Library, the University of Michigan (http://www.umich.edu/~bhl/)

<sup>&</sup>lt;sup>8</sup> Peckham, pp. 2-15.

<sup>&</sup>lt;sup>9</sup> Richard Rees Price, "The University of Michigan: Its Origin and Development", *Harvard Bulletin in Education*, Vol. III, January, 1923 (Cambridge: Harvard University, 1923).

 $<sup>^{10}</sup>$  The majority of the university's students were from out of state until the baby boom surge in Michigan enrollments following World War II. After a brief rise in the proportion of instate students during the early 1980s, the university today has returned to its more traditional ratio of 40% of undergraduate and 70% of graduate-professional students draw from out of state.

<sup>&</sup>lt;sup>11</sup> Peckham, p. 37.

<sup>&</sup>lt;sup>12</sup> Andrew D. White later became the founding president of Cornell University. Charles Adams also served as president of Cornell, as have three other members of the Michigan faculty (Ezra Day, Frank Rhodes, and Jeff Lehman).

<sup>13</sup> "The most striking feature of the University (of Michigan) is the broad and liberal spirit in which it does its work. Students are allowed the widest freedom consistent with sound scholarship in pursuing the studies of their choice; they are held to no minute police regulation, but are treated as persons with high and definite aims from which they are not easily to be diverted. No religious tests are imposed, but devotional exercises are held at stated times, which no one is compelled to attend against his choice, though all are welcome. Women are admitted to all departments on equal terms with men; the doors of the University are open to all applicants who are properly qualified, from whatever part of the world they may come." (*Harpers*, July, 1887; Peckham, p. 95)

<sup>&</sup>lt;sup>14</sup> Clark Kerr, *The Yellow and Blue* (Berkeley: University of California Press, 1999).

<sup>&</sup>lt;sup>15</sup> Peckham, p. 96; Rudolph, p. 279.

<sup>&</sup>lt;sup>16</sup> Rudolph, p. 277.

<sup>&</sup>lt;sup>17</sup> Rudolph, p. 269.

<sup>&</sup>lt;sup>18</sup> Technically, John Monteith was selected as Michigan's first president in 1817 when the territorial government formed the Catholespistemead or University of Michigania. But since this was, in reality, a system of public education in which college-level instruction would not occur for another two decades, it is understandable that Tappan would be regarded as Michigan's first true president.

<sup>19</sup> Peckham, p. 38.

<sup>&</sup>lt;sup>20</sup> Rudolph, p. 63.

<sup>&</sup>lt;sup>21</sup> Paul E. Lingenfelter, *The Firing of Henry Philip Tappan, University Builder*, M.S. Dissertation, 1970, The University of Michigan, Bentley Library Collections.

<sup>&</sup>lt;sup>22</sup> Rudolph, pp. 282-283.

<sup>&</sup>lt;sup>23</sup> Charles M. Perry, *Henry Philip Tappan: Philosopher and University President* (University of Michigan Press: Ann Arbor, 1933) p. 274

<sup>&</sup>lt;sup>24</sup> Rudolph, pp. 372-373.

<sup>&</sup>lt;sup>25</sup>Walter Byers, *Unsportsmanlike Conduct: Exploiting College Athletes* (University of Michigan Press, Ann Arbor, 1998) p. 37.

<sup>&</sup>lt;sup>26</sup> Rudolph, p. 269.

<sup>&</sup>lt;sup>27</sup> Peckham, p. 155.

<sup>&</sup>lt;sup>28</sup> Peckham, p. 193.

<sup>&</sup>lt;sup>29</sup> Peckham, p. 323.

<sup>&</sup>lt;sup>30</sup> Derek Bok, private communication, 1985.

<sup>&</sup>lt;sup>31</sup> This distinction among frontier analogies trailblazer, pioneer, and settler was taken from a presentation by Dr. Cherry Pancake concerning the future of cyberinfrastructure in scientific research at the National Science Foundation in 2004.