When Evolution Trumped the Bible In Our Colleges

Dr. Dave Lueloff

Introduction

America was founded on Christian principles. This influence carried over into its colleges. America saw its need to create a higher education based upon the German model. At the same time that our colleges accepted the German model of education, it also accepted the theory of evolution.

Darwinism infiltrated our colleges and the importance of the Bible was diminished. This great change occurred in the late 1800's.

This study contains several synopses of books written on the subject of this history of higher education in America. As one reads these synopses, the flow away from the Bible and toward secular humanism can be seen. Humanism has had a lasting impact in the training of our leaders in higher education.

Henry Tappan, a puritan preacher, was the first president of the University of Michigan. His failed attempt at introducing a German model in America was followed some twenty years later with success as Daniel Coit Gilman introduced it at Johns Hopkins University. The emphasis on evolution occurred at this same time. Not only was evolution accepted, but the science departments at the colleges were revered as having higher scholarship within the realm of academia.

From the Christian viewpoint, one would believe that the devil saw this change as an opportunity to bring about an acceptance of evolution in the minds of our young people. He succeeded in changing the course of America.

This is material taken from *The History of Higher Education in America.* Hence, there is some overlap of material from one writing to the next.

From Christianity to Humanism in Higher Education

One of the remarkable facts of American history is that only six years after their settlement in the Massachusetts wilderness, the Puritans established what soon became a reputable college. Higher education was for them a high priority.

The Puritans of the 1630's were still in many ways people of the Middle Ages. Their outlook was modified more by the Renaissance than by the Reformation.

The colleges served a dual purpose in training men for the sacred as well as the secular. The Puritan emphasis that all vocations were sacred was evident in the religious character that was to pervade the colleges. The rule of Harvard, in 1646, stated, “Every one shall consider the main end of his life and studies, to know God and Jesus Christ which is eternal life.” Not only did the Harvard have communal religious exercises, but also each student was to give himself to secret prayer and twice a day to reading Scripture.

Yale College started in 1701. It was highly influence by Puritan thought as men like Jonathan Edwards and David Brainard attended there in its early years.

The Protestant colleges of the mid-nineteenth century would have been readily recognizable to the founders of Harvard two centuries earlier. Chapel services were still regular parts of the day. Clergy dominated college leadership. Professors and tutors taught a variety of subjects. They were concerned for student piety and attempted to control student behavior largely by coercion.

With respect to religion, the most obvious modification was that the training of future clergy had been the strongest reason for maintaining colleges in early New England, but by the mid-nineteenth century concern for clerical education no longer was

a primary defining feature. By far, the majority of students were preparing for other professions, and ministerial education had been primarily shifted to divinity schools or separate theological seminaries.

In the mid 1800's, the desire for our universities to follow the German model bought much reform in the shaping of our colleges and universities. Francis Wayland, the president of Brown University, and Henry Tappan, the president of the University of Michigan, anticipated some of the most important principles that would soon reshape colleges into universities. They saw that ultimately American university education would have to play a more vital social role. German influence would have a major adjustment to the American university. While Wayland was the "prophet' of the practical orientation, Tappan was the "John the Baptist" in implementing this new system.

German influence helped promote the idea in America that scholarship should be a profession in its own right. This development had important implications for America, where theology had often been the preeminent intellectual profession. After the mid-nineteenth century, it could no longer be presumed that many of the strongest American intellects would be dedicated to theology. This conception of education is not that of merely teaching men a trade, an art, or a profession; but that of quickening and informing souls with truths and knowledge, and giving them the power of using all their facilities aright in whatever they choose to exert them.

Tappan had definite ideas about the relation of religion to the university. Essentially an evangelical, he assumed that the university would be broadly Christian. All students were to attend Sunday church services and he led student chapel. He had hoped that various denominations would establish theological faculties in Ann Arbor, since he believed that theological faculties were integral to a true university and

denominational differences at the state school itself could be avoided in this way.

Tappan believed that there was no need for sectarian colleges. The American majority should be consistent in its educational views. Since they were insisting against Catholics that the common schools could be nonsectarian, how could they turn around and demand that they must have sectarian higher education? University policy should be consistently nonsectarian. So Tappan brought an end to the denominational chair scheme, pointing out that Catholics, Unitarians, Universalists, and others, would soon be claiming chairs as well. In his view, except where there were theological faculties, sectarian teachings simply had no place in a university.

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Andrew Dickson White, a protégé of Tappan, wrote a thesis titled, *A History of the Warfare of Science with Theology in Christendom.* He argued that with the prestige of Darwinism, the old theory of direct creation is gone forever. While White had appeared in 1896, some 45 years after Tappan had gone to Michigan, he had carried on the mission of establishing American science and the university. There was still a place for Christianity in a broad sense, but only with its narrow ecclesiastical and theological functions kept to a strictly limited place.

Darwinism was taking a foothold in our colleges. By 1880, Yale, like almost all leading colleges in the North, was teaching biological evolution. As historian David Hoolinger pointed out, the reverence for science often assumed cultic proportions. By White's day, the metaphor of the temple was common and proponents of science might depict themselves of the 'priests' who guard the shrine, or the 'worshippers' who would enjoy 'sweet communion and peace of mind.' The institutional realities were that colleges were becoming universities and universities were being defined as scientific

institutions free from traditions.

Johns Hopkins is often thought of as a thoroughly secular institution. The question of what role religion would play at this new university was relatively open. Seven of the original twelve trustees were Quakers, as had been Johns Hopkins himself. To President Daniell Coit Gilman, the trustees affirmed that there should be a spirit of 'enlightened Christianity' at the university, an ideal with which he could concur.

Gilman would eloquently say, "The Institution we are about to organize would not be worthy of the name of a University, if it were to be devoted to any other purpose than the discovery and promulgation of the truth; and it would be ignoble in the extreme if the resources which have been given by the Founder without restrictions should be limited to the maintenance of ecclesiastical differences or perverted to the promotion of political strife.

As the spirit of the University should be that of intellectual freedom in pursuit of the truth and of the broadest charity toward those from whom we differ in opinion it is certain that sectarian and partisan preferences should have no control in the selection of teachers, and should not be apparent in the official work."

In Baltimore, Gilman's effort to take a stand for a thoroughly nonpartisan quest for truth soon drew sniper fire from the religious crowd. To add fuel to the fire, Gilman had invited Thomas Huxley to deliver a public lecture during September of 1876. Huxley was notorious not simply as a leading proponent of Darwinism but as a militant in using the prestige of Darwinism to champion the recently invented concept of agnosticism. While Gilman did not share all of Huxley's views, he considered that having him speak represented just the sort of openness in the scientific search for truth to which the university was most dedicated. Contrary to Gilman's suggestion, the trustees felt the

event should be kept professional and not opened by prayer. One clergyman stated, “It was bad enough to invite Huxley. It were better to have asked God to be present. It would have been absurd to ask both.”

As colleges turned toward German influence, they left behind the idea of being controlled by one denomination or one sect of Christianity. As this change was occurring, true Christian influence was shaped according to the leadership of the presidents of the universities. It was only a matter of time that as education was emphasized, religion would be quenched. Darwinism was sweeping the country and this newfound teaching had had an effect. Christianity was being squeezed out of the colleges and universities.

The fatal weakness in conceiving of the university as a broadly Christian institution was its higher commitments to scientific and professional ideals and to the demands for a unified public life. In light of such commitments academic expressions of Christianity seemed at best superfluous and at worst unscientific and unprofessional. Most of those associated with higher education were still Christian, but in academic life, as in so many other parts of modern life, religion would increasingly be confined to private spheres.

In 1860-1861, nearly 40% of the board members of higher education were clergy. By 1900-1901, less than 25% were clergy, and most were businessmen and lawyers. This percentage of clergy continued to drop in the coming years.

In 1914, Nicholas Murray Butler stated in an article, “The tenure of office of a university teacher must be quite independent of his views on political, religious, or scientific subjects.”

In 1909, *Cosmopolitan* magazine ran a series of articles on American colleges. Included in these articles, it stated, "Those who are in not in close touch with great colleges of the country, will be astonished to learn the creeds being foisted by the faculties of our great universities. In hundreds of classrooms, it is being taught daily that the Decalogue is no more sacred than a syllabus; that the home as an institution is doomed; that there are no absolute evils; that democracy is a failure and the Declaration of Independence only a spectacular rhetoric; that the change from one religion to another is like getting a new hat… and that there can be and are holier alliances without the marriage bond than within it."

During 1920, antievolution grew from what was largely a church issue into a national concern when William Jennings Bryan took up the crusade against evolution. He spoke on the evils of evolution to a Sunday crowd of 4,500 at the University of Michigan. Some local clergy were outraged that Bryan was presenting false and simplistic alternatives that reopened and issue they thought had long since been resolved. Bryan responded by beefing up his argument and having 5,000 copies of his speech printed and distributed.[1]

The founding pilgrims would turn over in their grave to know "how far we have come." America, a Christian nation, had lost its Christian foot-hold in its institutions of higher learning. The colleges and universities, which are the training centers for the leaders of the next generation, have replaced Christianity with humanism.

[1] The Soul of the American University, George M. Marsden

German Influence on American Universities

The German Universities have helped to create and to nourish America and the American Universities. This enriched and penetrated into all of American life. Most American students desiring to pursue graduate studies in the early 19th century turned to Germany.

Many Germans had migrated to American at this time. In 1776, the German people made up only about one-tenth of the total United States population. There were 225,000 Germans at this time. By 1900, there were 18,000,000 Germans in America where there was a total population of 66,000,000. Thus, they had accounted for 28% of Americans.

In 1766, Benjamin Franklin was the first American known to pay a visit to a German University. (In later years, one Dr. Tom Malone, also has done this). Franklin had been the first printer to print German books in America.

Between 1820 and 1920, over 10,000 students had traveled from America to Germany for their education studies.

"The American students, returning, bearing the German doctorate, bore at least three distinct intellectual possessions. The first, relating to a point of view, was an intellectual habit, the second was an intellectual method; and the third was an intellectual and ethical conviction. The point of view was represented in thoroughness in thinking and in research, and the third treasure, of intellectual and moral conviction, was represented in the assurance that one should make a contribution not wholly unworthy of himself to human knowledge.

The point of view, or the intellectual habit, embodied in the personal

independence of the scholar, was perhaps the most precious of the three treasures."[2] This personal independence was a direct result of the influence of Martin Luther and the freedom and independence that comes from Biblical principles. "To seek for truth, without fear of any antagonist and without the cooperative fervor of either ally or friend, was the primary principle, historical and modern. This independence also connoted freedom. He, the scholar, pursued his holy quest, unshackled. This free independence, or independent freedom, belonged to the study of theology, including exegetical and historical problems, quite as completely as to the natural and the physical sciences. The progress which theological thought has made in the United States is due, in no small measure, to the freedom and independence of scholars who were trained by Dorner and Tholuck, and their associates, to whom truth was the only ideal, and its pursuit the chief, quickened and quickening, force."[3]

"Thoroughness seems to be a peculiarly Teutonic (old Germanic influence) treasure. It represents, first, an ideal, to know all that can be known about the subject under investigation. Professor Farnam has written, 'Many say that it was in Germany that they learned the importance of facts as the basis of general principles. One puts in thus: The Germans got me to thinking early about the importance of getting next to facts. Of course, intellectual thoroughness stands also for a proper sense of relations. For, every subject, the student must know all. It is for him to determine at what point the application of his ideal shall cease."[4]

"With this ideal of full knowledge was united a second element, namely, a personal forcefulness in securing this knowledge."[5] The student must exercise a great

[2] The American and the German University, p. 46
[3] Ibid, p.47
[4] The American and German University, p.47-48
[5] Ibid, p.51

deal of discipline that comes with this newfound freedom. The student learns to make good use of his time and become a hard worker as he learns to excel in his studies. "Thoroughness in scholarship and research became typical of the student. The type profoundly influenced Americans receiving a German doctorate."[6]

"Every German scholar is expected, first of all, to *think of himself* and to develop an independent and critical mastery of whatever subject he may take in hand. Next, he is expected to *know all that has been learned* up to his day in respect to this subject, and to this purpose to know and digest the literature pertaining to it. And lastly, by personal contact with the original facts, by seeing for himself, and by examining them by the best methods and in the most thorough way, he is expected to *learn something* not yet known, and thus to *add to the sum of human knowledge.* And the great principle upon which the methods and details of educational process are grounded is that education should fit a man to do this – in fact render it an inner necessity for him that he should do it.

Somehow, Germany has succeeded in getting her American pupils inoculated with this principle and these ideals. They have come home, and they have generally sought to produce the same great results by education at which Germany aims….

The German idea of education begins with the idea of service to humanity. A man brought into the world not simply to live, or even to make a brilliant career for himself alone, but to advance human well-being as a whole. Hence education must provide him with the tools for his work, with skill to handle them, but still more with aggressive and creative power that he may venture out into new fields, find new truths, and bring back

[6] Ibid,, p.53

new products for the use of men….

The carrying out of this idea begins with the lowest grades of school work. Before a boy is ready for the University he has either passed through the gymnasium, where the class is predominantly classical, or the *Realschule,* where it is scientific. In either case he has got together a certain amount of literary tools, and has learned how to use them. If he has studied Latin, for example, he will be able to read it readily at sight, and will be able to speak it somewhat also. Two or three modern languages he will have mastered to the same extent. Indeed English is studied to such an extent among all classes of German, that almost every third man you meet upon the streets will profess to be able to speak it 'a leetle.' German youth are at least two years ahead of ours in the amount of their acquisitions, and they know what they know and can control it for practical purposes far better than ours. Thoroughness, facility, and maturity are the three things the primary education seeks to gain for the youth, and it is not a vain boast when to the student leaving the gymnasium there is given a *Maturitactszeugniss,* a certificate that he has arrived at maturity. How often have I noted in my intercourse with young Germans formerly and recently, the information, the grasp, the certainty of conception and expression which belong to men rather than to boys.

When he enters the University, now this mature youth is not led to despise mere information. He is lectured to a great deal, and the object of these lecture is to convey to him in the shortest possible way the outline and elements of the subject at hand. Lectures are of all grade, elementary and advance. He is introduced to books, and is taught to learn all that others have to teach him. But he is not left to read and read till all power of originality has been smothered under the accumulations of his erudition. He is soon encouraged to produce, to try his own powers, to see facts for himself, and then to

begin investigation. If he comes to preparation for a degree, he is expected to write a thesis which shall contribute in some measure, small though it may be, to human knowledge. To this end libraries and laboratories have been erected which are models for the world. And the American, who studies in Germany, is admitted, so far as he is prepared for it, to the advantage of all this opportunity. These ideals, and in a measure their attainments, he brings back with him to his native land."[7]

German thought made it a lifestyle and a business of study. Even things such as the theater and opera were to serve the student to this end. Everything around the student was looked at from this point of view. German education permeated thought – not just of Germans, but all those who were under it's domain. They were taught to study constantly, persistently, logically, systematically and in great detail to all they endeavored. They were extremely serious minded and dead-in-earnest about life and studies. This was especially true in their own independent research. As one person stated, "They taught me what research work is and how to do it and what its value is, no matter how long it takes or what findings…. This is where I came into closest and most helpful contact with my professors and learned most from them – often in their own seminaries or libraries, or over a glass of wine at their dinner tables… or on long walks in the parks or woods. They took me into their homes and into their hearts and gave me their rich stores all I could carry away."[8]

German thought produced: "A mind freed from prejudices (relatively speaking), free intellectually, free spiritually. This entails *enormously greater objectivity of judgment* in all thing. *A new conception of thoroughness. Immense widening of horizon.* All this

[7] The American and German University, p.58-61
[8] The American and German University, p.62-63

due to constant association with men who themselves were products of a system which created these values. Constant inspiration of philosophy, science, art, music, where your associates discussed their studies, art, drama, music, poetry, with as great pleasure and interest as our American students discuss athletics, Junior proms, college annual, baseball, etc. etc., *ad nauseam.*"

German University as an Institution

German influence started to permeate American education after the 1840's. Henry Philip Tappan, the first president of the University of Michigan introduced German thought and methods into this university. "It was not, however, till the opening of Johns Hopkins in 1876, that these influences, general and special, and somewhat desultory, as I have intimated, came to fruitage. Even in this fruitage embodied several fundamental influences other than German.

The keynote of the German system was also the keynote of President Gilman's conception of the university that was to be; for he had in view the appointment of professors who had shown their ability as investigators, whose duties as teachers would not be so burdensome as to interfere with the prosecution of their researches, whose students should be so advanced as to stimulate them to their best work, and the fruit of whose labors in the advancement of science and learning should be continually manifest in the shape of published results.

The seminar was installed as a method or means of securing this end, and research, scientific in method, was adopted as a condition and means for securing the highest scholastic ideals. The emphasis thus placed was new in American education. It was heralded, as it ought to have been, as a distinct advance. It came to possess great

influence over graduate instruction in the American university."[9]

From this German influence, "John Hopkins created the spirit of scholars and formed the atmosphere of scholarship. It was the research for truth, questioning, doubting, verifying, sifting, testing, proving, that which has been handed down; observing, weighing, measuring, comparing the phenomena of nature, open and recondite.' It was the spirit which young Rowland and the mature Sylvester and Remsen represented in science, Gildersleeve in classics, and Adams in history. It was the constructive, up-building, invigorating, cherishing all that man has learned from nature and from his own experience, while removing the incrustations imposed by ignorance and bigotry.

The service, which was embodied in Johns Hopkins, leads out to the general interpretation of methods, conditions, forces, and ideals which prevail in the German University."[10]

The German Way of Teaching

"The fundamental methods of the German university, first, concern the giving of instructions by lectures, and, second, concern research. In research, be it at once said, is included, as a chief instrument, the characteristic and constructive seminar.

The method of giving instruction by lectures is immediately and fundamentally to be distinguished from the English method of the tutorial system, and also from the American method of class discussion, recitation or conference.

The German method of the lecture is the oldest of all formal methods of conveying instruction by a teacher to the student. So far as our tradition is concerned, it begins with Aristotle, who, however, is preceded by the informal discussions of Plato

[9] The American and German University, p.108=109
[10] The American and German University, p. 113-114

and Socrates, and it is followed, through more than two thousand years, by and in the schools of continental Europe. It has a rich, as well as a broad, historic background. Manifestly subjected to essential weaknesses, it has yet survived in the universities of France and of Germany."[11] One of the most outstanding of recent historians of the system who is also a philosopher, Paulsen, has defined the lecture in terms of purpose:

"It's object is to give the hearer seeking an introduction into a subject a living survey of the whole field, through a living personality, in a series of connected lectures. It should enlighten him concerning the fundamental problems and essential conceptions of this science, concerning the stock of knowledge acquired and the method of its acquisition, and finally concerning its relation to the whole of human knowledge and the primary aims of human life, and should in this way arouse his active interest in the science and lead him to an independent comprehension of the same."[12]

Advantages To The Lecture

Paulsen points out six distinct advantages to the German method of teaching.

"(1) The hearer is confronted with science in the form of a *personality* that possesses it and is devoted to it. In case the personality is equal to the occasion, he is at once inspired with a belief in the thing itself. A book, is a lifeless object that cannot create a belief; all faith is transmitted from person to person.

(2) The book is a fixed and finished product, the lecture is a living and moving growth; even in the outward form, for the book exists as a complete whole, while the lecture offers a small and comprehensible part of the subject from hour to hour. And even this is not presented to the hearer as a finished product, but is developed before

[11] The American and German University, p.114-115
[12] The German University and University Study, p.192

his very eyes at the present moment.

(3) This outward flexibility of the lecture is accompanied by an *inner flexibility* and freedom. It can and does, for example, employ different methods of presentation. The text-book demands unity of style and form, it prefers to proceed systematically according to the deductive, synthetic method. The lecture course is more flexible, it is not compelled to adhere to a fixed plan, in one chapter it can adopt one method, in another another…. The lecture is also freer in the selection of the *material.* The text-book aims at completeness, uniformity, and accuracy in detail. Here, too, the lecture is more flexible; it may, yielding to the interest of the teacher or student, dwell upon one chapter longer that upon another, and then rapidly pass over one that has less systematic value, for its object is not to furnish a reference book of which completeness and uniformity can justly be demanded, but to help the beginner to understand the subject, and to this end it may be suitable to offer different material in different proportions. Nor will anything prevent the lecturer from discussing occurrences and questions which happen to be of general interest, new discoveries, scientific controversies, literary productions, sometimes also public events. It would be foolish to ignore a subject in which the hearers happen to take a lively interest, nor would it be wise always to seek it out. The lecture has this great advantage: It is repeated at shorter intervals and can more easily keep pace with the events than a handbook which is intended rather to record the settled and permanent results of scientific labor…. The object of the lecture is not to cram his memory with facts or to furnish him with a notebook that will prepare him for the examination, but to help him to understand the great and essential features of the sciences, as they are seen through the living personality of the teacher. If this end is realized, he will have no difficulty in handling the

details himself, and in making profitable use of text-books and works of reference….

(4) All this is of course, doubly and trebly true where *perception* plays an essential part, for example where the experiment stands in the foreground, as in experimental physics and chemistry or in physiology, or where the speaker's word explains a perceived object, as is the case in the clinic, or in archaeology, or the history of art….

(5) The lecture not only helps him who hears it, but him who delivers it. If the lecture system were not necessary for the students, it would be necessary for the sake of the teachers. Let us emphasize two points.

First, the systematic presentation of a science in lecture-form constantly directs the attention towards the *essential* and the *universal*…. Secondly, the teacher immediately perceives in the lecture, in the personal contact with his hearers, what is living, what is effective what is fruitful and what is true.

(6) Lastly, the lecture is the only form of instruction in which a teacher can communicate his thoughts to a large number at the same time. Only a few can take part of an exercise; the active participation of the individual, on which the superiority of the exercises depends, diminishes as the number grows; if the number becomes too large, the individual is here condemned to stupid passivity more than anywhere else."[13]

The Seminar

"A second method of the German university which has touched the American system concerns the seminar as a form of research, or, put in another way, concerns the system of research which uses the seminar as one of its chief instruments, or conditions. This method is largely a result of the academic enlightenment, or progress,

[13] The German Universities and University Study, p.193-198

of the nineteenth century. It is simply a method of the training of the student in carrying forward an independent investigation of an important problem. It applies to the philosophic and philological field, as well as to the scientific, or historical, or economic. It may be said to be the preliminary process of which the lecture is the exposition or product, and the accompanying exercises are the nurseries of research; their particular service is to familiarize the student with practical scientific methods. The method of solving problems varies with the various fields of research. In general, however, an expert in research gives a problem to his students, or encourages them to find such problems for themselves, and the work of solving it is then done under his guidance; expert criticism and advice are at the service of the halting endeavors of the inexperienced. Thus they learn to know and handle with skill the tools and methods of work. The aim is to make the pupil himself a master, hence, first of all, to enable him to do independent scientific work."[14]

Concerning this method of seminar method, one stated, "No man is truly a student of any branch until he is an original student. He is never fully interested in study till he begins to pursue it for himself by original methods. Hence it is the duty of all institutions which will fit their students for the highest intellectual service in the world, to train them in this method. Whatever their particular line of study may be, the opportunity is open before him. No branch of learning is shut out from the benefit of the enthusiasm which will come from such study. It is not meant that all students should be thus taught from the beginning of their public education, for this is a manifest impossibility and impropriety. There must be an age of dependent study before that of independent. A

[14] The German Universities and University Study, p. 312

man must walk before he can run. It would be a great error to introduce independent work at too early a point in a course of study. But everything which is worthy of being studied at all, has some stage at which it can properly be put into the seminary, to the great profit of both teacher and student."[15]

Divergent Opinion & Implementation of Lecture and Seminar

The lecture system and the seminar are the two great vehicles of obtaining knowledge given by German influence.

Some critics will say that the lecture will not work well as a vehicle. Some problems arise such as student absences, lack of listening by the student and over-crowding of classrooms for one lecturer. "But there is yet more important reason for the failure of the system. It is the reason that the system is not supported by the energetic, productive scholarship of the lecturing professors. He has learned the facts, but he has not made himself the active master of scholarly methods. He has not usually become a forth-putting and creative scholar. He lacks the self-confidence which is the normal result of prolonged and independent investigation. He has not advance into the field of the unknown, nor, indeed, far toward its limitless domain."[16]

The ineptness of the professor does not negate the effectiveness of the system. This is a weak argument as there will always be some inept professors, no matter what method of teaching is used.

The seminar introduced in America has had great success. Henry Adams introduced the seminar at Harvard University. "He took, as victims of his experiment, half a dozen highly intelligent young men who seemed willing to work. The course began with the beginning, as far as the books showed a beginning in primitive man, and

[15] The Seminary Method, p.3
[16] The American and German University, p.126

came down through the Salic Franks to the Norman English. Since no text-books existed, the professor refused to profess, knowing no more than his students, and the students read what they pleased and compared results. As pedagogy, nothing could be more triumphant. The boys worked like rabbits, and dug holes all over the field of archaic society; no difficulty stopped them; unknown languages yielded before their attack, and customary law became as familiar as the police court; undoubtedly they learned, after a fashion, to chase an idea, like a hare, through as dense a thicket of obscure facts as they were likely to meet at the bar…."[17]

The most direct and full institutional evidence of the introduction of the German method, or methods, is found in the first years of Johns Hopkins University. The influence of this introduction in every other great university was speedy, has proved fundamental, and apparently is to remain."[18]

The German Library

German universities are not only noted for their lectures and seminars, but they are also noted for their emphasis on great libraries. This appreciation began with a group of men who first went to Gottingen. Around 1820, the Gottingen's library had two hundred thousand volumes. This was over ten times as large as the largest library in the United States.

"Mr. Ticknor once said to me that nothing more marked the change produced in him by his long residence in Europe than the different impressions made by the library of Harvard College before his departure and after his return. ' When I went away,' he said, 'I thought it was a large library; when I came back, it seemed a closetful of

[17] The American and German University, p.127-128
[18] The American and German University, p. 130

books.'"[19]

In America, not only were there libraries limited as to the number of volumes, but access to these books was limited. Often, only the upper classmen had access to the books; library hours were only a couple of hours per day and only a couple of days per week. The emphasis was to keep the books safe and sound. German influence changed the policy on American libraries. These changes included hiring full-time librarians.

Not only were the Germans advanced in their libraries, but Germany had started to build and equip chemical laboratories. This concept was also picked up by the Americans and in 1848, America had established its first laboratory.

Individual Student Influence

Commenting on the differences of students from German to England to France, John Stuart Mill remarked, "The characteristic of Germany is knowledge without thought; of France, thought without knowledge; of England, neither knowledge nor thought."[20]

The German student was both a learner and a thinker. This influence in turn motivated American students to do the same. The American student developed a keen appreciation for knowledge.

The differences between the value put on education is noted by Cogswell as he wrote in 1817: "I have laid out for myself a course of more diligent labors the next semester. I shall then be at least eight hours in the lecture rooms, beginning at six in the morning. I must contrive, besides, to devote eight other hours to private study. I am not in the least Germanized, and yet it appalls me when I think of the difference between an education here and in America. The great evil with us is, in our primary schools, the best

[19] Life, Letters, and Journals of George Ticknor, p.72
[20] The Letters of John Stuart Mill, p.377

years for learning are trifled and whiled away; boys learn nothing because they have no instructors, because we demand of one the full work of ten, and because laziness is the first lesson which one gets in all our great schools."[21]

The educational eagerness and value of knowledge was instilled in the Germans. The German students were "glowing with the desire to know, who on their own resources plunge into passionate research and who spend wonderful nights in excited debates with their chums on purely theoretical problems."[22]

The German professor possesses and teaches excellence and the German students pick up on this as they search and delve into subjects and sources. This value of truth, scholarship, learning and thinking formed the German student.

The German mind values and gives great worth to both the teacher and the institution.

Possible Downsides To German Thinking

The downsides to this process of German thinking are three-fold. First, it negates the use of the whole man in failing to recognize the value of feelings, esthetic value and social life. Secondly, it borders on being chauvinistic. The supremacy and progress of one people led to the prideful arrogance that allowed the killing of six million Jews. It also fostered higher criticism of the Scriptures. Thirdly, the other deficiency lies in the field of specialization. In this area, it is pointed out: "The individual, accustomed to the microscopic, to which all research now compels attention, is in danger of losing his ability to look abroad, to take a comprehensive view of things. The constant, intensive attention upon a thousand little and, in themselves, unimportant things, has a tendency to weaken the ability and inclination to entertain great thoughts and general ideas; the

[21] Gottingen and Harvard Eighty Years Ago, p.10
[22] The American and German University, p. 141-142

philosophical instinct withers away; concentration upon a single point readily leads to narrowness: nothing is seen except that which lies in one's own little field, nothing esteemed unless it is built according to one's own notion. But for science itself there arises a danger, noticeable especially in the field of philology and history: the mass of facts, of details, of investigations is becoming so immense that no one can survey and comprehend them all, not even master them in a limited field. Our experience is somewhat similar to that of the wizard's disciple: the springs which scientific research has opened – recollect, for example, the publications on the history of economics and education, or the Goethe and Kant philology – flow and flow until historian and history itself are in danger of drowning in the heaving billows."[23]

Fault can be found within any area of life. Although these criticisms can be found and some are valid, the Germans produced the greatest educators and institutions. The German way of thought and teaching and training permeated throughout the greatest universities that America has had. The Germans are a race of scholars.

[23] German Universities, p.410

From Colleges To Universities

"What fired the imagination of the men who began to advocate graduate education in the late eighteenth and early nineteenth centuries? There had once been a time when the Bachelor's diploma truly represented a "first degree" of academic life rather than the completion of formal study; but that time was long past when the history of graduate education, as we know it, began. Many Americans did, of course, take the Master of Arts degree - qualifying for it by staying alive and our of trouble for three years after graduating from college and by giving very modest evidence of intellectual attainments. Residence as a student in a university was not ordinarily required.

Did a desire to rescue the M.A. from complete decay motivate reform? Where it existed at all, this concern was apparently incidental. The medieval tradition of exacting study in a university for the second degree and then for a doctorate had grown too feeble by 1800 to be the inspiration for change. Instead, academic men were aroused to action by what they found when they scrutinized the established system of higher education in the United States and measured it by the standards of its era. The American college of the decades just before and immediately after 1800 may well have been more effective in an unassuming way than its critics admitted, but it did have limitations which became increasingly intolerable."

In the mid 1800's, the desire for our universities to follow the German model bought much reform in the shaping of our colleges and universities. Francis Wayland, the president of Brown University, and Henry Tappan, the president of the University of Michigan, anticipated some of the most important principles that would soon reshape colleges into universities. They saw that ultimately American university education would

have to play a more vital social role. German influence would have a major adjustment to the American university. While Wayland was the “prophet’ of the practical orientation, Tappan was the “John the Baptist” in implementing this new system.

The college was inadequate when it was compared to the German Universities. Educators looked to England, France, Germany and even Scotland, and found American education was in need of reform.

"The college was also judged inadequate when its curriculum was compared with the entire body of knowledge. At a time when all fields of learning, from chemistry to philology, were expanding at an extraordinary rate, the college course changed slowly. To be well-informed in may subjects, a student would have had to go far beyond the limits of the Bachelor's attainments. Contrary to an impression general today, the curriculum was not invariable in content, although it was rigid in its prescriptions. The colleges did sometimes incorporate new material into the established course, but they did so at the risk of treating no subject thoroughly. With liberal arts education in danger of becoming either archaic or superficial, college authorities were forced to justify their old ways or to invent methods of adjusting the curriculum to the growth of learning. One result was experimentation with courses for graduates."

As the United States gained its independence politically, there was also a desire to offer independence in other areas. There was a reverberating cry for our institutions of higher learning to rise up to the standard set by the German model.

There was a realization that there was a distinction made between a college and a university. The thought by many was that a college was a stepping stone to the University.

“Henry E. Dwight implied that the colleges of this country were inferior schools

when he spoke of the very general feeling in America 'that we need a University like those of Germany. Graduates after leaving the colleges of the United States, usually abandon their classical studies, because there are no Universities to which they can resort, and attend lectures on the higher branches of classical literature. If this University should in this respect equal the ardent hopes, and may I not add the expectations of its friends, many of the graduates of our colleges will visit it for the purpose of pursuing criticism and we shall ere long see some of that enthusiasm, for classical literature, which is now so visible in Germany.'

A college has to provide for the *eruditio* of young men, if I may style it so; for them for the common vocations of life. Of this kind, the same as are called *Gymnasia* in Germany, we have a sufficient number, and among them many, which may rival with the most famous of Europe.

A University, however, is to satisfy the higher demands of science; *Universitas literarum* is its object….the students who are to be received in the University, must be expected to have passed previously through a regular college education."

Dr. Augustus Strong sets forth his notion of what a university is: "A university in the proper sense is an institution for advanced and professional studies - advanced in distinction from studies that are merely elementary and intended for purposes of mental discipline, professional in contrast to those that are merely general and incident to all liberal education." He also cited that the true universities of his day were found only in Europe. He cited the University of Berlin with its five thousand students, all with a complete 'college' or *gymnasium* training before entrance upon university work.

German education made the inadequacy of the colleges in America transparent.

In the 1830's, Harvard attempted to establish a seminar after the German pattern, but it soon failed.

Throughout the 1830's and the 1840's, colleges and interest in higher education was expanding. This expansion created change within the college's offering of courses.

Daniel Coit Gilman described conditions in respect to advanced university instruction during the 1850's and the 1860's:

"Opportunities for advanced, not professional, studies were then scanty in this country. In the older colleges certain graduate courses were attended by a small number of followers - but the teachers were for the most part absorbed with undergraduate instruction, and could give but little time to the few who sought their guidance."

In 1851, Henry P. Tappan wrote *University Education.* Within this treatise, he expounded on his thoughts concerning higher education.

The need for a University:

"The establishment of Universities in our country will reform, and alone can reform our educational system. A University is literally a Cyclopedia where are collected books on every subject of human knowledge that can aid learned investigation and philosophical experiment, and amply qualified professors and teachers to assist the student in his studies, by rules and directions gathered from long experience, and by lectures which treat of every subject with the freshness of thought not yet taking its final repose in authorship, and which often present discoveries and views in advance of what has yet been given to the world… where provision is made for carrying forward all scientific investigation; where study may be extended without limit, where the mind may be cultivated according to its wants, and where, in the lofty enthusiasm of growing knowledge and ripening scholarship, the bauble of an academic diploma is forgotten."

"We hold, therefore, that Universities are natural and necessary institutions in a great system of public education. To delay their creation is to stop the hand upon the dial-plate which represents the progress of humanity."

Two branches of education:

Education is preparatory and executive. "The preparatory is formal and scholastic, and comes under the direction of institutions of learning. Herein is comprised that education of the mental facilities in general. "Man is a creature of reason, and therefore, his capacity or reasoning should be developed through all the forms of logic. He is a creature of language, and therefore should be taught the full power and beauty, and the ready and apt use of language in speech and writing by the study of the most cultivated languages. He is a creature of imagination and beautiful tastes, and therefore should be drawn forth in studies of the arts, and by poetry and music. He is a creature of passions and will and therefore should be instructed in morality, and be disciplined to self-government. He is immortal, and therefore should he learn that system of religions which brings life and immortality to light.

Under the philosophical, or ideal point of view, education is the cultivation, the improvement of man, in respect to the capacities wherewith he is constituted; it is the nurture and development of his soul. Nor do we forget his physical being, and neglect a training in all those manly exercises which give noble proportions, and hale vigor and strength. The ideal of a man is a true and cultivated soul dwelling in a sound and active body, prepared for all proper duties."

Under the executive part, we embrace professional studies such as Law, Medicine and Theology, or the studies relating to any course of life for which the

individual may design himself…. This conception of education is not that of merely teaching men a trade, an art, or a profession; but that of quickening and informing souls with truths and knowledges, and giving them the power of using all their facilities aright in whatever direction they choose to exert them. It seems, indeed, to belong only to the few who enjoy prolonged leisure for study, and a full supply of means and appliances to carry out this conception fully; but it contains a principle of universal application; for even the lower grades of education, the true idea of education as to the development of the soul in all its faculties, may be held up to view and acted upon… Let this higher notion of Education be adopted, and the human soul be treated not as a thing for secular uses, but as the lofty, lordly and immortal subject for whose improvement and good all secular things are to be used, and then will the conception of its own value be infused, and it will aspire after its true civilization, and those who direct popular education will aim to adapt studies to this end, unfolding it even under a limited education. The condition of human life may forever limit a thorough education to the few, but we see not why a valid principle of education should not govern every form and degree of it."

The emphasis on quality of education, not quantity of students:

"It seems, indeed, (higher education) to belong only to the few who enjoy prolonged leisure for study, and a full supply of means and appliances to carry out this conception fully."

"It will do more for mankind if it should send forth only a few men of the right kind, than one that should pour forth a rabble multitude of sciolists (a pretentious attitude of scholarship)."

"A few men of great and cultivated powers may do more for a nation than hosts of mere expert empirics, who without learning succeed in gaining a reputation for learning,

and without principle, dare to invade the most sacred offices of society." Higher education is for specializing and exhausting a subject.

"The question in education, as in religion, is not what men desire, but what they need. This must govern us in determining the form and quality of our educational institutions. Now when it is asked, What we need in the way of education? We may reply, either, that we need to fit men well for professional life, and for the general business of the world in the mechanical arts, in agriculture, and commerce; or that we need to cultivate the human mind according to the philosophical or ideal conception; or we might reply, that we need all in due order and proportion. The last reply would, unquestionably, be the correct one. We do need all in due order."

"Those Institutions of Education which are designed to stand pre-eminent, must be so ordered as to lead, in the general, to a solid and thorough method. It is required to make and vindicate a rule of education which takes its rise in the very constitution of man, and which calmly and majestically walking over the plausible but fleeting expedients of a day, meets with a sound heart and a strong hand the permanent exigencies (pressing needs) of mankind."

Free thought was a necessity.

"It is easy to get up scholasticism under prescription, but investigation and productive thought must be free as birds upon the wing - They must bear themselves along by their own native vigor, in their own native element. We must run the risk of flying in the wrong direction sometimes or we can have no flying at all, unless it be wretched flying of a decoy-pigeon - fluttering within the limits of a string held by the hand of its master. Universities may, indeed, make learned men; but their best commendation

is given when it can be said of them, that furnishing the material and appliances of learning, setting the examples in their proffesors and graduates, breathing the spirit of scholarship in all that pertains to them, they inspire men, by the self-creative force of study and thought, to make themselves both learned and wise, and thus ready to put their hand to every great and good work, whether of science, of religion, or of the state."

"Human souls are to be educated because they are human souls: they are to be disciplined - to think, to reason, to exercise all the faculties wherewith they are endowed; they are to gain character and worth, to be fitted for duty, as human souls. This should be the leading thought of all education - of education in every degree, and for every purpose of life. When the lower ground is taken - that of making preparation for a particular art or profession, we shall fail of developing the full strength of the mind and of communication the highest principles of action: when the higher ground is taken, we aim directly at the accomplishment of both."

The German model is necessary

After personally checking out the universities in England, France, Scotland and Germany, Tappan, like many educators who were ahead of their time, saw the German model as a necessity. The amazing thing about Tappan was that he saw this about twenty-five years before anyone did. Tappan thought he could implement a 'German model' at the University of Michigan. He was their first president, and he was give free reign by the Board of Regents as he formed this new university.

There was a conflict between Tappan and the newly elected Board of Regents, and he was forced out after only 10 years as president of U.M.

Tappan was a man with a vision for higher education. Even while he was president at the University of Michigan, the visionary Tappan advocated starting a

University in New York City. “Cities were the proper seat of learning; for they possessed wealth and facilitated the ‘fellowship of congenial spirits’ necessary to scholars.”

Tappan had written to William Astor, a man of wealth and a man with whom he had previously discussed university matters personally. In 1855, Tappan formed a coalition to try to establish this university in New York City, but seeds of discontent aborted the efforts.

“President Tappan was appreciated by some as a real educational pioneer; by others he was bitterly attacked and his plans were denounced as designed to ‘Prussianize’ the good citizens of Michigan through their State university. Before Tappan lost out, however, he had spent eleven years at Ann Arbor and had helped build up a concept of higher education that went far beyond the confines of Michigan. ‘I found,’ said President James B. Angell in describing years later conditions at Michigan when he went there, ‘that the University had been inspired to a considerable extent by German ideals of education and was shaped under broader and more generous views of university life than most of the eastern colleges.’

In 1902, Andrew D. White said of Tappan: ‘To him, more than to any other, is due the fact that, about the year 1850, out of the old system of sectarian instruction, mainly in petty colleges obedient to deteriorated traditions of English methods, there began to be developed *universities* - drawing their ideals and methods largely from Germany.”

After Tappan’s death, the Senate of Michigan stated: “He saw better than others did, that … the chief need was not stately halls and aspiring chapels, but education and able men.”

In 1869, the National Teachers’ Association reported: “We have as yet, no near

approach to a real university in America." "What the committee meant, as a detailed reading of its able report will show, was that no higher institution then existed in the United States was engaged in advance teaching and research beyond the limitations of the traditional college. 'No competent nation may stand acquitted before its own conscience and the enlightened judgment of the world until it can point to one such center of original investigation and educational power,' the committee declared."

Within the next two decades following the publication of this report, three institutions were established in different parts of the country to do specifically what this committee had recommended - provide advanced education, mainly or exclusively on the graduate level, and enlarge the boundaries of human knowledge by means of researches and investigations. These three institutions were the Johns Hopkins University in Baltimore, Maryland (1876), Clark University in Worchester, Massachusetts (1888), and the University of Chicago (1890).

Daniel Coit Gilman was to be the president of Johns Hopkins University. It opened its doors in 1876. This was truly the first University that was modeled after the German universities.

The advancements made at Johns Hopkins had a domino affect throughout the other institutions of higher education. We conclude with the address given by President of Harvard, Dr. Charles Eliot, on the occasion of the twenty-fifth anniversary of Johns Hopkins:

"President Gilman, your first achievement here, with the help of your colleagues, your students, and your trustees, has been, to my thinking - and I have had good means of observation - the creation of a school of graduate studies which not only has lifted every

other university in the country in its departments of arts and sciences. I want to testify that the graduate school of Harvard University, started feebly in 1870 and in 1871, did not thrive until the example of Johns Hopkins forced our faculty to put strength into the development of our instruction for graduates. And what was true of Harvard was true of every other university in the land which aspired to create an advanced school of arts and sciences."

What made these words on this occasion even more significant, is the fact that in a conference with the Hopkins trustees in 1874, Dr. Eliot had put himself on record as convinced that what was proposed in Baltimore could not succeed, on the ground that no institution, old or young, could cut loose from the educational foundations of the community in which it was placed. Dr. Eliot is on record as having said, "We at Harvard, could not deliberately undertake to give only a high degree of education for a few. We could not deliberately undertake that, not even if we were starting anew."

Francis Wayland

Francis Wayland was both a notable Baptist preacher and an outstanding educator. He wrote a book in 1842 entitled *Thoughts on the Present Collegiate System in the United States.* In this treatise, Wayland was ahead of his time as he addressed the needful change and recommended solutions in the revolution of higher education.
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Francis Wayland was born in New York City in 1796. He studied at Andover Theological Center and became a Baptist minister. He served for six years at the First Baptist Church in Boston and became known as a powerful preacher and many were brought to repentance and conversion.

Wayland left the church in Boston and became a professor at Union College and then accepted the position as president of Brown College. He remained there for eighteen years.

Although he was the head of this seminary, he distrusted seminaries. He is quoted as saying, “The tendency of seminaries is to become schools for theological and philological learning and elegant literature, rather than schools to make preachers of the Gospel.” He was determined that his school not drift with that tide. Wayland led in worship and delivered powerful sermons to his students, urging those who were not converted to get right with God.

Francis was also involved in prison work and made such a deep impression on the state prisoners that the prison chapel was filled with sobs when the chaplain announced that he had died.

In 1842, Wayland authored an expose entitled *Thoughts on the Present Collegiate System in the United States.* He realized that the culture of America had

progressed and yet the higher education system needed to update and provide a supply of well instructed teachers. Wayland's emphasis on this can be summed up as he said, "It is self evident that no nation can derive the benefit which God intended from the intellect which he has conferred upon it, unless all that intellect, of what sort sover it be, have the means of full and adequate development."[24]

The colleges in America were established by graduates from Cambridge and Oxford with the students all going through the same course of studies within the same time. Wayland felt there was a need for changes within the visitorial (board of trustees), the faculty, and the need for a University formed after the German model.

The Visitorial Powers

The Board of Trustees hold the property of the Institution; they remove and appoint professors; they fix and alter the salaries of the professors. Their office is commonly for life. If they do well, they receive no praise, and if ill, no censure. They are wholly independent of all authority. In New England alone, more than a million and a half dollars are set apart and entrusted to the Board of Trustees.

Wayland suggested five areas of reform:

1) The members of the board should be capable of fulfilling their duties which include appointing teachers and removing them. Another would be prescribing the course of studies to be pursued.
2) They should be from station and character elevated above the reach of personal or collateral motives. They should be incapable of acting from fear, favor or affection.
3) They should be few in number. In large bodies, responsibility is too much divided. It is too easy to "hide" in a large group and escape personal responsibility.

[24] Wayland, Francis *Thoughts on the Present Collegiate System in the United States,* p.5-6

4) They should be chosen for a term of time, not for life. He stated that inefficient men rarely die and never resign.
5) They should be elected by some body out of themselves to whom they should be responsible.

The Faculty

There is a great need to secure the best men for instructors. In order to accomplish this, the appointing power should reside with the visitorial corporation. The professorships should be opened to competition and positions would be filled by competence, not partiality.

The tenure of the faculty should depend upon the labor and the success of the individual professor. A small salary might be properly guaranteed him, and the rest would depend upon his efforts. Wayland stated, "I have myself known of a case in which a gentleman utterly unfit for his office was appointed to preside over a very important department of college education; for more than twenty years he kept that department down under the intolerable pressure of his own inefficiency; and thus for more than twenty classes of young men were sent our into the world without any adequate instruction in one branch of their education; without the mental discipline which this portion of study ought to have afforded; by so much unfitted for the study of a profession, and prepared only to depress the standard of education whenever they were employed as instructors."[25]

Wayland felt there were two ways to employ quality professors. "Either the appointment to office must be made by examination, and be subject to strict and impartial supervision, including removal from office at the judgment of the Board of Visitors, or else every officer must be so situated that his emolument (compensation /

[25] Wayland, Francis, *Thoughts on the Present Collegiate System in the United States,* p.72

pay) will in the nature of the case depend upon his desert, so that if his instruction be worthless, no one will be obligated to pay him for it, and if it be valuable, it may attract pupils according to its value.

Instead of a great number of small and ill supported Colleges, we should have had a small number of real and efficient Universities. I believe that this change alone would have increased the learning and intellectual vigor of the nation an hundred fold."[26]

Need For Change

The vast changes in civilization and the increased knowledge since the Revolution had still not changed the course of study within the colleges. The amount which the college is required to teach is doubled, if not trebled, but the time in which all this is to be done, is still a four-year course. The end result of this is that students acquire the habit of going rapidly over the text book with less and less thought, and a tendency is created to cultivation of the passive power of reception instead of the active power of originality; he thus knows a little of everything, but knows nothing well.

"Instead of fixing a set period of time of four to six years, I would designate the amount of knowledge and discipline which could be attained by ordinary talent and persevering diligence during that time. Let the requirements for a degree be high, but let them be high in attainment of knowledge and not in the number of things to be properly learned."[27]

Wayland recommended the following changes:

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[26] Wayland, Francis, *Thoughts on the Present Collegiate System in the United States,* p.74-75
[27] Ibid, p.103

1) It is certain practicable to enlarge our requirements for admission. There is a need to demand a much more thorough and scholar-like acquaintance with Latin, Greek, and Arithmetic.
2) Add one or two years to the term of offering of degrees.
3) Make the College to resemble a real University. Make it a place of education in all the most important branches of human learning.

How To Implement Change

Wayland did not arrogantly propose these changes. He just felt compelled to speak out at a time when education was not meeting the needs of students. He stated, "My desire is merely to make out the points at which we are to aim in the changes which we attempt to introduce. I leave to others to say when and how, and in how far they may be adopted; if worthy of being adopted at all. We have proceeded for nearly two centuries on the same plan, adapted by imitation from the then existing institutions of the old country. It surely cannot be obtrusive, since we seem at present determined to modify our system, to examine its construction and inquire with what object, and tending to what design, our changes are to be made."[28]

Wayland was the 'voice of one crying in the wilderness' as he was bold enough to speak out for the need for change as this revolution in higher education was to take place. Wayland's ideas and writings were a full 34 years before the founding of Johns Hopkins University and 10 years before Henry Tappan unsuccessfully tried to implement a University after the German model.

[28] Wayland, Francis, *Thoughts on the Present Collegiate System in the United States,* p.105

Henry Philip Tappan

Henry Philip Tappan, clergyman, was born in Rhinebeck, New York, on April 23, 1805. He died in Vevay, Switzerland on November 15, 1881. He graduated at Union college in 1825, and at Auburn theological seminary in 1827. After serving for a year as associate pastor of a Dutch Reformed church in Schenectady, New York, he became pastor of a Congregational church in Pittsfield, Massachusetts, but resigned, owing to impaired health, and visited the West Indies. In 1832 he became professor of moral philosophy in the University of the city of New York, which post he resigned in 1838, and opened a private school. In 1852 he was elected first chancellor of the University of Michigan, and secured valuable additions to the literary and scientific resources of the university, among which were several fine instruments for the observatory. He retired in 1863, and spent the rest of his life in Europe. In 1859 he was elected corresponding member of the French imperial institute, and president of the American association for the advancement of education. He devoted much attention to the subject of university education, and studied the systems of England and Germany.

In August of 1852 he was elected president of the University of Michigan. George Bancroft, who declined the offer as president, recommended Tappan as, “the man of all others in the country who was fitted for the presidency.”

Michigan – The Early Years

Michigan was still at the log-cabin stage of civilization when Tappan was installed as president. The state was still a region of woods and swamps and small clearings where game was plentiful. Lansing was a place “whose principal inhabitants were stumps, bullfrogs, mosquitoes and popinjay politicians.”

In 1821, there were only 8,700 inhabitants in the Territory. The opening up of the

Erie Canal helped increase population and in 1837 when Michigan was admitted to the Union, there were 170,000 people. By 1850, the population was 397,000 and had 509,000 in 1854. Not only was the University of Michigan in its infancy, but the State of Michigan was also in its infancy.

Religion was a large factor in this pioneer state. A pioneer home was likely to have the Bible and a few religious books in it. This early period had been the day of the circuit riding preacher. The census of 1850 noted that the Methodist stood first, the Presbyterians second, the Baptists were third, and the Roman Catholics fourth. In the U.S. Census of 1860, they appeared in the same order.

Each denomination had its own powerful organization with leaders who were quite at home in the public affairs of the state as well in those of the local community. This was noticeable in the young university at Ann Arbor. Ministers in the first two or three years had come to occupy strong positions on the board of regents and an effort was made to keep the faculty balanced among the leading Protestant denominations. The code of the university in the early days was extremely churchy. It required all students to attend some church on Sunday and also morning and evening prayer; in order to keep the students from violating the Sabbath by pursuing secular studies, the first recitation for Monday mornings was a lesson from the Greek New Testament, which was prescribed for each of the four classes.

Tappan – The Man

In his very appearance and personal characteristics, there were elements that naturally excited irritation in those not quite sure of themselves. Tappan was a prophetic figure, an immense personality, original, daring, eloquent and intense. He was fully six

feet in height. His strong proud head was set on massive shoulders. The dignity of Tappan was something awful; on further acquaintance, it seemed to fit him well like a well-cut garment.

With those who were not intimidated by him and his style, Tappan could get along very well. He and Mrs. Tappan were known for helping with charities for the poor, however, they were never popular in Ann Arbor or in Lansing. Many people interpreted his dignity as pomposity and his eastern accent and his use of the florid style of the period as affectations. They viewed the Tappans as snobbish and charged them with being “aristocrats and exclusives.”

However, those who knew him described his chapel services at the University as follows, “He opens his Bible, and reads from the Psalms and Prophets, and comments as he reads. He is an orator, logical, earnest, ample in speech, intense and picturesque. He spoke as the thundercloud speaks.”

Philosophy of Education

Tappan believed that a university could be built up only as an inseparable part of a system of public education. The university must rise from the successive stages of primary and secondary schools. He felt that the University of Michigan could work with the state system to offer this ideal.

Tappan states as he pondered the decisions to accept the call as president: “Believe me, it was a painful decision for me to make to accept that call, although so honorable, and implying so much public trust. But I saw that I was called for more ordinary purpose, to enter upon no common work. A young, vigorous, free, enlightened and magnanimous people had laid the foundation of civilization, culture, refinement and prosperity…. It was the charm of this high promise and expectation that drew me here.”

Tappan's interest was not in a popularization of the University, but in the creation of an institution that should cultivate originality and genius. Tappan said, "Universities make learned men; but their best commendation is given when it can be said of them, that furnishing the material and appliances of learning, setting the examples in their professors and graduates, breathing the spirit of scholarship in all that pertains to them, they inspire men, by the self-creative force of study and thought, to make themselves both learned and wise, and thus ready to put their hand to every great and good work, whether of science, religion or of the state. The ideal of a man is a true and cultivated soul dwelling in a sound and active body, prepared for all proper duties." The aim of the ideal institution would be to develop men such as this.

Education is preparatory and executive. "The preparatory is formal and scholastic, and comes under the direction of institutions of learning. Herein is comprised that education of the mental facilities in general… nor do we forget his physical being, and neglect a training in all those manly exercises which give noble proportion, and hale vigor and strength…. Under the executive part, we embrace professional studies such as Law, Medicine and Theology, or the studies relating to any course of life for which the individual may design himself…. This conception of education is not that of merely teaching men a trade, an art, or a profession; but that of quickening and informing souls with truths and knowledges, and giving them the power of using all their facilities aright in whatever direction they choose to exert them. It seems, indeed, to belong only to the few who enjoy prolonged leisure for study, and a full supply of means and appliances to carry out this conception fully; but it contains a principle of universal application; for even the lower grades of education, the true idea of education as to the development of the

soul in all its faculties, may be held up to view and acted upon… Let this higher notion of Education be adopted, and the human soul be treated not as a thing for secular uses, but as the lofty, lordly and immortal subject for whose improvement and good all secular things are to be used, and then will the conception of its own value be infused, and it will aspire after its true civilization, and those who direct popular education will aim to adapt studies to this end, unfolding it even under a limited education. The condition of human life may forever limit a thorough education to the few, but we see not why a valid principle of education should not govern every form and degree of it."

Tappan said, "It is easy to get up scholasticism under prescription, but investigation and productive thought must be free as birds upon the wing – They must bear themselves along by their own native vigor, in their own native element. We must run the risk of flying in the wrong direction sometimes or we can have no flying at all, unless it be wretched flying of a decoy-pigeon – fluttering within the limits of a string held by the hand of its master."

Tappan spoke of Germany as having model universities. He concluded this after examining France, England and European universities.

Tappan made a distinction between a College and a University. "A University is literally a Cyclopedia where are collected books on every subject of human knowledge that can aid learned investigation and philosophical experiment, and amply qualified professors and teachers to assist the student in his studies, by rules and directions gathered from long experience, and by lectures which treat of every subject with the freshness of thought not yet taking its final repose in authorship, and which often present discoveries and views in advance of what has yet been given to the world… where provision is made for carrying forward all scientific investigation; where study may

be extended without limit, where the mind may be cultivated according to its wants, and where, in the lofty enthusiasm of growing knowledge and ripening scholarship, the bauble of an academic diploma is forgotten."[29]

A College, in distinction from a University, is an elementary and preparatory school. The colleges would become places of separate study, under masters appointed for a particular purpose.

Tappan believed that America had no "Universities." There was a basic philosophical difference here that is shown in the opinions of Francis Wayland and Henry Tappan.

Wayland believed, "Every student should be allowed, so far as practical, to study what he chose, and nothing but what he chose."

Tappan boldly declared, "The idea of fitting our colleges to the temper of the multitude does not promise great results…. We have multiplied colleges so as to place them at every one's door; we have multiplied the branches of study so as to give every one enough to do, and to satisfy the ambition of learning, if all are to be acquired; we have cheapened education so as to place within the reach of everyone; we have retained the short term of four years, so that no great portion of life need be spent in study; and we have made the terms of admission quite easy enough. Now all this would tend to the popularity of these institutions, if the education acquired helped us to gain money and political influence. But as it does not, it is not valued by a commercial people, and a people of political institutions like ours." Tappan believed that quality, not quantity was the test of success.

[29] Tappan, Henry P. University Education

What Tappan was looking for in his examination of existing schemes of education was the thoroughness of preparation required of the scholar and a “yearning after the University element.” What Tappan wanted was a university.

Tappan’s Successes at Michigan

While Tappan was at the University of Michigan, he instituted a vast improvement in the library. He organized the books and was first to have paid librarians. He also started a collection of art. Many of the art collections was donated out of his own money. It was also in his ambition to create a great
Museum of Natural History.

Shaw gives this testimony of Tappan, “As the atmosphere of European learning began to pervade American academic life, the double function of a true university came to be more clearly recognized. Not only were facilities for research developed, but the scientific spirit, which refused to accept the limitations long established, and sought new truths, or new interpretations of old principles, became the order of the day. This was the ideal of Tappan. But in his time, the need for less advanced work was too pressing, the foundations had to be laid; though his efforts bore fruit long after he left, the victim in part of his high ideals of scholarship.

James Burril Angell said, “I found that largely under the influence of Tappan, the University had been inspired to a considerable extent by German ideals of education and was shaped under broader and more generous views of university life than most of the eastern colleges.”

Andrew White was quoted as saying, “He was a statesman, a theologian, a patriot in the highest sense… To him, more than to any other, is due the fact that , about the year 1850, out of the old system of sectarian instruction, there began to be

developed universities – drawing their ideals and methods largely from Germany. Dr. Tappan's work was great, indeed. He stood not only at the beginning of the institution at Ann Arbor, but really at the beginning of the other universities of the Western States, from which the country is gaining so much at present, and is sure to gain vastly more in the future. The day will come when his statue will commemorate his services."

There is no doubt that his genius, his eloquence, his force and persistence gave an impulse to the educational work of the University and of the State of Michigan.

The University of Michigan

A New Constitution

In June of 1850, Michigan adopted a new constitution. Within its framework, the Board of Regents of the University was established as a separate entity. This separate authority and power enabled the Board of Regents free to develop the best university it could visualize and afford.

The Rise of Tappan

The University hired Henry Phillip Tappan as their first president. He was a professor of philosophy at New York University in 1832. In 1837, he was dismissed in a reorganization of the said university. In the next several years, Tappan spent time abroad and became enamored by the German universities. In 1851, he published *University Education* where he set forth his ideas.

In his book he stated, “In our country we have no Universities. Our institutions of learning have neither libraries and materials of learning nor the large and free organization which go to make up Universities.”

As he saw it, “A University is literally a Cyclopedia where are collected books on every subject of human knowledge, cabinets and apparatus of every description that can aid learned investigation and philosophical experiment, and amply qualified professors and teachers to assist the students in his studies, by rules and directions gathered after long experience, and by lectures which treat of every subject with the freshness of thought not yet taking its final repose in authorship, and which often presents discoveries and views in advance of what has yet been given to the world… where study may be extended without limit, where the mind may be cultivated according

to its wants, and where, in the lofty enthusiasm of growing knowledge and ripening scholarship, the bauble (gem) of an academic diploma is forgotten…."

"Universities, may indeed make learned men, but their best commendation is given when it can be said of them, that furnishing the material and appliances of learning, setting the examples in their professors and graduates, breathing the spirit of scholarship in all that pertains to them, they inspire men, by the self-creative force of study and thought, to make themselves both learned and wise, and thus ready to put their hand to every great and good work, whether of science, of religion, or of the state."

Tappan believed that after the college course is completed with all its advantages, the student who wishes to pursue his studies still further will look in vain for an Institution to receive him. He aimed to develop that Institution. He wanted an University where 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.

However clearly Tappan perceived his educational ideal, he had no ideal how long the growth of said concept would take. He was ahead of his time, but he gave the University of Michigan a conception of what it could be.

Following the German Model

In his inaugural speech in December of 1852, Tappan indicated that he would bring in distinguished scholars to the faculty. He would enlarge the library and laboratory, and establish an art gallery. He recommended the lecture system as more appropriate to a university than a textbook-recitation procedure. His aim was to broaden the field of learning that a university should make available.

He advocated that a professor should engage in research as well as teaching

and that his students should participate in his research. He wanted to go past the dissemination of learning (teaching) to advancement of knowledge (research). This University should be an investigating institution that maintained the excitement of learning.

Tappan set out to enlarge the library by soliciting funds among citizens of Ann Arbor. He raised $1500 and some 1200 volumes were purchased. The total number of books jumped to nearly 6000 and annual appropriations by the Regents to the library were begun.

Tappan's greatest achievement was an astronomical observatory, called the Detroit Observatory because the greatest bulk of the money for it was raised in Detroit.

The first bachelor of science degrees were awarded in 1855. Michigan was the second school in the country to grant such degrees. The curriculum attracted more and more students who disliked the classical studies and were vocationally oriented.

The Fall of Tappan

In 1858, a new Board of Regents were elected. This new board sought to micro manage the University. They even viewed the president as merely another employee of the Board. The relationship between Tappan and the Board started on a downward path that continued to deteriorate until he was dismissed in 1863.

Between 1858 and 1863, Tappan continued to mold the University according to his vision. The old-style master's degree that had been awarded to alumni on a purely honorary basis was superseded by a graduate program of study and examination that led to an earned degree of master of arts or a master of science. This was first granted in 1859. What a success given here. Tappan had planted the seeds of a future graduate

school.

After Tappan was dismissed, there was much discussion among the students to try to have him reinstated. Tensions grew high on a state-wide level but Tappan was permanently dismissed.

Tappan had left his stamp on the University. He antedated Johns Hopkins University by more than twenty years in acknowledging the German universities as a model. His idea of what a university could be and should be might be obscured from time to time as other goals attracted temporary attention, but it will not be forgotten. The University moved - albeit slowly - in the direction he indicated ever since.

His other accomplishment was that this University was a nonsectarian at a time when sectarian was rampant. This was a new concept and people could not conceive of education without strong religious coloring. Any president who did not believe that religious indoctrination was paramount was regarded as profane and weak.

The University of Michigan had a better instrument than they yet knew how to use. It was Tappan who revealed its potential.

Continued Growth

In 1865-1866, the University experience its first postwar bulge. 1205 students enrolled, many of them veterans. With this number, Michigan out numbered Harvard and became the largest university in the country. Here was an institution not yet twenty-five years old, already with thirty-two professors and with buildings equal to that which took Cambridge two centuries to obtain. Fifty years earlier, Michigan was known only to the fur trade, but now students were flocking from all parts of the country to attend the one of the finest institutions in the country.

President Angell

James Burrill Angell was elected as president of the University of Michigan in 1871 and remained there until 1909. Under his leadership, the University remained strongly Christian. Rev. Francis Horton attacked the University of California and cited the University of Michigan as a contrast. “That institution does not teach religion any more than does ours, but its prevailing sentiment is favorable to revealed religion, as here it is against it.”

Michigan was often mentioned as a model for the future of religion in higher education. It showed not only that a state school could be openly sympathetic to Christianity, but also that such sympathy was in fact displayed be a leader among the new research universities.

In this era when presidents ran universities almost single-handedly, Michigan’s reputation as a Christian university was closely related to the testimony of James Burrill Angell. Angell made Christianity a major cause. He spoke about it, conducted surveys on it and wrote articles and edited a book on Christianity. The growth of campus ministries and the preaching of Christ continued through the first decade of the twentieth century.

Angell liked to quote Article III in the Northwest Ordinance: “Religion, morality and knowledge being necessary to good government and the happiness of mankind, schools and the means of education shall forever be encouraged.” At his inauguration Angell interpreted “religion” to mean explicitly Christianity, announcing that “the Christian spirit, which pervades the law, the customs, and the life of the State shall shape and color the life of the University, that a lofty, earnest, but catholic and un-sectarian Christian tone shall characterize the culture which is here imparted.”

Strong Leadership

The University of Michigan was in many ways slightly ahead of its time. Much of the success of the university must be accredited to the successful leadership of two of its presidents; Henry Phillip Tappan and James Burrill Agnell. These two godly presidents were the leading candidates, which guided the University of Michigan from their infancy into the twentieth century. They gave the university fifty years of stability.

Planting the First University

In 1869, the National Teachers' Association reported: "We have as yet, no near approach to a real university in America." "What the committee meant, as a detailed reading of its able report will show, was that no higher institution then existed in the United States was engaged in advance teaching and research beyond the limitations of the traditional college. 'No competent nation may stand acquitted before its own conscience and the enlightened judgment of the world until it can point to one such center of original investigation and educational power,' the committee declared."[30]

Within the next two decades following the publication of this report, three institutions were established in different parts of the country to do specifically what this committee had recommended – provide advanced education, mainly or exclusively on the graduate level, and enlarge the boundaries of human knowledge by means of researches and investigations. These three institutions were the Johns Hopkins University in Baltimore, Maryland (1876), Clark University in Worchester, Massachusetts (1888), and the University of Chicago (1890).

Daniel Coit Gilman was to be the president of Johns Hopkins University. It opened its doors in 1876. This was truly the first University that was modeled after the German universities.

Gilman stated that there were six requisites before a University can be launched:

1) An idea
2) Capital – to launch that idea
3) A definite plan
4) Able staff
5) Books
6) Students

[30] Ryan, W. Carson Studies in Early Graduate Education, p.3

Gilman was the first president of Johns Hopkins University and was able to fulfill all six requisites. He traveled to other countries to obtain the finest teachers and was instrumental in enlarging the library.

Truly, Johns Hopkins was the culmination of the need for a University that followed the German model. The advancements made at Johns Hopkins had a domino affect throughout the other institutions of higher education.

On the twenty-fifth anniversary of Johns Hopkins University, there were several speeches given showing the great impact that Gilman had had. Woodrow Wilson (Ph.D., 1886) said: "If it be true that Thomas Jefferson first laid the broad foundation for American universities in his plans for the University of Virginia, it is no less true that you were the first to create and organize in America a University in which the discovery and dissemination of new truths were conceded a rank superior to mere instruction, and in which the efficiency and value of research as an educational instrument were exemplified in the training of many investigators. In this, your greatest achievement, you established in America a new and higher university ideal, whose essential feature was not stately edifices, nor yet the mere association of pupils with learned and eminent teachers, but rather the education of trained and vigorous young minds through the search for truth under the guidance and with the co-operation of master investigators. That your conception was intrinsically sound is attested not only by the fruitfulness of the institution in which it was embodied at Baltimore, but also by its influence upon the development of the university ideal throughout our country, and notably at our oldest and most distinguished seats of learning."[31]

[31] Cordasco, Franceso The Shaping of American Graduate Education

President of Harvard, Dr. Charles Eliot, on this occasion also chimed in: "President Gilman, your first achievement here, with the help of your colleagues, your students, and your trustees, has been, to my thinking – and I have had good means of observation – the creation of a school of graduate studies which not only has lifted every other university in the country in its departments of arts and sciences. I want to testify that the graduate school of Harvard University, started feebly in 1870 and in 1871, did not thrive until the example of Johns Hopkins forced our faculty to put strength into the development of our instruction for graduates. And what was true of Harvard was true of every other university in the land which aspired to create an advanced school of arts and sciences."[32]

What made these words on this occasion even more significant, is the fact that in a conference with the Hopkins trustees in 1874, Dr. Eliot had put himself on record as convinced that what was proposed in Baltimore could not succeed, on the ground that no institution, old or young, could cut loose from the educational foundations of the community in which it was placed. Dr. Eliot is on record as having said, "We at Harvard, could not deliberately undertake to give only a high degree of education for a few. We could not deliberately undertake that, not even if we were starting anew."

Thus, America, as the need for higher education expanded in the early 1800's, had finally gotten its first University. This was not only the result of Daniel Coit Gilman and his fine efforts. But it was also a culmination of the voices primarily of Francis Wayland and Henry Tappan.

Of course there were others who felt the same as these two great men, but these two men were the ones who wrote down and expressed in writing what

[32] Ryan, W. Carson Studies in Early Graduate Education, p.3-4

was evident to many others concerning the need for change. Tappan stands out as the one who went against the grain and tried unsuccessfully to establish a University after the German model.

This change in higher education has had a lasting impact in our colleges and universities and our approach to educating our nation's finest scholars.

Conclusion

There is no doubt there was a need for a University and that it was inevitable that it would come. However, it is tragic that along with this tremendous change that occurred, the acceptance of Darwinism transformed our universities forever.

One would note that almost 100 years later, in the 1960's, there was again a great change in our country. Rock and roll music, immorality and rebellion was the trademarks of this era, and much of this change was intertwined with the colleges in America.

The devil is always quick to take advantage of a situation. May God give us wisdom to use change as a time to seek the Lord and realize that times of change may be an opportunity for the enemy to gain ground in our lives.

Bibliography

Cordasco, Franceso The Shaping of American Graduate Education

Elliott, Hugh The Letters of John Stuart Mill, Vol. II

Foster, Frank Hugh The Seminary Method

Higginson, Thomas Wentworth Gottingen and Harvard Eighty Years Ago

Hillard, George S. Life, Letters, and Journals of George Ticknor, Vol. I

Marsden, George M. The Soul of the American University

Paulsen, Fredirich, German Universities

Paulsen, Friedrich The German Universities and University Study

Peckham, Howard H. The Making of The University of Michigan

Ryan, W. Carson Studies in Early Graduate Education

Storr, Richard J. The Beginnings of Graduate Education in America

Tappan, Henry P. University Education

Thwing, Charles Franklin The American and the German University

Wayland, Francis Thoughts on the Present Collegiate System in the United States