## THE HISTORY OF UNIVERSITIES'

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## THE UNIVERSITIES OF THE MIDDLE AGES AND THE RENAISSANCE

IN these lectures I am attempting with all the rashness of a novice, to cover in some manner the history of American institutions of higher learning and their European background. This will seem to many of you an odd subject; and so it is, in a way, since we who belong to the academic world are seldom conscious of the long history and rich traditions that determine the conditions of our membership and our functioning in a university. Even if historians, it is the history of an era or a country that interests us, not the history of our college or university. Just as you seldom find a scientist who cares for the history of science, or a great industrialist who cares for economic and business history, or an archaeologist who does his digging in his home town; so the few historians who follow the history of their profession or their university are apt to be regarded by their colleagues as harmless antiquarians, dry-as-dust grubbers in a narrow pathway of the past that has little significance or relevance to our present problems. Yet I cannot feel that the history of universities, which have had such an immense influence on the thought, learning, and creative achievements of the modern

<sup>&</sup>lt;sup>1</sup>Lectures delivered at the Rice Institute, April 3 and 4, 1935, by Samuel Eliot Morison, Ph.D., Professor of History at Harvard University.

world; which have been the object of so much devotion, and the scene of wave after wave of vouthful effort (even though much of it has been effort to avoid effort), is of any less interest or significance than the history of the Christian Church, or of political institutions. The literature is not great in quantity, and very unequal in quality. No man has attempted to write even a short history of universities and lived. Fr. Denisle tried it, but died after publishing one volume of his Die Universitäten des Mittelalters. Hastings Rashdall left three volumes, but many gaps; and he did not even reach the Renaissance. Stephen d'Irsay, sometime of Johns Hopkins, had just completed the second volume of his Histoire des Universités, extending into the sixteenth century, when he died. So I feel that I have cheated fate by flying over the ground quickly.

For the origin of universities, we need go no further back than the middle ages. There had indeed been schools since the dawn of civilization, and classical antiquity was familiar with the noblest form of education, in which men of learning taught pupils not merely so much as was conceived proper for the adolescent mind, but methods of attaining knowledge and wisdom. It flattered the men of the Renaissance and the eighteenth century to call a school or group of learned men an academy, after the grove where Plato walked and argued. According to a medieval tradition which American colonial colleges accepted with uncritical alacrity, the prophet Samuel presided over the world's first university, consisting of "Sons of Prophets" organized in colleges at Bethel, Jericho, and elsewhere; and a learned Dutchman, writing in 1602, attributed the founding of the first university to Noah, as a means of spreading the knowledge of good letters, and so preventing another flood!

Now, every university is a school. The mid-western usage

in this respect is correct, and in the medieval tradition; but a school of higher learning is not necessarily a university, the very name of which implies corporate privileges and autonomy. The American whose notion of an efficient college was a student at one end of a log and Mark Hopkins at the other, unconsciously voiced a Greek, not a medieval, idea of education; for the men of the middle ages found it difficult, like ourselves, to conceive of higher learning apart from a society of scholars.

In the decay and destruction that overcame ancient civilization during the dark ages, it became necessary for men engaged in the same occupation, or living in the same community, to band together for self-protection. That is why the middle ages bred institutions. Medieval man, like his American frontier descendant (and for much the same reason), liked to merge his individuality in a guild, commune, fraternity, or corporation. He was an excellent "joiner," and one of the things he loved to join was a university.

A university in the middle ages meant an institution of learning recognized as such by Church or State, where the teachers or students, or both, were united in guilds enjoying a certain privilege and autonomy, where some "superior" study such as Law, Medicine, or Theology was taught in addition to the Seven Arts and Philosophy, and where definite curricula led to specific degrees. Four of these attributes still mark the university in America. It must be recognized as such by the State, and from the same source receive the power to grant degrees; it should have professional and graduate schools in addition to a liberal arts course for undergraduates and definite curricula. The only attribute of the university that has lapsed in eight centuries is the one that occasioned its formation—the corporate autonomy of masters, doctors, and scholars. The university is no longer

a privileged corporation, a state within a state. If a corporation, its members are subject to the same laws as other citizens; and in many instances the modern university is a mere organ or department of the State. Oxford and Cambridge are the only universities that are still governed by their teaching faculties, instead of by governing boards in the appointment of which the teachers have no share.

The relation of college and university has completely changed since medieval times. In Europe, and in Latin America, the university is older than the college: colleges grew up inside universities in the later middle ages to provide board and lodging for their "fellows," a group of limited scholars, corresponding to the graduate or research students of today. The university as such was entirely absorbed in teaching; the colleges existed to enable poor scholars to continue their studies beyond the Arts course, and do original research in Theology, Law, or Medicine. In the United States, on the contrary, the college is older than the university. We had colleges for one hundred and fifty years before any of them could properly claim university status; indeed Abraham Flexner claims we haven't yet a real university in the United States. And in America it is the college that is exclusively concerned with teaching; the university that supports the research function. This reversal of the historic relationship came about because the first institution of higher learning in the English colonies-Harvard-was founded at a time when the colleges of the University of Cambridge had absorbed the teaching function, and because the first need of a new country was for teaching, and the transmission of culture, not for research. So the New Englanders founded a college, not a university; other colonies followed suit, and the American university in most cases has grown out of the college.

America inherited the ecclesiastical tradition of the medieval universities. Since the Church had saved all that could be saved of learning from the wreck of the Roman Empire, she naturally took charge of education in the middle ages; universities grew up under her patronage; all masters and scholars were clerici, potential priests. Moreover, the Church fostered the universities in order to provide herself with a learned clergy, and to reconcile philosophy with theology. Medieval universities were distinctly "purposeful"; they did not cultivate the Arts for their own sake, as possibly the Ancients did (I am cynical enough to doubt whether the thought of a "teaching job" was wholly absent from the thoughts of Plato's disciples in the academic groves of Athens). The medieval universities taught the Arts as a means of acquiring that philosophical culture considered the necessary background for a lawyer, physician, or divine. There was no special vocational training for the priesthood until after the Reformation: the ecclesiastical seminary is a child of the Council of Trent. Theological faculties were intended to train doctors of the Church, the "research scholars" of that age; one did not require a divinity degree to obtain even the highest ecclesiastical offices—nobody ever said to an ambitious priest, "Go get a doctor's degree, and maybe you will become a bishop." And the Protestant reformers had no new ideas in this respect; they merely wished to recall universities to their proper functions.

A college or university may be religious in purpose, yet not a theological school. In our colonial colleges, the entire curriculum was imbued with religion. It was fortunate indeed for the United States that religion was so strong a force in the Colonies and the early Republic; for without the religious motive, the passionate desire of New England Puritans, Scotch Presbyterians, and others to gain greater

knowledge of God through a study of His word and works, the rich resources of European learning would have been lost, colonial education would have been slight and wholly utilitarian in character, and a century ago the United States would have had to start from the bottom in building up schools of higher learning, instead of undertaking the lighter task of expanding and transforming to modern purposes the colonial colleges that had kept learning alive through pioneer poverty. That the Churches, Catholic and Protestant, have dealt many blows at academic freedom everyone knows; yet these weigh but a feather in the scale against the immense service to civilization performed by the Catholic Church and the Reformed Churches, through the universities that they founded and fostered.

Almost simultaneously, in the twelfth century, there sprang up in Western Europe two universities: Bologna and Paris; and from these two are descended in direct line the universities of Latin America, and of the United States.

In Italy, where Roman law survived, the growth of commerce and of communal life in the twelfth century created a demand for trained lawyers. At the same time the Church was developing a law of her own, through the successive canons and decretals issued by popes and councils, and this discordant body of Canon Law was sadly in need of straightening out. By chance, two great teachers, Irnerius and Gratian, began holding forth at Bologna during the first half of the twelfth century; the one on Civil, and the other on Canon Law. Gratian's "Decretal" was "one of those great text-books which appearing just at the right time and in the right place, take the world by storm." Both Irnerius and Gratian are somewhat shadowy figures. Traditionally, it was due to the teaching of the one and the text-book of the other that Docta Bononia became a Mecca for students of both Laws; and eventually of Arts and Medicine as well.

At some time in the latter half of the twelfth century the teachers of Civil and Canon Law at Bologna organized themselves into a universitas (corporation) or guild. But Bologna's great contribution to university organization was student sovereignty. The law students who flocked thither were aliens without rights; to rob or kill them was no crime in Bolognese law. Hence at an early period the students, for self-government and self-protection, organized "nations" or guilds of their own. Their large contribution to Bolognese prosperity, and their frequent threat to remove elsewhere, enabled these student nations to wrest concessions from the city, including the right of jurisdiction under their own elected officers. The earliest Bolognese professors, on the contrary, were local citizens, and the same threat of secession soon brought them also to heel. Students of Bologna not only elected their professors and made their salary contracts, but regulated the length, methods, and scope of their lectures. Indeed the only statutory right which the professors retained was that of examining candidates and admitting them to degrees; but even here they were forced to submit to student regulations respecting the nature and conduct of the examination. At Bologna, students were more eager to learn than teachers were to teach, and in subjects of direct professional consequence such as Medicine and Law, this proved an excellent system for keeping the professors up to the mark; at a later age, and in the Arts course, its advantages became less obvious.

The influence of Bologna on Latin America was exerted through Spain. Lérida, the first Spanish University, was deliberately founded on the Bolognese model in the year 1300. It was taken for granted that law students should be self-governing, and liberal arts students insisted on the same rights that were granted to canonists and civilians. The same student government was extended to other universities of

the Peninsula, including Salamanca, with the important modification that the professors, although elected to office by their students, obtained independent support from the municipality or the Crown. By the time that America was discovered Salamanca had become one of the largest and most famous universities in Europe, numbering her students by the thousands.

The Royal and Pontifical University of Mexico, first in the New World, was founded in 1551 and established in 1553 deliberately on the model of Salamanca. Serving the richest country in the world, the University of Mexico was born to full university stature, with professors of Law, Medicine, and Theology, as well as Arts, with a Chancellor, a Rector whose negro lackeys carried swords (a privilege denied even to the viceroy's servants), with imposing bedels and gorgeous ceremonies. The democratic Bolognese influence appears in a public oratorical contest of opositores (candidates) for a vacant chair. At the close of the oposición, when all the candidates had had their say, the assembled students and Masters of Arts elected the professor by popular vote. This system was so destructive of university discipline that it was done away with about 1780.

The University of San Marcos de Lima, also founded in 1551, is still in existence, though temporarily closed because of student participation in politics. And there were two other universities in the Spanish Colonies—Cuzco and Córdoba—before the English colonies had even a college. Lima and Mexico were more wealthy, learned, and probably more effective in the seventeenth century than any university of the United States before the nineteenth century. But they fell behind in the eighteenth century, owing largely to a too rigid control by the Church; and in the nineteenth cen-

tury they suffered from the vicissitudes of Latin American politics, to which the large measure of student government that they had inherited from Bologna, made them particularly prone. Sad indeed is the contrast between the relative poverty and futility of the Latin American universities today, with their magnificent effectiveness three centuries ago: a warning to the universities of the United States. Academic freedom, and a healthy body politic that functions without chronic violence, are absolutely essential conditions of a sound university.

So much for Bologna and her offspring. Docta Bononia mater Studiorum, as an old medal describes her, is still carrying on in the ancient city, although shorn of all her independence by the Fascist government; and with her independence have gone her former excellence and distinction. If we turn to her coeval and ancient rival, the University of Paris, our ancestor in the academic family tree, we find a different story; for the University of Paris, in spite of successive reorganizations, is happily functioning in a democratic society as one of the world's greatest institutions of learning.

Bologna was first a Law School; Paris, first a school of Liberal Arts and Theology. For a thousand years before America was discovered, European boys were studying the seven Liberal Arts as described by Martianus Capella in the fifth century: the *Trivium* (Grammar, Rhetoric, and Logic) and the *Quadrivium* (Music, Arithmetic, Geometry, and Astronomy). These Seven Arts, together with the Three Philosophies brought in by the twelfth-century renaissance, and the Greek and Hebrew literature introduced by the later renaissance, remained the backbone of the undergraduate course in European and American universities well into the nineteenth century. The Liberal Arts originally meant the studies suitable for a liber homo, or free man. To

their immemorial prestige we pay conscious tribute whenever we speak of a "Faculty of Arts and Sciences," an "Arts College," or a "liberal education."

From one century to another the content and even the meaning of these subjects has changed. Grammar meant Latin Grammar. Latin was the language of law, of literature, of the Church, of learned conversation, and of international intercourse. Even within the memory of men now living, boys in Southern and New England schools preparing for college spent more time on Latin than on all other subjects combined. Rhetoric, the art of persuasion, was studied from ancient models and examples. But the major intellectual excitement of the twelfth century was the rediscovery of Aristotle. In 1100, Christendom knew only two or three of his books; by the end of the century, largely through Arabic translations, there had been translated into Latin the New Logic, the Ethics, Politics, Metaphysics, and the numerous books on Natural Science. The logical books in particular appealed to intellectuals of the time, for in Aristotle's Logic they found a ready-made tool, an organon, to reconcile ancient philosophy with holy writ. The subtleties of Logic had the same fascination for the medieval scholar's mind as have the mysteries of Economics and Chemistry for twentieth-century scholars. The University of Paris grew up almost spontaneously out of the crowd of young men who thronged there to learn Logic; for the word had been passed around that Logic was the key that unlocked a good job in the Church, and a necessary prerequisite to the study of Philosophy, Law, and Theology. The Church, after a preliminary fear-flurry over the popularity of a "pagan" author, took Aristotle to her bosom; and the great doctors of the Church set themselves the task of reconciling all that Aristotle taught with the Bible and the Church Fathers.

Within a little more than a century their prayers and pains were rewarded by one of man's most glorious achievements, Scholastic Philosophy, a system of thought and of nature at once rational and authoritative, which not only explained but integrated the universe.

Then time played one of her many jokes: Scholasticism crumbled before the fresh intellectual efforts. But the universities outlived the purpose that gave them birth. Like all human institutions they must one day disappear; and die they will and must when they cease to persuade mankind to value things of the spirit.

Peter Abaelard was the greatest, although not the first, of the teachers who applied the Aristotelian organon to the speculative problems of his age. Although the active part of his life preceded the birth of universities, it was as much the prestige of his teaching in the schools of Notre-Dame and Sainte-Geneviève as the physical advantages of Paris, that fixed there the first university in northern Europe. The stream of pupils who came to learn under Abaelard, the masters who remained after he had gone, and the increasing importance of Paris under Capetian kings, fixed that city as seat of the first and greatest medieval university.

The process by which this congeries of teachers and pupils became the University of Paris began shortly after the death of Abaelard in 1142, and was not completed within a century. There was no organization in Abaelard's time, except that a teacher required a license from the Archbishop's representative before he was allowed to set up a school, or to lecture. Here is the first, or ecclesiastical, element in university government. Self-government, the second element, came when the teachers organized a guild to protect themselves and further their common interests, just as every trade and profession was then doing. Commencement

(Inceptio), the oldest, most dignified, and widespread university institution, began simply as initiation to this guild of Masters of Arts. The candidate, having received his license to teach from the Chancellor, was ceremonially admitted to the masters' or teachers' guild, and confirmed in his new fellowship and title of Master of Arts by performing an appropriate "Act." If, eventually, he proceeded Doctor of Divinity, he was admitted to the guild of theologians with a different ceremonial, at a doctors' Commencement.

Most American universities, fearing to waste their presumably precious time, have telescoped all their commencements into one ceremony, at which the President admits candidates to sundry degrees that he does not himself possess. Yet even St. Thomas Aquinas might recognize in an American Commencement of the twentieth century a lineal descent from the masters' *Inceptiones* which he had often witnessed. Our caps, gowns, and hoods have not greatly changed from academic robes of the middle ages; our "Commencement parts" are representative performances of the "Act" formerly required of each candidate in order to prove himself worthy of his new status.

From granting degrees and prescribing curricula, it was an easy step to gaining corporate autonomy. As early as 1210 the *universitas* or society of Masters of Arts of Paris was recognized as a corporation by the Pope. In order to protect scholars from the municipal authorities, they were given the privilege of being tried by their own courts. So many foreigners came to Paris that the Bolognese organization of students and masters by "nations" was adopted.

In the middle ages the two Arts degrees were prerequisites for the professional study of Theology, Law, or Medicine. But young men of the middle ages were just as impatient as young Americans of our own day to obtain degrees with the least possible expenditure of time, work, and money. Tremendous pressure was exerted on examiners to grant the M. A. prematurely. "Getting by" seems to have been practised as much in the thirteenth century as in the twentieth, judging from a satirical poem of the time:

Jam fiant baccalaurei pro munere denarii quam plures idiotae: in artibus, et aliis egregiis scientiis sunt bestiae promotae.

Jam fit magister artium qui nescit quotas partium de vero fundamento: habere nomen appetit, rem vero nec curat nec scit, examine contento. Now let us make these boys B.A. as long as Dad their fees can pay although they are but half-wits. In all the noble Seven Arts and Sciences, in all their parts, the candidates have calf-wits.

Now make him magister of Arts who doesn't know the smallest parts of subjects of cognition.

To have the name he's mighty hot, the substance simply matters not—Exams. exhaust ambition.

Yet the university stuck to her guns; everyone must take the two Arts degrees before proceeding B.D. or B.M. This important principle, that a general or liberal education must precede specialization, was largely lost sight of in America owing to the impatience of young men in a new country to get on with their professional training; but fifty years ago Johns Hopkins and Harvard reëstablished the ancient principle; and it is now followed once more by some of the leading American universities.

No later university has occupied or can occupy so exalted a position as that of the University of Paris in the thirteenth to the fifteenth centuries. Feared by kings, courted by Popes, she attracted masters and students from every part of the civilized world, and sent them forth, with an enthusiasm for learning, to found universities in their own countries. Oxford, Louvain, and all the older universities of Germany are her offspring. Her collective opinion, frequently sought

on matters of law, philosophy, and theology, when once pronounced, had almost the force of a Supreme Court decision. Her efforts and influence healed the Great Schism of the Church. She counted among her alumni the greatest philosopher (Aquinas) and the greatest poet (Dante) of the middle ages. Yet all this was accomplished before the University of Paris had a penny of endowment, or owned an acre of land or a single building; when her thousands of students were crowded into the narrow space between the Ile de la Cité and Mont Sainte Geneviève; when her teachers had literally to "hire a hall" to lecture in, and lived on students' fees; when students and teachers came and went as they liked.

The medieval university was informal where we are formal, and formal where we are informal. There were no entrance examinations; a student merely attached himself to a resident master who was willing to receive him as a pupil. Of course he must be able to speak, read, and write Latin, as that was the language of lectures and manuscript text-books from St. Andrews to Salerno, and from Cracow to Coïmbra. The universality of Latin gave the learned world a unity that it has never recovered since the rise of nationality, and of tongues. The fame of a great master like Abaelard reached the most distant parts of Europe; and such was the enthusiasm for learning that students thought little of travelling from Sweden to Bologna, or from Scotland to Sicily, in order to sit at the feet of some respected master. If the student became dissatisfied he left without formality, and found or begged his way to another university.

Let us follow a medieval student through his Arts course at Paris, which was very much the same at any university of northern Europe in the thirteenth and fourteenth centuries. The recens or "freshman," as he was called in England,

bec-jaune or "yellow-beak," as he was called at Paris, came up to the university between the ages of thirteen and sixteen. If possible, he arrived in time for the opening of Michaelmas term in late September or early October. Unless very poor, he joined a hall, an informal boarding and rooming house, kept by older students or a Bachelor of Arts; and in the first week of term, he went "sight-seeing" (as American students call the process), sampling lectures, until he found a Master of Arts whom he liked, and who agreed to take him as a pupil for a certain fee.

Before many days elapsed the freshman discovered something far more exciting than lectures. He must be initiated. In vain did universities legislate against the "trials and tribulations to which new students are subjected." In vain did masters denounce the "reception committees," upper-classmen who took from each freshman magnam partem suae pecuniae. First the bejaunus is the victim of miscellaneous japes and tricks. In Paris he must be paraded through the streets on an ass; in England the obvious antidote to freshness was salt, administered internally and externally. But the really important part of the initiation was a feast at the freshman's expense to the comrades of his hall and to his new master. The next thing on the programme, no doubt, was to write home for more funds. "A student's first song is a demand for money," writes an irate father of the thirteenth century, "and there will never be a letter which does not ask for cash."—"But this town is expensive and exacting!" retorts an Oxford student to his parents about the year 1220. Both wails have sounded down the ages.

The medieval Arts course, which required six or seven years to complete, consisted, in theory, of the Seven Arts and the Three Philosophies. In practice it was very nearly equivalent to a course on the works of Aristotle. Students heard

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lectures read by their masters out of Latin translations of Aristotle, on all subjects in succession of the Trivium and Quadrivium, and on Ethics, Physics, and Metaphysics, the master moving on every few months to a new subject. After each lecture it was customary for the auditors to get together for an informal quiz among themselves, to make sure that they had got it all. The normal length of a lecture, even in the thirteenth century, was one hour. The University of Perpignan, to be sure, required that lectures last three hours; it is not surprising to learn that this University died an early death.

Medieval students had plenty of "extra-curricular activities" such as drinking, brawling, and wenching; but they were not distracted by the constant flitting from one subject to another that our modern system requires. Ordinarily they concentrated on one subject before moving on to another; and if two or three overlapped, the lectures were on different days. After advanced Latin Grammar vou began Rhetoric, and then took up Logic, the most important subject in the Arts course; for Logic was supposed to enable you to reach the truth on any subject; it was the handmaid of all the Arts, and of Philosophy. In about a year's time, or as soon as he had learned enough Logic (in his master's opinion) to debate, the freshman became sophister. This was a sort of intermediate degree, which gave one the right and duty to take part in the public disputations. As about two years more were necessary before they commenced B.A., the sophisters were divided into junior sophisters and senior sophisters; these words crossed the ocean with freshman. and became by ellipsis the juniors and seniors of American colleges. The English universities normally required about two years' residence before the student became a junior sophister, and for the second year, they coined the word

sophomore. A witty upperclassman in the eighteenth century defined sophomore as a combination of sophos and moron; but it probably meant one who was practising his "sophomes" or disputations in preparation for being a sophister, or scholar skilled in Logic.

The essential thing a sophister did was to enter the public debates, or disputations: discussions in Latin, without notes, of some thesis (proposition), or question, by the recognized rules of Logic. Lectures required only a passive process of assimilation on the student's part, but the disputation offered him abundant opportunity to express himself, and to perform. From the time he ceased to be a freshman, the medieval student was constantly practising this art. At their best, these exercises trained men in oratory and debate, taught them to think on their feet, stimulated the sluggard, and showed up the bluffer. At its worst, the disputation was a mere play on words, obscuring sound habits of thought and rewarding the superficially clever. Nevertheless, the method had such recognized pedagogic value that it long outlasted the scholastic philosophy and manner of thinking to which it was peculiarly adapted. In our colonial colleges, the disputation still received the medieval emphasis; and when it disappeared, in the nineteenth century, there was left a void in the outgoing aspect of education that themes, reports, and debating societies only partially filled. Indeed the recent advocacy of "discussion groups," "socialized recitations," and the like is a recognition that the middle ages were right in placing this active method of education beside the passive ones of hearing lectures and reading books. The Jesuit colleges, very wisely, maintain disputations to this day.

The bachelor's degree in the medieval universities was but a half-way house to the M.A.; baccalaureus meant simply apprentice, and no student was a full-fledged "artist" until

he had commenced master. At Paris the B.A. candidate was examined by a board chosen by his own Nation. Before, during, and after the examination he was required to take about forty oaths, some of them to the effect that he had attended certain lectures and read certain books, and would read others in the near future. He even had to swear that he would not attempt to bribe the examiners, and that if he were "flunked" he would not attempt to assassinate the examiners! In contrast to the informality with which we take degrees nowadays, the medieval or renaissance candidate for the baccalaureate had to go through an incredible number of ceremonies, and give up a very large sum in fees to bedels, proctors, and all sorts of university officials who were supported by such means. The only way that a poor student might circumvent these fees was for him to pass the examinations for a rich student who paid for both; and the universities had to tolerate this practice before other means were provided.

The main ceremony of taking the B.A. was "determinations"—a sort of gala disputation, for which the bachelor hired his master's lecture hall. Fresh straw and free drinks were provided to attract an audience, two friendly sophisters were selected to serve as foils to the young man's talents, and the bachelor was stimulated to do his best by the knowledge that archdeacons, cathedral provosts, and even greater magnates might be there to get a line on rising young talent. At the conclusion of this exhibition, the bachelor's friends escorted him in triumphal procession to his lodgings, where a

<sup>&</sup>lt;sup>1</sup> The "patriotic societies" that are endeavoring to have teachers' and students' oaths required in the United States can derive little comfort from the history of oaths in the medieval universities. Even in an era when everyone believed in hell, perjury became a commonplace, and students cheerfully swore that they had attended lectures they had never heard of, read books that they never opened, as well as promising to perform acts that they had no intention of doing.

banquet was held at his expense; after which they might get up a torchlight procession, or dance with wenches in the street. At Oxford and Cambridge "determinations" early lost their hilarious character, and were conducted in common by all the B.A. candidates. The young men had to be on hand every weekday in Lent, in the university church, to dispute both formally and informally with sophister friends, or with any bachelor or master of the university who might drop in to "ride" them a bit. Harvard seniors in the seventeenth century had to follow the same practice, which gradually developed into an oral "quiz" by the Overseers of the College, and into the written final examinations that we all dread.

Originally there were two degrees in every faculty: the baccalaureate or apprentice degree, and the master's or doctorate. "Master" and "doctor" originally meant the same thing—teacher. But queer things have happened to degrees in the course of centuries. In the continental universities, the three years between the B.A. and the M.A. became the most important in the Arts course, when Philosophy was studied. In the fifteenth or sixteenth century, the German universities began to call their Faculties of Arts and Sciences. the Faculties of Philosophy; and the second degree in that faculty, Phil.M. or Phil.D. So our coveted Ph.D. is nothing but a medieval M.A. writ large. At the same time the requirements for the B.A. became progressively so easy that they might be fulfilled at entrance. Today, the baccalauréat or "bachot" in France is a degree taken at graduation from the lycée, which corresponds roughly to the American junior college. At Oxford and Cambridge, on the contrary, the tendency was to squeeze most of the Arts and Philosophies into the B.A. course, and then let the student study any subject he liked, or none, until the statutory three years were up, when the M.A. was conferred if he performed a few stated

exercises and paid certain fees. Similarly, in Medicine, the baccalaureate has tended to disappear; but in Law it has been retained, whilst the doctorate is conferred largely as an honorary degree, on persons who know no Law.

Commencement ended the undergraduate career of the liberal Arts student: it was so called because it marked the beginning of his career as a Master of Arts. Two oral examinations, one by the chancellor as representative of the Church, which resulted in the candidate receiving a teacher's license (hence the term liciendado, used in Latin America for M.A.), and the second by a committee of masters; numerous ceremonies and disputations; and finally the inceptio. This ceremony, Englished as commencement, was a characteristic medieval combination of stately pageant, religious ceremonial, and broad farce. The last element was furnished by a witty commencer who made shocking puns and low jests at the expense of university dignitaries, who were supposed to grin and bear it. That over, the candidates were voted their degrees by the assemblage of masters, and formally inducted into their fellowship by being invested with the master's hood and cap, kissed on the cheek, and presented with a book as a symbol that they were competent to lecture: Degree diplomas are apparently an American invention.

Such was the university in its original state:—a corporation of masters with a minimum of organization and a maximum of liberty, devoted almost entirely to teaching, with no inducement or facilities for research, not even a university library. Before the end of the middle ages, the liberty and flexibility of the universities were much impaired, but the lot of the poor scholar was greatly ameliorated, and research endowed, by the foundation of colleges.

<sup>1&</sup>quot;Commencement" was not used for the ceremony of conferring the B.A. until the sixteenth century, and then only in the English universities.

University colleges, in Europe, were originally endowed residential halls, established by wealthy donors in order to provide free board and lodging for a select number of students, especially graduate students in theology. Often there were subsidiary motives of providing for the donor's kindred, and ensuring a perpetual saying of masses for his soul. Almost all the European universities at one time or another had colleges founded within them; but in most universities before 1500 these colleges took care of a very small proportion of the students. At first the colleges did not concern themselves with teaching; but as the medieval system of instruction by regent masters declined, something had to be done to take its place. On the Continent the solution was the founding of professorial chairs. In England, wealthy benefactors preferred to found colleges rather than chairs; and in absence of other instruction, the older fellows (members of the college) had to teach the younger ones as well as study themselves. Magdalen College, Oxford, began in 1458 the tutorial system still followed in English universities, and lately revived in some of ours. This college invited undergraduates to become "commoners," i.e., boarders in the college commons; and the fellows, who were supported from the college revenues, took charge of the commoners' instruction for the B.A. degree. After that they were turned loose to study by themselves. Harvard was founded on just that basis. The College Corporation consisted of a president, treasurer, and five fellows, of whom one was probably intended to be a salaried researcher, and the other four to take charge of undergraduate studies besides studying divinity themselves. The college fellows were all very young, recent graduates themselves. It was not until 1766 that the teaching fellows at Harvard specialized; before that each of them took a freshman class in charge, and taught it every subject

of the curriculum for four years, exactly as the regent masters had done in the medieval universities.

The multiplication of colleges made a great difference in the life of the English universities. College gates enclosed the free cleric of the middle ages, and gave him security in return for liberty. The collegian's entire day was mapped out, with fixed hours for academic exercises, study, meals, prayers, and recreations—a system that lasted in some American colleges to the end of the nineteenth century. He was subject to a schoolboy discipline, and corrected by fines and whipping. Not only the crude horseplay of a rougher age, but pastimes like cards, dice, and playing such musical instruments as "provoked levity and interfered with work." were forbidden. But the colleges provided the student with many good things to compensate for the robust liberty that he had lost. He was assured of sufficient board and lodging. For recreation in summer, college gardens, bowling greens, tennis courts, and fish ponds were provided; in winter, at stated seasons, there were private theatricals and drinking parties. Bishop Fisher, founder of St. John's College, Cambridge, would have the college hall cleared after supper; but "whenever there is fire lighted in honour of God or His glorious Mother, or some other Saint," the fellows, scholars, and college servants might sit up late singing songs, reciting poetry, telling tales, and such other honest recreations "as becometh Scholars."

The first American institutions of higher learning were founded when most of the colleges of Oxford and Cambridge were well performing their founders' intentions of providing financial support and instruction for students of moderate means. The academic associations of Englishmen were centered about their colleges which took care of them, rather than around their universities, which merely examined them and granted degrees. That is why the first Anglo-

American institutions of higher learning were called "colleges," and why we still speak of "going to college" in America, rather than "to the university," as do Europeans.

Three other factors besides colleges profoundly affected the European universities before any colonial institutions of higher learning were begun. These were the Renaissance, the Reformation, and the rise of Nationalism. Nationalism, to be sure, had already appeared in the European universities while the Catholic front was still unbroken. When the first Scandinavian universities, Upsala and Copenhagen, were founded toward the close of the fifteenth century, the kings of Sweden and Denmark forbade their subjects to study elsewhere. Prince Hamlet could not have gone to Wittenberg, had he lived in Shakespeare's time. After 1500 it was unusual for a European student to study outside his own country. And this loss in international exchange we have only lately been attempting to make good through such arrangements as the Rhodes Scholarships and Commonwealth Fund.

While Nationalism was narrowing the watershed of each university, the Renaissance was broadening the curriculum, developing the functions of research and creative scholarship; and bringing a new type of young man into the universities. Intellectual America owes as much or more to the Renaissance as to the middle ages; for it is from the Revival of Learning that our colonial colleges caught the notion of a liberal training designed to develop the complete man, and to train youths to be men of action and affairs, not merely priests. And although our colonial colleges were too poor, and the conditions of a new country unsuitable for creative scholarship and scientific research, we obtained those priceless gifts in the nineteenth century through fresh contact with the German and French universities where they were a living tradition.

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Regarding the Renaissance as a state of mind rather than an era, the University of Florence, founded in 1349, the very year of the great plague so vividly described in Boccaccio's Decameron, was the first Renaissance university. It was started off with eighteen professorial chairs, including the one that Boccaccio himself occupied, on the study of Dante. To the fourteenth century succeeded the century of humanism, when Hellenic culture was recovered; and scholars both inside the universities and out, began to study, edit, and print classical texts. Many of the free-lance Italian humanists were frankly pagan in their attitude, but the university scholars took up the study of Greek as a key to the better understanding of the New Testament; and beside Greek they placed Hebrew, with its allied languages, Arabic, Syriac, and Aramaic, as the key to the Old Testament. At the University of Louvain, in the fifteenth century, there was established the first of the famous trilingual colleges of the Renaissance, devoted to the scientific study of the three sacred tongues— Latin, Greek, and Hebrew-without which (so wrote one of its earliest professors, Erasmus of Rotterdam) there can be no true religion, and no sound learning. Critical scholarship, we are too apt to forget, was applied to the Bible before the Protestant Reformation; the first of the great Polyglot Bibles was issued from the trilingual college at Cardinal Ximenes' University of Alcalá in 1517, the very year that Martin Luther nailed up his ninety-five theses. And the Collège de France was founded by the Catholic and humanist king Francis I in 1531, with two chairs of Greek, three of Hebrew, and one of Mathematics.

The first influence of the Renaissance on the universities then, was the introduction of Greek and Hebrew into the curriculum (not for undergraduates, to be sure, but for graduate students), the study of Greek and Hebrew philosophy, and the editing of Greek and Hebrew texts. And the recovery of the great corpus of Greek literature in turn affected the whole concept of education. Humanists promoted Plato to an equality with Aristotle, and as the clarity of Greek thought and the splendor of Greek civilization came home to them, they sought the secret of Greek education. An Italian humanist, Vergerio of Padua, came pretty close to it when he redefined a liberal education as one which "calls forth, trains, and develops those highest gifts of body and of mind which ennoble men, and which are rightly judged to rank next in dignity to Virtue only."

Coincident with the Renaissance, the spread of international commerce and banking, the rise of merchant princes, the growth of leisure, created a demand for a different sort of education from the medieval Seven Arts and Three Philosophies—for an education suitable for a gentleman and man of action. The medieval curriculum, with its overemphasis on Logic and Philosophy, and its neglect of Natural Science and of the Classics except some of the more obvious Latin authors, was no use to the rising merchants, who wished to make educated gentlemen of their sons. Courtly academies, such as Baldassare Castiglione described in his Book of the Courtier, were established, where the spirit of Christian devotion, the study of ancient classics, and physical exercises, were harmoniously combined. And just as, in the eighteenth century, the requirements of diplomacy and scholarship forced the universities to recognize modern languages, and as in the nineteenth century, the founding of technical schools and scientific institutes forced the universities to include experimental science in their curricula, so in the sixteenth century the demand of the privileged classes for ancient classics, history, and bonae litterae (belles-lettres, or polite learning, as Erasmus called it), forced those subjects on the universities. For the first time in modern history learning became fashionable with the upper classes, who had formerly despised it as fit only for clerks and lawyers. Louis XI of France forbade his son Charles VIII to study at the University, lest it make a clerk of him and not a soldier-prince; but Francis I founded a college, and his contemporary Henry VIII was no mean scholar himself. In England, especially, young gentlemen flocked into the universities, shouldering poor boys destined for the Church, and the young gentlemen have never ceased coming.

Finally, we must consider the effect of the Protestant Reformation on the universities. Although Protestantism attracted to itself a wide popular support, it was originally an intellectual movement, emanating from university men such as Professor Martin Luther of Wittenberg and his colleague Melancthon. Sundry princes took it up simply because they wished to free themselves from the restraining hand of Rome. The first effect of the Reformation on universities like Wittenberg and Cambridge that embraced it, was a sharp decline in enrollment. At Wittenberg the number of students fell from 330 to 85 the year after Martin Luther posted his ninety-five theses; new scholarships had to be founded out of confiscated monastic properties to bring the students back; and some of the leading German universities, such as Erfurt, never wholly recovered. More permanent was the political effect of the breach with Rome. The universities of North Germany and England, which had leaned on Rome for support against state interference, now lost their autonomy. The Reformation delivered them, bound hand and foot, to the state; and the Catholic universities were likewise affected, since Catholic monarchs, on the pretense of protecting universities from heresy, either laid heavy hands on them, or (as in the case of Ingolstadt) gave them

over to the Jesuits. The Protestant Reformation had the effect of a world war in accelerating the growth of Nationalism, at the expense of the local, communal, and corporate liberties of the middle ages.

Martin Luther's prince, the Elector Frederick of Saxony, set an example by placing the University of Wittenberg under a state commission that put all its property in escrow, paid the professors' salaries, expelled those who would not accept the Reformation, and censored their activities. Of course the medieval universities had never enjoyed complete academic freedom—the spectre of the inquisition was always there as a warning against too radical speculation; but in practice, medieval scholars were financially secure, and intellectually free. With the Reformation began the unhappy practice of requiring professors and students to subscribe to articles of faith and to take oaths of allegiance; a practice from which our earliest colonial colleges emancipated themselves, but which various pressure-groups representing the senile timidity, the super-nationalism, and the nascent fascism of our own day, are attempting to impose on American schools and universities. Once the religious schism had started, Catholic universities followed the same policy as Protestant universities, each attempting to secure by oaths complete religious uniformity, and in some cases complete national homogeneity, of their professoriat.

The Protestant Reformation was an enemy to certain aspects of the Renaissance; others it eagerly embraced. The emphasis of the Lutherans on faith alone, their distrust of human reason, and the Calvinist insistence on human depravity, made them hostile to the humanist glorification of "natural man." But, by the same token, their exaltation of the Sacred Scriptures over Church tradition as the constitution of the Christian Religion, made them pursue Greek

and Hebrew studies with avidity; and, instead of reacting against the new subjects in the curriculum, the Reformers tended to throw out Aristotle, as an intellectual bulwark to the Catholic philosophy, and make way for new subjects. Melanchthon's famous address to the students of Wittenberg, De Corrigendis Adolescentiae Studiis, "Concerning the Studies of Youth that should be Corrected" (1518), decried Metaphysics, called for more Mathematics, Poetry, and History; and emphasized the three Sacred Tongues, Latin, Greek, and Hebrew, as essential for an educated Protestant. Unfortunately it was the best works of Aristotle -his logical organon and his Ethics-that the Reformers threw out, while they retained his least valuable books, those on Natural Science; for the Reformers accepted the same general explanation of reality as the Catholic Church. The scientific work of the Renaissance did not get under way much before the seventeenth century, and Aristotelian science was brought over, with hardly a dent in it, to our first colonial college.

In the end, however, the Protestant Reformation strengthened the cause of higher education everywhere in the Western World. The Catholic Church, determined never again to be caught flat-footed, reformed the teaching of Theology in the universities that remained steadfast in the faith, and acquired an auxiliary of immense pedagogic power and boundless devotion, in the Jesuit order. Salamanca, for instance, reached the height of her glory in the era of the counter-reformation, with sixty professorial chairs, including four professorships of Greek and two of Hebrew, and subjects such as Medicine, Anatomy, Astronomy, and Music; with over six thousand students, ample revenues, and a score of colleges. But the most far-reaching and significant effect of the Protestant Reformation on the learned world

was the foundation of the universities of The Netherlands. The Seven United Provinces had no universities when they were under the House of Hapsburg; their students had to go to Louvain, or to Germany. But in the very midst of their struggle for independence, while Spanish armies were still on their soil, these indomitable Dutch Protestants founded no less than five universities. It was as if the English colonies had been forbidden by the English government from having colleges; and had founded Harvard, William and Mary, Yale, Princeton, and Columbia, while the Revolutionary War was going on. The story of the founding of the University of Leyden, as told in the stirring pages of Motley, is, I think, the most heroic episode in the whole history of universities.

On October 3, 1574, William of Orange raised the siege of Leyden, whose population had been reduced to the utmost extremity by famine and pestilence. The Protestant provinces had not yet formed their federal union, and thirty-five years of warfare were ahead of them before even a truce would be won from Spain. But on December 28, 1574, the Prince of Orange requested the Estates of Holland to found a university. On the sixth day after, they formally decreed its foundation; on January 6, 1575, the charter was issued; and on February 5, the University of Leyden was inaugurated by a solemn procession and a classical pageant. Since that day it has never closed its doors. Within thirty years Leyden had attracted to her four faculties the most distinguished group of scholars in northern Europe: Justus Lipsius, Scaliger the modern Aristotle, Arminius the theologian, the Vorstii, professors of Medicine and Botany, Cluver the geographer, and Grotius the father of International Law. The Dutch universities did not spend money on colleges. They allowed students to shift for themselves; and this gradually became the rule in continental universities. It is a curious fact, never satisfactorily explained, that the continental university colleges gradually faded out, until there were no foundations left for lodging and boarding students; it is only since the world war that Paris has acquired her cité universitaire.

The founders of the first English colonial college, Harvard, were familiar with the Dutch universities, which had given a hospitable reception to exiled English Puritans. The Pilgrim Fathers spent twelve years in Leyden before emigrating to America; several of the New England clergy had actually studied at Leyden or Francker. But when they came to found an institution of higher education they followed the colleges of their home land, rather than the more modern type of university in The Netherlands.

It was fortunate for England, and for us, that the Protestant Reformation, and the Classical Renaissance, struck the English universities at the same time; fortunate, too, that the Reformation in England was a unifying, not a disruptive movement, accepted by the nation without a civil war, and, that the Tudor monarchs were humanists and patrons of learning. Not that Oxford and Cambridge liked the Reformation any better than did other universities, or that they managed to evade the heavy hand of the State. Cambridge first showed a disposition to resist the Reformation, and then swung to the other extreme and tried to carry out the Reformation to its logical conclusion with Puritanism. In consequence, that university had a set of irrepealable and unamendable statutes imposed on her by Queen Elizabeth; and Oxford was similarly treated by Charles I.

The colleges of Cambridge and Oxford, as we have seen, had already absorbed the teaching function of the University, so that the Renaissance found both Universities unprovided with professorial chairs. Henry VIII founded two splendid colleges, Trinity and Christ Church, out of the spoils of the monasteries, and in each University established five Regius Professorships of Greek, Hebrew, Divinity, Medicine, and Civil Law, whose incumbents were appointed and salaried by the Crown. The Tudor and Stuart monarchs constantly interfered in university government, often dictating the choice of heads of colleges, and sometimes even of college fellows. Lecturers who said things ungrateful to royal ears were promptly silenced or dismissed; an historian who gave a lecture "upon the Excesses of Tarquinius Superbus his infringing the Liberties of the People" was thought to be reflecting on the Crown and was forbidden to continue his course. The Crown regarded it a first duty of the English universities to defend whatever religious compromise the Church of England happened to represent at a given moment; and it was in part their disgust with this situation that led so many university-trained Puritans to emigrate to New England. But by that time, 1630, England had been Protestant a full century; and the tradition of complete university autonomy had been lost: it was assumed that all institutions of learning would be regulated and supervised by the State, and our colonial colleges fell into the same pattern.

In time the English universities recovered their ancient freedom from State interference, and our colonial colleges gradually emancipated themselves from the same influence. So in the long run, the simultaneous adoption of the Renaissance and Reformation at Oxford and Cambridge was more effective on American higher education than the political influence of the Reformation. The twin humanist ideals of classical scholarship and a gentleman's education were brought to England by Erasmus early in the sixteenth century, and had made considerable progress before Henry VIII

decided to break with Rome. If the order of events had been reversed, England would undoubtedly have been hostile to the Renaissance. Erasmus wrote from Cambridge in 1516, "It is scarcely thirty years ago, when all that was taught in the university of Cambridge, was . . . those old exercises out of Aristotle, and quaestiones taken from Duns Scotus. As time went on, bonae litterae were introduced; to this was added a knowledge of mathematics; a new, or at least a regenerated, Aristotle sprang up; then came an acquaintance with Greek, and with a host of new authors. . . . " In this same year, 1516, Bishop Fox founded Corpus Christi College at Oxford, dedicated to the New Learning, and with the especial purpose of fostering a knowledge of the Greek Church Fathers. Oxford, after passing through a period of violent opposition to the New Learning, accepted both it and the reform with almost fanatical zeal in 1535. The works of the "subtle doctor" Duns Scotus, the quintessence of ultrarefined scholasticism, were torn, burned, thrown out of libraries. New College quadrangle was "full of the leaves of Dunce, the wind blowing them into every corner"; and the name of him who had once been the idol of the schools became the common English word for a school blockhead.

In the next half-century, the English colleges worked out a typically English compromise between medieval philosophy and classical belles-lettres. The official curriculum of the university required so small a part of a student's time that the colleges were able to supplement it by requirements of their own, along comparatively modern lines. In the curriculum that one college tutor, Dr. Holdsworth of St. Johns and Emmanuel, described around 1640, we find that students were supposed to read about five hours a day, to take careful notes on their reading, and to attend their tutor's college lectures. Mornings they spent on studies of medieval

origin-Logic and the Three Philosophies (Metaphysics, Ethics, and Natural Science), afternoons on humane letters: Rhetoric, conceived in the Renaissance spirit; History, Poetry, and the Classics. For instance, the freshman spent his afternoons on Roman history, Cicero, Erasmus' Colloquies, Terence, the Greek Testament, and the poetry of Theognis of Megara. The sophomore read Cicero, Florus, Sallust, Virgil, Ovid, Horace, Martial, Hesiod, and Theocritus. The junior sophister read orations of Quintillian and Demosthenes, Juvenal and Persius, and Cluver's Ancient History; the senior sophister, although much occupied with disputations, was supposed to work through Cicero's De Officiis, the Iliad and Odyssey, and spend a fortnight each on Statius, Seneca, and Lucian. For young gentlemen who do not care to take a degree, Holdsworth maps out a much easier course of reading, much of it in English; but nowhere is there any place for Mathematics, or for any Science but that of Aristotle. The mathematical glories of Cambridge date only from the era of Sir Isaac Newton.

In consequence of these reforms, the English universities became, in the second half of the sixteenth century, the favored place of education for the sons of gentlemen, or would-be gentlemen. As early as 1549 Latimer complained, "There be none now but great men's sons in Colleges, and their fathers look not to have them preachers." He, and other writers of the day, regarded the influx of wealthy young men as something unnatural, unexpected, and undesirable. But the colleges had "asked for it," as we say; and the new privileged class, enriched by the woolens trade or overseas commerce, glutted by spoils of the monasteries, wanted it. Not that the education of more seriously minded young men, and those destined for the ministry, came to an end; institutions founded near the end of the sixteenth century, like Emman-

uel (the college of John Harvard) and Sidney Sussex (the college of Oliver Cromwell), catered to this class, without excluding the other. Many sons of the squirearchy and the mercantile families were recruited for the Church, and parsons' sons for business: in one of the colleges it was solemnly debated whether a "pious dunce" made a better minister than a "learned rake-hell," and the latter won the decision. Probably the close integration of the Church of England with English life has been due to this commingling between young men of all classes at the universities, where the ministry of that Church was trained.

At the time the English colonies were founded, this essentially English compromise between gentility and learning had existed for a century. Regarded as the natural and proper thing, it was introduced into the colonial colleges, and has become part of the pattern and tradition of American college life. In fact, this social contact between the poor scholar and the squire's son has had a very important part in making the English and American college what it is today: the despair of educational reformers and logical pedagogues, the astonishment of European scholars, a place which is neither a house of learning nor a house of play, but a little of both; and withal a microcosm of the world in which we live. To this sixteenth-century compromise, become a tradition, we owe that common figure of the English-speaking world, "a gentleman and a scholar."

Such were several among the leading founders of Virginia and New England: men like George Sandys, who translated Ovid in the Virginian wilderness; the Winthrops and Saltonstalls of Massachusetts, and Peter Bulkeley, of whom Cotton Mather wrote that his education was "Learned, Genteel, and Pious." To America they brought a zeal for scriptural religion and a love of the humanist tradition. From their

opening day, our colonial colleges have included a large proportion of young men with no professional or even serious intentions. They have been complained of by their more serious preceptors, these three hundred years. They have committed every sort of folly and extravagance. New colleges have been founded, especially in the Middle West, in order to provide a religious education for poor but pious youths uncontaminated by the frivolous young men of Harvard, Yale, and Princeton—and in a few years' time the same class of students have flocked to the new colleges.

Doubtless there have been times, especially in the 1920's, when the gates were opened so wide, and standards of study were set so low, that our colleges were inundated by young barbarians of both sexes. The English and colonial colleges always maintained sufficiently stiff admission requirements to exclude young men incapable of profiting from university learning, even when they admitted many who were unwilling to drink at the Pierian spring. But, speaking broadly, the pattern of the American undergraduate college was set in England, in the sixteenth century, when the Arts course was liberalized, and the resulting "gentlemen's education" became the normal course both for young men who intended to study for the Church or other profession, and for those whose parents desired only to expose their sons to learning to the bonae litterae inculcated by teachers whose pattern was the learned, witty, and urbane Erasmus of Rotterdam.