



A GREAT MOVE FORWARD.

What the Academic Elective Pamphlet Shows and Suggests.

If one looks over the catalogue of Yale College for 1824-5, he will find the complete announcement of the schedule of studies for the four years' course on a single page. It covered Greek, Latin, Mathematics, Rhetoric, Natural Philosophy, Astronomy, Mental and Moral Philosophy. There was but one option given, and that was for the third term of Junior year between Greek, Hebrew and Calculus. To this list was added, in 1825, French, which was the first appearance of a modern language in the curriculum. In 1841 German and Spanish were added in the same way. The number of subjects from which a choice could be made being thus increased, in 1845 a student was allowed to elect one study of this group for one term of Junior year, and also for one term of Senior year. In 1876-7 the elective system was so far expanded that every Junior and Senior was required to select a single study (four exercises a week throughout the year) from a list of subjects which included Philosophy, Ancient and Modern Languages, Economics, History, Natural Science and Mathematics.

The present elective system took its rise in 1884, when the study of the modern languages was required in the Freshman and Sophomore years, and eight of the fifteen hours of recitations in Junior year and twelve in Senior year were assigned to elective studies. The announcement of the schedule in 1884-5 for Junior and Senior years covered two pages, while the elective pamphlet for 1898-9 contains 64 pages and gives a detailed description of the courses, with such directions for choice as will insure a connected program for the student who wishes to specialize in any line of work.

The following table gives a comparison of the schedule for 1884-5 with that of 1898-9, showing an increase in the opportunities for class room work from 94 to 294 hours per week, and of instructors from 27 to 79:

DEPARTMENT OF STUDY.	1884-5.		1898-9.	
	Hours of Class-room work per week.	Number of Instructors.	Hours of Class-room work per week.	Number of Instructors.
Philosophy	6	2	36	7
Economics and Law	6	2	25	6
History	7	2	22	6
Romance Languages	18	2	24	4
German	5	1	27	3
English	6	1	25	7
Classics and Ling.	18	6	37	10
Science	15	6	36	12
Mathematics	12	5	25	8
Music	0	0	10	2
Fine Arts	0	0	8	2
Physical and Mil. Sci.	0	0	2	3
Biblical Literature	0	0	17	3
	94	27	294	79

In the Department of Philosophy, the elements of Psychology and Ethics have been transferred from the Senior to the Junior year, and advanced courses along the lines of speculative philosophy have been added, while there have been opened up the new fields of Physiological Psychology, the experimental work of the Psychological Laboratory and the course in the Theories of Biological Evolution.

In Political and Social Science, by the bringing of Economics into the Junior class, the opportunities of the student in this line have been vastly increased along the line of general political economy, while special courses in Finance, Transportation and the application of mathematical methods to Economic Science have been added, to say nothing of the creation of the new Department of Sociology.

American History, from a single course of two hours per week for one term of Junior year, has developed into three courses, each running through a year, covering National, Colonial and Constitutional History. The addition of a course in Medieval History and of three courses in Asiatic History, as well as the large increase in the amount of instruction given in English and general European History, show the growth of this department of study.

The Department of Biblical Literature and Semitic Languages is a creation of the past few years.

In the Department of Natural and Physical Science, the work in Physics has been brought into the Sophomore year, thus making it possible for the student to specialize two full years in subjects based on a knowledge of this branch of study.

The opening of the Kent Laboratory has made it possible to offer two years of Chemistry. The courses in Biology, which have been added within the past ten years, combined with other courses in Chemistry and Physics, give a connected line of studies in preparation for the highest grade of medical schools.

The courses in Ancient Languages have been very greatly enlarged, and the facilities for instruction in that department have been wonderfully increased by the assignment of Phelps Hall to that department.

In comparing the opportunities for the study of English and the Modern Languages in 1884-5 with 1898-9, it should be remembered that each student is now required to pass an entrance examination in English which implies a course of study for nearly two years and that this, added to the requirement for English in Freshman year and the work in that subject which nearly every student takes in Sophomore year, makes for each student by the time he reaches Junior year, practically three years (three hours of recitation per week each year), whereas in 1884 English Literature was begun in Junior year. The same may be said also of the Modern Languages, showing that in this group of studies the opportunity had increased much more than in almost any other department of study in the College.

In Mathematics one is reminded that, up to 1845, Arithmetic was the only requirement in this group for admission to, and that no geometry was required for admission till 1855. The bringing of Elementary Calculus, the present year, into the Sophomore class as an option for those who propose to carry on advanced mathematical work, either in pure Mathematics or in its applications, has enabled the College to offer for next year four strong courses in that department to the Juniors, namely: Advanced Calculus, Analytical Geometry, Mechanics and Higher Algebra, which form a solid basis for the work in Vectors and the Higher Analysis, offered in Senior year.

In addition to what has been stated concerning courses leading to the Medical School, it may be said that equally valuable combinations can be made for those who expect to enter the Law School or the Theological School as well as for those who wish to enter almost any business or profession.

AN ANALYSIS OF YALE.

**A Combination of College and University in the Heart of a Small City—"Mass Formations"
—The Present Administration's Great Service.**

[Being a speech delivered by Prof. Bernadotte Perrin at the dinner of the Brooklyn Association, March 10.]

Mr. President, and Gentlemen of the Association:

I am still proud to be a Yale man, still proud to represent Yale, and you may still be proud as Yale men, in spite of all attacks yet made. There are foes, "of whom to be dispraised were no small praise." "Madam," said an aged clergyman to a mother anxiously enquiring about the dangers encountered by her son at Yale, "my father went to Yale and lived an honored life; I went to Yale and am trying to be a blessing to my fellow men; my son went to Yale, and his son shall go there, if I have anything to say about it." This illustrates one striking effect of the recent attacks on Yale. Her alumni are still more closely knit together in loyalty to their Alma Mater, as our great nation is now being welded together under the pressure of a danger from without.

And yet we must often ask ourselves the question: "why these frequent attacks upon an institution which we love and honor so much?" "Why should Yale be contrasted so unfavorably with Oberlin and Harvard?" I shall attempt an answer. It is because she is neither a college in an inland town which votes no license, nor a University in the suburb of a great city, which suburb votes no license, but a peculiar combination of College and University in the heart of a small city which votes license. This constitution and situation are so peculiar as to lead to misunderstandings and misjudgments on the part not only of strangers, but even of alumni and undergraduates.

Not many years have passed since our popular education was mainly by compulsion. The apparatus and methods of schools and academies, particularly in the country, were extremely simple, but extremely effective. A teacher with more or less formal knowledge laid a small section of that knowledge before the pupil, usually in unattractive form, and compelled him to acquire it within a given time under pain of punishment. There was little elucidation or enticement. The pupil was driven, not led. But the rude process fostered in the pupil a confidence in his own powers, an expectation of conquest and a delight in it, a vigor and persistency of effort, which many of us miss in the products of the modern educational processes. For now education is largely by seduction. From nursery and kindergarten up through Grammar Schools and High Schools and Academies, the approved tendency is to smooth difficulties away from before the pupil, to lure him on over easy and attractive paths, paths even of his own immature choice. Acquisitions may be larger and more varied under this modern system of education by seduction, but the mental fiber of the pupil lacks the aggressive vigor of the older days. In the face of a mountain of difficulty, the pupil's first instinct is to call for help rather than boldly attack and master the obstruction.

MASS TENDENCIES.

Now the old college system of training, as it survives at Yale in Freshman and Sophomore years, is to a great degree a continuation of the older

spirit and method in education. Methods of teaching and apparatus of teaching even in these two years of "required studies" have indeed improved vastly over those of earlier years. The influence of the new education is of course felt here. Subjects are made interesting to the student, and taught for his benefit rather than for that of the instructor. Zeal and ardor and a contagious enthusiasm now enliven the instruction here, and redeem it from scholasticism. But, after all, tasks are necessarily set the student in subjects which he did not directly elect to pursue, and he is rigidly held to frequent, almost daily, tests of the faithfulness with which he performs those tasks. Such a system has its disadvantages. Where three or four hundred men are forced through the same course of study, regardless of their individual preferences or tastes, there results a kind of collective or mass individuality. The large divisions in which men are necessarily handled and the impossibility of individual treatment by the instructor, encourage mass intellectual plays. Genius suffers, of course, but learns the great lesson of standing shoulder to shoulder with fellow men, a lesson worth all it ever costs. And so this lower undergraduate life at Yale fosters mass movements of every kind; keeps alive the old "class-spirit," with all its objectionable rivalries and petty collisions, brings out crowds of noisy boys to fires, processions, celebrations, and open air functions of every kind. We all know the tendency of a crowd to fall to the level of the lowest member of it. We know the cruelty and cowardice and meanness of a crowd. A man will do in a crowd what he would never forgive himself for doing by himself.

These objectionable mass tendencies are nowhere more plainly seen than in our compulsory chapel services, from which not even the two upper classes are yet exempt, though they otherwise breathe the air of University election. The coughing and hawking, which makes the place suggest a large bench show; the contagiousness of the idiotic laugh, or of the mischievous reminder of the flight of time; all the acts and postures and garbs which make the judicious among us grieve, are the result of this mass coherence which is so highly developed during the first two years of college requirements.

THE BRIGHT SIDE.

But there is a bright side to all this. Such responsiveness to good soul-stirring leadership, such glorious momentum in good causes, such collective loyalty and enthusiasm, such energy in all the manifold enterprises of our undergraduate life, such slowly gathering but grandly culminating demands of public sentiment, and even in chapel, such collective tributes to the really true and great and simple and pure; where else can they be found? Besides, it is not in groups and squads and crowds that idleness thrives. And vice, as the late Lord Laureate said, "vice sometimes appears to me as the shadow of idleness." Whatever else may thrive at Yale, idleness does not. Everybody belongs somewhere and is doing something. The work may not be entirely the work of the curriculum, but "ferret opus."

Out of this old-fashioned college-period of close supervision in the performance of allotted tasks, the student is gradually, not abruptly, transferred into the larger and freer air of University election. Full University freedom in the Continental sense he cannot have before the graduate departments; but University election of courses, and University methods of instruction, and enlarged freedom in attendance he can have in Junior and Senior years. To this freedom he comes with no jaded