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Correspondence, Columbia, 1902

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(Copy)

130 East 27th Street,

Jan. 11th, 1902.

~~Mr. Mitchell,~~

My dear Mr. Mitchell:

You were asking last night how it had happened that the School of Architecture was so independent in respect of Mathematics and Engineering, and what was the reason and justification for so exceptional and even anomalous a state of things.

The ultimate reason is to be found in the exceptional character of the work, which differs in kind from that done in the other Schools, ^{of Applied Science.} ~~and is~~ ^{has in} the anomaly ^a of what is primarily ~~a~~ School of Art being reckoned among the Schools of applied science, at all. Abroad, schools of Architecture are associated with schools of Painting and Sculpture, ^{or of} ~~with~~ the Decorative Art, and it was only in the lack of a more congenial field that some of those in this country were planted in ^{scientific} schools ~~of Science~~. Those indeed at Cornell University, Syracuse University, and the University of Pennsylvania, have been organized as part of the Academic instruction, and the new department of Architecture at Cambridge, though placed under the Faculty of the Lawrence Scientific School, is equally related to the work of the College. But the earliest of the American Schools,

that of the Institute of Technology in Boston and also, I believe, that of the University of Illinois, are, like our own, established in schools of Science. ^{Architectural} ~~The~~ schools were needed, and the simplest way to start them was to take advantage of the courses in Physics, Chemistry, Geology, Mathematics, and ^{Civil} ~~Mechanical~~ Engineering already established. A single instructor in Architecture was all that ^{required} ~~needed~~ to set the new branch of study upon its feet.

But all these schools have found, what we were ourselves quick to discover, that the conditions which were so favorable to the starting of ^a ~~the~~ School of Architecture were unfavorable to its growth and development. Schools of Architecture are first of all schools of Art, and in the somewhat sandy soil suitable to schools of Applied Science, they were in danger, like the ^{among} seed sown ~~by~~ ^{among} the ~~rocks~~ ^{rocks} sower, of springing up quickly indeed, but of presently withering away because they had no richness of earth. All these schools accordingly, have from their inception endeavored to differentiate their work from that of the scientific departments, adding more humane studies, such as History, Aesthetics, and the languages, including our own, and teaching even scientific subjects in ways suited to their special needs. In this endeavor some of these schools have indeed met with but indifferent success. Some of my correspondents are still groaning, as they say, under the ^{an} iron heel

" of mathematics, and there is not one of them who does not look with envy, and some of them with feelings akin to despair, on the complete freedom of action which has here been vouchsafed to us. The organization of our own school is looked upon by our friends and rivals as something almost ideal, and if we are not ourselves altogether content with it, if we ourselves look for modifications which shall enable us, even more completely than we do now, to profit by our exceptionally favorable environment, the changes we look forward to are not of the nature of any backward step which should bring us into closer organic relations with our immediate neighbors. What we would hope for is a still greater differentiation from them and a still more complete development of our own individuality.

A chief part of our time and thought and interest, and those of our students, is of course given to matters as far removed as possible from the natural sciences, and the spirit and methods in which our studies are conducted have little in common with the atmosphere of ~~the~~^a scientific school. The fifteen or twenty hours a week which in the other departments are given to laboratory work or to Mechanical Drawing, our men give to artistic exercises with pencil or brush, in India ink or in color and to the study of design in plan, elevation or detail, using the methods of free hand drawing with mathematical instruments, and the methods of geometrical

drawing with the free hand. These combinations are peculiar to Architectural draughtsmanship and are as characteristically different from those of schools of Engineering on the one hand as they are from those practiced in the schools of Drawing and Painting on the other.

a work which he has done
 Of the sixty hours devoted to recitations and lectures, only a dozen are given to the scientific subjects, such as Mathematics, ^{Descriptive Geometry} Engineering and ~~mechanics~~, the rest being occupied with the history of Architecture and of Ornament and ^{with} the Decorative Arts, ^{Modelling,} Aesthetics, Criticism, Graphics, and French and German Architectural Literature, and with the highly specialized subjects of Specifications and Building Materials.

These indispensable topics leave little time for the mathematical and engineering work proper to a school of science and necessary in a School of Architecture, so little that it needs to be administered in ways specially suited to these limitations.

But there are more important considerations than briefness of time which make it ^{necessary} ~~important~~ for our men to pursue these subjects in a different way from that in which they are taken up in the other departments. ^{theoretical instruction in the} The schools of Civil, Mechanical and Mining Engineering, necessarily embrace a wide range, for practical work may presently bring their students into unfamiliar portions of a

most extensive field, where if they have not even a school-book knowledge of the subject they will be unable to attack the ^{practical} problems that come up. It is not essential that they should remember everything they have studied, it is not even necessary that they should have thoroughly understood it when at school. If they have once gone over the ground, however inadequately, it will ^{suffice. Substantial} be of ~~incalculable~~ ^{to them.} advantage. These men spend their lives in the prosecution of applied science and all that school need do for them is to start them well on the road.

The Architect's relation to these studies is an entirely different one. In the first place only a small part of the field at all concerns him, that which relates to the statics ^{of} ~~the~~ buildings. The theory and practice of Dynamics, Hydraulics, Enginery, Steam and Electricity are to him merely matters of intellectual curiosity. It is no more important for him than for any well educated man thoroughly to understand them. Unlike the Engineer the Architect need extend his studies in Mathematics and Engineering over ^{only an} extremely limited field. But within that field he needs to ^{be upon} ~~get on~~ perfectly familiar terms with them, for he will have no chance of increasing his acquaintance with them after he leaves school. His time and attention and interest will be occupied by his own special work. Unlike the Engineer he will have little opportunity

to keep up his acquaintance with them, much less to extend it.

If he is ever to make any use of them it will be only by chance, at long intervals, and unless he knows what he knows ^{of these matters} by heart, unless he knows them so well that he can never forget them, he might as well, for practical purposes, not know them at all.

Hence both in Mathematics and in Engineering ~~we~~ ^{we} follow quite a different method in these subjects from that pursued by our neighbors.

In Mathematics our First Year ~~men~~ have but three hours a week, but in that time they become during the first term perfectly familiar with the small part of Analytical Geometry which it concerns them to know. In the second half of the year they give these three hours a week to the Differential and Integral Calculus. This is much less time than these classes used to give to these subjects when they took them along with the College students, and of course they cover less ground. But they do the work with singular thoroughness and understanding of the subject, and this is helped by their doing a great amount of ^{illustrative} graphical work in constructing ^{the} curves, ^{of} a work which ^{naturally} comes ^{easy} ~~natural~~ to them, from their ^{skill in} ~~habit~~ of drawing ~~out~~ ^{everything}.

Second

In the ~~third~~ year two hours a week are given to completing the work in the Integral Calculus and to the study of theoretical

Mechanics. But by adjusting this work to the special requirements of the course in Applied Mechanics or Architectural Engineering which is to follow it in the third year, this small amount of time ^{made} is adequate to the purpose. It is by thus coordinating each branch of study with every other that we are able to get over the ground we have to cover in the limited time at our disposal. But this coordination would be impracticable unless we had all the branches in our own hands.

For a long time after we had the elementary Mathematics in our own hands our men took their Engineering along with Mr. Trowbridge's classes. But just before he died Mr. Trowbridge came to me saying that the architectural contingent had become so large that he must needs put my men into a division by themselves and get a new Tutor for them. In this case he proposed that I should myself provide the additional instructor and transfer the work in Architectural Engineering to my own department. He said that neither he nor his men knew anything about Architecture and that they were entirely unfamiliar with the practical engineering problems which architectural construction presented. ^{during the ten years.} Since that time the work has been carried on, upon strictly Architectural lines, in accordance with the general methods in use in the Section of Architecture in the ^lEcole des Beaux-Arts, but with

illustrations and examples derived from our own professional practice. This occupies five hours a week and is carried on in connection with the instruction in Building Materials and Specifications, which occupy four hours a week. Besides these lectures four or five hours a week are spent by the class in the draughting room over practical exercises, illustrating both courses. These examples are ^{largely} taken from the current exercises in Design. This combination of theoretical and practical construction works admirably. ^{But this} ~~This~~ again it would be impracticable to carry on if the instruction in Engineering were not in our own hands.

Although all this is meant to be but a minimum course, designed to meet the needs of Architects who do not intend to do their own Engineering, it has proved more valuable than we expected, or indeed intended. I find that our men, whether in private offices or in the Department of Public Works, prove competent to do all the Engineering asked of them.

The Fourth Year offers two elective courses. It is optional for the students to pursue a course of advanced Architectural Design, or a course of advanced Architectural Engineering. In the course in Design the whole day, the whole week indeed, is given up to drawing and design, with an almost total omission of lectures and recitations. This is a state of things unthinkable in a

scientific school, but well calculated to promote the serious and continuous personal endeavor which characterizes ~~the~~^a School of Art.

The alternative Fourth Year course in advanced Architectural Engineering is adapted to the needs of the men who propose to adopt Architectural Engineering as a profession. These men, though studying under our direction and advice, ~~have done~~^{do} a chief part of their work in the school of Civil Engineering. Our independent position does not accordingly deprive our men of any service which that department is better able to afford them than we are.

But though these present arrangements seem to be fully justified by their results, they are not entirely satisfactory, and we hope, ~~if we can~~^{if we can} presently ~~manage~~^{manage} to require, for admission to the school, some of the elementary Architectural work which now occupies ~~our first year.~~^{most the time} ~~to~~^{we should expect} ~~gain~~^{us to have mathematics, but to} ~~in this way~~^{special} ~~time for some instruction in~~^{also} ~~Physics, Chemistry and Electricity.~~^{But this work like the work} ~~we now have in hand,~~^{will} ~~will~~^{highly} probably have to be specialized in order to meet our special needs, and so as to come into coordination and cooperation with the rest of our work. We could hardly expect to find ~~any~~ courses in these subjects already established that would exactly fit our requirements. ~~It~~^{me} would probably be easy for each of these departments to delegate an assistant for this service who ~~would~~^{me} closely follow a prescribed program and would give our men

a maximum of pertinent information in a minimum number of lectures.

Laboratory work in these subjects we ^{could} ~~cannot~~ expect to find time for.

But an equally desirable expansion of our work would lie in the direction not of more science, which we can ^{manage to} get along without, but of more art, ~~of~~ ^{less easy to secure.} which it is ~~difficult to get enough.~~ Architects should be made familiar with the history ^{and theory} of Sculpture and Painting and with the Decorative Arts which illustrate the same principles of design ^{that} ~~which~~ come into play in Architectural compositions. ^{moreover,} As I pointed out to Dr. Barnard a dozen years ago, and to some of the Trustees who at that time showed an interest in the subject, our nearest of kin are neither the men of science nor the painters and Sculptors, but the craftsmen, the practitioners of the other arts of Design. The field of monumental decoration, which lies between Architecture on the one hand and Painting and Sculpture on the other, is now almost entirely unoccupied. There is no school which undertakes to give to mural painters or to Architectural sculptors the training they need in order to ^{fashion} ~~freshen~~ their work in accordance with the requirements of the spaces it is to fill. We are ~~in~~ ourselves in a favorable position to meet this want and we can anticipate, when we are ready to do so, the hearty cooperation not only of the Academy of Design and of the Art Student's League, but of the whole body of the younger artists, both in

sculpture and in painting. Some of these have already been knocking at our door in search of training which the increasing employment of mural painting and Architect ural sculpture requires, and which nobody else is in so good a position to afford.

All this ^{seems} ~~goes~~ to illustrate H. Spencer's maxim that true progress consists in a change from ~~the~~ homogeneous organization to a heterogeneous one.

COPY.

February 28th, 1902.

My dear Professor McDowell:-

You were right in thinking that I should be greatly interested in the subject of your letter to Mr. Butler. It is a subject which has once or twice before, during the twenty years that I have been here, been brought to my notice, and I have expected that in the fullness of time it would again present itself and perhaps in a tangible shape.

I shall be very glad to meet any appointment you may make, to discuss the details of such a scheme as your letter foreshadows. I have not myself ever got beyond generalities. I agree that Architecture, at least as we teach it, has about as little in common with the methods of the schools of science with which we are associated, as Painting, Sculpture or Music would have, although Architecture touches Physics, Chemistry and Engineering on one side, just as it touches Painting and Sculpture on another, and Poetry and Music, Archaeology, Aesthetics, and the Decorative Arts, at yet other points, not to speak of Political Economy, Ethnology, and Sociology, without which its historical development and the lessons it teaches can be but imperfectly understood. An organization that would open these fields of thought to our students would give the profession the liberal culture and largeness of mind which it needs in order to occupy worthily the place that belongs to

it and adequately to solve the problems of the immediate future. The same thing is to be said of the education needed to qualify painters and sculptors to fill the place they should. If they are to perform their part in the drama that is presently to be enacted they must be something more than the gifted bores, destitute alike of high thoughts and of high feelings, which both here and abroad the present methods of training, as Taine long ago pointed out, are calculated to produce. The half dozen years spent in learning the manipulations of these crafts might probably, if differently administered, be made to impart a liberal education not only in science and literature, but in the history and theory of art itself, without sacrificing anything of serviceable skill.

I can believe that the same sort of thing is to be said of Music, perhaps also of Poetry and Belles-Lettres. But this is about as far as I have got. What I do not yet see very clearly is the extent to which the studies in the different departments of Music, Literature, Painting, Sculpture and Architecture could be carried on together, so as to be mutually serviceable. Even such closely associated subjects as Painting and Sculpture are in point of fact studied and practiced quite independently of each other, and Architecture joins them only when they enter the field of Decoration. These arts, in that they are Fine Arts, share with each other, and with Music and Poetry, an essential principle. But its manifestations are so different in these different fields, that the

theory and practice of one art contributes but little to any other, and although, in the paucity and imperfections of language, they to a considerable extent employ the same jargon, this community of speech is for the most part simply misleading, so little resemblance is there in the ideas which the words call up and so little real analogy in the subject matter. Except within a limited range, and that, it seems to me, a somewhat exalted one and difficult of attainment, these departments must needs develop pretty independently. Indeed, I should rather expect that the members of such a Faculty as a School of Fine Arts would assemble, would to an uncomfortable degree find each other mutually unintelligible. They would all be glad to have escaped from other hindrances, but would probably get but little help from each other, being largely unable to take each others' point of view.

I should expect also that they would be of comparatively little service to each others' students. I should be very glad for instance, to have my own students -- if sufficient time could be found -- study Painting and Sculpture, as well as Mathematics and Mechanics. But just as I find it necessary to take these subjects out of the hands of the Professors of Mathematics and Mechanics, because these men do not understand the relations between these sciences and Architecture, and to have them taught by architects, who do, so I should rather expect to find that the ministrations of painters and sculptors would be of but limited service unless I could find some men who knew more about the relations of these arts to

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Architecture, and about buildings themselves, than most artists do. It is of course always interesting and instructive to hear what specialists have to say about their own specialty, looking at things from their own point of view. It is eminently calculated to enlarge one's intellectual sympathies. But such exercises hardly meet the practical requirements of a scheme of professional education.

These are the difficulties that seem to lie at the threshold of the enterprise. They can doubtless be met in one way or another. Just how, is the question to consider, but they have seemed to me so formidable that I have myself, in forecasting the future, put off any attempt to solve them until people more familiar with these fields than I am should be ready to engage in the work. Meanwhile I have contemplated only the districts adjacent to our own, the kingdom of Decorative Art. It has seemed to me that our natural expansion would be in that direction and that when those regions were occupied it would be time enough to look over the border and consider our relations with the realms of Painting and Sculpture just beyond.

But your suggestion puts all these things in a new aspect and makes it incumbent upon us to consider the establishment of more intimate and more immediate relations, and the details of organization by which they may be brought about. Upon these I shall be glad to learn your own ideas.

I will add that besides the service done to the professional artists, architects and musicians, these courses

seem to promise to be of equal importance and value in another field. They could hardly fail to further the serious study of music and of art among amateurs. In giving Art, as you say, its proper place in the higher education the University would set up an apparatus which could easily be made useful not only to its own students but to the community at large. For the last dozen years at least the Trustees have recognized the duty of doing something for the city outside the regular work of the College and of the professional schools, and the city has been encouraged to look to the University for whatever it needs. There is already manifest a demand for instruction in the domain of the Fine Arts. This has of late found expression in the newspapers and my colleague, Professor Hamlin, as you may have noticed, has rather taken the initiative in this movement by sending an article on the subject to the September number of the University Quarterly. The scheme you suggest would obviously make any such plans more easily practicable and it would doubtless enlist the active support of their supporters.

I am generally at the School every day, morning and afternoon, except Wednesdays and Saturdays, and should be very glad to come and see you as may suit your convenience. But on Tuesdays I am pretty busy until five o'clock and on Thursdays until half past two.

MEMORANDUM IN REGARD TO
PROFESSIONAL SCHOOLS OF PAINTING, SCULPTURE, ARCHITECTURE AND MUSIC,
UNDER A UNIVERSITY FACULTY OF FINE ARTS.

There are three ways in which it has been suggested that Columbia University might promote the study of the Fine Arts. The first is to establish in Columbia College and in Barnard College courses in the History of Art, such as have for some years been given at Cambridge, Princeton, New Haven, New Brunswick, Williamstown and other places. The second is to set on foot public lectures, such as have already been given by the University in connection with the Metropolitan Museum of Art. The third is to establish a School of Fine Arts for the higher education in Painting, Sculpture, Architecture and Music, adding courses in Painting and Sculpture to the existing instruction in Architecture and Music, and bringing all together under a separate Faculty.

It is plain that if this last suggestion were adopted it would be easy to carry out the other two.

In organizing such a School, a Committee on "Scope and Plan", such as is often constituted at the inception of such enterprises, would probably work to best advantage by considering these four departments separately, with a view to discovering what ground each had better undertake to occupy, and what courses of instruction had better be set on foot in each. A comparison of the results would show how much and how little these different schools had in common.

PAINTING. The study of the "Art, Mystery, and Manual Occupation" of Painting, as it was called in the Middle Ages, naturally falls under three heads which, if we substitute the all-embracing term History for the somewhat mysterious word Mystery, are fairly well discriminated in the mediæval formula. The technical manipulations, the History, and the Art of Painting are the three subjects which Schools of Art have to take up. "Manual Occupation" may here be held to designate the technical skill of hand and eye which, whether native or acquired, is the special craft of the painter, covering everything that is implied in the term "Craftsmanship" and "Execution", with the manipulations of pen, pencil and brush.

All this, it seems to me, the University had better, at least in the beginning, leave to other hands. This work is already being done in excellent shape. The work of the higher education in Art should occupy higher fields, beginning where the other leaves off. The best work the University can do in these preparatory branches, is to stimulate excellence and to encourage a wider range of technical studies.

The folly and waste of duplicating apparatus already prosperously at work is of itself a sufficient reason for such abstinence, and for thus happily relieving the University from onerous responsibilities. But another consideration, less obvious but equally cogent, is to be found in the engrossing nature of these preparatory studies. They are, in their own field, of paramount and seemingly exclusive importance. They justly demand all the time and attention they can get. Other

studies, however important in themselves and however service-
able to Painting, in the end, are inevitably pushed aside into
a secondary place. This is illustrated by the histories of
all Academies of Art which have undertaken to carry on technical
and liberal studies under the same regimen. The liberal
studies, criticism, aesthetics, science, language, even the
history and theory of Art itself, have gone to the wall. By
introducing preparatory studies within its own precincts the
University would be inviting the presence of a dangerous rival.

Its safest, as well as its most rational policy is, as has been
said, to begin where the other schools leave off, using the
skill which is the object and end of the other schools as
means by which to obtain its own special objects and ends.

The chief of these, and those that most indisputably
fall within the province of University teaching, come, as has
been suggested, within the general domain of History, if we
understand History to embrace all the external conditions and
relations which of the Art of Painting. To understand this
Art in all its relations would be the object of such studies,
not to give knowledge to the thing itself but to make the
student understand all about it. This is the intellectual
training which it belongs to a University to set up. This
is its function in the community, and what is now proposed is
that it shall discharge this duty in the region of the Fine Arts
as well as in the fields of literature, Science, Law and Medicine.
This is its duty to the country, for prowess in the Fine Arts
is one of the chief marks ^{of} that higher civilization which it is

the purpose of universities to foster. It is as essential a factor in national preeminence as are business intelligence, scientific skill, literary distinction, just government, and private virtue. The university also owes it to the artist, if he is of an intellectual habit, as many artists are, to give him an opportunity for historical, literary, scientific, and philosophical culture, all within the range of his special pursuits. He may thus be saved from the fantastic vagaries into which the intellectual activity of half educated men so often betrays them. The history of Art, in all countries, its literature as recorded in all languages, the mathematics, physics and chemistry involved in its processes, the philosophical principles that underly its maxims,---these things should not indeed be forced upon the attention of those who do not care for them, but it is the business of the university, if it is to meddle in such matters at all, to put them within reach of the men who do.

In this field the instructors might well find enough amply to occupy their attention without encumbering themselves with teaching the technicalities of Drawing and Painting. Whether these general studies or the preparatory studies should have precedence in point of time is largely a matter of personal convenience with each pupil. But it may be anticipated that arrangements may be made which would enable those who were so disposed to carry on these two branches of study, in different institutions, more or less simultaneously. It might thus be found true, what has often been said, that the years spent by men in learning to paint, would suffice, if the time

were judiciously disposed, to give them at least the elements of a liberal education, without sensibly impeding their progress in knowledge of form, or in skill and dexterity in the representation of it. x

The question of how far university instruction should enter the field of Art, for the practice of Art itself, is yet to be considered. It is this practice for which the knowledge and skill needed for accurate delineation is a necessary preparation, the means to the end. This is that practice of Art which, however it may be defined, is admitted to be the finest flower both of barbarism and of civilization, the choicest manifestation of the human spirit. This is the end to which the artist's technical skill and attainments on the one hand, his personal culture on the other, are but the necessary means. Here come into play invention, imagination, taste, judgment, sentiment, aspiration, and on a lower level the study of composition, balance, color, chiaroscuro, contrast, harmony, keeping, etc., etc. All these things follow in a natural sequence the studies from still life, from the antique, and from nature which are pursued in all schools of Art, and entirely to surrender them to the university is what no school of painting could do and retain its self respect. But neither could the university forego the occupation of this field. These are just these higher studies for the promotion of which it takes up this new line of endeavor.

Moreover, if these university courses are to be of service in the training of professional artists they must be of a character to attract professional artists, and this the

historical, literary, and scientific courses alone would not do. It is still true that the main business of painters is to paint, and a scheme of professional study in which the most important branch of professional work does not play a chief part would not attract them. It would be a school without pupils. The scheme adopted must be such as to meet the present desires of the best men, or the experiment would fail for lack of material on which to experiment.

But the idea that a liberal education is as proper for an artist as it is for a lawyer, physician, or even an architect, is so contrary to present traditions that the attractiveness of the course will probably have to be still further enhanced by the prospect of tangible and personal benefits before its merits are recognized. Even in Paris it is only the offer of the Grand Prix de Rome, with its five years in Italy and the prospect of government employment for the rest of their lives, that keeps men at such studies. To ensure the success of any scheme for a higher professional education, whether under university direction or any other, a number of well endowed Travelling Scholarships will be needed. But advanced study in almost every department of learning is equally dependent upon such subsidies, as the long list of scholarships and fellowships in the Treasurer's annual report abundantly testifies. This already shows such fellowships in Architecture and in Music.

Just where a line of division should or could be drawn in this field of advanced artistic study, between these two friendly occupants, the schools of Painting and the university

schools, is a practical question for which time will probably soon furnish a practical solution, if general considerations do not suffice to settle it in advance. For the engrossing nature of "technique" and "execution" which has already been adverted to, will probably continue to work, as it has done in the past, to prevent the schools of Art from accomplishing much in this direction. The University classes, on the other hand, devoting all their time to these subjects, would naturally develop them as far as the gifts and capacities of their pupils would permit. While, moreover, literary and historical work would be mainly, as we may imagine, a matter of books and lectures, note books and written reports, in which sketches, drawings and tracings would play an indispensable part indeed, but still a minor role, these exercises in Composition, of whatever kind, would be chiefly drawings and paintings of a higher grade, in which all the knowledge and skill gained in the lower schools would come into play, as a means of studying higher things.

It need hardly be pointed out that although only those who had, so to speak, already graduated in drawing and painting would be qualified to take part in these academic exercises, these exercises would be distinctively lessons in Art, not lessons in Drawing and Painting. Yet they would afford constant practice in the knowledge of form and skill in representing it already attained, and would afford the best of opportunities for increasing both. But this improvement would not be the improvement of the apprentice while learning

to use his tools, but that of the master while using them. An Artist never forgets that he is also a craftsman and that he cannot become too skillful a performer.

So also, although the main work of the preparatory school must be preparatory, and in great part so to speak mechanical, devoted to the Craft rather than to the Art of the painter, the pupil should be encouraged to feel that he too is an artist in posse. He should be encouraged to try his half fledged wings in flights of fancy and imagination, invention and composition, not indeed as serious exercises but as pastimes. It is in the freedom of play that boys train their minds and muscles for the tasks that come to men.

The Regular Instruction in such a school as is here contemplated would probably be given in two simultaneous and to some extent parallel courses in "History", including science and literature, and in "Art", both running through four years and open to men who had already worked in the schools of the Academy, the Art Student's League, or elsewhere and who were otherwise qualified to take up these studies. Specially advanced and specially capable students would be able to complete the course and receive their degree in three years, or even in two, as already happens in the School of Architecture.

Under-graduates in Columbia College would be able to take a part of this work, as is already the case with Architecture and Music, during their college course. If then at its conclusion they wished to take up Painting as a profession they could by dividing three or four years between the preparatory schools and the School of Painting get a second de-

gree in Fine Arts, at the end of them:

The opportunity of thus cultivating a knowledge and taste for Art by the study of its master-pieces and of the principles that underly it; might not improbably determine to an artistic career some men eminently fitted to pursue it, who otherwise would drift into other pursuits. The somewhat narrow range of subjects and of intellectual interests which schools of Painting and Sculpture now offer is calculated to deter men of intellectual tastes and sympathies from the painter's career. It is not indeed desirable, in general, to do anything to draw into this field, already overcrowded, recruits from the highways and byways. But it is well worth while to bring into it persons of superior culture and education. This is in the interest of the profession at large, for the social and personal estimation in which any profession is held depends largely upon the amount and kind of education which prevails among its members, which is almost equivalent to saying that it depends upon the proportion of college bred men to be found among them. This is abundantly illustrated by the curious differences in social status of doctors, architects and men of business in different countries and indeed in different cities in the same country.

Meanwhile the students of the preparatory schools could, while pursuing their special studies, in them, be received as Special Students both in the historical and in the artistic courses of the university if they were prepared to take them up,---just as properly qualified persons are now received as Special Students into the classes in Architecture and Music. Such students could if they chose, as special

students in Architecture often do, pass the required examinations at their convenience, fall into rank in the regular classes, and in due season get their degrees and become candidates for the scholarships.

In all these studies, and most of all in the more advanced of them, the abundant resources of the Metropolitan Museum of Art could be systematically utilized. The examples there collected of the work both of the Old Masters and the more modern schools are now but inadequately used for purposes of artistic instruction.

Moreover, as is already the case in the department of Music, and as is habitual in university courses of lectures abroad, the public could be admitted to many of these lectures as Auditors. The University would thus be able, as it were, to carry on the work of University Extension without extending its activities beyond its own walls.

SCULPTURE.

What has been said of the historical studies that would necessarily form part of a University Course in Painting would seem to apply in almost identical terms to the Course in Sculpture. This also would be open to under-graduates and to the public, and here too the admirably chosen collections of the Metropolitan Museum would be an invaluable auxiliary. But the technical manipulations necessary to the practice of this art are relatively simple, and can be mastered with comparative ease. The forms to be learned also, embracing principally the actual proportions and anatomy of the human figure, are necessarily much simpler and fewer and thus more easily mastered, than the countless

complications of aspect which they present to the eye when seen from the innumerable points of view contemplated by the painter. It would seem as if the painter, in order to work without a model, would need to attain a much more highly disciplined development of the representative imagination. The period of preparation may accordingly be briefer for the sculptor than for the painter, and it may indeed be doubted whether it is worth while to separate these from his later studies. The university work might perhaps as well begin with the elements. That is mainly a matter of convenience of administration. But however this point may be determined there would still be a recognized distinction between the first stage and the second, and here again, while the classes in composition and design would be all the time rehearsing their lessons in manipulation and improving their touch, the class in mere modelling should be encouraged to try experiments, by anticipation, in the higher fields of fancy and imagination, by exercises in original composition.

ARCHITECTURE. The Course in Architecture now existing in the University is laid out on lines so nearly in accord with what has been suggested for Painting and Sculpture that but few changes would be needed to bring it into close conformity with them. The study of Composition and Design, both in Architecture and in Ornament is carried on in concert with historical, literary, and scientific studies and with lectures on the Theory of Architecture and upon the Decorative Arts, and it is found practicable to carry on all

this work without going outside the strictly architectural field. The first year is mainly taken up with elementary exercises in mere draughtsmanship. But these have no proper place in a University and it is hoped to ~~finally~~ devolve them upon preparatory schools as soon as proper arrangements can be made to that end.

Of the 27 courses open to students in the Department of Architecture, 19 are devoted to historical, literary and scientific subjects; four to draughtsmanship, and four to design and composition. But more time is given to these last four than to all the rest put together.

The School of Architecture, as has been said, is already endowed with a number of travelling scholarships.

It would seem as if, with the study of Ornament and the Human Figure, and of design and composition, both in the flat and in the round, already provided for in the Schools of Architecture, Sculpture and Painting, very little more would be needed, in the way either of apparatus or of instruction, to give such students as desire to devote themselves to Decoration an opportunity to do so. Decorative Art is equally in touch with Painting, with Sculpture, and with Architecture, and shares the elements which they share with each other. They would suffice to give the student of Decoration pretty much all he needed. Even the student of mural painting can find his requirements met in the higher classes of the School of Painting. A special School of Decorative Art would accordingly seem to be unnecessary, at least in the beginning. Any subsequent development along

the lines of special "Arts" and "Crafts" would probably have to be accompanied by a corresponding development of technical instruction in the preparatory schools.

MUSIC. The analogies between Music and the other Fine Arts are less direct and practical than those between Painting, Sculpture and Architecture, and the instruction which the students of Music would share with other students would probably be of but small extent. But the analogy would seem to be complete between the methods here suggested for these schools and those of the Department of Music as already established. The Course in Music seems to leave to the conservatories and music teachers the whole field of elementary instruction and mechanical execution. The work of the Department appears to be divided for the most part between the intellectual treatment of the subject, both historical and theoretical, and practice in composition. To this the knowledge and skill brought from the conservatory, and the scientific and literary studies pursued in the department, are alike tributary.

Of the eleven Courses now given in the Department of Music, two, those in Orchestral Training and in Chorus Singing, seem to be concerned with execution; five to be historical and scientific, and four to be devoted to composition.

When the time came for formulating detailed programmes of instruction for such Schools as have here been indicated, the persons charged with the work would soon discover which topics were common to all the schools, which special to each. It would probably be found that more specialization was de-

sired in each school then was really practicable, or indeed really desirable. In studying the history of the Renaissance, for instance, the Painters might desire quite a different handling of the subject from that which would best suit the Sculptors or the Architects. Yet a good deal would be common to all three, and a good deal that was not, it would be well for all three to be familiar with, in the interests of the liberality of culture and that mutual understanding between the different artistic professions which it would be one of the chief objects of the university to foster. Each of these closely related Arts throws light upon the others and studies pursued in common would further the sympathy and mutual respect needed for harmonious cooperation between them.

A more difficult matter will be the finding of men competent to conduct such courses. The history, the philosophy, even the chemistry and physics of painting, should not be taught by historians, philosophers or men of science, knowing nothing of painting except by hearsay. Yet to find painters who are also well up in history, philosophy and science, or any one of them, would be a task for Diogenes. It is one of the most satisfactory aspects of this whole enterprise that it contemplates a time, not too far distant, when in all these callings there shall be men, trained in these schools, competent to take a hand in conducting them.

Meanwhile it would probably be best to put at the head of each school a permanent chief whose functions would be largely administrative and educational. It would be his

task to adjust their relations and the complicated and difficult details of what is really a novel undertaking. He would himself give such instruction as he was specially qualified to give, historical, literary, scientific, or artistic, and would be aided by a considerable body of specialists who, under the title perhaps of Lectures, would cooperate with each other in carrying on the work. These auxiliary courses would, from the nature of the case, be somewhat numerous, and many of them brief. But as they would in great part be mutually independent, they need not all be given in any one year and the appointments, as in the case of many English Professorships, might be temporary, and in a manner tentative. The School of Architecture is organized substantially in this way, half of the instructors giving only a part of their time to its service. In this way it endeavors to keep in active touch with the profession it serves.

(signed) William R. Ware.

March 25, 1902.

COLUMBIA UNIVERSITY
IN THE CITY OF NEW YORK

PRESIDENT'S ROOM October 24, 1902.

My dear Sir:-

Preliminary to any formal consideration of the matters discussed in the Annual Report of the President submitted to the Trustees on October 6, 1902, the President invites a free expression of the opinion of each Professor and Adjunct Professor of the University in answer to the following questions:

1. Should the basis for admission to the professional schools of the University, i.e., Law, Medicine, Applied Science, and Teachers College, be
 - (a) The completion of a secondary school course,
 - (b) The completion of a four-years' college course, or
 - (c) The completion of a shortened college course?
2. If you prefer 1(c), to what extent should the college course be shortened?
3. Should any degree, or other academic designation, be granted for the completion of a college course less than four years in length? If so, what degree or designation?
4. Is the existing arrangement by which a College Senior may take the first year of a professional course and count it toward the degree of A.B. satisfactory as a permanent policy?

Your reply is requested before November 20th, if possible.

Very truly yours,

Nicholas Murray Butler

President

COLUMBIA UNIVERSITY
NEW YORK
SCHOOL OF ARCHITECTURE

New York, November 14th., 1902.

My dear Mr. Butler:-

The suggestion that the College course might well be shortened from four years to two, reminds one of the time when it was proposed to cut down the passage of the Atlantic from ten days to five. This has now been accomplished, but we have lost in the process the best part of the voyage, the only part anybody really cared for. What is left us is the first five days, with all their objectionable features.

I should fear something of the same sort for the College-bred ^eman who never got beyond being Freshmen and Sophomores. But might it not be possible to arrange things so that serious students should be able to enter in advanced standing, and to take their two years of College work as Sophomores and Juniors.

This could perhaps be brought about, if the College adhered strictly to the policy of keeping its entrance examinations down to the point where they can be met by students from the ordinary preparatory schools. If at the same time the higher class of secondary schools are encouraged to extend their work, as some of them already do, so as to occupy the ground covered in the Freshman year, their students would regularly enter in advanced standing and could get in two years of hard work the best the College has to offer. The Freshman year would still continue to supply the

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needs of the more poorly prepared students, and the Senior year would continue to a certain extent to anticipate or duplicate, as it does at present, the work of the Professional schools.

Such a policy would have the advantage of affording a two year, three year, or four year course, as might be required, without any violation of College traditions, while it would rob some of the most objectionable of these traditions of their injurious influence. It is a serious disadvantage to the men who now enter College at eighteen or ^enineteen to be subjected to the powerful traditions which impose upon a Freshman class the manners and customs of boys of fifteen or sixteen. These may indeed mend themselves in time. But meanwhile it seems to me that it would be a great gain for the earnest young men who are seeking before entering professional life a more generous and thorough scholarship than even the best secondary schools can offer, but who are unable to devote four years to the purpose, if they could evade the Freshman year altogether.

Giving the degree of Bachelor of Arts at the end of the Junior year would then be giving it, virtually, at the end of a three year's course. But if the fixed requirements of any two years of this course were such as to meet the wants of serious two-year students, they would probably be too laborious to form an integral part of a four year course. From this point of view the plan of

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fixing definite requirements for the degree, and then letting men take it ~~in~~ in four years of residence, or in three, or in two, according to circumstances, would seem to have its advantages.

I am accordingly disposed, on the whole, to favor for the College a course of liberal study which may be easily covered in four years and can be taken without too much difficulty in three, and the first year of which can be omitted by well-trained students. This might in time lead to dropping the Freshman year, with its undesirable traditions, altogether, or to bring them into disrepute.

Two years of liberal studies, in addition to what is given in the best secondary schools seems to be all that is necessary or, on the whole, desirable, either for professional or for business men.

C. D. W.

(Copy.)

Plan letter to G. W.

December 3rd., 1902.

My dear Mr Butler.

I find that in my letter of last week, I responded to only one of your inquiries, namely, No. 2. To the others I should say:—

1. I do not think it is practicable or desirable that all schools of Law, Medicine, Architecture, and the Applied Sciences, should require advanced academic studies of their candidates for admission. But it seems to me both desirable and practicable that the best of them should do so and thus signalize their superiority. By making liberal provisions for Special Students of mature age or of special attainments they would still reach the best and most desirable men from the secondary schools, and from the field of practical work, and such men could be encouraged and helped presently to make up their deficiencies, and to come into line for a degree.

The experience of the School of Architecture with Special Students of this sort has been entirely satisfactory. We have had about one hundred of them in our classes for longer or shorter periods. They have greatly profited by their work here, been very grateful for what they got, done credit to the School, and have made up their examinations and taken their degree in due course.

2. As I have already intimated, I do not think that the real benefits of a College course can be got in less than three years, though I should be glad to substitute a year of advanced work in preparatory schools for the first of the three. If the necessary ground is covered in a shorter time it can only be by an exclusive attention to the work of acquisition which would go far to rob College life of its best re-

COLUMBIA UNIVERSITY
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sults. Men need time for thinking and discussion as well as for reading and studying, and the best men need it the most.

3. I do not think that Special or "partial" Students should have any degree. A certificate of attendance suffices and can be made to vary to suit different conditions.

4. The present arrangement by which a Senior in College can give his whole time to professional studies, or by which a year of such studies can be divided between the Junior and Senior year seems to be a satisfactory scheme, But we have ourselves had no experience of it, and I have no means of knowing how it is working in practice.

C. R. V.