

Appendix VI

Sept 26, 1931

C O N F I D E N T I A L

To the Trustees of the Institute for Advanced Study:

Following the publication in December, 1930, of Bulletin No. 1, entitled "Organization and Purpose", I spent the better part of six months in conference with the leading scholars of America and the main European countries, seeking to elicit their critical opinion as to the value of the proposed Institute and their constructive suggestions as to the initial steps to be taken. I encountered no difference of opinion as to the importance of creating an institute of the proposed character and scope; and this, because, in the last half century, universities have everywhere undergone changes that have impaired their fundamental and essential character. The topics respecting which most discussion took place were the subjects which the Institute should first attack, the persons best qualified to lead, the conditions under which they would work most effectively, the location and ultimate character of the buildings. All these knotty questions need not be decided at once. On one or two of them my mind has become clear, as will be made plain in the course of this report; as to the others, further conference and reflection are still requisite.

I

In the interest of clarity, let me begin by recapitulating the reasons why the Institute for Advanced Study has been established and what its main characteristics should be; for only by recapitulation from time to time can we be sure that we will not be drawn or drift out of our course. Universities, being primarily intellectual in character, ought to be small and plastic; they should be havens where scholars and scientists may regard the world and its phenomena as their laboratory, without being carried off by the maelstrom; they should be simple, comfortable, quiet without being

monastic or remote; they should be afraid of no issue; yet they should be under no pressure from any side which might tend to force their scholars to be prejudiced either for or against any particular solution of the problems under study; and they should provide the facilities, the tranquillity, and the time requisite to fundamental inquiry. Now, current tendencies almost all run in the opposite direction: universities have with startling suddenness become big; having become big, they have lost plasticity; they are so big that in every direction they are pressed for funds; they have had to be organized as business is organized, which is precisely the type of organization that is inimical to the purposes for which universities exist and unpleasant to the type of person needed to promote science and scholarship; they have been dragged into the market place; they have been made to serve scores of purposes - some of them, of course, sound in themselves - which universities cannot serve without abandoning purposes which they and no other institution can serve at all. "It is the multiplicity of its purposes that makes an American university such an unhappy place for a scholar", writes one of my correspondents. Instead of limiting themselves to fundamental inquiries which may in the long run assist in the solution of complex problems, universities have almost without exception also engaged in training immature and unprepared boys and girls for practical tasks which are merely matters of the moment. Instead of providing absolute independence of speech and thought for mature men conscious of their vast responsibilities, universities have generally - though exceptions may be found - pursued two courses: emitted superficial utterances which only add to the existing Babel or avoided delicate and controversial issues, particularly in the social and economic realms. A repressive, often an unconsciously repressive influence, has emanated from trustees or executive officers. Scholarship does not prosper under the conditions I have briefly enumerated. In the entire course of my travels thus far,

I have encountered no one who felt that the present conditions of university life are favorable to sound thinking and contemplative living, though, to be sure, instances in abundance can be cited in which individuals have created or have insisted upon obtaining for themselves special terms which make their portion tolerable.

The suggestions that the Institute for Advanced Study should be small, that its staff and students or scholars should be few, that administration should be inconspicuous, inexpensive, subordinate, that members of the teaching staff, while freed from the waste of time involved in administrative work, should freely participate in decisions involving the character, quality, and direction of its activities, that living conditions should represent a marked improvement over contemporary academic conditions in America, that its subjects should be fundamental in character, and that it should develop gradually - on these suggestions there was on both sides of the Atlantic unanimous agreement.

To my request for constructive ideas, the response was different. Men knew more or less clearly what they would like or needed; but as no one had supposed that an institution of the kind described was likely to be established, no one was prepared to be definite in his immediate recommendations. In informal talk, often occupying many hours, we browsed over the whole field; frequently, before we parted, I was promised a memorandum which would embody deliberate observations as to procedure, personnel, subjects, etc. In what I now write, I am drawing upon these informal conferences, upon such notes and reflections, as I made at the time and subsequently, and upon the memoranda which have come to me from America, England, France, Germany, and Italy. I am indebted, very deeply indebted to all who gave me freely of their time, thought, and experience; and yet I should be at a loss to assign responsibility, if I were asked as to any particular item.

II

I have already reviewed the differences between existing universities and the Institute founded by Mr. Bamberger and Mrs. Fuld. Let me now draw a line between the Institute for Advanced Study, as I conceive it, and a research institute. The Institute for Advanced Study will, of course, by reason of its constitution and conception be a research institute; if the members of its staff are not contributors to the progress of knowledge and the solution of problems, there is no sufficient reason for setting it up; but they will also be teachers, men who have chosen a few competent and earnest disciples engaged in the mastery of a subject, precisely as the pupils of all the great masters of the last century - of Clerk Maxwell, Michael Foster, and Vinogradoff in England, of Claude Bernard or Halévy in France, of Helmholtz, Ludwig, and Wilamowitz in Germany - were in the first instance concerned to learn thoroughly physics, physiology, institutions, or Greek, as the case might be. Teaching should, however, be informal; for, if formal, mechanism will be devised; its burden should be light, for, if it is heavy, the teacher has too many pupils or the pupils are unfit. And the students may at times be investigators too, though not prematurely at the price of mastering their subjects.

In the so-called "research institutes" teaching is, of course, also carried on, though in somewhat different fashion. The members of a research institute are also learners, whatever else they be. And yet the emphasis is different, for the research institute is primarily concerned with problems, very specific problems, as a rule; and young men enter either as assistants to older workers or as novices to be tried out by time. The Institute for Advanced Study will be neither a current university, struggling with diverse tasks and many students, nor a research institute, devoted solely to the solution of problems. It may be pictured as a wedge inserted between the two -

a small university, in which a limited amount of teaching and a liberal amount of research are both to be found. Persons who require to be drilled or taught hard do not belong within the Institute for Advanced Study. The level of the teaching and its form mark it off sharply from college teaching, from most university teaching, from technological or professional teaching. This granted, the professor himself benefits, if for an hour or two weekly, in addition to his own research and the supervision of a few investigations, he discusses with a small thoroughly competent body a larger theme. He is thus assisted in preserving his own perspective, and he has a motive for wider reading and broader contacts.

If I may endeavor to visualize the Institute tentatively, I should think of a circle, called the Institute for Advanced Study. Within this, I should, one by one, as men and funds are available - and only then - create a series of schools or groups - a school of mathematics, a school of economics, a school of history, a school of philosophy, etc. The "schools" may change from time to time; in any event, the designations are so broad that they may readily cover one group of activities today, quite another group, as time goes on. Thus, from the outset the school of mathematics may well contain the history or philosophy of science; the school of economics, a chair of law or political theory. Each school should conduct its affairs in its own way; for neither the subjects nor the scholars will all fit into one mould. An annually changing chairman would perhaps be the only officer requisite. There should be complete academic freedom as there is in England, France, and Germany. We are, let it be remembered, dealing with seasoned and, I hope, eminent scholars, who must not be seriously or long diverted from creative work. These men know their own minds; they have their own ways; the men who have, throughout human history, meant most to themselves and to human progress have usually followed their own inner light; no organizer,

no administrator, no institution can do more than furnish conditions favorable to the restless prowling of an enlightened and informed human spirit, seeking its intellectual and spiritual prey. Standardization and organization do not aid: they are simply irksome.

III

Delicate questions arise in connection with the relations which should exist between director, staff, and trustees. Incidentally I have touched on them in saying that, as a matter of course, the staff will be made up of mature scholars, presumably conscious of the weight that should attach to their utterances and actively participating in the government of the Institute. But the subject is a difficult one, and I am not yet prepared to submit further positive recommendations, though it has received my continuous attention. I am clear that the relationship between the executive officers and the faculty is not usually in America cordial or satisfactory. On the contrary, for one reason or another, the American professorate is unhappy - and it will not enlist the country's best brains in sufficient number until the atmosphere is radically changed. I have already suggested changes of a fundamental character, among them the inclusion in the board of trustees of outside scholars as well as members of its own staff. Whether this is all that need be done to give learning its proper weight in the Institute, I am not at this moment prepared to say. I do say, however, that the Institute exists for the sake of learning and that policies and measures that are inimical to the happy and enthusiastic pursuit of learning are necessarily wrong. It has been urged that trustees should limit their activities to business matters and that faculties should govern all else. In support of this contention Germany, France, Oxford and Cambridge are cited. But none of these instances is convincing. In Germany, a powerful ministry is in constant cooperation, as it is in occasional conflict with the universities; practically the same is true in France, where,

however, the bureaucratic habit is stronger; Oxford and Cambridge do indeed govern themselves, but on three occasions in the last half century Parliament has intervened through Royal Commissions in order to cure some of the defects due to government by exclusively academic bodies. The results of the last Royal Commission were so unsatisfactory that a voluntary commission composed of scholars and laymen has now undertaken the study of the entire problem and has published the first of its reports. Both lay trustees, alone, and teachers, alone, are liable to be one-sided. When the president is the sole link or channel of communication between the staff or trustees, he tends to be autocratic and is unlikely to be widely informed. Our American experience shows the consequences. On the other hand, faculty government would distract scholars and might lead to internal and factional difficulties. We have, as I have said, tried to correct these weaknesses by constituting the Board of Trustees of the Institute out of laymen, academic personages not members of the Institute, and persons chosen from the Institute staff. Thus every relevant point of view should get a hearing. At present, this arrangement will, I believe, suffice. Further steps can be taken, if problems arise, for the solution of which this simple organization is inadequate. I fear, however, that mere organization and rules will not alone achieve our purpose - that of creating a genuine seat of learning. Sympathy, helpfulness, and mutual respect, involving director, trustees, and faculty are all requisite to create an atmosphere free of tension, attractive to men of high attainments and to students of unusual ability.

The schools composing the Institute should each select and admit its own students; no registration office is needed, for under existing academic conditions in America the possession of a diploma or degree does not indicate whether its owner is fit or unfit for advanced study. They must be discovered by any means calculated to locate them. Such students do indeed exist in

America in considerable numbers; but they are not easily found, for already universities bid against each other for them either by offering fellowships freely or by offering part-time employment. I am sure that employment as assistant at this stage of the student's progress is wrong: in a recent report the President of Harvard deplors the fact that of the graduate students of Harvard University 56% are now "part-time". I should urge that students be as a rule full-time, though I can conceive of circumstances and conditions which may justify the admission of a thoroughly competent and highly advanced student also otherwise engaged, that fellowships, grants, or more often loans be available for persons of distinctly unusual gifts and promise who cannot otherwise pursue their studies under proper conditions, and that reasonable fees be charged in other cases. The budget and the program should be so carefully controlled that the Institute will for some years at least be independent of receipts from fees. The precise manner of making the annual budget can be determined somewhat later; I am clear that the Institute should not annually spend its entire income, that it should undertake nothing involving a deficit, a procedure that is all too common and with disastrous results. Tentatively each school may work out its budget, and the several budgets can perhaps be harmonized in conferences between the director and the several schools, in preparation for consideration, first, by a budget committee of the Board of Trustees, consisting, perhaps, as at the Rockefeller Institute for Medical Research, of three scholars and two laymen, and finally by the Board as a whole.

IV

No requirements are needed as to the maximum or minimum number of hours or years that the student must or may work, neither as to majors or minors requisite to the attainment of a degree, and we can determine experimentally problems such as the length and arrangement of terms. There will be excellent students who will work in one way; equally excellent students who

will work quite differently. Subjects or fields do not have to be "covered" - cannot be, at a high level. In his own time, the student may show that he has mastered his subject, without which mastery the Institute should give him no mark of approval. He may perhaps, in addition thereto, have done what the Germans call an "Arbeit"; if so, he can be further distinguished. But in any case the numbers will be so small that professor and students will know one another intimately; machinery will be superfluous; arrangements should vary from man to man, from year to year, from subject to subject. The highest possible standard of both general and special education should be insisted on: so much the founders proposed in their first letter to the Trustees.

V

In this connection I wish to guard against a misinterpretation of the term, "schools". I have said that it is to be loosely interpreted. I may now add that it involves no particular theory as to how knowledge is to be advanced. In America, one is told time and again that knowledge must be "correlated", that "team-work" is essential. Now there is no question that scholars rely upon one another, as they rely upon the long history of which they are endeavoring to forge a new link. But great scholars, scientists, and philosophers may be mentioned, who, while leaning upon the past, did their fundamental thinking alone - Kant, Newton, Faraday, Darwin, Henry, and more recently Einstein, who has latterly said:

"I am a horse for single harness, not cut out for tandem or team work; for well I know that in order to attain any definite goal, it is imperative that one person should do the thinking and commanding and carry most of the responsibility. But those that are led should not be driven, and they should be allowed to choose their leader."

While, therefore, I am of the opinion that the Institute as a teaching body can probably best function if the representatives of a given subject meet and discuss their common interests as a school, I should also allow every

individual and every school or group to pursue the methods that seem to him or to them best. Between men of first-rate ability collaboration or team work cannot be arranged or forced; on the other hand, collaboration and discussion will take place, where a relatively small group of scholars have abundant opportunity to discuss with one another either their own individual problems or problems that lie on the border line.

In course of time, the buildings may be so conceived and executed as to facilitate intercourse of this type. I have in mind the evolution that in the process of centuries has taken place at All Souls College, Oxford, where, as in the proposed Institute, there are no undergraduate students, and where advanced students and the older Fellows live under ideal conditions, whether for their individual work or for collaboration and coöperation. No one planned all this. It grew up because scholars were left free to work out their own salvation. It cannot be imitated or taken over; but it is there, as evidence that the thing can be done, if the pace is not forced and if the hand of the executive and administrator touches but lightly the growing organism. There is a school of mathematics, let us say, made up of mathematicians; but the mathematicians will lunch, smoke, chat, walk, or play golf with the physicists; can any possible form of organization give the flexibility, the intimacy, the informality, the stimulus thus attainable? No "director" or "departmental head" or "executive" needs to worry for fear that independent or water-tight groups, ignorant of one another, will form or not form. If the spirit of learning animates the Institute - and without that there is no reason for its existence - men will talk together and work together, because they live together, have their recreation together, meet on the same humane social level, and have a single goal.

VI

In my opinion, every step taken in forming the Institute should be

viewed as experimental. And this will be easy, if the Institute is kept small and if its quality is securely guarded. To the question of what subjects or schools to start with I have given much attention; and I have profited by judgment and advice obtained from many sources. I assume at the outset that no subject will be chosen or continued unless the right man or men can be found. Subject to this reservation, never to be forgotten, a very vague statement is contained in Bulletin No. 1. I can be somewhat more definite now, though retaining liberty to change up to the very moment when action is resolved upon. The decision not to begin with the physical or biological sciences has become stronger; they are already better done than other subjects; moreover, they are creating problems with which universities are not now dealing competently. Finally, they are not at the very foundation of modern science. That foundation is mathematics; and it happens that mathematics is not a subject in which at present many American universities are eminent. Mathematics is the severest of all disciplines, antecedent, on the one hand, to science, on the other, to philosophy and economics and thus to other social disciplines. With all its abstractness and indifference both pure and applied scientific and philosophic progress of recent years has been closely bound up with new types and methods of sheer mathematical thinking.

In behalf of mathematics, other things are to be said in addition to the fact that it is both fundamental and severe. It has, to be sure, uses, as all the higher activities of the human mind have uses, if the word, "use", is broadly and deeply understood. But its devotees are singularly unconcerned with use, most of all with immediate use, and this state of mind and spirit, it seems to me, ought to dominate the new Institute. Nothing is more likely to defeat itself, nothing is on the whole less productive in the long run than immediacy in the realm of research, reflection, and contemplation. The men who have moved the world have usually been men who have followed the will of the

wisp of their own intellectual and spiritual curiosity. If we can make the Institute a congenial home for those who are curious in this sense, it will have its effect. On the other hand, there exists the precisely opposite type of mind - the mind that derives its initial stimulus from a practical need or problem. Lavoisier, the founder of modern chemistry, is said to have been started on his road by the need of improving the lighting of the streets of Paris; and Justice Holmes has shown that a great political philosopher can find his text and starting point in purely practical problems that arise in administering the law. Pasteur, Lister, Koch, Ehrlich, and an unending row of physicists and chemists have their feet in both worlds - the world of practice and the world of theory. Minds that are fundamental in their searching, whatever the spring that moves them - curiosity, pity, imagination, or practical sense - all belong in an institute for advanced study.

Now mathematics is singularly well suited to our beginning. Mathematicians deal with intellectual concepts which they follow out for their own sake, but they stimulate scientists, philosophers, economists, poets, musicians, though without being at all conscious of any need or responsibility to do so. Moreover, it is no small, though an accidental and incidental advantage, at a time when we wish to retain plasticity and postpone acts and decisions that will bind us, that mathematics is the simplest of subjects to begin with. It requires little - a few men, a few students, a few rooms, books, blackboard, chalk, paper, and pencils. Let us endeavor, therefore, to bring together a fertile mathematical group; let us provide for them ideal conditions of work. In due course, provision can be made for mathematical physics, and the door thus opened for another step forward when conditions are ripe; and for statistics, which will open a door on the other side.

At the same time, assuming that funds are adequate and that the right persons can be secured, I am now inclined to include economics. It is, as I

have intimated, linked to mathematics by statistics. In other respects, it seems to be everything that mathematics is not, for it is obviously of the world of action, rather than the world of sheer thought. But there are grave reasons for this choice. There is no more important subject than the evolution of the social organism, and the social organism is developing now as never before under the pressure of economic forces. Before our very eyes, mankind is conducting portentous social-economic experiments. Science and philosophy are creating new means and new goals; the economist must have something to say as to their value and feasibility. Almost half a century ago, while still a Massachusetts judge, Justice Holmes declared: "The man of the future is the man of statistics and the master of economics." But where does the economist enjoy the independence and the leisure which have for a century been enjoyed by the philosopher and the physicist? Where is the economist who is by turns a student of practice and a thinker - in touch with the realities, yet never their slave? At present, economists too often live from day to day, from hand to mouth; a professor, a journalist, a handyman for banks and business men. Economics, hard pressed by the tasks of the day, has not usually enlisted minds willing to work in leisurely and philosophic fashion. Hence, in part, its failures and disappointments. Half-baked ideas, experiments, recommendations flood the world; economists are simultaneously expected to be investigators, journalists, advisers, forecasters, and what not. Not infrequently, the source of their income may impair the soundness or reliability of their judgment. Nowhere does a group of economists enjoy the conditions which Pasteur enjoyed, when he was working out the foundations of preventive medicine, or Helmholtz, Clerk Maxwell, and Rowland, when they were working out the foundations of modern physics.

Time was, when Europe was exposed to ravage by typhus or bubonic plague. Their origin and progress were shrouded in mystery; but the veil has

now been lifted; these plagues will not recur, because their causes and methods of distribution are understood; they can be prevented or stopped. But from social and economic plagues the world is not yet immune. They continue to come and go mysteriously. We cannot any longer sit helpless before these social and economic plagues, which, once well under way, ravage the world, as our present economic and social perplexities and sufferings show. The very conquests which science has wrought - increased production and easier distribution, which ought to be blessings - have drawn in their wake curses that may or may not be connected with them. On these intricate and recondite matters I have no opinion; but clear it is that nowhere in the world does the subject of economics enjoy the attention that it deserves - economics in the broad sense, inclusive of political theory, ethics, and other subjects that are involved therein. The Institute for Advanced Study has here a pressing opportunity; and assuredly at no time in the world's history have phenomena more important to study presented themselves. For the plague is upon us, and one cannot well study plagues after they have run their course; for with the progress of time it is increasingly difficult to recover data, and memory is, alas, short and treacherous.

Thus I conceive a group of economists and their associates, financially independent, unhurried, and disinterested, in closest possible contact with the phenomena of business and government and at this high level endeavoring to understand the novel phenomena taking place before our eyes. The mathematician is in a sense secure from immediacy; the economist must be made so. He has at times to mingle in the stream of life; we must make it safe for him to do so. He must be enabled to take the same attitude towards social phenomena that the medical scientist has now been enabled to take towards disease. Not even the practical man need be concerned as to the good of this sort of work. The late Professor Starling, discussing discovery and research, said wisely:

"The preparation of insulin by Banting and Best, an admirable piece of work, is but the last step of an arduous journey, in which hundreds of workers have taken part. There is no need to be concerned about 'discoveries'. It is only necessary to ensure that the growing tree of knowledge is dug round and pruned and watered."

Beyond these two schools, I do not now look, though it is obvious how readily history and other schools - literature, music, or science - can be added when money, men, and ideas are available. I am opposed to making a "small beginning" in other subjects that will soon create a deficit on the theory - mistaken, as I think - that, if the pressure becomes acute enough, funds can somehow be obtained for necessary expansion. Experience shows that under such conditions the head of an institution must become a money-getter and that the university itself may lose its freedom in certain directions. I favor, as I have already said, financial, administrative, and educational methods that will leave a surplus, not create a deficit. Thus the Institute will be enabled to pursue a policy analogous to that of the Collège de France, viz., to take advantage of surprises by creating from time to time a chair for a new subject or an unexpected person. By the same token, not being concerned with subjects or degrees in the ordinary sense, chairs that have served their purpose can be discontinued. In these respects the stimulating influence of the Collège de France has proved of incalculable value. It has pioneered in every direction, even in medicine, in which, while never attempting the formation of a faculty, it has furnished chairs and laboratories for some of the greatest of medical scientists. Under such circumstances, growth will be slow and unsymmetrical, as it should be; for, if growth is slow, we shall learn much from experience - much that will be helpful in reshaping such schools as we start, much that will be helpful in shaping others; and, if the Institute is unsymmetrical, it can the more readily remain elastic and highly vitalized.

VII

Scholarly groups such as I have described are not readily procurable. The war destroyed many persons who would have been eligible; the unsatisfactory economic status of teaching surely deters others. None the less, the conditions to be offered will, I believe, attract some American scholars of high rank; they will certainly attract, for varying, but always sufficiently long periods, distinguished foreigners. Foreigners often find it so difficult to accommodate themselves to our usual type of academic organization that they are hardly more than decorative. I suspect that, in the Institute, as above described, they will feel themselves "at home". In the great days of the early Hopkins, President Gilman "borrowed" and recommended "borrowing". I am hopeful that "borrowing" for periods long enough to be telling may become a recognized feature of the new Institute. Because of the increased cost of living and travel, students, unless financed by outside agencies, can no longer wander as freely as they did half a century ago; it may be at times easier to reverse the process by bringing the professor to the students rather than to send the students to the professor. It is, however, also important that the director and the staff should from time to time visit other institutions in this country and Europe. Foreign scholars and scientists, living, as they do, in easy reach, know one another personally. The American scholar or scientist travels relatively little; neither he nor his university can afford the expense. Yet nothing is more stimulating - or in the long run more economical - than personal contacts. How can the head of a university judge wisely, if he has not for a generation been in touch with scholars and scientists, if he does not keep in close and constant contact with scholars and scientists, on the one hand, and with the real world, on the other? Business men know better; they are constant first-hand students of their competitors; on this point an institute for advanced study can certainly learn something important from industry.

VIII

I have from the start insisted that in nothing can the new Institute do a better service or exert a more wholesome influence than by placing its staff on a sound economic basis. The professor is not in competition with professional or business life; the income of a busy lawyer or doctor or business man would harm, not help, him. He must be so devoted to learning that he would be willing for its sake to endure hardship and deprivation. All too frequently he has done and is doing so. But it does not follow that, because riches may harm him, comparative poverty aids him. His needs are relatively simple, though, such as they reasonably are, they should be amply satisfied; and a contributory pension scheme should be open to all connected with the Institute. It does not help the clarity or concentration of a man's thinking, if he is oppressed by the fear of a needy or precarious old age, if on retirement his scale of living, already none too lavish, has to be suddenly reduced, if his wife is compelled to forgo domestic help, if his children are deprived of liberal educational opportunities, if he lives in cramped quarters, if he lacks privacy, books, music, or travel, if he is led either to marry for money or to forgo the raising of a family, if a gap - social or financial - exists between the administrative and executive heads, on the one hand, and the scholar, on the other. Nor is the university assisted, if a low scale of remuneration draws to its staff mainly mediocre or part-time workers, forced to increase their income by splitting their energy and attention. Younger men, still on trial, may be decently remunerated without danger, provided their terms of service are definitely limited. We shall open a new era in education, if our salaries indicate that, whatever his importance, not the administrator, but the faculty, creates a university. Surely the nation which has built palaces for libraries, laboratories, and students will not permanently ignore the professor who is in truth the university itself. For, as life becomes more complicated, the university

becomes more and more important; into its chairs an ever larger share of brains and devotion must be drawn. Under what conditions will this take place? It is our duty to ascertain them and to meet them. But such a scale of remuneration is not a one-sided affair; it pledges the professor to devote his whole time to the university and to avoid gainful activities. Should this policy be accepted, as in my opinion it must, the entire faculty of an American institution will thus be placed on a full-time basis; real academic freedom - the freedom to work unworried and unhampered - will be attained. Under such circumstances, the professor of economics may elect to study thorny and contentious financial, business, or social problems; he can take his time in so doing; whatever his conclusions, his intellectual integrity is not likely to be impaired or impugned. On this basis alone can a university or an institute be in the world and of the world, as far as any individual may desire, and yet preserve its absolute independence and freedom of thought and speech.

IX

The success of the Institute will in the slow processes of time be measured by the development of its staff, the students that it trains, and the additions that it makes to the world's fund of knowledge and experience. For the future of its students it need take little thought; their number will be limited; they will find their level. Additions to knowledge take the form of papers, books, and occasional addresses. Many American universities maintain their own presses. They may in some cases be justified in so doing; but the Institute for Advanced Study needs no press. A university press is a business; if possible, it must pay a profit - at least, it must endeavor to carry itself. In either event, it usually publishes what will sell - sometimes worth-while books and pamphlets, often books and pamphlets that had far better remain unprinted; it shrinks from publications that appeal to a small circle of readers and students, though from a university point of view such publications may be

of prime importance. I favor a strict policy in respect to publication. "Viel arbeiten, wenig publizieren", Ehrlich used to say. Let us hold to a high standard of performance as to both form and content. When a paper deserves publication, there will usually be a place for it; if a larger work merits printing, it can easily be handled, provided the actual outlay is underwritten. Thus university organization will be simplified; money will be saved; distribution will be more skilfully managed. Publicity need not be sought: if the Institute succeeds, the real problem will be how to avoid or restrict it.

I have said nothing definite thus far as to buildings and site, and that because despite their crucial importance these things come second. Nevertheless, they cannot be ignored. A group of scholars should not be isolated; they need access to libraries, museums, collections, and other scholars - the more so, because a slow development is contemplated. If the life of the academic body is to be normal and wholesome, the accessories of civilization must be obtainable with such means as they possess - I mean schools, physicians, friends, and domestic aid. "Association with other men like themselves", writes one who has thought deeply about the project, "will be agreeable and informed by the interests and graces of the mind. Life will be intensely active, but leisurely at the same time, as scholars and wise men know how to make life leisurely. When I contemplate the possibilities of leading life under such circumstances, I am filled with a deep enthusiasm and a vast yearning. If I am so moved, I cannot doubt that there must be countless other men who are moved by the same desires." It is not, in the first instance, a question of erecting buildings; for the subjects, with which I propose that we begin, any kind of buildings may be made to answer. In time, certain conditions affecting the site will require consideration. It should be large enough to be forever protected against the noise and bustle of urban or commercial life. But I have come to no conclusion on these points; I have merely been analyzing the problems in order to separate

the various factors. I shall suggest the appointment of a small committee which may make a preliminary study of this question with a view to general discussion by the Board later.

Certain topics I have purposely omitted in this report. I have said nothing, for example, of the duties of the director. These are described in general terms in the By-Laws; to this description, nothing needs at this moment be added. For the same reason I have not touched on details of business management; for the present they can continue to be carried by cooperation between the treasurer and the assistant secretary. Many persons raise the problem of a library; but the library problem depends partly on location; partly it will be solved by equipping with books the several schools; out of these, by the mere process of addition, the Institute library will ultimately grow. I have proposed nothing definite as to fees or the terms on which degrees will be conferred: both subjects ought to be discussed by the Committee on Education which cannot be formed until the first staff appointments are made.

In closing, let me say that I am not unaware of the fact that I have sketched an educational Utopia. I have deliberately hitched the Institute to a star; it would be wrong to begin with any other ambition or aspiration. On the other hand, I have been careful to keep within the realm of the practical. But I do not deceive myself; it will not be easy even to begin on any such basis; it will be harder, as the years pass, to keep to this standard. We shall find ourselves dealing with men and women, not with angels or super-men. Difficulties will arise; disappointments will occur. But we shall be helped, not harmed, by the high level at which we have pledged ourselves to act. In any case, unless we attempted something much higher than is now attained, there would be little reason to attempt anything at all.

X

For the present, I ask no final action on this report. I hope only that it may be freely discussed. On several important matters, I desire to seek further counsel. When the time is ripe, I shall ask the Board for authority to proceed. Meanwhile, I wish to feel free to alter it in the light of such further knowledge as I may obtain.

Abraham Flexner

Sept. 26, 1931.

C O N F I D E N T I A L

Sept 26, 1931

To the Trustees of the Institute for Advanced Study:

Following the publication in December, 1930, of Bulletin No. 1, entitled "Organization and Purpose", I spent the better part of six months in conference with the leading scholars of America and the main European countries, seeking to elicit their critical opinion as to the value of the proposed Institute and their constructive suggestions as to the initial steps to be taken. I encountered no difference of opinion as to the importance of creating an institute of the proposed character and scope; and this, because, in the last half century, universities have everywhere undergone changes that have impaired their fundamental and essential character. The topics respecting which most discussion took place were the subjects which the Institute should first attack, the persons best qualified to lead, the conditions under which they would work most effectively, the location and ultimate character of the buildings. All these knotty questions need not be decided at once. On one or two of them my mind has become clear, as will be made plain in the course of this report; as to the others, further conference and reflection are still requisite.

I

In the interest of clarity, let me begin by recapitulating the reasons why the Institute for Advanced Study has been established and what its main characteristics should be; for only by recapitulation from time to time can we be sure that we will not be drawn or drift out of our course. Universities, being primarily intellectual in character, ought to be small and plastic; they should be havens where scholars and scientists may regard the world and its phenomena as their laboratory, without being carried off by the maelstrom; they should be simple, comfortable, quiet without being

monastic or remote; they should be afraid of no issue; yet they should be under no pressure from any side which might tend to force their scholars to be prejudiced either for or against any particular solution of the problems under study; and they should provide the facilities, the tranquillity, and the time requisite to fundamental inquiry. Now, current tendencies almost all run in the opposite direction: universities have with startling suddenness become big; having become big, they have lost plasticity; they are so big that in every direction they are pressed for funds; they have had to be organized as business is organized, which is precisely the type of organization that is inimical to the purposes for which universities exist and unpleasant to the type of person needed to promote science and scholarship; they have been dragged into the market place; they have been made to serve scores of purposes - some of them, of course, sound in themselves - which universities cannot serve without abandoning purposes which they and no other institution can serve at all. "It is the multiplicity of its purposes that makes an American university such an unhappy place for a scholar", writes one of my correspondents. Instead of limiting themselves to fundamental inquiries which may in the long run assist in the solution of complex problems, universities have almost without exception also engaged in training immature and unprepared boys and girls for practical tasks which are merely matters of the moment. Instead of providing absolute independence of speech and thought for mature men conscious of their vast responsibilities, universities have generally - though exceptions may be found - pursued two courses: emitted superficial utterances which only add to the existing Babel or avoided delicate and controversial issues, particularly in the social and economic realms. A repressive, often an unconsciously repressive influence, has emanated from trustees or executive officers. Scholarship does not prosper under the conditions I have briefly enumerated. In the entire course of my travels thus far,

I have encountered no one who felt that the present conditions of university life are favorable to sound thinking and contemplative living, though, to be sure, instances in abundance can be cited in which individuals have created or have insisted upon obtaining for themselves special terms which make their portion tolerable.

The suggestions that the Institute for Advanced Study should be small, that its staff and students or scholars should be few, that administration should be inconspicuous, inexpensive, subordinate, that members of the teaching staff, while freed from the waste of time involved in administrative work, should freely participate in decisions involving the character, quality, and direction of its activities, that living conditions should represent a marked improvement over contemporary academic conditions in America, that its subjects should be fundamental in character, and that it should develop gradually - on these suggestions there was on both sides of the Atlantic unanimous agreement.

To my request for constructive ideas, the response was different. Men knew more or less clearly what they would like or needed; but as no one had supposed that an institution of the kind described was likely to be established, no one was prepared to be definite in his immediate recommendations. In informal talk, often occupying many hours, we browsed over the whole field; frequently, before we parted, I was promised a memorandum which would embody deliberate observations as to procedure, personnel, subjects, etc. In what I now write, I am drawing upon these informal conferences, upon such notes and reflections, as I made at the time and subsequently, and upon the memoranda which have come to me from America, England, France, Germany, and Italy. I am indebted, very deeply indebted to all who gave me freely of their time, thought, and experience; and yet I should be at a loss to assign responsibility, if I were asked as to any particular item.

II

I have already reviewed the differences between existing universities and the Institute founded by Mr. Bamberger and Mrs. Fuld. Let me now draw a line between the Institute for Advanced Study, as I conceive it, and a research institute. The Institute for Advanced Study will, of course, by reason of its constitution and conception be a research institute; if the members of its staff are not contributors to the progress of knowledge and the solution of problems, there is no sufficient reason for setting it up; but they will also be teachers, men who have chosen a few competent and earnest disciples engaged in the mastery of a subject, precisely as the pupils of all the great masters of the last century - of Clerk Maxwell, Michael Foster, and Vinogradoff in England, of Claude Bernard or Halévy in France, of Helmholtz, Ludwig, and Wilamowitz in Germany - were in the first instance concerned to learn thoroughly physics, physiology, institutions, or Greek, as the case might be. Teaching should, however, be informal; for, if formal, mechanism will be devised; its burden should be light, for, if it is heavy, the teacher has too many pupils or the pupils are unfit. And the students may at times be investigators too, though not prematurely at the price of mastering their subjects.

In the so-called "research institutes" teaching is, of course, also carried on, though in somewhat different fashion. The members of a research institute are also learners, whatever else they be. And yet the emphasis is different, for the research institute is primarily concerned with problems, very specific problems, as a rule; and young men enter either as assistants to older workers or as novices to be tried out by time. The Institute for Advanced Study will be neither a current university, struggling with diverse tasks and many students, nor a research institute, devoted solely to the solution of problems. It may be pictured as a wedge inserted between the two -

a small university, in which a limited amount of teaching and a liberal amount of research are both to be found. Persons who require to be drilled or taught hard do not belong within the Institute for Advanced Study. The level of the teaching and its form mark it off sharply from college teaching, from most university teaching, from technological or professional teaching. This granted, the professor himself benefits, if for an hour or two weekly, in addition to his own research and the supervision of a few investigations, he discusses with a small thoroughly competent body a larger theme. He is thus assisted in preserving his own perspective, and he has a motive for wider reading and broader contacts.

If I may endeavor to visualize the Institute tentatively, I should think of a circle, called the Institute for Advanced Study. Within this, I should, one by one, as men and funds are available - and only then - create a series of schools or groups - a school of mathematics, a school of economics, a school of history, a school of philosophy, etc. The "schools" may change from time to time; in any event, the designations are so broad that they may readily cover one group of activities today, quite another group, as time goes on. Thus, from the outset the school of mathematics may well contain the history or philosophy of science; the school of economics, a chair of law or political theory. Each school should conduct its affairs in its own way; for neither the subjects nor the scholars will all fit into one mould. An annually changing chairman would perhaps be the only officer requisite. There should be complete academic freedom as there is in England, France, and Germany. We are, let it be remembered, dealing with seasoned and, I hope, eminent scholars, who must not be seriously or long diverted from creative work. These men know their own minds; they have their own ways; the men who have, throughout human history, meant most to themselves and to human progress have usually followed their own inner light; no organizer,

no administrator, no institution can do more than furnish conditions favorable to the restless prowling of an enlightened and informed human spirit, seeking its intellectual and spiritual prey. Standardization and organization do not aid: they are simply irksome.

III

Delicate questions arise in connection with the relations which should exist between director, staff, and trustees. Incidentally I have touched on them in saying that, as a matter of course, the staff will be made up of mature scholars, presumably conscious of the weight that should attach to their utterances and actively participating in the government of the Institute. But the subject is a difficult one, and I am not yet prepared to submit further positive recommendations, though it has received my continuous attention. I am clear that the relationship between the executive officers and the faculty is not usually in America cordial or satisfactory. On the contrary, for one reason or another, the American professorate is unhappy - and it will not enlist the country's best brains in sufficient number until the atmosphere is radically changed. I have already suggested changes of a fundamental character, among them the inclusion in the board of trustees of outside scholars as well as members of its own staff. Whether this is all that need be done to give learning its proper weight in the Institute, I am not at this moment prepared to say. I do say, however, that the Institute exists for the sake of learning and that policies and measures that are inimical to the happy and enthusiastic pursuit of learning are necessarily wrong. It has been urged that trustees should limit their activities to business matters and that faculties should govern all else. In support of this contention Germany, France, Oxford and Cambridge are cited. But none of these instances is convincing. In Germany, a powerful ministry is in constant cooperation, as it is in occasional conflict with the universities; practically the same is true in France, where,

however, the bureaucratic habit is stronger; Oxford and Cambridge do indeed govern themselves, but on three occasions in the last half century Parliament has intervened through Royal Commissions in order to cure some of the defects due to government by exclusively academic bodies. The results of the last Royal Commission were so unsatisfactory that a voluntary commission composed of scholars and laymen has now undertaken the study of the entire problem and has published the first of its reports. Both lay trustees, alone, and teachers, alone, are liable to be one-sided. When the president is the sole link or channel of communication between the staff or trustees, he tends to be autocratic and is unlikely to be widely informed. Our American experience shows the consequences. On the other hand, faculty government would distract scholars and might lead to internal and factional difficulties. We have, as I have said, tried to correct these weaknesses by constituting the Board of Trustees of the Institute out of laymen, academic personages not members of the Institute, and persons chosen from the Institute staff. Thus every relevant point of view should get a hearing. At present, this arrangement will, I believe, suffice. Further steps can be taken, if problems arise, for the solution of which this simple organization is inadequate. I fear, however, that mere organization and rules will not alone achieve our purpose - that of creating a genuine seat of learning. Sympathy, helpfulness, and mutual respect, involving director, trustees, and faculty are all requisite to create an atmosphere free of tension, attractive to men of high attainments and to students of unusual ability.

The schools composing the Institute should each select and admit its own students; no registration office is needed, for under existing academic conditions in America the possession of a diploma or degree does not indicate whether its owner is fit or unfit for advanced study. They must be discovered by any means calculated to locate them. Such students do indeed exist in

America in considerable numbers; but they are not easily found, for already universities bid against each other for them either by offering fellowships freely or by offering part-time employment. I am sure that employment as assistant at this stage of the student's progress is wrong: in a recent report the President of Harvard deploras the fact that of the graduate students of Harvard University 56% are now "part-time". I should urge that students be as a rule full-time, though I can conceive of circumstances and conditions which may justify the admission of a thoroughly competent and highly advanced student also otherwise engaged, that fellowships, grants, or more often loans be available for persons of distinctly unusual gifts and promise who cannot otherwise pursue their studies under proper conditions, and that reasonable fees be charged in other cases. The budget and the program should be so carefully controlled that the Institute will for some years at least be independent of receipts from fees. The precise manner of making the annual budget can be determined somewhat later; I am clear that the Institute should not annually spend its entire income, that it should undertake nothing involving a deficit, a procedure that is all too common and with disastrous results. Tentatively each school may work out its budget, and the several budgets can perhaps be harmonized in conferences between the director and the several schools, in preparation for consideration, first, by a budget committee of the Board of Trustees, consisting, perhaps, as at the Rockefeller Institute for Medical Research, of three scholars and two laymen, and finally by the Board as a whole.

IV

No requirements are needed as to the maximum or minimum number of hours or years that the student must or may work, neither as to majors or minors requisite to the attainment of a degree, and we can determine experimentally problems such as the length and arrangement of terms. There will be excellent students who will work in one way; equally excellent students who

will work quite differently. Subjects or fields do not have to be "covered" - cannot be, at a high level. In his own time, the student may show that he has mastered his subject, without which mastery the Institute should give him no mark of approval. He may perhaps, in addition thereto, have done what the Germans call an "Arbeit"; if so, he can be further distinguished. But in any case the numbers will be so small that professor and students will know one another intimately; machinery will be superfluous; arrangements should vary from man to man, from year to year, from subject to subject. The highest possible standard of both general and special education should be insisted on: so much the founders proposed in their first letter to the Trustees.

V

In this connection I wish to guard against a misinterpretation of the term, "schools". I have said that it is to be loosely interpreted. I may now add that it involves no particular theory as to how knowledge is to be advanced. In America, one is told time and again that knowledge must be "correlated", that "team-work" is essential. Now there is no question that scholars rely upon one another, as they rely upon the long history of which they are endeavoring to forge a new link. But great scholars, scientists, and philosophers may be mentioned, who, while leaning upon the past, did their fundamental thinking alone - Kant, Newton, Faraday, Darwin, Henry, and more recently Einstein, who has latterly said:

"I am a horse for single harness, not cut out for tandem or team work; for well I know that in order to attain any definite goal, it is imperative that one person should do the thinking and commanding and carry most of the responsibility. But those that are led should not be driven, and they should be allowed to choose their leader."

While, therefore, I am of the opinion that the Institute as a teaching body can probably best function if the representatives of a given subject meet and discuss their common interests as a school, I should also allow every

individual and every school or group to pursue the methods that seem to him or to them best. Between men of first-rate ability collaboration or team work cannot be arranged or forced; on the other hand, collaboration and discussion will take place, where a relatively small group of scholars have abundant opportunity to discuss with one another either their own individual problems or problems that lie on the border line.

In course of time, the buildings may be so conceived and executed as to facilitate intercourse of this type. I have in mind the evolution that in the process of centuries has taken place at All Souls College, Oxford, where, as in the proposed Institute, there are no undergraduate students, and where advanced students and the older Fellows live under ideal conditions, whether for their individual work or for collaboration and cooperation. No one planned all this. It grew up because scholars were left free to work out their own salvation. It cannot be imitated or taken over; but it is there, as evidence that the thing can be done, if the pace is not forced and if the hand of the executive and administrator touches but lightly the growing organism. There is a school of mathematics, let us say, made up of mathematicians; but the mathematicians will lunch, smoke, chat, walk, or play golf with the physicists; can any possible form of organization give the flexibility, the intimacy, the informality, the stimulus thus attainable? No "director" or "departmental head" or "executive" needs to worry for fear that independent or water-tight groups, ignorant of one another, will form or not form. If the spirit of learning animates the Institute - and without that there is no reason for its existence - men will talk together and work together, because they live together, have their recreation together, meet on the same humane social level, and have a single goal.

VI

In my opinion, every step taken in forming the Institute should be

viewed as experimental. And this will be easy, if the Institute is kept small and if its quality is securely guarded. To the question of what subjects or schools to start with I have given much attention; and I have profited by judgment and advice obtained from many sources. I assume at the outset that no subject will be chosen or continued unless the right man or men can be found. Subject to this reservation, never to be forgotten, a very vague statement is contained in Bulletin No. 1. I can be somewhat more definite now, though retaining liberty to change up to the very moment when action is resolved upon. The decision not to begin with the physical or biological sciences has become stronger; they are already better done than other subjects; moreover, they are creating problems with which universities are not now dealing competently. Finally, they are not at the very foundation of modern science. That foundation is mathematics; and it happens that mathematics is not a subject in which at present many American universities are eminent. Mathematics is the severest of all disciplines, antecedent, on the one hand, to science, on the other, to philosophy and economics and thus to other social disciplines. With all its abstractness and indifference both pure and applied scientific and philosophic progress of recent years has been closely bound up with new types and methods of sheer mathematical thinking.

In behalf of mathematics, other things are to be said in addition to the fact that it is both fundamental and severe. It has, to be sure, uses, as all the higher activities of the human mind have uses, if the word, "use", is broadly and deeply understood. But its devotees are singularly unconcerned with use, most of all with immediate use, and this state of mind and spirit, it seems to me, ought to dominate the new Institute. Nothing is more likely to defeat itself, nothing is on the whole less productive in the long run than immediacy in the realm of research, reflection, and contemplation. The men who have moved the world have usually been men who have followed the will o' the

wisp of their own intellectual and spiritual curiosity. If we can make the Institute a congenial home for those who are curious in this sense, it will have its effect. On the other hand, there exists the precisely opposite type of mind - the mind that derives its initial stimulus from a practical need or problem. Lavoisier, the founder of modern chemistry, is said to have been started on his road by the need of improving the lighting of the streets of Paris; and Justice Holmes has shown that a great political philosopher can find his text and starting point in purely practical problems that arise in administering the law. Pasteur, Lister, Koch, Ehrlich, and an unending row of physicists and chemists have their feet in both worlds - the world of practice and the world of theory. Minds that are fundamental in their searching, whatever the spring that moves them - curiosity, pity, imagination, or practical sense - all belong in an institute for advanced study.

Now mathematics is singularly well suited to our beginning. Mathematicians deal with intellectual concepts which they follow out for their own sake, but they stimulate scientists, philosophers, economists, poets, musicians, though without being at all conscious of any need or responsibility to do so. Moreover, it is no small, though an accidental and incidental advantage, at a time when we wish to retain plasticity and postpone acts and decisions that will bind us, that mathematics is the simplest of subjects to begin with. It requires little - a few men, a few students, a few rooms, books, blackboard, chalk, paper, and pencils. Let us endeavor, therefore, to bring together a fertile mathematical group; let us provide for them ideal conditions of work. In due course, provision can be made for mathematical physics, and the door thus opened for another step forward when conditions are ripe; and for statistics, which will open a door on the other side.

At the same time, assuming that funds are adequate and that the right persons can be secured, I am now inclined to include economics. It is, as I

have intimated, linked to mathematics by statistics. In other respects, it seems to be everything that mathematics is not, for it is obviously of the world of action, rather than the world of sheer thought. But there are grave reasons for this choice. There is no more important subject than the evolution of the social organism, and the social organism is developing now as never before under the pressure of economic forces. Before our very eyes, mankind is conducting portentous social-economic experiments. Science and philosophy are creating new means and new goals; the economist must have something to say as to their value and feasibility. Almost half a century ago, while still a Massachusetts judge, Justice Holmes declared: "The man of the future is the man of statistics and the master of economics." But where does the economist enjoy the independence and the leisure which have for a century been enjoyed by the philosopher and the physicist? Where is the economist who is by turns a student of practice and a thinker - in touch with the realities, yet never their slave? At present, economists too often live from day to day, from hand to mouth; a professor, a journalist, a handyman for banks and business men. Economics, hard pressed by the tasks of the day, has not usually enlisted minds willing to work in leisurely and philosophic fashion. Hence, in part, its failures and disappointments. Half-baked ideas, experiments, recommendations flood the world; economists are simultaneously expected to be investigators, journalists, advisers, forecasters, and what not. Not infrequently, the source of their income may impair the soundness or reliability of their judgment. Nowhere does a group of economists enjoy the conditions which Pasteur enjoyed, when he was working out the foundations of preventive medicine, or Helmholtz, Clerk Maxwell, and Rowland, when they were working out the foundations of modern physics.

Time was, when Europe was exposed to ravage by typhus or bubonic plague. Their origin and progress were shrouded in mystery; but the veil has

now been lifted; these plagues will not recur, because their causes and methods of distribution are understood; they can be prevented or stopped. But from social and economic plagues the world is not yet immune. They continue to come and go mysteriously. We cannot any longer sit helpless before these social and economic plagues, which, once well under way, ravage the world, as our present economic and social perplexities and sufferings show. The very conquests which science has wrought - increased production and easier distribution, which ought to be blessings - have drawn in their wake curses that may or may not be connected with them. On these intricate and recondite matters I have no opinion; but clear it is that nowhere in the world does the subject of economics enjoy the attention that it deserves - economics in the broad sense, inclusive of political theory, ethics, and other subjects that are involved therein. The Institute for Advanced Study has here a pressing opportunity; and assuredly at no time in the world's history have phenomena more important to study presented themselves. For the plague is upon us, and one cannot well study plagues after they have run their course; for with the progress of time it is increasingly difficult to recover data, and memory is, alas, short and treacherous.

Thus I conceive a group of economists and their associates, financially independent, unhurried, and disinterested, in closest possible contact with the phenomena of business and government and at this high level endeavoring to understand the novel phenomena taking place before our eyes. The mathematician is in a sense secure from immediacy; the economist must be made so. He has at times to mingle in the stream of life; we must make it safe for him to do so. He must be enabled to take the same attitude towards social phenomena that the medical scientist has now been enabled to take towards disease. Not even the practical man need be concerned as to the good of this sort of work. The late Professor Starling, discussing discovery and research, said wisely:

"The preparation of insulin by Banting and Best, an admirable piece of work, is but the last step of an arduous journey, in which hundreds of workers have taken part. There is no need to be concerned about 'discoveries'. It is only necessary to ensure that the growing tree of knowledge is dug round and pruned and watered."

Beyond these two schools, I do not now look, though it is obvious how readily history and other schools - literature, music, or science - can be added when money, men, and ideas are available. I am opposed to making a "small beginning" in other subjects that will soon create a deficit on the theory - mistaken, as I think - that, if the pressure becomes acute enough, funds can somehow be obtained for necessary expansion. Experience shows that under such conditions the head of an institution must become a money-getter and that the university itself may lose its freedom in certain directions. I favor, as I have already said, financial, administrative, and educational methods that will leave a surplus, not create a deficit. Thus the Institute will be enabled to pursue a policy analogous to that of the Collège de France, viz., to take advantage of surprises by creating from time to time a chair for a new subject or an unexpected person. By the same token, not being concerned with subjects or degrees in the ordinary sense, chairs that have served their purpose can be discontinued. In these respects the stimulating influence of the Collège de France has proved of incalculable value. It has pioneered in every direction, even in medicine, in which, while never attempting the formation of a faculty, it has furnished chairs and laboratories for some of the greatest of medical scientists. Under such circumstances, growth will be slow and unsymmetrical, as it should be; for, if growth is slow, we shall learn much from experience - much that will be helpful in reshaping such schools as we start, much that will be helpful in shaping others; and, if the Institute is unsymmetrical, it can the more readily remain elastic and highly vitalized.

VII

Scholarly groups such as I have described are not readily procurable. The war destroyed many persons who would have been eligible; the unsatisfactory economic status of teaching surely deters others. None the less, the conditions to be offered will, I believe, attract some American scholars of high rank; they will certainly attract, for varying, but always sufficiently long periods, distinguished foreigners. Foreigners often find it so difficult to accommodate themselves to our usual type of academic organization that they are hardly more than decorative. I suspect that, in the Institute, as above described, they will feel themselves "at home". In the great days of the early Hopkins, President Gilman "borrowed" and recommended "borrowing". I am hopeful that "borrowing" for periods long enough to be telling may become a recognized feature of the new Institute. Because of the increased cost of living and travel, students, unless financed by outside agencies, can no longer wander as freely as they did half a century ago; it may be at times easier to reverse the process by bringing the professor to the students rather than to send the students to the professor. It is, however, also important that the director and the staff should from time to time visit other institutions in this country and Europe. Foreign scholars and scientists, living, as they do, in easy reach, know one another personally. The American scholar or scientist travels relatively little; neither he nor his university can afford the expense. Yet nothing is more stimulating - or in the long run more economical - than personal contacts. How can the head of a university judge wisely, if he has not for a generation been in touch with scholars and scientists, if he does not keep in close and constant contact with scholars and scientists, on the one hand, and with the real world, on the other? Business men know better; they are constant first-hand students of their competitors; on this point an institute for advanced study can certainly learn something important from industry.

VIII

I have from the start insisted that in nothing can the new Institute do a better service or exert a more wholesome influence than by placing its staff on a sound economic basis. The professor is not in competition with professional or business life; the income of a busy lawyer or doctor or business man would harm, not help, him. He must be so devoted to learning that he would be willing for its sake to endure hardship and deprivation. All too frequently he has done and is doing so. But it does not follow that, because riches may harm him, comparative poverty aids him. His needs are relatively simple, though, such as they reasonably are, they should be amply satisfied; and a contributory pension scheme should be open to all connected with the Institute. It does not help the clarity or concentration of a man's thinking, if he is oppressed by the fear of a needy or precarious old age, if on retirement his scale of living, already none too lavish, has to be suddenly reduced, if his wife is compelled to forgo domestic help, if his children are deprived of liberal educational opportunities, if he lives in cramped quarters, if he lacks privacy, books, music, or travel, if he is led either to marry for money or to forgo the raising of a family, if a gap - social or financial - exists between the administrative and executive heads, on the one hand, and the scholar, on the other. Nor is the university assisted, if a low scale of remuneration draws to its staff mainly mediocre or part-time workers, forced to increase their income by splitting their energy and attention. Younger men, still on trial, may be decently remunerated without danger, provided their terms of service are definitely limited. We shall open a new era in education, if our salaries indicate that, whatever his importance, not the administrator, but the faculty, creates a university. Surely the nation which has built palaces for libraries, laboratories, and students will not permanently ignore the professor who is in truth the university itself. For, as life becomes more complicated, the university

becomes more and more important; into its chairs an ever larger share of brains and devotion must be drawn. Under what conditions will this take place? It is our duty to ascertain them and to meet them. But such a scale of remuneration is not a one-sided affair; it pledges the professor to devote his whole time to the university and to avoid gainful activities. Should this policy be accepted, as in my opinion it must, the entire faculty of an American institution will thus be placed on a full-time basis; real academic freedom - the freedom to work unworried and unhampered - will be attained. Under such circumstances, the professor of economics may elect to study thorny and contentious financial, business, or social problems; he can take his time in so doing; whatever his conclusions, his intellectual integrity is not likely to be impaired or impugned. On this basis alone can a university or an institute be in the world and of the world, as far as any individual may desire, and yet preserve its absolute independence and freedom of thought and speech.

IX

The success of the Institute will in the slow processes of time be measured by the development of its staff, the students that it trains, and the additions that it makes to the world's fund of knowledge and experience. For the future of its students it need take little thought; their number will be limited; they will find their level. Additions to knowledge take the form of papers, books, and occasional addresses. Many American universities maintain their own presses. They may in some cases be justified in so doing; but the Institute for Advanced Study needs no press. A university press is a business; if possible, it must pay a profit - at least, it must endeavor to carry itself. In either event, it usually publishes what will sell - sometimes worth-while books and pamphlets, often books and pamphlets that had far better remain unprinted; it shrinks from publications that appeal to a small circle of readers and students, though from a university point of view such publications may be

of prime importance. I favor a strict policy in respect to publication.

"Viel arbeiten, wenig publizieren", Ehrlich used to say. Let us hold to a high standard of performance as to both form and content. When a paper deserves publication, there will usually be a place for it; if a larger work merits printing, it can easily be handled, provided the actual outlay is underwritten. Thus university organization will be simplified; money will be saved; distribution will be more skilfully managed. Publicity need not be sought: if the Institute succeeds, the real problem will be how to avoid or restrict it.

I have said nothing definite thus far as to buildings and site, and that because despite their crucial importance these things come second. Nevertheless, they cannot be ignored. A group of scholars should not be isolated; they need access to libraries, museums, collections, and other scholars - the more so, because a slow development is contemplated. If the life of the academic body is to be normal and wholesome, the accessories of civilization must be obtainable with such means as they possess - I mean schools, physicians, friends, and domestic aid. "Association with other men like themselves", writes one who has thought deeply about the project, "will be agreeable and informed by the interests and graces of the mind. Life will be intensely active, but leisurely at the same time, as scholars and wise men know how to make life leisurely. When I contemplate the possibilities of leading life under such circumstances, I am filled with a deep enthusiasm and a vast yearning. If I am so moved, I cannot doubt that there must be countless other men who are moved by the same desires." It is not, in the first instance, a question of erecting buildings; for the subjects, with which I propose that we begin, any kind of buildings may be made to answer. In time, certain conditions affecting the site will require consideration. It should be large enough to be forever protected against the noise and bustle of urban or commercial life. But I have come to no conclusion on these points; I have merely been analyzing the problems in order to separate

the various factors. I shall suggest the appointment of a small committee which may make a preliminary study of this question with a view to general discussion by the Board later.

Certain topics I have purposely omitted in this report. I have said nothing, for example, of the duties of the director. These are described in general terms in the By-Laws; to this description, nothing needs at this moment be added. For the same reason I have not touched on details of business management; for the present they can continue to be carried by cooperation between the treasurer and the assistant secretary. Many persons raise the problem of a library; but the library problem depends partly on location; partly it will be solved by equipping with books the several schools; out of these, by the mere process of addition, the Institute library will ultimately grow. I have proposed nothing definite as to fees or the terms on which degrees will be conferred: both subjects ought to be discussed by the Committee on Education which cannot be formed until the first staff appointments are made.

In closing, let me say that I am not unaware of the fact that I have sketched an educational Utopia. I have deliberately hitched the Institute to a star; it would be wrong to begin with any other ambition or aspiration. On the other hand, I have been careful to keep within the realm of the practical. But I do not deceive myself; it will not be easy even to begin on any such basis; it will be harder, as the years pass, to keep to this standard. We shall find ourselves dealing with men and women, not with angels or super-men. Difficulties will arise; disappointments will occur. But we shall be helped, not harmed, by the high level at which we have pledged ourselves to act. In any case, unless we attempted something much higher than is now attained, there would be little reason to attempt anything at all.

X

For the present, I ask no final action on this report. I hope only that it may be freely discussed. On several important matters, I desire to seek further counsel. When the time is ripe, I shall ask the Board for authority to proceed. Meanwhile, I wish to feel free to alter it in the light of such further knowledge as I may obtain.

Abraham Flexner

Sept. 26, 1931.

C O N F I D E N T I A L

Sept 26, 1931

To the Trustees of the Institute for Advanced Study:

Following the publication in December, 1930, of Bulletin No. 1, entitled "Organization and Purpose", I spent the better part of six months in conference with the leading scholars of America and the main European countries, seeking to elicit their critical opinion as to the value of the proposed Institute and their constructive suggestions as to the initial steps to be taken. I encountered no difference of opinion as to the importance of creating an institute of the proposed character and scope; and this, because, in the last half century, universities have everywhere undergone changes that have impaired their fundamental and essential character. The topics respecting which most discussion took place were the subjects which the Institute should first attack, the persons best qualified to lead, the conditions under which they would work most effectively, the location and ultimate character of the buildings. All these knotty questions need not be decided at once. On one or two of them my mind has become clear, as will be made plain in the course of this report; as to the others, further conference and reflection are still requisite.

I

In the interest of clarity, let me begin by recapitulating the reasons why the Institute for Advanced Study has been established and what its main characteristics should be; for only by recapitulation from time to time can we be sure that we will not be drawn or drift out of our course. Universities, being primarily intellectual in character, ought to be small and plastic; they should be havens where scholars and scientists may regard the world and its phenomena as their laboratory, without being carried off by the maelstrom; they should be simple, comfortable, quiet without being

monastic or remote; they should be afraid of no issue; yet they should be under no pressure from any side which might tend to force their scholars to be prejudiced either for or against any particular solution of the problems under study; and they should provide the facilities, the tranquillity, and the time requisite to fundamental inquiry. Now, current tendencies almost all run in the opposite direction: universities have with startling suddenness become big; having become big, they have lost plasticity; they are so big that in every direction they are pressed for funds; they have had to be organized as business is organized, which is precisely the type of organization that is inimical to the purposes for which universities exist and unpleasant to the type of person needed to promote science and scholarship; they have been dragged into the market place; they have been made to serve scores of purposes - some of them, of course, sound in themselves - which universities cannot serve without abandoning purposes which they and no other institution can serve at all. "It is the multiplicity of its purposes that makes an American university such an unhappy place for a scholar", writes one of my correspondents. Instead of limiting themselves to fundamental inquiries which may in the long run assist in the solution of complex problems, universities have almost without exception also engaged in training immature and unprepared boys and girls for practical tasks which are merely matters of the moment. Instead of providing absolute independence of speech and thought for mature men conscious of their vast responsibilities, universities have generally - though exceptions may be found - pursued two courses: emitted superficial utterances which only add to the existing Babel or avoided delicate and controversial issues, particularly in the social and economic realms. A repressive, often an unconsciously repressive influence, has emanated from trustees or executive officers. Scholarship does not prosper under the conditions I have briefly enumerated. In the entire course of my travels thus far,

I have encountered no one who felt that the present conditions of university life are favorable to sound thinking and contemplative living, though, to be sure, instances in abundance can be cited in which individuals have created or have insisted upon obtaining for themselves special terms which make their portion tolerable.

The suggestions that the Institute for Advanced Study should be small, that its staff and students or scholars should be few, that administration should be inconspicuous, inexpensive, subordinate, that members of the teaching staff, while freed from the waste of time involved in administrative work, should freely participate in decisions involving the character, quality, and direction of its activities, that living conditions should represent a marked improvement over contemporary academic conditions in America, that its subjects should be fundamental in character, and that it should develop gradually - on these suggestions there was on both sides of the Atlantic unanimous agreement.

To my request for constructive ideas, the response was different. Men knew more or less clearly what they would like or needed; but as no one had supposed that an institution of the kind described was likely to be established, no one was prepared to be definite in his immediate recommendations. In informal talk, often occupying many hours, we browsed over the whole field; frequently, before we parted, I was promised a memorandum which would embody deliberate observations as to procedure, personnel, subjects, etc. In what I now write, I am drawing upon these informal conferences, upon such notes and reflections, as I made at the time and subsequently, and upon the memoranda which have come to me from America, England, France, Germany, and Italy. I am indebted, very deeply indebted to all who gave me freely of their time, thought, and experience; and yet I should be at a loss to assign responsibility, if I were asked as to any particular item.

II

I have already reviewed the differences between existing universities and the Institute founded by Mr. Bamberger and Mrs. Fuld. Let me now draw a line between the Institute for Advanced Study, as I conceive it, and a research institute. The Institute for Advanced Study will, of course, by reason of its constitution and conception be a research institute; if the members of its staff are not contributors to the progress of knowledge and the solution of problems, there is no sufficient reason for setting it up; but they will also be teachers, men who have chosen a few competent and earnest disciples engaged in the mastery of a subject, precisely as the pupils of all the great masters of the last century - of Clerk Maxwell, Michael Foster, and Vinogradoff in England, of Claude Bernard or Halévy in France, of Helmholtz, Ludwig, and Wilamowitz in Germany - were in the first instance concerned to learn thoroughly physics, physiology, institutions, or Greek, as the case might be. Teaching should, however, be informal; for, if formal, mechanism will be devised; its burden should be light, for, if it is heavy, the teacher has too many pupils or the pupils are unfit. And the students may at times be investigators too, though not prematurely at the price of mastering their subjects.

In the so-called "research institutes" teaching is, of course, also carried on, though in somewhat different fashion. The members of a research institute are also learners, whatever else they be. And yet the emphasis is different, for the research institute is primarily concerned with problems, very specific problems, as a rule; and young men enter either as assistants to older workers or as novices to be tried out by time. The Institute for Advanced Study will be neither a current university, struggling with diverse tasks and many students, nor a research institute, devoted solely to the solution of problems. It may be pictured as a wedge inserted between the two -

a small university, in which a limited amount of teaching and a liberal amount of research are both to be found. Persons who require to be drilled or taught hard do not belong within the Institute for Advanced Study. The level of the teaching and its form mark it off sharply from college teaching, from most university teaching, from technological or professional teaching. This granted, the professor himself benefits, if for an hour or two weekly, in addition to his own research and the supervision of a few investigations, he discusses with a small thoroughly competent body a larger theme. He is thus assisted in preserving his own perspective, and he has a motive for wider reading and broader contacts.

If I may endeavor to visualize the Institute tentatively, I should think of a circle, called the Institute for Advanced Study. Within this, I should, one by one, as men and funds are available - and only then - create a series of schools or groups - a school of mathematics, a school of economics, a school of history, a school of philosophy, etc. The "schools" may change from time to time; in any event, the designations are so broad that they may readily cover one group of activities today, quite another group, as time goes on. Thus, from the outset the school of mathematics may well contain the history or philosophy of science; the school of economics, a chair of law or political theory. Each school should conduct its affairs in its own way; for neither the subjects nor the scholars will all fit into one mould. An annually changing chairman would perhaps be the only officer requisite. There should be complete academic freedom as there is in England, France, and Germany. We are, let it be remembered, dealing with seasoned and, I hope, eminent scholars, who must not be seriously or long diverted from creative work. These men know their own minds; they have their own ways; the men who have, throughout human history, meant most to themselves and to human progress have usually followed their own inner light; no organizer,

no administrator, no institution can do more than furnish conditions favorable to the restless prowling of an enlightened and informed human spirit, seeking its intellectual and spiritual prey. Standardization and organization do not aid: they are simply irksome.

III

Delicate questions arise in connection with the relations which should exist between director, staff, and trustees. Incidentally I have touched on them in saying that, as a matter of course, the staff will be made up of mature scholars, presumably conscious of the weight that should attach to their utterances and actively participating in the government of the Institute. But the subject is a difficult one, and I am not yet prepared to submit further positive recommendations, though it has received my continuous attention. I am clear that the relationship between the executive officers and the faculty is not usually in America cordial or satisfactory. On the contrary, for one reason or another, the American professorate is unhappy - and it will not enlist the country's best brains in sufficient number until the atmosphere is radically changed. I have already suggested changes of a fundamental character, among them the inclusion in the board of trustees of outside scholars as well as members of its own staff. Whether this is all that need be done to give learning its proper weight in the Institute, I am not at this moment prepared to say. I do say, however, that the Institute exists for the sake of learning and that policies and measures that are inimical to the happy and enthusiastic pursuit of learning are necessarily wrong. It has been urged that trustees should limit their activities to business matters and that faculties should govern all else. In support of this contention Germany, France, Oxford and Cambridge are cited. But none of these instances is convincing. In Germany, a powerful ministry is in constant coöperation, as it is in occasional conflict with the universities; practically the same is true in France, where,

however, the bureaucratic habit is stronger; Oxford and Cambridge do indeed govern themselves, but on three occasions in the last half century Parliament has intervened through Royal Commissions in order to cure some of the defects due to government by exclusively academic bodies. The results of the last Royal Commission were so unsatisfactory that a voluntary commission composed of scholars and laymen has now undertaken the study of the entire problem and has published the first of its reports. Both lay trustees, alone, and teachers, alone, are liable to be one-sided. When the president is the sole link or channel of communication between the staff or trustees, he tends to be autocratic and is unlikely to be widely informed. Our American experience shows the consequences. On the other hand, faculty government would distract scholars and might lead to internal and factional difficulties. We have, as I have said, tried to correct these weaknesses by constituting the Board of Trustees of the Institute out of laymen, academic personages not members of the Institute, and persons chosen from the Institute staff. Thus every relevant point of view should get a hearing. At present, this arrangement will, I believe, suffice. Further steps can be taken, if problems arise, for the solution of which this simple organization is inadequate. I fear, however, that mere organization and rules will not alone achieve our purpose - that of creating a genuine seat of learning. Sympathy, helpfulness, and mutual respect, involving director, trustees, and faculty are all requisite to create an atmosphere free of tension, attractive to men of high attainments and to students of unusual ability.

The schools composing the Institute should each select and admit its own students; no registration office is needed, for under existing academic conditions in America the possession of a diploma or degree does not indicate whether its owner is fit or unfit for advanced study. They must be discovered by any means calculated to locate them. Such students do indeed exist in

America in considerable numbers; but they are not easily found, for already universities bid against each other for them either by offering fellowships freely or by offering part-time employment. I am sure that employment as assistant at this stage of the student's progress is wrong: in a recent report the President of Harvard deplors the fact that of the graduate students of Harvard University 56% are now "part-time". I should urge that students be as a rule full-time, though I can conceive of circumstances and conditions which may justify the admission of a thoroughly competent and highly advanced student also otherwise engaged, that fellowships, grants, or more often loans be available for persons of distinctly unusual gifts and promise who cannot otherwise pursue their studies under proper conditions, and that reasonable fees be charged in other cases. The budget and the program should be so carefully controlled that the Institute will for some years at least be independent of receipts from fees. The precise manner of making the annual budget can be determined somewhat later; I am clear that the Institute should not annually spend its entire income, that it should undertake nothing involving a deficit, a procedure that is all too common and with disastrous results. Tentatively each school may work out its budget, and the several budgets can perhaps be harmonized in conferences between the director and the several schools, in preparation for consideration, first, by a budget committee of the Board of Trustees, consisting, perhaps, as at the Rockefeller Institute for Medical Research, of three scholars and two laymen, and finally by the Board as a whole.

IV

No requirements are needed as to the maximum or minimum number of hours or years that the student must or may work, neither as to majors or minors requisite to the attainment of a degree, and we can determine experimentally problems such as the length and arrangement of terms. There will be excellent students who will work in one way; equally excellent students who

will work quite differently. Subjects or fields do not have to be "covered" - cannot be, at a high level. In his own time, the student may show that he has mastered his subject, without which mastery the Institute should give him no mark of approval. He may perhaps, in addition thereto, have done what the Germans call an "Arbeit"; if so, he can be further distinguished. But in any case the numbers will be so small that professor and students will know one another intimately; machinery will be superfluous; arrangements should vary from man to man, from year to year, from subject to subject. The highest possible standard of both general and special education should be insisted on: so much the founders proposed in their first letter to the Trustees.

V

In this connection I wish to guard against a misinterpretation of the term, "schools". I have said that it is to be loosely interpreted. I may now add that it involves no particular theory as to how knowledge is to be advanced. In America, one is told time and again that knowledge must be "correlated", that "team-work" is essential. Now there is no question that scholars rely upon one another, as they rely upon the long history of which they are endeavoring to forge a new link. But great scholars, scientists, and philosophers may be mentioned, who, while leaning upon the past, did their fundamental thinking alone - Kant, Newton, Faraday, Darwin, Henry, and more recently Einstein, who has latterly said:

"I am a horse for single harness, not cut out for tandem or team work; for well I know that in order to attain any definite goal, it is imperative that one person should do the thinking and commanding and carry most of the responsibility. But those that are led should not be driven, and they should be allowed to choose their leader."

While, therefore, I am of the opinion that the Institute as a teaching body can probably best function if the representatives of a given subject meet and discuss their common interests as a school, I should also allow every

individual and every school or group to pursue the methods that seem to him or to them best. Between men of first-rate ability collaboration or team work cannot be arranged or forced; on the other hand, collaboration and discussion will take place, where a relatively small group of scholars have abundant opportunity to discuss with one another either their own individual problems or problems that lie on the border line.

In course of time, the buildings may be so conceived and executed as to facilitate intercourse of this type. I have in mind the evolution that in the process of centuries has taken place at All Souls College, Oxford, where, as in the proposed Institute, there are no undergraduate students, and where advanced students and the older Fellows live under ideal conditions, whether for their individual work or for collaboration and cooperation. No one planned all this. It grew up because scholars were left free to work out their own salvation. It cannot be imitated or taken over; but it is there, as evidence that the thing can be done, if the pace is not forced and if the hand of the executive and administrator touches but lightly the growing organism. There is a school of mathematics, let us say, made up of mathematicians; but the mathematicians will lunch, smoke, chat, walk, or play golf with the physicists; can any possible form of organization give the flexibility, the intimacy, the informality, the stimulus thus attainable? No "director" or "departmental head" or "executive" needs to worry for fear that independent or water-tight groups, ignorant of one another, will form or not form. If the spirit of learning animates the Institute - and without that there is no reason for its existence - men will talk together and work together, because they live together, have their recreation together, meet on the same humane social level, and have a single goal.

VI

In my opinion, every step taken in forming the Institute should be

viewed as experimental. And this will be easy, if the Institute is kept small and if its quality is securely guarded. To the question of what subjects or schools to start with I have given much attention; and I have profited by judgment and advice obtained from many sources. I assume at the outset that no subject will be chosen or continued unless the right man or men can be found. Subject to this reservation, never to be forgotten, a very vague statement is contained in Bulletin No. 1. I can be somewhat more definite now, though retaining liberty to change up to the very moment when action is resolved upon. The decision not to begin with the physical or biological sciences has become stronger; they are already better done than other subjects; moreover, they are creating problems with which universities are not now dealing competently. Finally, they are not at the very foundation of modern science. That foundation is mathematics; and it happens that mathematics is not a subject in which at present many American universities are eminent. Mathematics is the severest of all disciplines, antecedent, on the one hand, to science, on the other, to philosophy and economics and thus to other social disciplines. With all its abstractness and indifference both pure and applied scientific and philosophic progress of recent years has been closely bound up with new types and methods of sheer mathematical thinking.

In behalf of mathematics, other things are to be said in addition to the fact that it is both fundamental and severe. It has, to be sure, uses, as all the higher activities of the human mind have uses, if the word, "use", is broadly and deeply understood. But its devotees are singularly unconcerned with use, most of all with immediate use, and this state of mind and spirit, it seems to me, ought to dominate the new Institute. Nothing is more likely to defeat itself, nothing is on the whole less productive in the long run than immediacy in the realm of research, reflection, and contemplation. The men who have moved the world have usually been men who have followed the will of the

wisp of their own intellectual and spiritual curiosity. If we can make the Institute a congenial home for those who are curious in this sense, it will have its effect. On the other hand, there exists the precisely opposite type of mind - the mind that derives its initial stimulus from a practical need or problem. Lavoisier, the founder of modern chemistry, is said to have been started on his road by the need of improving the lighting of the streets of Paris; and Justice Holmes has shown that a great political philosopher can find his text and starting point in purely practical problems that arise in administering the law. Pasteur, Lister, Koch, Ehrlich, and an unending row of physicists and chemists have their feet in both worlds - the world of practice and the world of theory. Minds that are fundamental in their searching, whatever the spring that moves them - curiosity, pity, imagination, or practical sense - all belong in an institute for advanced study.

Now mathematics is singularly well suited to our beginning. Mathematicians deal with intellectual concepts which they follow out for their own sake, but they stimulate scientists, philosophers, economists, poets, musicians, though without being at all conscious of any need or responsibility to do so. Moreover, it is no small, though an accidental and incidental advantage, at a time when we wish to retain plasticity and postpone acts and decisions that will bind us, that mathematics is the simplest of subjects to begin with. It requires little - a few men, a few students, a few rooms, books, blackboard, chalk, paper, and pencils. Let us endeavor, therefore, to bring together a fertile mathematical group; let us provide for them ideal conditions of work. In due course, provision can be made for mathematical physics, and the door thus opened for another step forward when conditions are ripe; and for statistics, which will open a door on the other side.

At the same time, assuming that funds are adequate and that the right persons can be secured, I am now inclined to include economics. It is, as I

have intimated, linked to mathematics by statistics. In other respects, it seems to be everything that mathematics is not, for it is obviously of the world of action, rather than the world of sheer thought. But there are grave reasons for this choice. There is no more important subject than the evolution of the social organism, and the social organism is developing now as never before under the pressure of economic forces. Before our very eyes, mankind is conducting portentous social-economic experiments. Science and philosophy are creating new means and new goals; the economist must have something to say as to their value and feasibility. Almost half a century ago, while still a Massachusetts judge, Justice Holmes declared: "The man of the future is the man of statistics and the master of economics." But where does the economist enjoy the independence and the leisure which have for a century been enjoyed by the philosopher and the physicist? Where is the economist who is by turns a student of practice and a thinker - in touch with the realities, yet never their slave? At present, economists too often live from day to day, from hand to mouth; a professor, a journalist, a handyman for banks and business men. Economics, hard pressed by the tasks of the day, has not usually enlisted minds willing to work in leisurely and philosophic fashion. Hence, in part, its failures and disappointments. Half-baked ideas, experiments, recommendations flood the world; economists are simultaneously expected to be investigators, journalists, advisers, forecasters, and what not. Not infrequently, the source of their income may impair the soundness or reliability of their judgment. Nowhere does a group of economists enjoy the conditions which Pasteur enjoyed, when he was working out the foundations of preventive medicine, or Helmholtz, Clerk Maxwell, and Rowland, when they were working out the foundations of modern physics.

Time was, when Europe was exposed to ravage by typhus or bubonic plague. Their origin and progress were shrouded in mystery; but the veil has

now been lifted; these plagues will not recur, because their causes and methods of distribution are understood; they can be prevented or stopped. But from social and economic plagues the world is not yet immune. They continue to come and go mysteriously. We cannot any longer sit helpless before these social and economic plagues, which, once well under way, ravage the world, as our present economic and social perplexities and sufferings show. The very conquests which science has wrought - increased production and easier distribution, which ought to be blessings - have drawn in their wake curses that may or may not be connected with them. On these intricate and recondite matters I have no opinion; but clear it is that nowhere in the world does the subject of economics enjoy the attention that it deserves - economics in the broad sense, inclusive of political theory, ethics, and other subjects that are involved therein. The Institute for Advanced Study has here a pressing opportunity; and assuredly at no time in the world's history have phenomena more important to study presented themselves. For the plague is upon us, and one cannot well study plagues after they have run their course; for with the progress of time it is increasingly difficult to recover data, and memory is, alas, short and treacherous.

Thus I conceive a group of economists and their associates, financially independent, unhurried, and disinterested, in closest possible contact with the phenomena of business and government and at this high level endeavoring to understand the novel phenomena taking place before our eyes. The mathematician is in a sense secure from immediacy; the economist must be made so. He has at times to mingle in the stream of life; we must make it safe for him to do so. He must be enabled to take the same attitude towards social phenomena that the medical scientist has now been enabled to take towards disease. Not even the practical man need be concerned as to the good of this sort of work. The late Professor Starling, discussing discovery and research, said wisely:

"The preparation of insulin by Banting and Best, an admirable piece of work, is but the last step of an arduous journey, in which hundreds of workers have taken part. There is no need to be concerned about 'discoveries'. It is only necessary to ensure that the growing tree of knowledge is dug round and pruned and watered."

Beyond these two schools, I do not now look, though it is obvious how readily history and other schools - literature, music, or science - can be added when money, men, and ideas are available. I am opposed to making a "small beginning" in other subjects that will soon create a deficit on the theory - mistaken, as I think - that, if the pressure becomes acute enough, funds can somehow be obtained for necessary expansion. Experience shows that under such conditions the head of an institution must become a money-getter and that the university itself may lose its freedom in certain directions. I favor, as I have already said, financial, administrative, and educational methods that will leave a surplus, not create a deficit. Thus the Institute will be enabled to pursue a policy analogous to that of the Collège de France, viz., to take advantage of surprises by creating from time to time a chair for a new subject or an unexpected person. By the same token, not being concerned with subjects or degrees in the ordinary sense, chairs that have served their purpose can be discontinued. In these respects the stimulating influence of the Collège de France has proved of incalculable value. It has pioneered in every direction, even in medicine, in which, while never attempting the formation of a faculty, it has furnished chairs and laboratories for some of the greatest of medical scientists. Under such circumstances, growth will be slow and unsymmetrical, as it should be; for, if growth is slow, we shall learn much from experience - much that will be helpful in reshaping such schools as we start, much that will be helpful in shaping others; and, if the Institute is unsymmetrical, it can the more readily remain elastic and highly vitalized.

VII

Scholarly groups such as I have described are not readily procurable. The war destroyed many persons who would have been eligible; the unsatisfactory economic status of teaching surely deters others. None the less, the conditions to be offered will, I believe, attract some American scholars of high rank; they will certainly attract, for varying, but always sufficiently long periods, distinguished foreigners. Foreigners often find it so difficult to accommodate themselves to our usual type of academic organization that they are hardly more than decorative. I suspect that, in the Institute, as above described, they will feel themselves "at home". In the great days of the early Hopkins, President Gilman "borrowed" and recommended "borrowing". I am hopeful that "borrowing" for periods long enough to be telling may become a recognized feature of the new Institute. Because of the increased cost of living and travel, students, unless financed by outside agencies, can no longer wander as freely as they did half a century ago; it may be at times easier to reverse the process by bringing the professor to the students rather than to send the students to the professor. It is, however, also important that the director and the staff should from time to time visit other institutions in this country and Europe. Foreign scholars and scientists, living, as they do, in easy reach, know one another personally. The American scholar or scientist travels relatively little; neither he nor his university can afford the expense. Yet nothing is more stimulating - or in the long run more economical - than personal contacts. How can the head of a university judge wisely, if he has not for a generation been in touch with scholars and scientists, if he does not keep in close and constant contact with scholars and scientists, on the one hand, and with the real world, on the other? Business men know better; they are constant first-hand students of their competitors; on this point an institute for advanced study can certainly learn something important from industry.

VIII

I have from the start insisted that in nothing can the new Institute do a better service or exert a more wholesome influence than by placing its staff on a sound economic basis. The professor is not in competition with professional or business life; the income of a busy lawyer or doctor or business man would harm, not help, him. He must be so devoted to learning that he would be willing for its sake to endure hardship and deprivation. All too frequently he has done and is doing so. But it does not follow that, because riches may harm him, comparative poverty aids him. His needs are relatively simple, though, such as they reasonably are, they should be amply satisfied; and a contributory pension scheme should be open to all connected with the Institute. It does not help the clarity or concentration of a man's thinking, if he is oppressed by the fear of a needy or precarious old age, if on retirement his scale of living, already none too lavish, has to be suddenly reduced, if his wife is compelled to forgo domestic help, if his children are deprived of liberal educational opportunities, if he lives in cramped quarters, if he lacks privacy, books, music, or travel, if he is led either to marry for money or to forgo the raising of a family, if a gap - social or financial - exists between the administrative and executive heads, on the one hand, and the scholar, on the other. Nor is the university assisted, if a low scale of remuneration draws to its staff mainly mediocre or part-time workers, forced to increase their income by splitting their energy and attention. Younger men, still on trial, may be decently remunerated without danger, provided their terms of service are definitely limited. We shall open a new era in education, if our salaries indicate that, whatever his importance, not the administrator, but the faculty, creates a university. Surely the nation which has built palaces for libraries, laboratories, and students will not permanently ignore the professor who is in truth the university itself. For, as life becomes more complicated, the university

becomes more and more important; into its chairs an ever larger share of brains and devotion must be drawn. Under what conditions will this take place? It is our duty to ascertain them and to meet them. But such a scale of remuneration is not a one-sided affair; it pledges the professor to devote his whole time to the university and to avoid gainful activities. Should this policy be accepted, as in my opinion it must, the entire faculty of an American institution will thus be placed on a full-time basis; real academic freedom - the freedom to work unworried and unhampered - will be attained. Under such circumstances, the professor of economics may elect to study thorny and contentious financial, business, or social problems; he can take his time in so doing; whatever his conclusions, his intellectual integrity is not likely to be impaired or impugned. On this basis alone can a university or an institute be in the world and of the world, as far as any individual may desire, and yet preserve its absolute independence and freedom of thought and speech.

IX

The success of the Institute will in the slow processes of time be measured by the development of its staff, the students that it trains, and the additions that it makes to the world's fund of knowledge and experience. For the future of its students it need take little thought; their number will be limited; they will find their level. Additions to knowledge take the form of papers, books, and occasional addresses. Many American universities maintain their own presses. They may in some cases be justified in so doing; but the Institute for Advanced Study needs no press. A university press is a business; if possible, it must pay a profit - at least, it must endeavor to carry itself. In either event, it usually publishes what will sell - sometimes worth-while books and pamphlets, often books and pamphlets that had far better remain unprinted; it shrinks from publications that appeal to a small circle of readers and students, though from a university point of view such publications may be

of prime importance. I favor a strict policy in respect to publication. "Viel arbeiten, wenig publizieren", Ehrlich used to say. Let us hold to a high standard of performance as to both form and content. When a paper deserves publication, there will usually be a place for it; if a larger work merits printing, it can easily be handled, provided the actual outlay is underwritten. Thus university organization will be simplified; money will be saved; distribution will be more skilfully managed. Publicity need not be sought: if the Institute succeeds, the real problem will be how to avoid or restrict it.

I have said nothing definite thus far as to buildings and site, and that because despite their crucial importance these things come second. Nevertheless, they cannot be ignored. A group of scholars should not be isolated; they need access to libraries, museums, collections, and other scholars - the more so, because a slow development is contemplated. If the life of the academic body is to be normal and wholesome, the accessories of civilization must be obtainable with such means as they possess - I mean schools, physicians, friends, and domestic aid. "Association with other men like themselves", writes one who has thought deeply about the project, "will be agreeable and informed by the interests and graces of the mind. Life will be intensely active, but leisurely at the same time, as scholars and wise men know how to make life leisurely. When I contemplate the possibilities of leading life under such circumstances, I am filled with a deep enthusiasm and a vast yearning. If I am so moved, I cannot doubt that there must be countless other men who are moved by the same desires." It is not, in the first instance, a question of erecting buildings; for the subjects, with which I propose that we begin, any kind of buildings may be made to answer. In time, certain conditions affecting the site will require consideration. It should be large enough to be forever protected against the noise and bustle of urban or commercial life. But I have come to no conclusion on these points; I have merely been analyzing the problems in order to separate

the various factors. I shall suggest the appointment of a small committee which may make a preliminary study of this question with a view to general discussion by the Board later.

Certain topics I have purposely omitted in this report. I have said nothing, for example, of the duties of the director. These are described in general terms in the By-Laws; to this description, nothing needs at this moment be added. For the same reason I have not touched on details of business management; for the present they can continue to be carried by cooperation between the treasurer and the assistant secretary. Many persons raise the problem of a library; but the library problem depends partly on location; partly it will be solved by equipping with books the several schools; out of these, by the mere process of addition, the Institute library will ultimately grow. I have proposed nothing definite as to fees or the terms on which degrees will be conferred: both subjects ought to be discussed by the Committee on Education which cannot be formed until the first staff appointments are made.

In closing, let me say that I am not unaware of the fact that I have sketched an educational Utopia. I have deliberately hitched the Institute to a star; it would be wrong to begin with any other ambition or aspiration. On the other hand, I have been careful to keep within the realm of the practical. But I do not deceive myself; it will not be easy even to begin on any such basis; it will be harder, as the years pass, to keep to this standard. We shall find ourselves dealing with men and women, not with angels or super-men. Difficulties will arise; disappointments will occur. But we shall be helped, not harmed, by the high level at which we have pledged ourselves to act. In any case, unless we attempted something much higher than is now attained, there would be little reason to attempt anything at all.

X

For the present, I ask no final action on this report. I hope only that it may be freely discussed. On several important matters, I desire to seek further counsel. When the time is ripe, I shall ask the Board for authority to proceed. Meanwhile, I wish to feel free to alter it in the light of such further knowledge as I may obtain.

Abraham Flexner

Sept. 26, 1931.

STATEMENT FOR THE FACULTY

The Director announced that he had called this meeting in order to give the departments the opportunity to present proposals in accordance with the procedure announced at the last meeting. After proposals are made by the different Schools, it is proposed to allow an interval of some weeks to elapse before the Faculty will be called together again to act on them.

The Director announced that he had studied the budgetary questions involved and had talked them over with the President of the Board of Trustees. It seems probable that for budgetary reasons the Trustees may think it wise to authorize not more than one new appointment for each School at the present time. The matter will be studied carefully. The Faculty will realize the paramount importance of conservative action and of keeping commitments well within prospective income.

The Director urged upon the Faculty the importance of using the utmost care in the study of all possible appointments. For our purposes it may easily happen that the good will be the enemy of the best. We should be especially careful *and for the establishment of standards of* For the sake of the scholarly reputation of the Institute, *it* is important that we be especially careful in connection with the first appointments recommended.

3/6
3/14
10/9
11/2

~~PARTICIPATION IN ADMINISTRATION~~

Academic Personnel

FLEXNER, A.

Biographical

RIEFLER, W.

VEBLEN, O.

Correspondence ~~lwe~~ between Flexner and Faculty on degree of Faculty participation in administration. *Selection of undated*

Filed in Vertical File under P, Participation in Administration.

File



Arizona Biltmore
PHOENIX.

March 6, 1936

Dear Professor Veblen:

I have had a glorious week in this perfect paradise, in which cloudless and mild days follow one another without a break. I wish the whole Institute, wives and all, could be transported here during the dull, cold winter months. One does nothing but sit in the sun from early morning till sunset.

Naturally, one does think and my mind has often reverted to the question which I discussed with the entire group some weeks ago. One or two persons have spoken to me on the subject since then. As I am under the necessity of making some sort of report to the Board a month hence, I should appreciate it if you would assemble the faculty and in my absence discuss quite frankly the problem as I stated it to you. You may all be sure that I desire your honest opinions and that I shall submit a resume of them to the Board for a final decision. As I view the matter, the following are important considerations:

1. It would be a mistake to select a successor now, before the necessity of so doing really arises.

2. On the other hand, the Institute is a novel affair, the outlines of which are growing more definite year by year.

3. The choice of an assistant or associate to serve annually would not necessarily be final, since the bylaws provide the manner in which the director is to be selected to fill ~~in~~, in case of a vacancy.

-2-

4. While the person chosen as assistant would have an advantage, he would also be on trial.

5. The general administration and the unique character of the Institute are something that can really be learned and I have the feeling that I could teach a great deal to a competent person in the next few years. If he should fail to learn, the Institute would be protected against a mistake. If he should learn, the Institute would avoid the danger of a break in policy.

6. While these considerations are important in the case of the Institute, they are also important in the cases of other educational institutions or foundations. Consider how much might have been gained had Gilman or Eliot or Vincent at the Foundation had assistants competent to step in their respective places, instead of persons who had to learn everything and who in each of these instances made very serious errors. By way of contrast, Rose at the International Health Board did have an understudy, Colonel Russell, who succeeded him and who carried on and expanded the work in the same spirit in which Rose had developed it.

These constitute briefly my reasons for inclining to the opinion that as the Institute is in its growing stage, it might prove very helpful if some possible successor were on the ground to learn both from the faculty and from me the technique which we have employed in developing the Institute itself and its relations with Princeton. I should like to have them laid before the faculty, and after discussion, I should like each person who is interested to prepare for me a brief statement of his own views, so that I could present to the Board both sides of the question. I believe that in this way, the Professors will have a larger share in determining the general policy than they are likely to have if the whole question is dismissed until I myself retire.

There is an additional reason which occurs to me as I finish: In choosing a person, if the Board decides to take such action, we should, I think, seek not a distinguished specialist, but rather a person of my own type;

namely, one who has varied interests and sympathies, a large acquaintance with men and institutions in this country and in Europe and profound respect for scholars and their own individual ways of solving their own problems. This sort of choice seems to me important at this stage, while the Institute is gradually expanding. A decade hence, some other type may be more useful; but while I shall present my views to the Board, with whom the ultimate responsibility lies and in my judgment should lie, I shall not, of course, insist upon it.

I shall be here until towards the end of next week and I hope to arrive in Princeton on the 15th, bringing with me a big chunk of Arizona weather.

Remember me warmly to Mrs. Veblen and believe me

Always sincerely,

W. Abraham Hesse

Professor Oswald Veblen,
Fine Hall,
Princeton, New Jersey.

AF/HB

may suggest that at the outset of your meeting you read this letter to the entire group, so that each may have my present views. These views may be modified by considerations which you or your associates present.

March 14, 1936

Dear Dr. Flexner:

At our Faculty Meeting this morning we discussed in considerable detail the problem which you put before us in your letter of March 6, namely the desirability of adopting some procedure for the orderly selection of an understudy, and possible eventual successor, to yourself. We found ourselves, in substance, unanimously agreed on the following points:

1. We are pleased at your consideration in consulting us and welcome the opportunity to formulate our views. We all feel that the problem raised is of primary importance; the Institute is young and owes its existence to the generosity of Mr. Bamberger and Mrs. Fuld and to their supreme confidence in your wisdom, experience and insight. It is especially necessary that we provide for a continuation of the wise policies which you have developed.
2. We feel that the custom you have inaugurated of consulting the Faculty as well as the Trustees with regard to a basic question of this kind is sound academic procedure and establishes a precedent, the wisdom of which we hope to justify.
3. We are not convinced that the specific suggestion laid before us, namely that an understudy to the Director be appointed on a year by year basis, would prove feasible in practice. In the absence of any specific nomination, we doubt whether a person of the caliber required would accept such a position on a temporary basis. We also doubt whether the duties which could be found for him to perform, in case he did accept, would be compatible with the qualities of the man who should be chosen. You have made it one of your main purposes to reduce administration as such to a minimum and to establish scholarship here on the basis of minimum interference with the faculty. Under these circumstances the Director is a sort of an artist. He must be sensitive to conditions in the University, to conditions in the Institute, and intimately aware of the deeper currents in the world of scholarship.

Dr. Flexner

-2-

March 14, 1936

4. We would suggest that the proposed order of procedure in meeting this problem be reversed--that the Institute attempt first to find that individual who would seem most eminently qualified to carry on this work, if and when the time comes that you are forced to lay the burden down. Having found such a person, if he can be found, we would then suggest that an endeavor be made to work out the specific procedure necessary to bring that individual into effective contact with the problems with which he would be called upon to deal. You have outlined in your letter the considerations which you would try to convey to him. We are convinced that, if we know the individual, a method can be found for imparting these considerations to him, and that that method should be designed to meet the specific requirements of his situation.

5. In order to carry out this approach to the problem, we have a definite suggestion to advance which would involve a slight change in the by-laws and procedure of the Institute. The by-laws at present provide that when a vacancy in the directorship occurs, a committee of the Board of Trustees be appointed to nominate a candidate for the vacant position. Would it not be possible to amend the by-laws to provide that such a committee be in existence at all times? It would then be in a position to make a study of the field of possible candidates, and, when necessary, to prepare a definite recommendation. If that were done, this committee could meet the problem raised by your letter by canvassing the field. It could agree tentatively on the person or persons whom it would be most likely to consider as a successor, in case the need arose, and then proceed to interest one or more of these candidates in the Institute and to bring them into effective contact with its problems. It might be that such a candidate would be in a position to come here and occupy the position of understudy which you have outlined. If he were not, rather than select the second choice for understudy, we would prefer to canvass other means of educating the first choice in the ideals, problems and policies which you have developed. We attach importance to the greater flexibility of procedure which this plan would permit.

Dr. Flexner

-3-

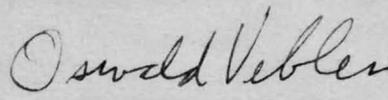
March 14, 1936

6. We would suggest that membership of such a committee consist of yourself, the Founders, two members from the Board of Trustees, and two members from the Faculty. We feel that the Institute would be inaugurating a very sound precedent in American academic procedure if it should provide definitely that those members representing the Faculty on this committee be nominated by the Faculty themselves.

You will realize, of course, that these are tentative suggestions which we are advancing as our contribution to the discussion of the problem. They are put forward for your consideration only at this stage and are not intended for transmission to the Trustees. We would all appreciate a further complete discussion of the problem with you present to give us the advantage of your wisdom. It was with this in view that the undersigned were requested to formulate the results of the discussion this morning.

Very sincerely yours,


Winfield W. Riefler


Oswald Veblen

V-2

THE INSTITUTE FOR ADVANCED STUDY

(FOUNDED BY LOUIS BAMBERGER AND MRS. FELIX FULD, 1930)

OFFICE

20 NASSAU STREET

PRINCETON, NEW JERSEY

CABLE ADDRESS: VANSTITUTE PRINCETON NEW JERSEY

October 9, 1936

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HERBERT H. MAASS
Vice-Chairman

WALTER W. STEWART
Vice-Chairman

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FLORENCE R. SABIN
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OSWALD VEBLEN
LEWIS H. WEED

LIFE TRUSTEES

LOUIS BAMBERGER
MRS. FELIX FULD

Dear Dr. Flexner:

The Faculty at a meeting on October 2 took up once more the problem which you laid before it last Spring, namely, whether it would be wise to choose now an understudy to act as your assistant and possibly to succeed you. The undersigned were requested to lay before you the results of this discussion as well as of those which preceded it.

We as a Faculty are, of course, deeply concerned about the qualities of the person who will succeed yourself as Director and appreciate the foresight which raises this problem at a time when it has no immediate urgency. In view of the fact that the question is not a critical one at present, however, we feel that it would be a mistake to approach it too formally at this time. Specifically, we doubt the wisdom of appointing an assistant to act as an understudy. At the same time we do not wish the question to be forgotten, nor the choice to be made without the benefit of your advice. It is our feeling, therefore, that the problem will be more satisfactorily handled for the present if, from time to time, you will confide your

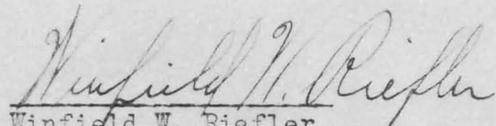
meditations as to possible candidates for a successor to members of the Board and also, if you wish, to members of the Faculty. This we feel is the best guaranty of continuity of policy in case an emergency should arise.

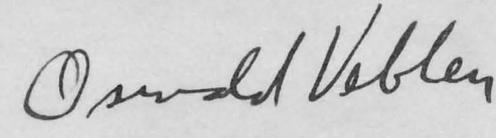
We have debated at great length the suggestion that an understudy be appointed. It has in our opinion one advantage which we hesitate to forego, namely, it would insure that your successor would be intimately aware of the Princeton situation, both in the Institute and in the University. This qualification on the part of a successor we regard as almost essential. The appointment of an understudy would also avoid the uncertainties and loss of morale which would ensue if the directorship were vacant for a considerable time. Attractive as these considerations are, we have come to the conclusion that the appointment of an understudy would be unwise. You have reduced administration as such to a minimum and have established scholarship here on the basis of a minimum amount of interference with the Faculty. The contribution of the Director to the Institute under these conditions is not measured by his performance of executive duties, but rather by the insight and guidance which he brings to the development of the Institute as a whole. To function effectively he must be sensitive to conditions within the Institute and within the University as well as aware of the deeper currents in the world of scholarship. Responsibility for action resting upon insight of this character must be taken largely by the Director

himself. It is difficult for us to see how an individual of the requisite calibre and imagination could be happy in the role of understudy, or to visualize what he would find to do.

In the meantime, we have one practical suggestion to offer toward deferring the problem for as long a time as possible. We feel that the severity of the weather in Princeton in February constitutes the greatest present hazard to your continued good health. Would it not be possible for you to repeat regularly the vacation which you took last Winter with such satisfactory results?

Very sincerely yours,


Winfield W. Riefler


Oswald Veblen

V-2

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Director of the Institute

OFFICE

20 NASSAU STREET

PRINCETON, NEW JERSEY

CABLE ADDRESS: VANSTITUTE PRINCETON NEW JERSEY

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PERCY S. STRAUS
OSWALD VEBLEN
LEWIS H. WEED

LIFE TRUSTEES
LOUIS BAMBERGER
MRS. FELIX FULD

November 2, 1936

Dear Professor Veblen:

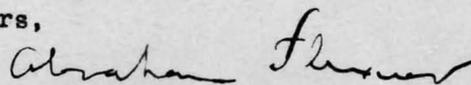
I have given very thoughtful consideration to the gratifying memorandum submitted in behalf of the faculty by you and Mr. Riefler. I am inclined to believe that the attitude which the faculty group recommends is sound and that we should make no commitment until in the course of nature it becomes unavoidable.

The one change I would suggest is the following,-that in place of my communicating such ideas as float into my mind from/to ^{time} time as I think of the problem, I will embody them in confidential memoranda which I shall seal and deposit in Mrs. Bailey's care. In that way I shall feel free to change my mind, and there will be absolutely no danger of leakage which inadvertently might take place under the method suggested by the group. This is of course not meant, as you well understand, as a reflection upon their discretion but rather as a means of enabling me to retract or modify my opinions in the light of experience and further thought.

I am very deeply touched by the attitude of the whole group towards me, and I trust that for the few remaining years nothing will ever disturb the spirit which has prevailed within the Institute and between the Institute and the University.

Will you let Mr. Riefler see this and use your own discretion as to communicating it to the other members of the faculty group?

Very sincerely yours,



Professor Oswald Veblen

V-2

1944
1945

12/27
1/15

PRINCETON

Relations WOAI

LIBRARY

Facilities

Letters from Masss to Dodds, December 27, 1944, and
Dodds to Maass, January 15, 1945, regarding above.

Letters filed in Vertical File under "P" for Princeton.

D, Princeton University Library

APPENDIX

C O P Y

December 27, 1944

President Harold W. Dodds
Princeton University
Princeton, New Jersey

Dear President Dodds:

At the meeting of the Board of Trustees of the Institute for Advanced Study held in Princeton on December 5, 1944, Dr. Aydelotte informed the Trustees of his conversations with you concerning the funds which you are now raising for the construction and maintenance of a new library for Princeton University. Dr. Aydelotte raised the question of the participation of the Institute in this enterprise.

In the discussion which ensued, the value of the Princeton University Library to the work of the Institute was strongly emphasized and the Trustees were unanimous in their appreciation of the generosity with which Princeton University has placed its central Library, various departmental libraries and other facilities at the disposal of the Faculty and Members of the Institute. The Trustees of the Institute welcome the opportunity of paying some part of the cost of a new library in order that they may have, as you have so kindly expressed it, a permanent right to the facilities which they have heretofore enjoyed as a matter of hospitality.

After full discussion it was moved and carried that the Institute for Advanced Study appropriate the sum of \$500,000 to be paid to Princeton University toward the cost of erection and maintenance of the new Princeton University Library. It is to be understood that this appropriation is not a gift but a payment by which the Institute for Advanced Study bears a share of the cost of such facilities of Princeton University as may be used by the Faculty and Members of the Institute. Payment is to be made on the basis of this agreement between the Institute and Princeton University that, in consideration of this sum, the Faculty and Members of the Institute are to have permanently the same rights as the members of the Princeton Faculty in the use of the Library as well as of other related facilities and services of the same general character.

This payment is made with the understanding that the Institute for Advanced Study, while it may increase somewhat in size, will nevertheless remain a relatively small institution. This is its clearly stated policy, and indeed it is hard to see how the Institute could preserve its

President Harold W. Dodds

- 2 -

December 27, 1944

character unless that policy were adhered to. If at some future time that policy should be reversed and the Institute should expand so greatly in numbers as to create a need for library facilities out of all proportion to the present payment, it is understood that the Trustees of Princeton University and of the Institute for Advanced Study may then redefine the terms of this agreement in the light of the new situation to their mutual satisfaction.

The Trustees welcome your suggestion that a room should be set aside in the new Library building for the use of the Faculty and Members of the Institute. They suggest that such further questions as may arise concerning relations between the two institutions in this connection should be dealt with by the President of Princeton University and the Director of the Institute, within the general terms of this agreement.

With kindest regards, I am

Yours sincerely,

Herbert H. Maass
President

HHM:jsr

C O P Y

PRINCETON UNIVERSITY
Princeton, New Jersey

President's Room

January 15, 1945

Dear Mr. Maass:

At the meeting of the Board of Trustees of Princeton University on January 11 your letter of December 27, 1944, in which you, as President of The Institute for Advanced Study, informed us of the desire of the Institute to make an appropriation of \$500,000 towards the construction and operation of a new University Library, was read in full. The Board thereupon voted unanimously to accept the offer of the Institute under the conditions and in accordance with the terms expressed in your letter of above date.

Our Board feels great satisfaction in your willingness to make such a substantial contribution to the University Library. It finds in it a promise of continued cooperation between our two institutions such as has characterized our mutual relations in the past.

Will you be kind enough to convey to the Trustees of the Institute our sincere thanks and gratification for what you have done towards making a new Library possible?

With warm personal regards, I am

Very sincerely yours,

HAROLD W. DODDS

Mr. Herbert H. Maass,
President, The Institute for Advanced Study,
Princeton, New Jersey

Discovery of New Particle Called 'Crucial Test' of Theory

By WALTER SULLIVAN

Detection of the new subatomic particle, the omega-minus, was described by its discoverers yesterday as a "crucial test" of a theory that could mark a turning point in particle physics.

It may play a role in bringing order out of the chaos of subatomic particles comparable to that played by the periodic table of elements. The latter was devised about 1870 by the great Russian chemist Dmitri Ivanovich Mendeleev.

By arranging the elements in parallel columns, according to their atomic weights, Mendeleev showed that they fell into groups with common properties. Furthermore, there were obvious gaps in the table and these enabled him not only to predict the discovery of new elements, but their properties as well.

Moreover, the fact that the elements fell into such a striking arrangement showed that there was an inner symmetry in the structures of these atoms—a symmetry that was yet to be discovered.

This is what now has happened on the much more fundamental level of the atomic particles. In Mendeleev's case the discovery of his three predicted elements, gallium, scandium and germanium, persuaded the scientific world of the validity of his hypothesis. The omega-minus performs the same role in that its properties are peculiar and would have been unexpected but for the concept known as "the eightfold way."

This theory was proposed independently, early in 1961, by Dr. Murray Gell-Mann at the California Institute of Technology and Dr. Yuval Ne'eman of the Imperial College of Science and Technology in London. Dr. Ne'eman, strange to say, was a newcomer to physics. He was a colonel in the Israeli Army who suddenly decided to turn physicist.

The theory did not come to them out of the blue. Others had recognized various symmetries and relationships between the subatomic particles. Likewise, Mendeleev's predecessors had experimented with groupings of elements. In both cases it was dramatic success in prediction that demonstrated the validity of the theory.

As Dr. Maurice Goldhaber, director of the Brookhaven National Laboratory, Upton, L. I., put it at a news conference on Friday, "Most people smiled when they spoke about the

		Electric charge				Mass (in millions of electron volts)
		-1	0	+1	+2	
Hypercharge (isotopic spin in brackets)	-2 (0)	OMEGA ⁻				1,686
	-1 (1/2)	Xi ⁻	Xi ⁰			1,530
	0 (1)	Sigma ⁻	Sigma ⁰	Sigma ⁺		1,385
	-1 (3/2)	Delta ⁻	Delta ⁰	Delta ⁺	Delta ⁺⁺	1,238

Hypercharge is related to the average electric charge of particles of a particular type and to their "strangeness."
 Isotopic spin is a quantity related to the number of particles of a particular type that vary only in electric charge.

The New York Times

Feb. 23, 1964

The discovery of the Omega minus particle, which was predicted on the basis of this symmetrical arrangement of lighter particles, strongly supports the validity of the theory behind such groupings of atomic particles. It opens the way for prediction of new particles and a better understanding of their diversity. Mass is expressed, as customary, in terms of equivalent energy values. The symbols following each particle's name indicate its electric charge. Figures shown in the column on left are values, peculiar to particle physics, that are fundamental to the theory.

eightfold way." They do not smile any longer.

It was with the world's most powerful accelerator, or atom smasher, at Brookhaven that the omega-minus was discovered. The experiment is described in the issue of Physical Review Letters dated Feb. 24 and made public yesterday. The scope and importance of the experiment is illustrated by the fact that the report is signed by 33 participants.

The proliferation of particles produced when the nuclei of atoms are broken apart by high energy bombardment has been a source of dismay to physicists. The number of such particles, including some that, because of their extremely short lifetimes, are called "resonances," is at least 82. The discovery of the omega-minus, however, has been a cause for rejoicing.

The eightfold way was suggested by a form of algebra developed in the last century by the Norwegian Sophus Lie. Part of this algebra deals with eight components and this seemed to Dr. Gell-Mann and Dr. Ne'eman to be applicable to eight "conserved quantities" characteristic of the various particles.

These quantities in general cannot be explained in terms of familiar concepts in that they involve mathematical relationships. For example, one of them, "isotopic spin," is derived from the electric charges characteristic of a particular group of particles.

Some particles have a positive charge, some a negative one and some have no charge at all—a zero charge. One kind has two positive charges. Isotopic spin is an arbitrary number equal to the number of charge states characteristic of a given particle (plus, minus, etc.) minus one, divided by two.

For example, a group of particles known as pions appear in three charge states: positive, negative and zero. Their isotopic spin is therefore three minus one, divided by two, which is one.

The other quantities of the eightfold way are similarly derived. Some of them, as stated in an article by Dr. Gell-Mann and others in the February issue of Scientific American, have not yet even been named.

However it was found that application of the hypothesis to eight particles, some of which had hitherto seemed quite unrelated, showed them to be, in

a sense, variations of the same particle, differing only in energy levels (or mass) and electric charge. The eightfold nature of this symmetry seemed further justification for the title of the theory.

Further eight-part groupings were identified. However, there was one misfit group of particles, called by Dr. Gell-Mann and his colleagues the deltas, with a mass of 1,238 million electron volts. It is customary in physics to describe the mass of a particle in terms of its equivalent value in energy, mass and energy being interchangeable in nuclear reactions.

The delta particles, discovered in 1952, appear in four electric states: plus, minus, zero and double-plus. This is the only group of particles with four such states. The eight-part patterns were no more than three spaces wide and hence it was proposed that a ten-unit pattern, formed as a triangle or pyramid, was needed to accommodate the deltas.

The four deltas would form the base. Three sigma particles would form the next layer. The discovery of two xi particles with a mass of 1,530 fit the third layer. Hence, at the 1962 high energy physics conference in Geneva Dr. Gell-Mann urged that a search be made for the particle needed to crown this pyramid.

He described the characteristics that it must have to fit this slot and named it the omega-minus. Its properties were in part based on the work of Dr. S. Okubo of the Universities of Rochester and Tokyo.

Meaning Still Obscure

Its discovery, in the words of Dr. Goldhaber, "forms the capstone in a building which was so far held together only by the bold imagination of Dr. Gell-Mann and Dr. Ne'eman"

Like the periodic table of elements and the complex arrangements of lines in the spectrums of light emitted by atoms, the structures of the eightfold way clearly have some inner significance. However this meaning, in the last-named case, is still obscure.

The eightfold way is described by Dr. Gell-Mann in terms of a new set of ten particle names that many physicists consider more logical than the old system. Grouped together under each of these ten names are those heavy particles (baryons) with the same isotopic spin and hypercharge.

Hypercharge, like isotopic spin, is one of the quantities that determine the patterns of the eightfold way. It is related to the average electric charge

of a group of particles and to their "strangeness." The latter is a property of particles so named because it seemed strange when first discovered.

When particles are defined in terms of these quantities, some with the same name have widely varying masses. It is the assumption of Dr. Gell-Mann and others that these differences in weight are actually differing energy levels in the same particle. In high energy reactions, such as those required to produce these short-lived fragments, energy is converted into matter and vice versa.

Search at Brookhaven

The search for the omega-minus began several months ago at several laboratories. At Brookhaven the basic tool was a high-energy beam of protons, or hydrogen nuclei. These smashed into a tungsten target generating a multitude of fragments including a variety known as negative K mesons.

With a 400-foot array of magnets and electrostatic separators, these were extracted and directed into an 80-inch bubble chamber. This device, filled with liquid hydrogen at its boiling point, is the world's largest of its kind. The mesons occasionally struck hydrogen nuclei in this chamber, and researchers hunted for the telltale decay products of the encounter that theoretically might produce the omega-minus.

The latter would decay, almost immediately, into other particles that could be identified. Thus the omega-minus would be known by its children. On Jan. 31 one such decay mode was observed and, since then, a second form has been detected.

Dr. Ralph P. Shutt was in over-all charge of the experimental team with Dr. Nicholas Samios responsible for conduct of the experiment. Dr. William B. Fowler was in charge of the bubble chamber and Dr. Medford S. Webster headed the group that produced the K mesons.

Private Reactor Passes Test

LYNCHBURG, Va., Feb. 22 (AP)—The Babcock & Wilcox Company said today that its test reactor had achieved its first sustained nuclear chain reaction. The reactor is the only privately owned and operated test reactor in the Eastern United States. It is considered the largest in the world of the swimming pool type. It will be used primarily for company programs to reduce the cost of generating electricity and propelling ships.

UNIVERSITY MEN

Special MILWAUKEE Peace Commission from special financial opportunity to be state University

The University of Wisconsin training allocated fellowship tuition so demically in the country

The fall ships will be on the new program, which was deprived. Corps of studies, and adult affairs.

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DIRECTOR

Administration

✓ PARTICIPATION IN ADMINISTRATION

Academic Personnel

COMMITTEES (ON SELECTION TO DIRECTOR)

EARLE, E. M.

Biographical

STRAUSS, LEWIS L.

FORRESTAL

Letters (photostated) on the above headings filed in Vertical File under "P" for Participation in Administration.

Earle's Files.

Institute for Advanced Study, Directorship, Meetings, etc., 1946 & 1947

January 27, 1947

Mr. Lewis L. Strauss
The Metropolitan Club
17th and H Streets, N. W.
Washington, D. C.

My dear Mr. Strauss:

This is to remind you of a suggestion which I made in a telephone conversation a month or so ago, to the effect that the Institute would be very fortunate indeed if it could obtain the services of Mr. Forrestal as a member of the Board of Trustees. As I understand it, there is a vacancy occasioned by the resignation of Mr. Moe, and I could imagine no one who could better grace the Institute Board than your and my friend, The Secretary of the Navy.

Always sincerely,

Edward Mead Earle

P.S. I hope you will send me the data concerning your son so that I may discuss him with Harry Smyth and Dean Taylor.

January 21, 1947

Mr. Lewis L. Strauss
The Metropolitan Club
17th and H Streets, N.W.
Washington, D. C.

My dear Mr. Strauss:

Professor Wallace Notestein of Yale University has suggested Arnold Wolfers, Master of Pierson College at Yale, as a desirable candidate for the Directorship of the Institute for Advanced Study.

Professor Wolfers is a person of distinguished appearance and of considerable attainment as a scholar. He is a Swiss by birth, but spent considerable time in Germany as Director of the Hochschule für Politik in Berlin. He came to the United States in 1933 as Professor of International Relations at Yale and was subsequently made Master of Pierson College. He became an American citizen in 1939. Like most Swiss, he is an accomplished linguist, speaking German, French and English about equally well. His English is impeccable; indeed, one would not suspect that English is not his native tongue. Mrs. Wolfers has real social gifts and would grace the Director's house.

Upon numerous occasions during the past ten years I have worked with Professor Wolfers on various scholarly enterprises and have always found him considerate, tactful and discriminating in his judgments. As his biographical sketch in Who's Who will indicate, he has done good scholarly work, although he is not, of course, as distinguished in his field as the scientists you have under consideration are distinguished in theirs. I should say, however, that he could be rated about on a par with Hagen and Mason so far as academic distinction is concerned. Like Hagen and Mason, he has interests closely related to the School of Economics and Politics.

I am not pretending to express a consensus of faculty opinion concerning Professor Wolfers, as his name has received only casual consideration up to the present.

The introduction of Professor Wolfers as a candidate stresses the importance of canvassing the situation with the utmost care before a definitive decision is made. I am going to make some further discreet inquiries concerning Wolfers and may want to telephone you later in the week.

Meanwhile, my very best wishes.

Always sincerely,

Edward Mand Page

January 15, 1947

Mr. Lewis L. Strauss
Metropolitan Club
17th and H Streets, N. W.
Washington, D. C.

My dear Mr. Strauss:

This is first of all to express my appreciation of your part in the very pleasant and helpful telephone conversations we have had concerning the Directorship. Rather than telephone you again and thus trespass upon your already over-busy life, I am going to incorporate in this note one or two further ideas.

The conversations we have thus far had have been confined to candidates whose names appeared on the Faculty list of suggestions, plus one other who has, I believe, now been dropped from consideration. We realize, of course, that other names may be brought to your attention when your Committee meets on January 24. Should any person so suggested seem to be your definitive choice, may I express the hope that my colleagues and I have the opportunity to discuss with you the desirability of the proposed appointment? It is probably superfluous for me to raise this point, because I am sure that it corresponds with your own idea concerning procedure.

As you know, some of the success of the Institute depends upon the degree to which we can cooperate effectively with Princeton University. It would seem desirable, therefore, if some means of liaison with President Dodds could be affected by your Committee, so that the University officers and trustees could know of our proposed appointment before it is announced to the general public. I am not suggesting, of course, that the University should have any voice in the appointment or any veto over it, but it would seem to be neighborly courtesy as well as wise academic strategy to see that friendly relationships in this vital matter be maintained. I cannot imagine any of the persons whom we have discussed being other than acceptable to the University authorities.

For what it may be worth, I should like to give you my own preferences, which I have heretofore refrained from doing. On the whole, I should prefer Bronk to Oppenheimer, partly because I think a man of fifty is a little more likely to have stability of judgment than a man almost ten years younger, and partly because I

#2. Mr. Lewis L. Strauss. 1/15/47

know and have considerable admiration for Bronk. On the other hand, I feel that any of the four persons we have discussed would be satisfactory.

If there is any further information which I can furnish in advance of your meeting, I hope you will feel free to telephone me.

Sincerely yours,

Edward Mead Earle

December 9, 1946

Mr. Lewis L. Strauss
United States Atomic Energy Commission
Washington 25, D. C.

My dear Mr. Strauss:

Since receiving your letter of December 4, I have learned from Mr. Aydelotte that he has had a conversation with you concerning a visit of our committee to Washington or a visit on your part to Princeton.

Although we appreciate the inconvenience to which you would be put by coming here, we also feel very strongly that if you can possibly do so it would be much the more desirable procedure. It would give you an opportunity not only to talk with the committee as such, but with other members of the faculty who might be able to throw light on individual candidates or on the problem as a whole. We should, of course, be entirely at your disposal as to choice of a day and would be prepared to stand by on short notice. I very much hope you can arrange to come.

Meanwhile, my very best wishes to you.

Sincerely yours,

Edward Mead Earle

cc. to Dr. Aydelotte
Prof. Alexander
Prof. Penofsky

UNITED STATES
ATOMIC ENERGY COMMISSION
WASHINGTON 25, D. C.

4 December 1946

Dear Dr Earle

This is to thank you for your favor of 21
November 1946 which I found upon my return here.

When you are ready for a further conversation
on the subject about which we have corresponded, I wonder
if it would be too much of an imposition for me to
ask you to come to Washington and spend an hour or two
with me canvassing the matter before I call a meeting of
the Committee of the Board of Trustees.* I have the
feeling that this would be preferable to a joint meeting
of the two committees as I will explain when we meet.

Our trip proved to be as interesting as you
might have anticipated and the problems which we will
have to grapple a little less nebulous.

I hope this finds you well.

* Of course, I will come to
Princeton, if you prefer it
but will have to pick
a free half day when it
happens instead of planning it in advance

Sincerely yours

Lewis L Strauss

LEWIS L STRAUSS

Dr Edward Mead Earle
The Institute for Advanced Study
Princeton New Jersey

November 21, 1946

Mr. Lewis L. Strauss
52 William Street
New York, New York

My dear Mr. Strauss:

The faculty meeting held on Monday, November 18th, was called by the Director primarily to discuss the question of a new appointment. This business took rather more time than we had anticipated, with the result that we had only a limited discussion--which will be resumed at the regular monthly luncheon on December 2--concerning the Directorship.

In talking about the Directorship, we found ourselves in something of a dilemma: on the one hand, we were eager to comply with your request that we rate candidates in preferential order; on the other hand, we felt that this could not be done with full justice to us, to the Trustees, and to the candidates themselves.

Furthermore, since I last wrote you, other names have been suggested, and one of these--Lins Pauling of the California Institute of Technology--seems to us especially worthy of serious consideration.

There is so much to be said concerning each of the men we have in mind--something of course depending upon the special qualities which ought to be sought in the next Director--that we wonder whether it would not be more desirable if we could hold a joint meeting of the faculty and trustees committee--or a preliminary meeting of our committee with you--for a full and frank discussion of the names which I have previously sent you and of such other names as may be brought forward in the meantime. Would you be willing to give some thought to this question of procedure and let us have the benefit of your judgment? Meanwhile, we hope to clarify our own thoughts and to communicate with you further.

I myself very much hope that you may find it possible to pay us a visit, not merely for the purpose of discussing the Directorship but in order to become more intimately acquainted with the work in which the Institute is engaged. I understand, of course, how busy you are and how pressing the demands are upon your time, and

Dr. Lewis L. Thomas. 11/21/46

It may, therefore, be quite selfish of us to suggest a procedure which will burden you still further.

I hope you are having an interesting trip and that you will return less rather than more harassed by official duties.

Sincerely yours,

Edward Ross Davis

November 13, 1946

Mr. Lewis L. Strauss
52 William Street
New York, New York

My dear Mr. Strauss:

Thank you for your letter of November 7, which I have had circulated among my colleagues. The members of the faculty committee on the directorship are reluctant to arrange the names of the five candidates in order of preference. We are, however, asking the faculty as a whole to do so, and a meeting of meetings for that purpose will be held next week. There is the possibility, also, that additional names may be suggested during our discussions. In any case, you will be hearing from me as soon as it may be possible for us to furnish you with the information which you have requested.

I hope you will have a pleasant and profitable trip to the several atomic energy plants which are on your itinerary. We all hope very much that upon your return to the East it will be possible for you to come to Princeton for a visit with us.

Sincerely yours,

Edward Mead Earle

LEWIS L. STRAUSS
52 WILLIAM STREET
NEW YORK

November 7th, 1946

Dear Dr. Earle,

I am very much obliged indeed for your letter of November 4th. It now develops that I will have to leave here the end of this week to join my associates on the Atomic Energy Commission for a tour of Oak Ridge, Los Alamos and Hanford. That will mean that I shall not return until nearly the end of the month. Since so much time has already elapsed, it is probably wise to make as much progress as possible in the very early future. I wonder, therefore, whether I could persuade you and your colleagues, Professor Alexander and Professor Panofsky to meet again and to give me the benefit of your current consideration of the subject in a memorandum in which you would discuss the individuals in the order of your preference.

I have had the advantage of an informal conversation with Dr. Aydelotte and with several members of the Trustee's Committee, but I do not intend to have a meeting of the Trustee's Committee until after my return. Naturally, I will consider in confidence any part of your memorandum which you may care to 'classify' in that respect.

Looking forward to the opportunity of seeing you again as soon as possible after I get back from the coast, and hoping in the meanwhile to have some word from you (which my secretary will forward), I am,

Yours faithfully,

Lewis Strauss

Dr. Edward Mead Earle,
The Institute for Advanced Study,
Princeton, N.J.

Jp

November 4, 1946

Mr. Lewis L. Strauss.
52 William Street
New York, New York

My dear Mr. Strauss:

At a luncheon meeting of the Institute faculty held today Dr. Aydelotte informed us that you have been appointed chairman of a committee to select his successor. This was good news to me personally, and, I might add, was welcomed by all other members of the faculty as well.

In November 1945 at the request of the faculty, Dr. Aydelotte appointed a committee representing each of the three schools, for the purpose of complying with a request of Mr. Moe (then chairman of the trustees committee on the directorship) that members of the faculty as individuals or as a group submit the names of candidates who might appropriately be considered as Dr. Aydelotte's successor. The committee consisted of Professor Alexander, Professor Panofsky and me.

We canvassed the situation thoroughly from November 1945 until March 1946 when at the request of the faculty as a whole, we told Mr. Moe that we were prepared to discuss with him, at his convenience, the names of persons who seemed to us to be possibilities. Actually, however, no meetings were held between Mr. Moe's committee and the faculty committee.

Although my colleagues and I have conducted no further investigations since March 1946, we are prepared to discuss with you, if you so desire, the names of some of the persons concerned. For obvious reasons, we should prefer to do this in an informal conference rather than in writing. However, I am sending you herewith a memorandum which our committee sent to the members of the faculty on March 5, 1946, which includes all the names which we had under discussion at that time. Although biographical sketches appear in Who's Who, we are, I believe, in a position to make further comment concerning each of them. In any case, we are at your disposal.

With every good wish,

Sincerely yours,

Edward Mead Earle

January 16, 1940

Memorandum for members of the Faculty:

Acting upon advice which I have received from various members of the Faculty, I have appointed as members of the Standing Committee for the academic year 1939-40 Mr. Veblen, Mr. Stewart, and Miss Goldman. (See 1578/56 for attempt to get actual names.)

I hope that the committee will serve to economize my time and the time of the Faculty by advising me on various routine matters connected with the administration of the Institute, such as assignment of rooms, possible economies in the administration of Fuld Hall, expenditures for library service, and other matters affecting the Institute as a whole as distinct from problems concerning the various Schools or the work of individual Professors.

I expect to change the membership of the Committee from year to year, and it may well be that after a few years time the need for such a committee will no longer be felt.

Meanwhile I wish to make it clear that I shall be accessible to each member of the Faculty individually at any time, and am prepared to hear at length any concern anyone may feel in regard to his own work or in regard to the welfare of the Institute as a whole.

FRANK AYDELOTTE,
Director.

D Fac memos < com

Faculty

September 17, 1940

TO THE MEMBERS OF THE FACULTY:

There will be a meeting of the faculty on Wednesday, September 25, at five o'clock, in the Director's office, to consider plans for luncheon in Fuld Hall and other matters connected with the opening of the new year.

Teas in the Common Room will begin on Thursday afternoon, September 19, at 4:15. It is expected that all the members of the Economics Section of the League of Nations who are working in Fuld Hall will be present on that day.

MARSTON MORSE
Secretary of the Faculty

① For memo E. C. ...

INSTITUTE FOR ADVANCED STUDY

Office of the Director

May 15, 1941

MEMORANDUM FOR MEMBERS OF THE FACULTY:

The Board of Trustees will meet in Fuld Hall Monday afternoon, May 19th, and will have tea in the Common Room after the meeting. No formal reception is planned, but I should be glad if members of the faculty and their wives who can conveniently do so would come to tea on that day.

FRANK AYDELOTTE

D For mem. s 2 copy

March 11, 1944

TO THE TRUSTEES AND FACULTY:

I am deeply grieved to inform you that Mr. Louis Bamberger died about 10:30 this morning. He had been ill several days, but it was not thought that his illness was serious. He was born May 5, 1855, and would have been 89 this year. Because of the illness of Mrs. Fuld, the funeral will be strictly private, confined to the members of the family. The family have assured me that they would prefer that none of us should send flowers.

FRANK AYDELOTTE, Director

D For memo 2 em

April 13, 1944

MEMORANDUM FOR MEMBERS OF THE FACULTY:

In accordance with my promise, I give herewith a list of the Trustees who are expected for the Board Meeting in Fuld Hall on Tuesday, April eighteenth.

Messrs: Edgar Bamberger
Abraham Flexner
John F. Fulton
John R. Hardin
Herbert H. Maass
Henry Allen Moe
Lessing J. Rosenwald
Michael Schasp
Oswald Veblen
Lewis H. Weed
Lewis W. Douglas (?)

SOL ?
Mr Wolman
FA.

Most of the Trustees will arrive at the Princeton station at 12:00 and at Fuld Hall about 12:15. I have suggested to them that they lunch informally with Members of the Faculty in the regular dining room. The Institute will be host at luncheon both to Faculty and Trustees. I should be grateful if Members of the Faculty who are free would meet the Trustees in the Common Room at 12:15, form small groups, and proceed to luncheon at their convenience. Professors Veblen and Meritt will be on hand to introduce Members of the Board and Faculty who do not know each other. I shall myself be engaged with the meeting of the Finance Committee which takes place in my office at 12:15. Members of the Board will be free to look around Fuld Hall after luncheon until 2:15 when they are due for their meeting in the Board Room.

Frank Aydelotte

FA:KK

D For memo 2. em

Particip

5 December 1947

Dear Mrs. Leary:

Mrs. Jenkins told me of your inquiry about the Standing Committee, and I am glad to furnish you with information concerning it. I give you herewith a list of the members of the faculty who have served on this committee since it was first organized. My policy was to have a member from each School and to rotate the members so that practically everyone on the faculty has served his term. The enclosed sheet of members by years will make this clear.

Except when I was away I have never had any regular date of meeting of the committee but have called them together only when I wished to ask their advice. I have always considered the committee as a channel of communication to the faculty on points which would not seem to justify the calling of a special faculty meeting. If you will read through the faculty minutes you will find occasional reports of the Standing Committee which will show you the kind of business I put up to them. I think I have a few sets of minutes of the meetings and I shall try to dig these out and forward them to you.

It so happens that I have a concern which I wish to put up to the committee the next time it meets. People are always asking for permission to hold meetings at the Institute for various purposes, some connected with our work and some not. I made a rule, accordingly, that such meetings should only be held if authorized by the Standing Committee and that the Standing Committee should authorize them only if some member of the faculty were specially concerned.

A few years ago we organized at Princeton what is known as the United Monthly Meeting of the Society of Friends, including both the Hicksite and Orthodox branches. Two years ago we held in Princeton a United Quarterly Meeting, the first one since 1829. The question came up as to where we should hold it, and the Institute seemed to be, at least from the point of view of the Quakers, the ideal place. With the authorization of the Standing Committee we held the meeting at the Institute and it was a great success. The Friends would like to have a similar United Quarterly Meeting on Saturday, May 15, 1948, and I should like to ask the Standing Committee to authorize it. The meeting takes place on Saturday afternoon and evening. It is held in the Common room, the Friends bring box suppers, which are eaten in the dining room on the fourth floor, and the whole thing is, of course conducted without any

-2-

~~any~~ expense to the Institute. I hope very much that when the Standing Committee meets next it will authorize me to invite the two Quarterly Meetings in this district to hold a similar joint session on May 15th.

Yours sincerely,

FRANK AYDELOTTE

Mrs. John Leary
Institute for Advanced Study

October 10, 1947

MEMORANDUM FOR MEMBERS OF THE STANDING COMMITTEE:

When the minutes of the meeting of the Standing Committee of September 29, 1947, were read to the Faculty there seemed to be some disagreement about paragraph (4). I should be grateful if members of the Committee would give me their idea as to how this paragraph should read. The minute as made was as follows:

"(4) The proposal for a nursery school for children of members living in faculty apartments was approved and details were left to Miss Miller and the Director."

FRANK AYDELOTTE

Copy to Professor Meritt
Professor Stewart
Professor von Neumann

Mrs. Leary

Particip.

Swarthmore, Pa.
27 November 1939

Dear Stewart:

Will you consult Riefler and Warren, and ask them to let me know, individually or collectively, whom they would suggest to represent the School of Economics and Politics on this committee. I am sending a similar request to Earle to ask his advice. I think it useless to try to reach Mitrany. I am sending copies of this letter to Riefler and Warren at the best addresses I have for them, and I shall be grateful if you will telephone them in case my letter may have missed them.

The members of the School of Mathematics and of Humanistic Studies I can reach in Princeton on Thursday. I should be grateful if I could have your opinions addressed to me at my office in the Institute by Thursday if possible.

Yours sincerely,

FRANK AYDELOTTE.

Dr. Walter W. Stewart,
Roger Smith Hotel,
Washington, D. C.

Swarthmore, Pa.
27 November 1939

Dear Earle:

I have written to Riefler, Steward
and Warren to ask their opinions. I think it no
use to try to consult Mitrany. The members of the
School of Mathematics and Humanistic Studies I can
consult individually when I go over on Thursday.

Yours hastily,

Professor Edward M. Earle
Institute for Advanced Study
Princeton, New Jersey